
Resource Booklet

READ THESE INSTRUCTIONS FIRST

Guidance for teachers

This Resource Booklet contains stimulus material to be used by candidates preparing their presentation for 9777/9766/1340, Component 03. One copy should be given to each candidate.

Presentations must be prepared in a four-week period.

The Presentation is marked out of 40.

Instructions to Candidates

- You should use the enclosed stimulus material to help you identify the subject for your presentation.
- Your presentation should attempt to answer a question.
- Your presentation must address alternative perspectives on the question you select and must engage directly with an issue, an assumption, a piece of evidence and/or a line of reasoning (explicit or implicit) in one or more of the documents within this Booklet (i.e. you should not just pick an individual word or phrase which is not central to the reasoning in or the issues covered by the documents).
- Include in your presentation an explanation of how it relates to these pre-release materials.
- Your presentation should be designed for a non-specialist audience.
- Originality in interpretation is welcomed.
- Your presentation may be prepared in a variety of formats (e.g. PowerPoint, weblog or web pages) and your submission must include a verbatim transcript of the presentation.
- The speaking or running time of your presentation should be a maximum of 15 minutes.
- All work must be your own. Any material that is not your own must be acknowledged, and quotations referenced.

This document consists of **10** printed pages.

Document 1

'The world's most valuable stuff.

Mostly because of farming, water is increasingly scarce. Managing it better could help.'

***The Economist*, a UK-based international news magazine, 20 May 2010**

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<http://www.economist.com/node/16163366>

Document 2**Extracts from 'The Pain of Water.'****A speech by Loïc Fauchon, President of the World Water Council, given to the 15th African Water Association Congress, 15 March 2010**

What unites us, what brings us together is a common will to eradicate what I call the 'pain of water', the pain that so many African men and women experience every day because they do not have access to water and sanitation.

The first challenge we must face today is demographic growth, especially in Africa with one billion inhabitants today and twice as many in 2050.

The second challenge lies in controlling rapid urbanization and growing tensions in coastal areas, with increasingly large and numerous mega-cities. These mega-cities have enormous domestic and industrial water needs which create severe and hazardous pollution downstream – so many time bombs that cannot be easily defused.

The third challenge is obviously the food crisis. Population growth, improving living standards, changes in eating habits, all contribute to an increase in water demand in agriculture. This results in significant waste water production and overall water loss which adds to increasing tensions over water resources. And of course, climate change could add to these enormous challenges.

At this very time in the history of mankind, we are faced with a major challenge: to enhance the value of water resources, and to protect them. The use of water is not confined to humans and human activities alone. Hence, a harmonious, albeit rigorous way to share water between humans and nature, must be reached and maintained.

This is why I reiterate that "the time of easy water is over". We have understood that future action in the field of water will be based on two key principles:

First, the future of water does not only rest on technological progress, but increasingly on political commitments.

Second, resolving tensions over water resources does not only rest on increasing water supply, but more and more on regulating water demand. This regulation implies a fundamental change in habits and behaviours.

In order to achieve this, we must establish a stronger relationship between water and energy. Today, on behalf of the World Water Council, I would like to suggest that you select in Africa, country by country, theme by theme, ten of the most realistic innovative solutions. Together we will seek funds for implementing these new solutions. One thing is certain: we need more money for water and energy in Africa.

Other important issues are the maintenance of water facilities, and the provision of institutions that can both develop and maintain capacity. The governance issue is also essential, because there is not just one, but several models of governance in Africa.

Help us identify these solutions and the ways to implement them. Be more than ever the "voices of water" that will speak for Africa. My dear friends, let's give water a chance.

Document 3

Adapted from ‘Billionaire Thugs Plot To Steal California’s Water And Everything They Tell You Is A Lie.’

A blog on a news website now based in the US, 8 January 2010

Yasha Levine

We’ve been lied to for years now about the severity of California’s water shortage. The media and state officials have been ringing the alarm, warning that the state was in the grips of quite possibly the “worst California drought in modern history,” when in fact the state nearly pulled in its average rainfall in 2009. The fear-mongering is about to go into overdrive, as powerful interests start whipping up fears of drought, setting up the Golden State for a corporate water grab.

One of the big boosters promoting the drought scare is Governor Schwarzenegger, who declared a state of emergency in early 2009, and promised to reduce water deliveries across the state by a whopping 80 percent.

Such a huge cutback is alarming for a state in which most of the population lives hundreds of miles away from water sources and is dependent on a gargantuan aqueduct system for basic survival. So journalists seized on this juicy disaster-in-progress story, hitting their readers with heavy-handed images of drought and suffering that seemed more in line with something filed on a UN humanitarian mission in Somalia than news from the heart of California.

Has the drought really been that bad? According to the November/December 2009 issue of *Mother Jones*, yes, it has: “Farmers are selling prized almond trees for firewood, fields are reverting to weed, and farm workers who once fled droughts in Mexico are overwhelming food banks. In short, the valley is becoming what an earlier generation of refugees thought they’d escaped: an ecological catastrophe in the middle of a social and economic one – a 21st century Dust Bowl.” A *60 Minutes* recent segment on California’s water crisis agreed, proclaiming: “You don’t have to go to Africa or the Middle East to see how much the planet is running dry. Just go to California.” *The New York Times*, *Los Angeles Times*, McClatchy’s, the *Wall Street Journal* – all have sung the same tune.

When left, right, print, broadcast and mainstream media outlets agree, it has to be true, right? Well, not exactly. Here’s what an end-of-the-year update published in November 2009 by the US Bureau of Reclamation had to say about the drought: precipitation in 2009 was about 94 percent of average in Northern California, which is pretty much the only region that matters since it is where three-quarters of the state’s water comes from. Ninety-four percent of average? That does not sound like severe drought conditions at all. But don’t tell that to California’s Department of Water Resources, which still has a huge “Drought Condition Severe” orange alert plastered on its Web site.

The power of simple fact-checking aside, why would California officials exaggerate – if not outright lie – about the drought? Well, the issue here is less about the drought itself and more about what a drought – real or not – can help achieve. If there is one thing 2009 revealed about California’s “action hero” governor, it’s that he is eagerly willing to serve as the front man for the sleaziest, most crooked business cartel in the state: a *de facto* water oligarchy made up of billionaire corporate farmers who run vast stretches of the state like their own personal fiefdoms, exploiting migrant workers for slave labor and soaking the taxpayers for billions of dollars in subsidies every year. And like all good businessmen, they aren’t letting a good mini-crisis go to waste. Their objective is to whip up fears of a drought-related calamity to push through a “solution” they’ve been dreaming about for the past five decades: a multi-billion-dollar aqueduct the width of the Panama Canal that would give them near total control of more than half of California’s water supplies.

In the convoluted world of California water politics, nothing is ever what it seems. And this time, it appears that even the most well-meaning of journalists fighting the good fight fell hook, line and sinker for the propaganda spun out by California’s well-greased water oligarchy. But if everyone got something

as basic as the premise of California's supposed water crisis – the drought – wrong, what else did they miss? Turns out, quite a bit. With no real drought in California, a lot of the myths, falsehoods and outright lies meant to stir up the masses might no longer make sense. On the other hand, just because the state has rain doesn't mean the state can't run out of water, not with the way corporate farmers are ramping up the pumping of the state's increasingly-overtapped water supplies. So here are some key myths about water:

Myth: Urban water conservation is key in protecting California's water resources

Schwarzenegger's mandate that urban water use be cut by 20 percent has earned the governor a lot of green cred, but few people realize that his plan for water conservation is actually a forced wealth transfer scheme in an environmentalist disguise. Conservation is a good idea, but it won't do much good for California, no matter how diligent residents are about turning off the tap while brushing or the number of low-flush toilets they install, not unless farmers are forced to conserve water as well.

It is a simple matter of discrimination. Why is the agricultural industry exempted from mandatory conservation when it consumes an unreal 80 percent of California's water? There won't be much conservation going on even if every living soul in California up and moves to another state. Because no matter how much water city dwellers save, it'll be sucked up by wealthy corporate farmers who are always on the lookout for more taxpayer-subsidized wet wealth. And with water trading for a minimum at ten times what they pay for it on the open market, every gallon a city dweller conserves will end up as cash in the personal bank account of some wealthy corporate farmers. It's all part of the master plan because, even as the governor talks up urban conservation, he tries his darnedest to get them more water.

Myth: Water shortages threaten to wipe out California's agricultural industry, causing a chain reaction that will cripple the state's economy and raise food prices around the country, maybe even the world

It's true, a total meltdown of California's agricultural industry, the largest in the United States, would be bad news for everyone involved. But the problem with this apocalyptic domino effect, which pops up as a talking point on Schwarzenegger's press releases and is parroted by the likes of Bloomberg and the *Wall Street Journal*, is a pesky thing called reality. Most irrigation districts have been getting their water on schedule. And because the drought has only affected a tiny sliver – about two percent – of California's total farmland, most of which happens to be some of the most heavily-subsidized growing operations in the state, any "multiplier effect" is bound to be limited, if noticeable at all.

Take Westlands Water District, where a sizable chunk of the state's fallowed farmland is concentrated. The district produces about \$1 billion in gross income a year, \$750 million of which is funded by water subsidies. Add to that hundreds of millions more in direct crop subsidies, and pretty soon the government ends up funding most, if not all of Westlands' economic output. Even if Westlands farmers weren't such welfare queens, it would be hard to get worked up even if the entire old billionaire club went under. After all, their entire output amounts to one-half of one percent of California's \$1.8 trillion. And we're not talking about missing out on vital crops here: who'd even notice an uptick in almond prices?

Document 4

Adapted from 'The Human Rights Based Approach to Development.'

A report produced by the charity Water Aid for a UN workshop in Georgia, 2004

A human rights approach to development is one which:

- puts people first and promotes human-centred development
- stresses liberty, equality and empowerment
- recognises the inherent dignity of every human being without distinction
- recognises and promotes equality between women and men, between minority and majority
- promotes equal opportunities and choices for all so that everyone can develop their unique potential and have a chance to contribute to development and society
- promotes national and international systems based on economic equity, equitable access to public resources, and social justice
- promotes mutual respect between peoples as a basis for justice and conflict prevention and resolution.

Such an approach would identify the plight of people with disabilities unable to collect their own water or access public sanitation facilities. It would highlight the problems facing the elderly, particularly widowers and widows. It will also point to the fact that poor people who have lost their families, whether through conflict or natural disaster, are particularly vulnerable in urban areas where they may be unable to rely on the kind of community support more usual in rural areas.

We believe that water and sanitation make a vital contribution to poverty elimination. A lack of water and sanitation clearly has an impact on the enjoyment of other human rights, such as the rights to education, health and work, which form such an essential basis for poverty elimination and human development.

There is an emerging international consensus on the issues of water management including agreement that:

- Water is key to development
- Water is a key social and economic resource for any nation
- The right to water must be protected for equity as well as sustainable development
- Water is key to improved health, improved nutrition and quality of life
- The private-public partnership is essential for development of the water resources
- Community based management is essential to conserve, properly utilise and develop water resources
- Sustainable water resource development is possible only through an integrated approach to soil, water, forest and livestock.

This final point of sustainability is also important in the context of protecting the rights of future generations to sustainability of the world's water resources and to inherit a clean and healthy environment.

Document 5**Adapted from 'Why development aid has failed.'****An article on the website of a UK-based libertarian think tank, April 2010****Sam Bowman**

Britain's international development policymakers should heed the medical maxim *primum non nocere* – first, do no harm. The most important consideration for the future must be to avoid making the situation in Africa worse than it already is.

Development aid has been central to UK development policy since decolonization in the 1960s. The purpose of this aid was to help recipients grow economically, but it has had the opposite effect – with few exceptions, African countries' economic performance has diverged from the rest of the world since the 1960s.

Development aid has had damaging unforeseen consequences because it is a top-down solution. Development policies are conceived in European capitals, far removed from the places where they will be implemented. This often has tragic and ludicrous consequences, such as gifts of mosquito nets to African countries driving the indigenous mosquito net industries out of business. William Easterly discusses a similar case of free mosquito nets being misused as wedding dresses, among other things.

Humanitarian aid can have particularly dangerous consequences, with food aid undercutting local farmers and prolonging famines. Top-down solutions can never take into account the countless unforeseeable results of their actions, and frequently cause more harm than good.

Aid props up tyrannical governments who would otherwise collapse under the weight of their own imploding economies. Cash injections from the West, even if earmarked for worthy projects, can be diverted to the military and corrupt projects. The 1985 famine that Live Aid was held to relieve was caused by the Ethiopian government's war against domestic opposition. Recent allegations suggest that the Ethiopian government and rebel groups appropriated the aid raised by the concert, exacerbating the famine in the long run. These perverse consequences of a seemingly noble event like Live Aid demonstrate how easily aid money can be misused.

Africa in particular has suffered from governments that have implemented extremely harmful interventionist and collectivist policies (such as in Tanzania, Ethiopia and Zimbabwe) that have inhibited wealth creation. By rewarding poverty with aid, African governments have had no incentive to encourage growth in their own states and have become more dependent for money on the whims of Western donors than on the economic health of their people. They have thus had no incentive to promote wealth-creating policies in their own countries. The thinking behind development aid is economically misguided: businesses and entrepreneurs create wealth, not governments.

Does all this mean that Britain should give up its efforts to help eliminate poverty? No – but there is a fundamental problem with the current aid-heavy approach to international development.

Document 6

Adapted from 'Nile Water Politics: Uganda in Dilemma.'

An article on the website of a Mauritius-based online distributor of African news, 19 May 2009

Gerald Tenywa

The first time he heard about shadoofs was way back in school. His teacher demonstrated it as a simple device used to raise water from one level to another. He explained it as an ancient technology used in Egypt for raising water for irrigation from the River Nile.

It stuck in the mind of Amon Muzoora, a former MP of Rwampara. "It had a pole that looked like a see-saw. The suspended pole had a stone at one end and a bucket at the other," Muzoora tells of his school lesson that left him amazed. But when his turn came to visit Egypt, he did not find the shadoofs. Egyptians have evolved superior technologies such as the Aswan High Dam to irrigate the vast desert. However, the technology has come with many challenges that have given sleepless nights to politicians in Egypt and other countries sharing the Nile.

"Can you imagine that Uganda and other countries which harbour the source of all this water cannot command responsibility and authority over the Nile?" asked Muzoora. "We need to come together to do something about this kind of unfairness."

Under the 1929 agreement which was re-affirmed in 1959, no person or persons, companies or government shall build dams without the permission of the Egyptians.

"This means that if you want to use water from Kyoga to irrigate, you cannot proceed until the Egyptians consent," he says. "In the Nile agreements, there is no water left for Uganda and other countries to use for irrigation."

In the 1959 agreement between Egypt and Sudan, Egypt walked away with 70% (55.5 billion cubic metres of water) and Sudan took 30% (18.5 billion cubic metres of water) of the Nile water.

Other agreements relating to the Nile assumed that the upper river states did not need the Nile for irrigation. "The basic assumption here was that the upper basin states would always use rain-fed agriculture," says a report. "This led to the attempt by the lower most river states to appropriate all the waters of the Nile, thereby ignoring the interests of the upper river states."

Muzoora stood up against the lopsided agreements and moved a motion in Parliament to repeal colonial laws on the Nile. He was stepping in the footsteps of Tanzania's former president Julius Nyerere, who declared that the treaties were null and void.

"I moved a motion in Parliament because all the agreements were not in the interest of Uganda," says Muzoora. "But there were people who were sharing the same bed with Egypt; I left Parliament before the issue was concluded."

Egypt needs to use the world's longest river flowing about 6,677km through eastern Africa to the Mediterranean Sea in northeast Egypt to turn the desert into arable land. The mainstream headwaters; the Blue Nile and the White Nile, meet at Khartoum in Sudan to form the Nile proper.

The population in Egypt has tripled to 72 million people and now needs between 73 and 79 billion cubic metres of water to serve its farmers, who use less than 10% of the country's total land area. The water allocated to Egypt under the Nile agreement is only 55 billion cubic metres annually.

A new agreement on the Nile is being discussed. All countries have to agree on the Nile Cooperative Framework. "The Nile river is ours. All of us are in the Nile basin and should work hard to maintain a good relationship," says Reda Bebars, the ambassador of Egypt. "We will give the Nile Basin Initiative and Uganda all the support they need. No dream is too big to achieve."

Muzoora does not agree: "Anyone in Egypt or Sudan who would sign the new agreement on the Nile would lose his political base," he says. Muzoora says the agenda of the Egyptians is a much bigger one. "It needs people who understand international politics and water issues," he says.

Document 7

Adapted from 'Enough is not enough. It must also be clean.'

A special report on water in *The Economist*, a UK-based international news magazine, 20 May 2010

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<http://www.economist.com/node/16136260>

Document 8

Adapted from ‘Are we all doomed?’

An article on the website of a UK-based libertarian think tank, 3 March 2010

Dr Madsen Pirie

The annual investment forum in Tokyo of Credit Lyonnais Securities Asia has heard a grim forecast from Dr Marc Faber, a market analyst with some success at forecasting crises. Universally pessimistic, he is dubbed “Dr Doom” by the industry.

He ventures beyond market conditions to warn us of a coming “dirty war” which will shut down the internet and mobile phones, and see city water supplies being poisoned. He advises buying farmland and living rurally to escape the violence and biological attack which will afflict cities. He also suggests buying gold and precious metals “because they can be carried.” In Asia he advises buying into agriculture and water treatment to play on future food and water shortages.

Chilling stuff, but will it happen? Doomsayers don’t have a very good record. Humanity seems to muddle through despite the catastrophes so regularly predicted. Part of the reason is that we alter our behaviour to avoid them. We develop new technologies such as those which enabled the “green revolution” to avoid the threatened starvation. We will not all choke on the nightmare levels of pollution forecast because we are constantly developing ways of dealing with it and avoiding it. We haven’t all died yet in a nuclear holocaust because we changed the way we behave once nuclear weapons entered the frame.

This is not to say Dr Faber is wrong – although I believe he is. It is just that he, like other doom-speakers, downplays what Julian Simon called “The Ultimate Resource,” the creative ingenuity of humankind. Despite the gloomy forecasts that civilization would be wiped out by a new ice age, a population time bomb, a silent spring, or the depletion of scarce resources, we have proved quite adaptable and quite resourceful at dealing with problems.

I doubt Dr Faber’s hedge fund audience will all rush to take his advice. Maybe a few will hedge their bets by buying just a little farmland and just a little gold. The rest of us will probably bet on humanity again, rather than disaster.

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