

Economic and Social Council

- Accelerating Escape From Poverty
- Oil Boom in Africa
- Water Scarcity



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Table of Contents

Introductory Letter	3
Topic 1: Accelerating Escape from Poverty	4
Introduction	4
Discussion of the Problem	5
The Present Situation	6
Basic Rural Infrastructure	6
Sociocultural Environment	7
Child and Adult Education	8
Health and Welfare	9
Economic Opportunity	10
Local and Global Politics	10
Major Questions to Address	11
Conclusion	12
Further Information	13
Bibliography	13
Topic 2: Repercussions of the Oil and Gas Boom in Sub-Saharan Africa	16
Introduction	16
Resource Curse	17
Economic Factors	17
Political and Institutional Factors	18
Adjusting to the Case of Sub-Saharan Africa	19
Economic Mechanisms	20
Political and Institutional Measures	20
Challenges	22
Conclusion	22
Questions	23
Additional Reading	23
Bibliography	24
APPENDIX 1: Map of Present and Future Oil and Gas Exporters	25
APPENDIX 2: Oil and Gas Exporting Countries Data	26
Topic 3: Water Scarcity	27
Introduction	27

What is Water Scarcity?	29
Reasons for Water Scarcity	30
Threats to Water Scarcity	31
Water Pollution	33
Case as an Example of Water Scarcity: Israel	34
Conclusion	36
Additional Reading	37
Bibliography	38

Introductory Letter - Welcome to ECOSOC!

As one of the principal organs of United Nations, The Economic and Social Council has one of the most expansive mandates of any intergovernmental body in existence. Taking up more than a tenth of the UN Charter, Chapter X clearly outlines the gamut of ECOSOC to include “*international economic, social, cultural, educational, health, and related matters,*” assist the Security Council, prepare draft conventions to submit to the General Assembly, and enter into agreements with specialized agencies on all matters under its competence.

ECOSOC’s primary function in the UN is to be overarching advisory body on nearly all important international issues and actively coordinating the decisions made by The General Assembly and The Security Council with the numerous specialized agencies that autonomously implement the decisions and delineate the results. ECOSOC is largely responsible for synchronizing the activities of these various organizations and agencies via various consultations and recommendations and for taking the appropriate steps to obtain regular reports to properly carry out its function.

At IsraMUN, members of ECOSOC will be expected to discuss and debate international issues while keeping in mind their own national policies, negotiating with international financial institutions, addressing the needs of the public and private sectors, recognizing the shift in global response, and being an impetus for societal change. Delegates are encouraged to use their knowledge of trade, finance, social issues, international relations, and national policies to contribute to multilateral solutions that enhance or replace existing systems to solve major international problems. The committee is expected to draft one or more resolutions, which outline the major problems, allocate resources effectively, and clearly describe the mechanism of operation, and commission for regular reports.

Members of ECOSOC should remember that the principal aim of IsraMUN participants is to explore the complex and fascinating world of international politics in an immersive and fun simulation with their peers. With that goal in mind, we have created this study guide to outline and focus your efforts.

Sincerely,

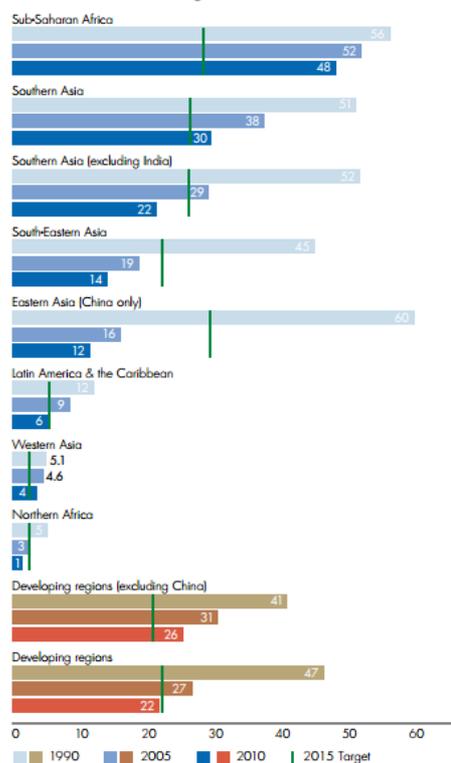
Nicolai Beerheide, Paulina Debska, Efrat Lawi and Samaikya Karri

Topic 1: Accelerating Escape from Poverty

Introduction

Around the turn of the century, all the members of the United Nations met and adopted the Millennium Declaration, which established a unanimously agreed upon a set of international development goals to achieve by the year 2015. Amongst these goals, now called the Millennium Development Goals (MDG), was a target to “Halve, between 1990 and 2015, the proportion of people whose income is less than \$1.25 a day”

Proportion of people living on less than \$1.25 a day, 1990, 2005 and 2010 (Percentage)



Source: UN, The Millennium Development Goals Report-2013

In 1990, nearly 47% of the population in developing regions was living in absolute poverty. By 2010, 5 years ahead of schedule, that proportion was reduced to less than 22%. There are several reasons for this sudden reduction in poverty and they linked to a variety of issues also addressed in the MDG's. In 1990, 12 million children, under the age of 5, died each year; by 2010 that dropped to 7.6 million per year and the child-mortality rate lowered from 87.3 to 53.3 deaths per 1000 live births. With better infant mortality rates and family planning services being available in rural areas,

parents were able to devote more time to a few children. Without the burden of having to feed large families, parents were willing to

send their kids to school as opposed to using them for manual labor. Even with a primary school education, being literate and having basic arithmetic skills has allowed many to find jobs outside of the agrarian sector, drastically increasing household income.

During this 20 year period the amount of people who didn't have access to clean drinking water also halved and the enrollment rate disparity between boys and girls has dropped substantially. This increase in access to clean drinking

water has reduced the spread and severity of many waterborne diseases and thus increasing productivity. Similarly as girls are kept in school longer they have children later in their lives and gain skills that allow them to contribute to non-domestic labor. The largest contributions to this decline in absolute poverty though were the result of policy changes in the two largest countries, China and India. In that same 20 year period, the amount of people living in absolute poverty dropped from 65% and 51% to 4% and 22% respectively.

Despite this major improvement there are still 1.2 billion people living in absolute poverty today, on top of that the amount of people living on \$1.25-\$4 a day is decreasing far more slowly. Even with tremendous international efforts, there does not seem to be any escape from poverty just a transition between an impoverished state to a slightly less impoverished state. There are also very few permanent mechanisms in place to assist the impoverished, witnessed in 2008 when loss of funding of aid programs increased the proportion of impoverished people.

Discussion of the Problem

One of biggest factors in escaping poverty is the ability to hold a job outside the agrarian sector. As the number of people working in agrarian fields decrease the price for crops and livestock increase further accelerating the escape from poverty. This influx into non-agrarian fields also increases domestic output and introduces a much larger variety of goods to the market, which in turn attracts foreign direct investment into other impoverished regions. Another determining factor is basic primary education. Without the ability to read or write or do simple arithmetic, jobs that require skill are hard to come by reducing employment options down to simple menial labor.

There have also been many indirect causes or compounding factors that increase the poverty rate. Without proper medical facilities, debilitating diseases such as HIV, Tuberculosis, Polio, and Measles can severely impact productivity and reduce household income to nothing. The cost of treatment for these diseases far exceed what little savings people have and with no major liquid assets the sick spend most of their money getting what little medical attention they can. Another factor that traps people in poverty is inability to save or store

wealth for the long term. Without the access to banks or any savings mechanism it becomes impossible for the destitute to invest in any solid assets such as land or machinery.

Regional factors can also contribute to the poverty rate; this is especially true in Sub-Saharan Africa. The problem of local conflicts, corrupt government officials, and lack of infrastructure makes many parts of Sub-Saharan Africa a poverty trap. Without proper legal protection, gangs, organized crime units, and even local authorities often rob small business owners. In rural areas lack of roads, electricity, or even running water cripple family incomes as man hours must be devoted to chores that revolve around basic domestic maintenance.

War torn areas also experience high rates of poverty due to the destruction/loss of property, death/permanent injury, and forced migration. The sudden rise of refugee and internally displaced populations dramatically aggravate all the factors that contribute to systemic poverty. Even in refugee camps, lack of security forces and struggle for resources usually increase the likelihood of gang formation. These gangs then take advantage of their relative power to steal basic resources such as food and water and sell them back at much higher prices to the few refugees with liquid assets or to local dealers in the black market.

The Present Situation

Basic Rural Infrastructure

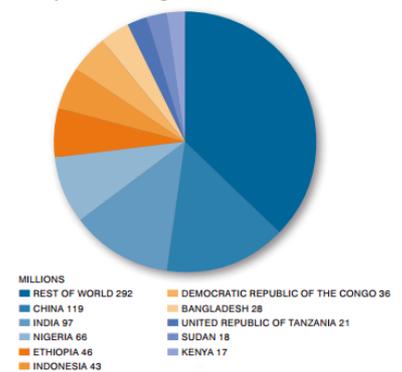
The use of e-teaching methods has allowed many areas to offer both adult/child education programs. Some NGO's have provided slums with internet access to help give menial labors new skills such as carpentry or sewing. However, the success of these programs depends highly on the availability of cheap hardware and compatible educational content. The One Laptop Per Child (OLPC) initiative has been helping to provide cheap laptops for school age children in developing nations. Although early optimistic estimates put the eventual production price of the laptop below USD \$75, no such laptop has been able to hit the market for less than USD \$100. In contrast, educational content providers like Khan Academy have been having tremendous success thanks to

video sharing sites like YouTube; allowing for the easy delivery of educational materials to anywhere in the world.

Even areas that might have the infrastructure to support digital education might be severely lacking in the most basic of necessities. Nearly one billion people in the world still lack access to clean water sources. The WHO estimates that, on average, 1 person dies every 15 seconds due to water-borne diseases like diarrhea, cholera, and dysentery. The problem is further compounded by the lack of toilets in developing regions allowing these diseases to spread through slums rapidly. This is clearly highlighted in the case of countries like India, where the telecommunications industry is able to offer cell service to more than 63% of the population but water and waste management systems cater to less than 50%.

The lack of investment into plumbing systems, electrical grids, and roads is a major impediment to economic growth, heavily limiting products that can be offered. This ultimately results in stagnation where any wealth creation quickly saturates due to the lack of goods or products that can be exchanged or obtained.

Ten countries are home to two thirds of the global population without an improved drinking water source



Source: Progress on Drinking Water and Sanitation-2012 Update

Sociocultural Environment

Child marriages and cultural norms are still barriers to reducing the gender gap and little has been done to change it. Seen as little more than domestic help or future brides, girls are often denied or even strictly forbidden from attending school. Although there are clear acts of malice such as those carried out by Boko Haram on Nigerian schoolgirls or the Taliban on Malala Yousafzai, there are also choices made by parents who disproportionately elect to have their daughters remain home. Lack of primary education severely limits job opportunities for girls and is likely to lead to earlier pregnancies via child marriages and in turn diminished overall health. Without the necessary reading or writing skills, 75 million women aged 15 to 24 have little opportunity outside menial labor or agrarian work earning paltry sums of money.

Other impoverished demographics include internally displaced persons (IDP) and refugee populations. Without the proper assurances necessary to secure property and wealth, economic mobility in refugee or IDP camps is rare. The lack of opportunity and the limited capabilities of people living within these refugee and IDP camps further compound the problem and few poverty reduction strategy papers suggest strategies that incorporate multilateral solutions with refugee hosting countries. The Syrian conflict, which produced over 2 million refugees, has seen massive improvements in refugee camp organization and security given the large population. Although sexual and gender based violence continue to be an issue, proper distribution of cash assistance and non-food items along with better policing of refugee camps has positively influenced the economic means of its inhabitants. Informal markets spring up in these camps that help internally reallocate aid and increase protection measures have allowed some to operate small businesses.

Child and Adult Education

In impoverished regions children are given free meals at schools, in some cases their only meal of the day, and are likely to stay in school longer and less likely to suffer from vitamin deficiency and malnutrition. These school meal programs lower the burden on impoverished families to provide food for their children, allowing more of household income to be saved for emergencies or invested in small businesses. In addition to this, the higher school enrollment rates allow for vocational and occupational training while at the same time freeing parents to pursue more non-domestic work as they no longer need to be at home to take care of the children. These children are more likely to be aware of the causes of poor health and sanitation and incur less medical expenses throughout life. Primary education can help children take preventative measures to ensure long term health greatly reducing financial burden in areas where families cannot afford healthcare.

UN Women reports indicate that more than nearly 300 thousand women die each year due to complications during pregnancy or childbirth, however, estimates show that 80% of these deaths could be averted with better obstetric care.. Encouraging children to be breastfed within 1 hour of birth and exclusively

for the first 6 months has cut down on infant mortality rates whereas increased contraceptive use has decreased fertility rates.

Health and Welfare

In the poorest 83 countries average expenditure on healthcare is USD \$13 per person per year according to the Commission on Macroeconomic and Health. Healthcare in many rural areas is either non-existent or too expensive without international aid. Total household income in impoverished regions is well below the amount needed to cover the cost of treatment and sick family member are often unable to work further increasing economic strain. As of 2013, 123 countries now have a greater than 90% coverage rate for the measles vaccine and worldwide the coverage for all vaccine preventable diseases is over 80%. Similarly, antiretroviral drugs have reduced the spread of HIV dramatically, the absolute number of deaths is slowly decreasing and the rate of spread is expected to reverse by 2015. Debilitating diseases such as polio are likely to be eradicated in the coming years but polio sufferers are often unable to find work due to their diminished motor skills, muscle failure, or paralysis.

According to the FAO, food availability has dropped rapidly in rural locations and especially in Sub-Saharan Africa after prices rose sharply in 2008. Malnutrition is a major contributing factor in both development and long term health; children who lack proper access to food during their formative years will likely be more immune-susceptible later in life. Recent controversy arises over the usage of genetically modified (GM) food. GM crops are able to grown to produce higher yields per acre and be able to survive in drought ridden and pest infested regions. Lobbying from various environmental groups has led to governmental organizations like the EU to adopt very strict regulations limiting the export value of GM crops in agrarian societies. Countries like Malawi and Zimbabwe have set up barriers to GM food donation to prevent GM crops from being introduced into their agricultural sector often prioritizing loss of exports over production of food.

Economic Opportunity

Public construction projects have helped establish wells and water purification systems giving these areas much needed access to a constant supply of fresh water. These projects offer employment opportunities to the area, training and experience for otherwise unskilled laborers, and help decrease the gap between urban and rural infrastructure development. Financial constraints since 2008 have caused

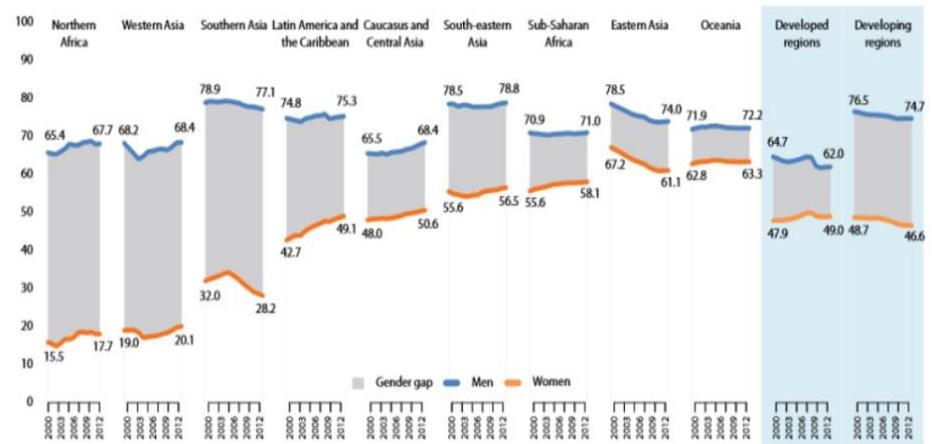
many countries to stop funding these supplementary activities as well as programs that offer rural areas health services.

Without proper vocational training

parents are more likely to engage themselves in dangerous working conditions or other forms of

vulnerable employment. It has also been shown that women are disproportionately likely to opt for vulnerable employment and occupational segregation and lack of access to social protections has resulted in them being highly underpaid. The gender gap in vulnerable employment is partly due differences in primary education, as Sub-Saharan Africa and Southern Asia have the highest gender gap in both areas, whereas Latin American and Central with relatively equal enrollment in schools sees negligible differences in vulnerable employment rates.

Employment-to-population ratio, women and men, 2000-2012 (Percentage)



Source: UN Women, MDG Gender Chart

Local and Global Politics

There has been little focus, on encouraging local government to adopt similar policies to countries like China and India, which has allowed their populations to escape poverty. The 2008 financial crisis has also shown that without the constant flow of international aid, escaping poverty becomes impossible. Although efforts have been made to help people escape absolute poverty, many populations stagnate at relative poverty rates due to the effects of

global trade and lack of economic freedom. National policies such as those implemented by the US in which it subsidized locally grown cotton for export dramatically lowered the market price of cotton. These subsidies made it effectively impossible for cotton farmers in countries like Brazil to compete in the international market. In 2002, the WTO ruled in favor of Brazil in citing that the subsidies were indeed unlawful under the international trade agreements at the time.

Major Questions to Address

1. By physically keeping young girls out of the home, schools help lower the rate of child marriages, lower the incidences of sexual assault, and increase the chances of surviving pregnancy. Similarly, properly installed water and waste management systems lower infant mortality rates, reduce the spread of waterborne diseases, and allow for the establishment of factories in impoverished communities. How can we maximize these positive externalities?
2. A lot of programs designed to help the poor have had major dependencies on international assistance. Post-2008 financial meltdown, many countries cut large portions of foreign aid packages that target the impoverished. This has led to large stagnation in the lower classes of many countries. Without appropriate international aid, it seems many programs simply cannot be sustained. What can we do to insure continuous source of funding for future programs? Is there any way we can make some projects partially or completely self-sustaining?
3. With the technological progress made in the last several decades it has been possible to provide educational material to even the most remote areas, cure or treat otherwise deadly illness, grow high yield crops in drought ridden areas, and offer entrepreneurs more opportunities to start local businesses. How can we make it viable to systematically introduce new technology in various impoverished regions?
4. Often times national policies can have unintended negative consequences for large populations of people. Religious organizations are often given tax-exempt or charity status in many countries, however some like the

Catholic Church have made misleading or even blatantly incorrect, statements about the usage of condoms and their ability to reduce the risk of transmission of HIV. Similarly environmental organizations such as Greenpeace have actively campaigned against the use of GM food. In 2002, the government of Zambia has refused to accept GM food surpluses from the USA despite a high risk of famine. What can we do to downplay the negative externalities of such organizations without diminishing their positive roles they play?

5. The lack of infrastructure in many rural areas tends to be a major impediment to economic growth. Lack of roads, electrical grids, or water and waste management systems, many households go without basic necessities and spend major portions of their day trying to find ways to obtain them. What reasonable long terms plans can we offer these communities to encourage economic growth and what short term substitutes or alternatives can we provide?

Conclusion

Poverty is both the cause and effect of many economic and sociopolitical problems. Although it is a widely researched issue with well understood mechanisms and agents finding appropriate solutions to it is by no means an easy task. The impoverished are often trapped in a very complex cycle that is hard to escape from due to the intricacies and subtleties of the issue. The decisions made by individuals to intergovernmental organizations play a role in determining how quickly a population can escape from poverty just as much as local policies and culture. Many times the combination of these matters tends to result in several positive and negative externalities that become the decisive factor in the alleviation of the suffering of the impoverished.

In short, the direct and indirect causes of poverty discussed are by no means an exhaustive list. As seen above the factors and variables involved are complex, vary in degrees of subtlety, and are often interlinked. They are far more numerous than can be properly addressed in your position papers or resolutions. You are not expected to find perfect solutions to the world's many problems just optimal ones to a limited scope that you identify as critical. Make

sure you keep the salient points in mind when discussing this topic during committee session and have done ample research on the factors that you find most relevant to the discussion. The following reports and news articles explore the separate issues in a more in-depth fashion and should help you in identifying your countries position.

Further Information

[UN MDG Report 2013](#)

[China's Evolving Poverty Reduction Agenda](#)

[Poverty Eradication](#)

[MDG Indicators](#)

[CGD-Zimbabwe Crisis Analysis](#)

[Global Partnership for Development UNDP](#)

[UNICEF Childhood Development](#)

[UNICEF Drinking Water Update 2012](#)

[World AIDS Day Report 2011](#)

[WHO STOP TB PLAN 2015](#)

[Combating Maternal and Child Malnourishment Project](#)

[UNDP on Achieving Universal Primary Education](#)

[UNESCO Approved Program and Budget 2012-2013](#)

[Are the poor being left behind?](#)

[Why economics can't explain the modern world.](#)

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“Syria crisis: Economy of Jordan's Zaatari refugee camp”. Howard Johnson BBC 12 August 2013

“New Refugee Camp in Jordan Tries to Create a Community for Syrians”. RANA F. SWEIS New York Times MAY 30, 2014

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“Towards the end of poverty” The Economist. June 1st 2013.

“Bourgeois Dignity: Why Economics Can’t Explain the Modern World” Deirdre N. McCloskez

"Basic Education and Gender Equality." UNICEF. Feb. 2014.

"Building Capacity in Science and Engineering." UNESCO. Feb. 2014.

"Child Friendly Schools." Case Study: Occupied Palestinian Territory. UNICEF

"Convention on Technical and Vocational Education." Convention on Technical and Vocational Education. UNESCO Feb. 2014.

"Education for Sustainable Development." UNESCO. Web. Feb. 2014.

"EFA Global Monitoring Report." UNESCO 2014

"ESD+TVET." Promoting Skills for Sustainable Development. UNESCO

Topic 2: Repercussions of the Oil and Gas Boom in Sub-Saharan Africa

Introduction

In a reality where developing countries energy demand grows rapidly and western worlds necessity to diversify import sources increases, the cost efficient African oil and gas become a very attractive commodity.

Currently 13 out of 48 countries in Sub-Saharan Africa jointly export over 5730 thousand barrels of crude oil per day. Additionally 3 countries in the region are natural gas exporters. The collective amount of the exported resource is 1240 billion cubic feet annually.¹ Oil rents provide for 15% of sub-Saharan Africa's total GDP with the range of 98% to 5% between the exporting countries, while natural gas rents contribute an average of 2% to their respective countries GDP.²

This big of an inflow of capital to the economy could provide substantial benefits for the exporting countries and local communities. If well managed it could provide funds for physical infrastructure development and in the long run contribute to an increase in the standard of living. Additionally the exploitation process could provide employment opportunities. However while such a capital gain has great potential the reality is that along with the growth of GDP comes increase or at least stagnation of the poverty figures. During last ten years the region experienced an average annual GDP growth rate of 4,5% amounting to a level of \$1647 GDP per capita, while the ratio of people surviving on less than \$5 a day remained at 93,5% of the population and the number of citizens living below the poverty line grew from approx. 390 million to 415 million. According to the Human Development Index only two of the exporting countries are slightly above the low human development threshold.³

Due to, technological progress, mainly in the area of extraction capabilities and a relative political stabilization of the region, it is predicted that during the next decade 12 more countries in east and west regions of sub-Saharan Africa will become oil and gas exporters supplying estimated 25 billion

¹ Independent Statistics and Analysis. U.S. Energy Information Administration

² The World Bank Open Data

International Monetary Fund 2012 "Regional Economic Outlook. Sub-Saharan Africa"

³ United Nations Development Program "Human Development Report 2013".

barrels of oil, which over the period of 30-50 years at current prices will provide approximately \$3 trillion to the least developed economies.⁴

Resource Curse

The relation between sub-Saharan Africa's abundance in energy resources and its underdevelopment can be seen as an illustration of a hypothesis called the Resource Curse, first applied in 1993 by Richard Auty and then exemplified and developed by Jeffrey Sachs and Andrew Warner in 1995. The theory states that economies with a high ratio of natural resource exports to GDP tend to have low development rates in comparison with those with scarce natural resources.⁵

Economic Factors

The resources are extracted and traded, mainly by international private actors, without benefiting the rest of the country's economy. Literature recognizes two main exogenous reasons for the existence of the resource curse phenomenon. Both are avoidable with good policies in stable economies.

The **Dutch Disease** refers to a situation in which commodity exports driving up the value of the currency, shift of production factors towards the booming sector making other parts of the economy less competitive, leading to a current-account deficit and even greater dependence on commodities.⁶ Angola is a fitting example, since in the 1970s the country greatly relies on oil production with all other sectors diminishing. This commodity accounts for over 96% of the country's exports.⁷

The second reason is the **volatility of income**, caused by the fluctuations in rates of extraction, timing of payments by corporations to states, and value of the natural resource produced. It leads to uncertainty in long term planning resulting in high levels of expenditure in good years followed by deep cuts in bad

⁴ Diamond, Larry. Mosbacher, Jack. "Petroleum to the People, Africa's Coming Resource Curse and How to Avoid It"; *Foreign Affairs* September/October 2013 issue

⁵ Sachs, Jeffrey D. Warner, Andrew M. "Natural Resource Abundance and Economic Growth" *NBER Working Paper 5398*. December 1995

⁶ The Economist. "The Dutch Disease" November 26, 1977. pp. 82-83.

The Economist. "It's Only Natural" September 9, 2010

⁷ The World Bank Open Data

years. Excessive international lending against future oil earnings additionally increases the problem.⁸ Nigeria and Côte d'Ivoire took vast loans during the oil boom in the 1970s just to finish up with a great outstanding debt after the prices fell ten years later.

Political and Institutional Factors

While analyzing this issue one must acknowledge the existence of states, abundant in energy resources, that were not affected by the resource curse. Norway, which is currently world's 9th largest oil exporter, managed the capital inflow in a way that enabled it to achieve high economic growth and standard of living. Indonesia, although not a democracy at the beginning of the oil exploitation process, succeeded by focusing on technical policies and mechanisms providing economic and social development.⁹ What distinguishes the sub-Saharan region from those countries are endogenous factors. Those are not limited to this area but here they play an especially important role.

The revenues, from oil and gas trade, add up to the already existing rents obtained in the form of foreign aid. Additionally, unlike the latter, the prior comes with no external conditions or restrictions. As a result countries become predominantly dependent on **non-tax income**, governments come to be less reliant on citizens and consequently states have little reasons to engage with the people. One of the main government accountability mechanisms falls apart.¹⁰

While according to the **Corruption** Perspectives Index 2013 sub-Saharan Africa is the second most corrupt region in the world, all but one, of the oil or gas exporting countries, are even below the region's average score of 32.5.¹¹ Corruption practices are enabled through weak institutions as well as bureaucracy and appear in two distinctive forms
Government officials embezzling financial assets directly from the national treasury or through defraud schemes.

⁸ Humphreys, Macartan. Sachs, Jeffrey D. Stiglitz, Joseph E. "Escaping the Resource Curse" pp. 2-18

⁹ "Natural Resources When Blessings Become Curses" *World Bank*

¹⁰ Diamond, Larry. Mosbacher, Jack. "Petroleum to the People, Africa's Coming Resource Curse and How to Avoid It"; *Foreign Affairs* September/October 2013 issue

¹¹ Transparency International. "The Corruption Perceptions Index 2013"

International private actors obtaining resources below market value, attempting to boost their negotiating position or seeking to meet other interests through bribery.

Corruption might also concern the management of oil or gas directly and would result in inefficient resource distribution and utilization.

Sub-Saharan Africa is ranked sixth out of seven regions in the Democracy Index [and](#) only 2 out of 12 energy resource exporting states are not authoritarian regimes.¹² According to a study by Michael J. Ross there are three factors that link **lack of democracy** and oil or gas exports

The *rentier effect* - where governments use oil and gas revenues to lower tax rates and increase spending to dampen pressures for democracy;

The *repression effect* - where governments use oil and gas revenues build up their internal security forces to ward off democratic pressures;

The *modernization effect* - the failure of the population to move into industrial and service sector jobs renders them less likely to push for democracy.¹³

Most of the **export legislation** comes from the colonial era and thus inadequate to modern political and business reality. All natural resources are property of the state, which retains its profits from extraction by granting licenses and concessions to private firms. Additionally most property ownership in the region is not legally recognized, making removing residents simple. It not only financially harms the local communities but also renounces the opportunity for additional local employment.¹⁴

The region experiences big scale **bad rent allocation**. Money even if invested than in abroad investments not benefiting the national economy or vain projects like sport stadiums instead of necessary public physical infrastructure.

Adjusting to the Case of Sub-Saharan Africa

The abundance of oil or gas and the rents from their export are not alone sufficient to become a curse. Minimizing the associated factors would increase

¹² The Economist Intelligence Unit. "Democracy index 2012" *The Economist*

¹³ Ross, Michael J. "Does Oil Hinder Democracy," *World Politics* 53 (3) (2001). pp. 325–61.

¹⁴ Boudreaux, Karol. Mennen, Tiernan. "Reverse the Curse; How Can Oil Help the Poor?" *Foreign Affairs* January/February 2014 issue

the chance of economic and social success. An integrated set of policies requires analyzing the problem from all angles and tackling different issues that turn up.

Economic Mechanisms

On grounds of certain resource exhaustion and the necessity for fostering competitiveness, it is crucial for the oil and gas exporting states to **diversify** their economy to achieve sustained long term growth. The increase of competitiveness would prompt export activity in the alternative production branches. However to make it profitable, a real exchange rate policy supporting non-oil exports would have to be adopted.¹⁵

Example of a successful **stabilization** mechanism is to set up oil funds to keep money outside of a producer economy and to smooth volatility. Such a scheme worked effectively in Norway.¹⁶

Political and Institutional Measures

One of the basic elements for ensuring social justice is the **equal distribution** of revenues. The Center for Global Development came up with oil to cash scheme, which assumes distribution of oil revenues directly to a nation's citizens as taxable income.¹⁷ Chinese investors in Africa adopted a different approach. Companies build infrastructure directly in exchange for oil cargoes or oil concessions.¹⁸

However those methods do not recompense the disproportionate harm caused to communities that inhabit land devastated in the extraction process. To effect the situation in any way, the states legal systems would first have to recognize individuals and communities claims to land in general. The government would still most likely own the natural resources located offshore but inland reserves proprietorship could be allocated according to different approaches. The most known model is the one adopted by the United States of America, where resource rights are attached to individual landownership and

¹⁵ Treviño, Juan Pedro. 2011 "Oil-Price Boom and Real Exchange Rate Appreciation: Is There Dutch Disease in the CEMAC?" *International Monetary Fund*

¹⁶ Shaxson, Nicholas. 2009 "Angola's Homegrown Answers to the "Resource Curse""

¹⁷ Center for Global Development. "Oil-to-Cash: Fighting the Resource Curse through Cash Transfers" <http://www.cgdev.org/initiative/oil-cash-fighting-resource-curse-through-cash-transfers>

¹⁸ Shaxson, Nicholas. 2009 "Angola's Homegrown Answers to the "Resource Curse""

the state gains revenue from taxing the incomes earned from their exploitation.¹⁹ However when establishing this kind of system in a poorly governed state there is a possibility that when the ownership rights will be transferred to individuals it might provoke large-scale land grabs and not contribute to the equal distribution at all. Another helpful action would be establishing regulation reducing negative impacts on the environment and advancing the development of the local community.

The international community began the process aimed boosting **transparency** in resource-rich nations with schemes like Publish What You Pay and the Extractive Industries Transparency Initiative. Additionally the International Monetary Fund and the World Bank made increasing the transparency of resource revenue a condition for multilateral aid. The task now is to ensure the states adoption and participation in those actions. Anti corruption and transparency measures within the, producing countries, legal systems could also prove very beneficial. However the enforcement of those would remain problematic, it could possibly be achieved through strengthening **government's accountability** towards the public and nations comprehension of what should rightfully benefit them.

If a government of a country abundant in oil or gas is hesitant about the fair distribution of rents from their production, than maybe it would be better to leave the resources as they are. However it is rather doubtful that such a government would concisely and willingly give up all the potential revenues, so it would have to be at the discretion of the international community and companies not to provide those countries with extraction assistance at the same time also possibly reducing their own prospective profits.²⁰

Section 1504 of the United States of America "Dodd-Frank Act" requires extractive companies listed in the U.S. to provide details of payments made to the U.S. and foreign governments. Followed by the 2010 Hong Kong Stock Exchange disclosure requirements for extractive companies, the EU "Directive on Accounting" and "Directive on Transparency" as well as other countries national

¹⁹ Boudreaux, Karol. Mennen, Tiernan. "Reverse the Curse; How Can Oil Help the Poor?" *Foreign Affairs* January/February 2014 issue

²⁰ Humphreys, Macartan. Sachs, Jeffrey D. Stiglitz, Joseph E. "Escaping the Resource Curse" pp. 2-18

regulations, the U.S. Act started the progress towards transnational extractive sector transparency policy.²¹

Challenges

When forming and proposing solutions as well as approaching negotiations one has to have in mind that the governments, of current and future oil and gas exporting states, that tend to remain eternally in power, might differ their view on the matter at hand from the one automatically adopted by the majority of the international community.

It is also important to take in to consideration the extent to which importing states can afford and want to surrender convenient resources in name of helping citizens of a different country.

Conclusion

According to the UN Resolution 1803 (XVII) on “Permanent Sovereignty over Natural Resources”, which states that “The right of peoples and nations to permanent sovereignty over their natural wealth and resources must be exercised in the interest of their national development and of the well-being of the people of the State concerned”²² every action, concerning the revenues from oil and gas trade, that is not for the benefit of the producing country and its citizens is an act against the international communities recommendations.

Apart from poverty and lack of social or economic development the resource curse can also have several other repercussions like labor rights violation or environmental degradation as well as more sever ones, namely civil wars and armed conflict. Additionally according to predictions, the discussed problem is jet to affect more countries in the sub-Saharan region than it did till now. Proposing suitable solutions could not only improve the existing situation but also prevent it from happening again.

Implementing policies directly transferred from states that dealt with the resource curse might not always work on account of regional specific factors.

²¹ Ushie, Vanessa. 2013 “Policy Brief. Dodd-Frank 1504 and Extractive Sector Governance in Africa” *The North-South Institute*

²² General Assembly resolution 1803 (XVII) of 14 December 1962 (Permanent sovereignty over natural resources)

Successful management of oil and gas trade revenues requires a integrated set of policies and institutions.

Questions

1. Most crude oil and dry natural gas import restrictions are made on national basis, could a multilateral international approach be established?
2. Sub-Saharan Africa's lack of capital and technological resources necessitates cooperation with private actor in the production process and trade. With the knowledge advantage on the corporations side and considering not only the revenues received by the state but also the way they adapt to the changing economic reality of the energy sector, how to ensure that the countries will get a fair and beneficial contract?
3. Is an oil/gas to cash scheme feasible? How about the infrastructure for concessions idea? Which one could produce better results? Are there any other options for ensuring fair and equal distribution of revenues? Would decentralization of revenue distribution help?
4. Are there measures that could be taken to strengthen extractive sector companies' compliance with the international standards of corporate social responsibility?
5. To what extent can the transparency level of exporting countries' institutions be influenced? Will a transparency policy enforced through national regulations of the extractive companies origin countries be effective? Would such a policy need any reciprocation from the exporting countries government?
6. What land ownership model would best fit the sub-Saharan Africa's case?

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Weijers, Hanna. 2009 "Distribution of natural resources in third world countries : the curse of oil and diamonds." *Wolf Legal Publishers* (adequate volumes)

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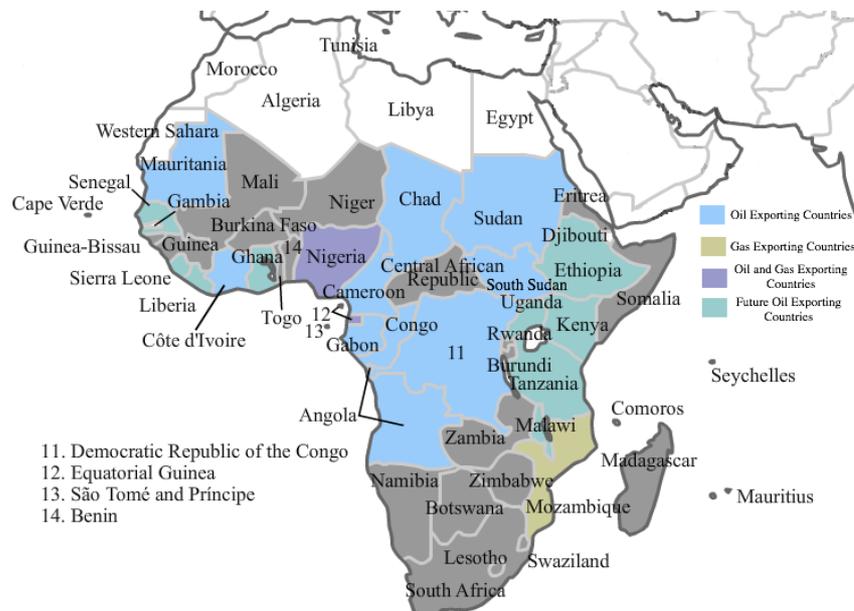
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The World Bank Open Data <http://data.worldbank.org/> (last visited on 15th May 2014)

Appendix 1: Map of Present and Future Oil and Gas Exporters



Appendix 2: Oil and Gas Exporting Countries Data

Existing Exporters	Exports of Crude Oil 2010 (Thousand Barrels Per Day)	Commodity Exports as % of GDP 2012	GDP Growth Rate 2012	Human Development Index 2012** (Scale 0-1)	2007-2012 HDI Rank Change	Corruption Perceptions Index 2013 (Scale 0-100)	Democracy Index *** (Scale 0- 10)
Nigeria	2341	27	6,7	0,471	1	25	3,77
Angola	1928	43	6,8	0,508	1	23	3,35
Sudan	389	5	-10,1	0,414	-3	11	2,38
Equatorial Guinea	319	48	2,5	0,554	-2	19	1,83
Congo	288	71	3,8	0,534	-1	22	2,89
Gabon	225	43	5,6	0,683	0	34	3,56
Chad	126	26	8,9	0,340	-2	19	1,62
Cameroon	56	8	4,6	0,495	1	25	3,44
Cote d'Ivoire (Ivory Coast)	32	4	9,5	0,432	0	27	3,25
Democratic Republic of the Congo	22	4	7,2	0,304	-3	22	1,92
Mauritania	7	*	7,6	0,467	-3	30	4,17
South Sudan	*	98	-47,6	*	*	14	*
Sub-Saharan Africa	5733	15	4,3	0,475		av. 25	4,33

	Exports of Dry Natural Gas 2012 (Billion Cubic Feet)			
Equatorial Guinea	167	*		
Mozambique	127	3	0,327	30
Nigeria	946	2		

Future Exporters

* no data available

** low human development threshold = 0,535

*** authoritarian regime threshold = 3,9

Ethiopia	Kenya	Sierra Leone	Mauritius
Gambia	Liberia	Tanzania	Sao Tome and Principe
Ghana	Malawi	Uganda	Senegal

Topic 3: Water Scarcity

Just as water is central to every aspect of life on earth, it must lie at the heart of the new vision we forge for sustainable development for the century ahead.

- Ban Ki-moon

Introduction

Three Simple Facts about Water:

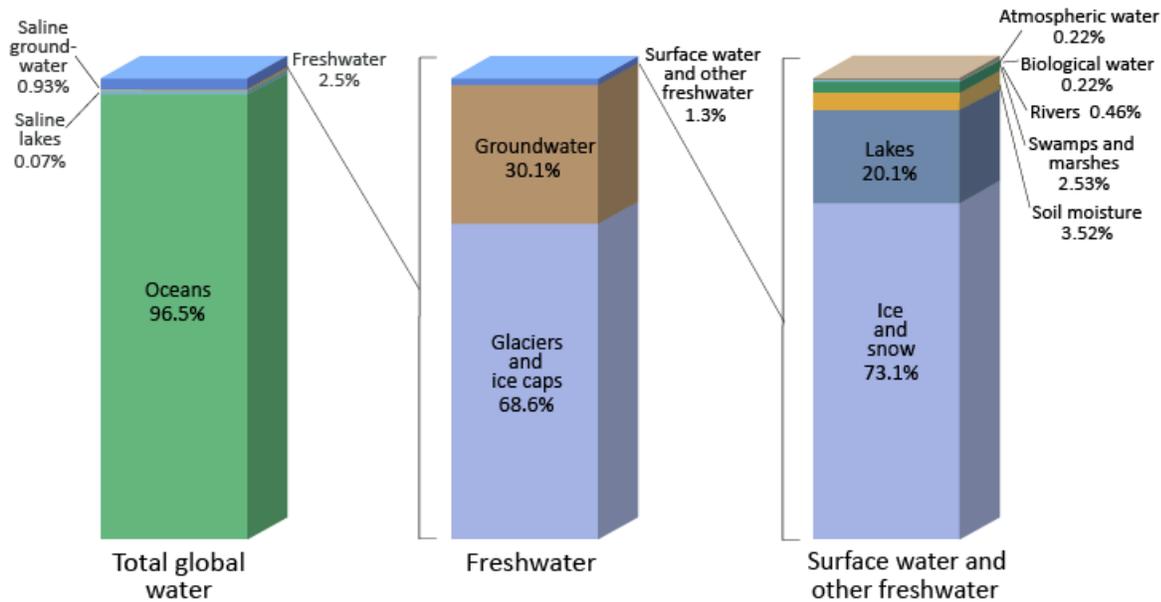
1. An average person drinks three to four litres of water per day. That adds up to 1095 – 1460 litres per person per year. This number does not take into account other water uses such as cleaning, cooking, agriculture or industrial production.
2. Water is not distributed equally on the planet. Some regions can rely on a huge amount of freshwater, while in others people use most of their time and walk long distances to find clean freshwater sources.
3. Both of the above factors are not solely responsible for water scarcity. Most people are “used” to the problems concerning water in their own environment and found strategies to deal with them. The difficulties occur when other factors like, urbanization, climate change and a growing population come into action.

Most of the world's population lives in an urban environment due to several pull and push factors like economic factors (work and income), quality of living, security and family. Work in the city can often provide a higher income than one in the countryside. With a growing world population the movement will be even larger since self-sustaining agriculture has limited resources in space and quantity. Therefore cities are or will become the centres of water consumption in the world. They have to provide infrastructure for water transport, use and disposal. But in most cities in the undeveloped world this infrastructure lacks reliability if it even exists at all. Water is often transported long distances from sources outside the city and becomes not accessible for people living in the periphery. Furthermore bad water management often contributes to excessive waste of water.

The amount of water is fixed and as mentioned before unequally spread around the globe. Only 2.5% of water is freshwater, 30.8% of that amount is groundwater (0, 77% of

the total amount of water) and 0.3 % (0.0075%) is easy accessible water in rivers and lakes. The rest of 68.8% (1,72%) is stored in glaciers¹².

Distribution of Earth's Water



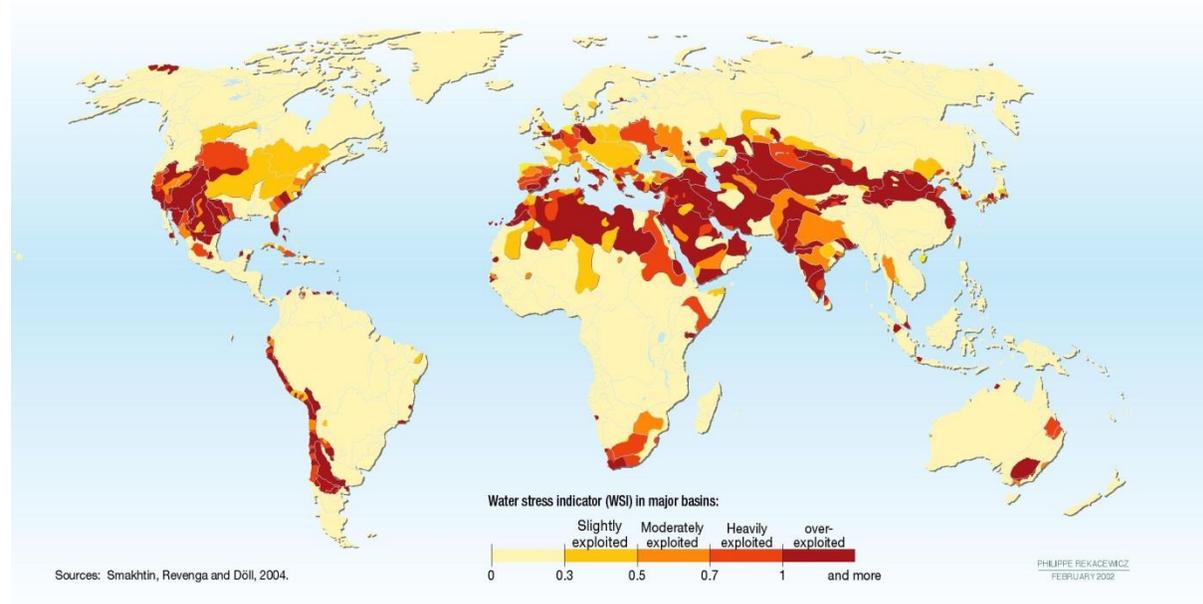
Source: Igor Shiklomanov's chapter "World fresh water resources" in Peter H. Gleick (editor), 1993, *Water in Crisis: A Guide to the World's Fresh Water Resources*.

In addition, due to pollution caused by major floods, water aquifers can become unusable. Droughts also pose a great threat since they inhibit the natural regeneration of aquifers. Last but not least a growing world population causes a growth in domestic water use per capita.

Considering the global trends and developments in the 21st century, the international community will be dealing with severe water shortage in the future. Some regions are already affected by water scarcity. The United Nations are addressing water scarcity as part of their Millennium Development Goals. But first it is important to take a look at the difficulties of water scarcity.

What is Water Scarcity?

There are three different types of water scarcity: Water Stress, Water Shortage/Deficits, Water Crisis. All of them differ in severity.



Water Stress occurs when a region experiences difficulty with obtaining usable freshwater sources during a period of time, which could lead to further depletion and deterioration of available water sources. This means that lakes, rivers or aquifers can provide sufficient water supply but the depletion rate is higher than the recovery rate. The water source gets under stress. The Middle East North Africa (MENA) region is the most water stressed region in the world according to the UN.

Water shortage or water deficits come from droughts and floods. In case of floods the water is polluted and not usable for domestic demand. Fighting water scarcity also includes post catastrophe recovery for regions already under water shortage and suffering from floods.

However water deficits can also be caused by increased pollution due to misuse of pesticides or fertilizers. Another aspect is increased human demand and overuse due to changes in the ecosystem, which forces users to consume more water.

Water crisis is a situation when demand is higher than the available, unpolluted and portable amount of water. In opposite to the water shortage/deficits the high demand

is inherent for the whole region. An economic explanation of water crisis is that the amount of water is lower than demand because of a lack of property rights, government regulations and/or too many subsidies in the water sectors. Those cause low prices and foster consumption on a level, which is higher than the recovery rate.

The Global situation concerning water crises is striking. About 884 million people have inadequate access to safe drinking water. 2.5 billion People lack access to water for sanitation and waste disposal. The excessive use of groundwater is diminishing agricultural yields and causes starvation. It is likely that regional conflicts can occur if the water is scarce causing people to suffer from warfare.

What are the Reasons for Water Scarcity?

There are two major factors, which drive water scarcity. First the growing demand and use of freshwater caused by factors such as high birth rate and a growing population. Secondly depletion of usable freshwater sources due to their wrong or excessive use for agriculture.

For the purpose of analysing the situation it is important to separate different types of water scarcity around the world. It can be the result of either physical or economic factors. Physical water scarcity occurs when regional demand cannot be fulfilled sufficiently by the available water sources. It is estimated that 1.2 billion people are affected by physical water scarcity. Additionally 500 million people approach a state of physical water scarcity. On the other hand economic water scarcity is the result of poor management of the sufficient available water sources. It affects one quarter of the world population and is often the result of a lack of investment in infrastructure or technology. Nearly 1.6 billion people suffer from economic water scarcity.

In the past the ECOSOC established a foundation of five attributes for water security. It is a human right to have safe, sufficient, acceptable, physical accessible and affordable access to water for domestic and personal use.

Water scarcity is furthermore addressed in several Millennium Development Goals (MDG)¹:

- MDG 1: Access to water for domestic and productive uses (agriculture, industry and other economic activities) has a direct impact on poverty and food security.

- MDG 2: Incidence of catastrophic but often recurrent events, such as droughts, interrupts educational attainment
- MDG 3: Access to water, in particular in conditions of scarce resources, has important gender related implications, which affects the social and economic capital of women in terms of leadership, earnings and networking opportunities.
- MDG 4 and 5: Equitable, reliable water resources management programmes reduce poor people's vulnerability to shocks, which in turn gives them more secure and fruitful livelihoods to draw upon in caring for their children.
- MDG 6: Access to water, and improved water and wastewater management in human settlements, reduce transmission risks of mosquito-borne illnesses, such as malaria and dengue fever.
- MDG 7: Adequate treatment of wastewater contributes to less pressure on freshwater resources, helping to protect human and environmental health.
- MDG 8: Water scarcity increasingly calls for strengthened international cooperation in the field of technologies for enhanced water productivity, financing opportunities, and an improved environment to share the benefits of scarce water management.

Threats to Water Scarcity

Human demand for water is motivated not only by the vital need for hydration of the human body, but also to maintain a suitable level of hygiene or cook as well as for agricultural or industrial needs.

Water supply is in danger for several reasons. Those can be categorized into supply and demand side reasons.

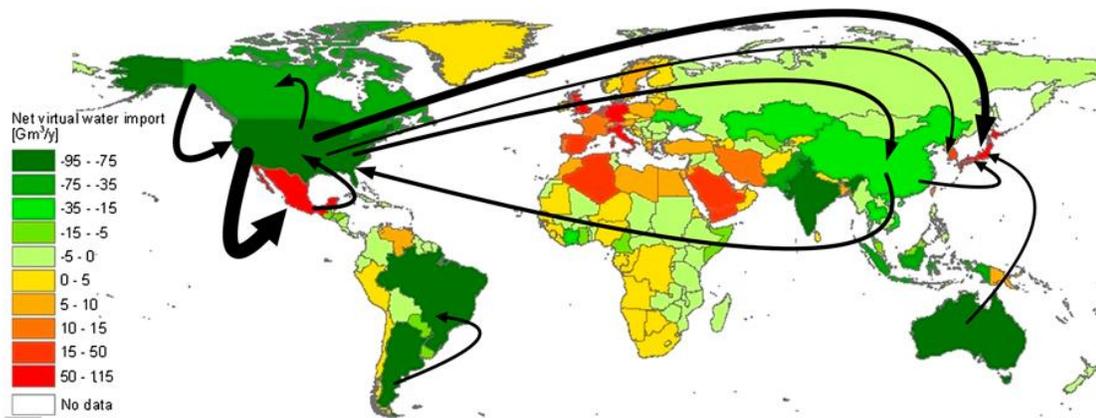
Supply Side⁶:

- **Recharge rate is lower than utilization rate:** Users of freshwater resources are depleting the source faster than it recovers. The reason can be a low value (price) of water or wrong information and a lack of knowledge of how to use it in an efficient way.
- **Quality of water:** The quality of the water is important for the purpose of using it for human demands. In many cases the water is not good enough for cooking, hygiene and drinking. Much of the world's fresh water is being degraded by pollution (industrial or agricultural)

- **Scarcity for the global poor:** In regions with economic scarcity and an applied market for water, the resource is often scarce and not affordable for people with low incomes.

Demand Side⁶:

- **Increasing number of people on the planet:** More people consume more water for drinking and food preparation. The growing population is putting stress on already short water sources.
- **Geography:** High-demand users are often concentrated in regions that cannot sustain demand levels. This also links to the phenomenon of “virtual water”.



Virtual water is water used to produce goods. It is not directly consumed by the user but indirectly through commodities production process. The problem is that goods with a high consumption of water are supporting water scarcity if they are produced in already arid regions. For example: It is cheaper for Saudi Arabia to produce milk within in Saudi Arabia than to import milk from Europe. But the amount of water used to produce a glass of milk is ten times higher in UAE than in Europe. Nevertheless milk products are exported to Europe from Saudi Arabia and worsen the situation in Saudi Arabia. From an economic perspective the milk price lacks in ability to internalize the externalities (damage caused e.g. by water consumption) within the price.

- **Technologies:** In some cases it is cheaper to use a technology, which wastes more water than alternative ones because of lower investment costs. Once again the revenue price is not taking externalities into account.
- **Legal rules:** Beside inadequate price mechanisms as mentioned above, legal rules that set few limits on excessive use contribute to water scarcity.

Water Pollution

One reason for economic water scarcity is bad discharge of used water. Wrong water disposal can pollute aquifers, rivers and lakes. Major sources of water pollution are human settlements and industrial and agricultural activities.

Negative factors are⁸:

- Unhygienic disposal
- Inadequate treatment of human and livestock wastes
- Deficient management and treatment of industrial residues
- Inappropriate agricultural practices and unsafe solid waste discharge

Water pollution is due not only to the lack of regulatory laws, but also public awareness and ability to discharge waste (waters) in a clean way. There are several possible policy interventions to achieve solutions concerning water quality⁸:

1. Improving Understanding of Water Quality
2. Effective communication, education and advocacy
3. Financial and institutional arrangements
4. Technology and infrastructure

Improving Understanding of Water Quality includes a broad view of the status quo concerning pollution, depletion and recharge and requires an improved monitoring of water sources. It is also important to collect data about water use, quality and quantity of water sources and to analyse the data on a global perspective and not only limited to certain regions. For this purpose it is important to have international standards and guidelines to collect and analyse the data. Last it is important to include scenario building for different situations and events, for example to be prepared in case of droughts or floods⁸.

Effective Communication, education and advocacy are necessary to build sustainable knowledge for people suffering under water scarcity. This measure is not only limited to teaching how to deal with the issue but further convincing people to save water for the future⁸.

Financial and institutional arrangements as a milestone to improve quality of water supply contain rules and procedures to improve the infrastructure for water supply and disposal. It is necessary that rural areas are supported and infrastructure projects have the financial power to build a lasting supply for the future. It is in the best interest of ecology and the future generations to use not the cheapest but the best technology and infrastructure. As mentioned before, the externalities have to be internalized into the price of the product. Hence the (cheap) water consuming technology is in the end more expensive than the (expensive) water saving technology⁸. Furthermore the infrastructure has to include several development scenarios for the future.

Case as an Example of Water Scarcity: Israel

Israel as part of MENA region is constantly under water stress. It suffers from physical water stress because of its arid geography. With wetlands and swamps in the North, the Mediterranean Sea in the west and the Jordan River, Sea of Galilee and the Golan Heights in the east, the northern part of Israel can rely on several freshwater sources. On the contrary the south with the Dead Sea and the Negev desert is the most arid part of Israel.

The country can use several sources of water¹⁰:

- Groundwater and aquifers
- Natural surface reservoirs
- Storm run-off
- Recycled domestic and industrial effluent

The problems of the Israeli water supply are significant. Because of excess water pumping for example from the Jordan River, the Israelis are harming their natural water potential. Hence the water level at the Dead Sea is constantly sinking. The reasons for the shrinking water level are excessive usage of the Jordan River for the Jordanian and Israeli

water supply. In addition industrial effluents pollute aquifers and make the water unusable for further domestic or industrial use.

Changes in Israel's water policy are inhibited by three major factors contradictory to each other.

First is a set of convictions that still influence the Israeli-Jewish society. This is the foundation of the Jewish state in a way that the first Jewish settlers coming with the waves of aliyah, in times of the British mandate started to turn arid land, which was not usable for agriculture at all, into farmland to support the building of a Jewish state.

The second factor is the people's perception of the nature of the Israeli-Arab conflict, since the general opinion describes functional advantages to agriculture in its use as a weapon in the territorial struggle that is at the core of the conflict. Both parties claim land to contribute it to the substance of national power for the sake of the territories and natural resources. This factor is found on both sides of the conflict parties.

Last but not least, the third factor concerns the institutional and statutory arrangements within the government. In the past the Israeli government enacted laws to gain control over the country's water resources, in order to fulfil aims concerning rural settlement and agriculture. However this "Water Act" was not successful in means of gaining back control of water sources. The Water Act claims that water sources are public property controlled by the state and intended for public use. It states that water does not belong to private owners and there are no private rights. But the exception to this rule of law is if the private possession already existed before the publication of the law, the water sources remains private. For regulative issues a "Water board" was established to decide about quantity of extraction, allocation and price. Since the water price is crucial for the success of the agricultural policy the board lacks in realistic pricing of water to farmers. Additionally most of the representatives are from the agricultural sector¹¹.

A proposed solution for this situation includes four steps¹¹:

- Purify all types of urban water sufficiently to make them suitable for agricultural recycling
- Limit the type of cultivation requiring fresh water
- Direct farming to those areas where its harm to the ground water will be minimal

- Gradually give the areas lying above the main national aquifers over to non-agricultural uses such as forest, national parks and nature reserves. The aim of that measure is an active recreation of natural surroundings.

Although every example of water scarcity is different, and although the case of Israel cannot be applied for every state or region, it gives an idea of what is important to combat water scarcity and fulfil the MDGs for a better future.

Conclusion

For the further discussion in the committee consider the current situation in your country and in other regions on a global level. Also take the aims of the MDGs into consideration. How can they be achieved in the means to fight water scarcity? What can a possible contribution of my country be?

To summarize the topic we therefore cite the World Health Organization with 10 facts about water scarcity⁵:

- Fact 1 - Water scarcity occurs even in areas where there is plenty of rainfall or freshwater. How water is conserved, used and distributed in communities and the quality of the water available can determine if there is enough to meet the demands of households, farms, industry and the environment.
- Fact 2 - Water scarcity affects one in three people on every continent of the globe. The situation is getting worse as needs for water rise along with population growth, urbanization and increases in household and industrial uses.
- Fact 3 - Almost one fifth of the world's population (about 1.2 billion people) live in areas where the water is physically scarce. One quarter of the global population also live in developing countries that face water shortages due to a lack of infrastructure to fetch water from rivers and aquifers.
- Fact 4 - Water scarcity forces people to rely on unsafe sources of drinking water. It also means they cannot bathe or clean their clothes or homes properly.
- Fact 5 - Poor water quality can increase the risk of such diarrhoeal diseases as cholera, typhoid fever and dysentery, and other water-borne infections. Water scarcity can lead to diseases such as trachoma (an eye infection that can lead to blindness), plague and typhus.

- Fact 6 - Water scarcity encourages people to store water in their homes. This can increase the risk of household water contamination and provide breeding grounds for mosquitoes - which are carriers of dengue fever, malaria and other diseases.
- Fact 7 - Water scarcity underscores the need for better water management. Good water management also reduces breeding sites for such insects as mosquitoes that can transmit diseases and prevents the spread of water-borne infections such as Schistosomiasis, a severe illness.
- Fact 8 - A lack of water has driven up the use of wastewater for agricultural production in poor urban and rural communities. More than 10% of people worldwide consume foods irrigated by wastewater that can contain chemicals or disease-causing organisms.
- Fact 9 - Millennium Development Goal number 7, target 10 aims to halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation. Water scarcity could threaten progress to reach this target.
- Fact 10 - Water is an essential resource to sustain life. As governments and community organizations make it a priority to deliver adequate supplies of quality water to people, individuals can help by learning how to conserve and protect the resource in their daily lives.

Additional Reading

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<http://www.sustainable-sanitation-alliance.org/>

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