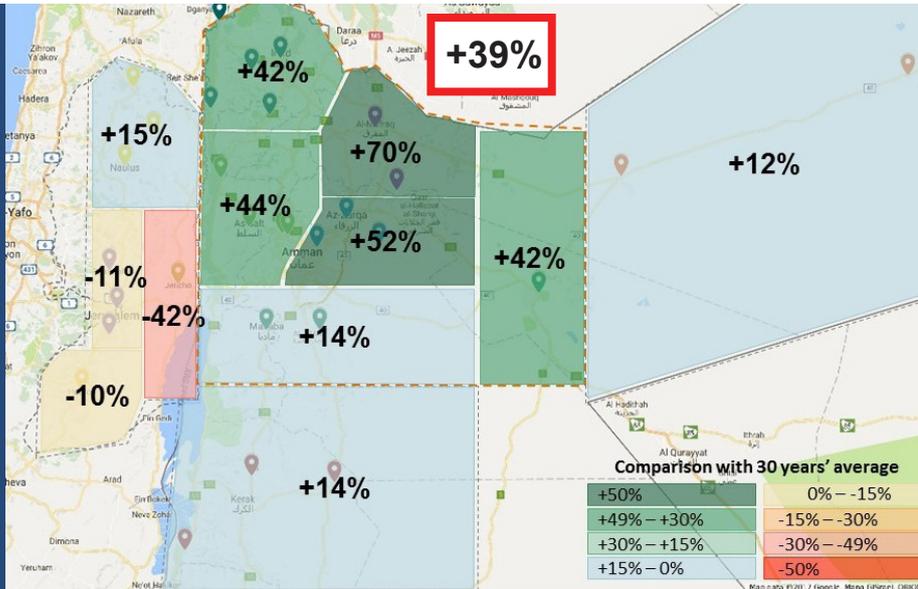


WeatherTec Newsletter



The Rainfall Enhancement Company | Q2/2017

WEATHERTEC'S SUCCESS IN JORDAN: +39% MORE RAIN



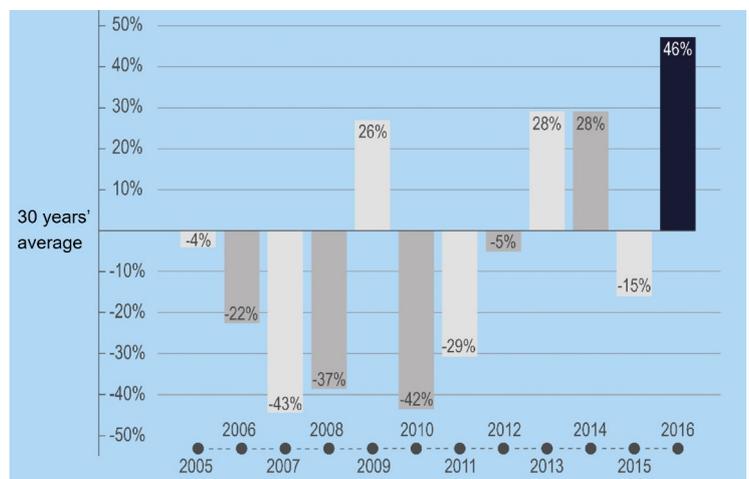
- 2 Success Story Jordan
- 3 How does it work? The Ionization Technology
- 4 Economical Impact of the New Technology
- 5 WeatherTec on Munich Security Conference 2017 and 4th Arab Water Week
- 6 Issues > Crises > Wars on Water
- 7 Comparison of Freshwater Producing Technologies
- 8 WeatherTec in the Media

In the Hashemite Kingdom of Jordan, from May 1st to December 31st, 2016, WeatherTec successfully demonstrated a +39% precipitation increase directly generated by WeatherTec Ionization Technology.

These results are extraordinary when compared to the 30 and 10 year's average precipitation for the operating area. In none of the

previous years there has been such an increase in rainfall. Despite being an average natural rainfall year within the region, the WeatherTec operations triggered:

- +39% additional rainfall
- +384 M m³ additional precipitation
- +28.4 M m³ directly usable water
- +36.9 M € direct value of generated usable water



On the WORLD ECONOMIC FORUM MENA 2017, due to the great success in Jordan, WeatherTec will be presented as a key innovation for the whole region. With additional

rainfalls through ionization, economic growth and national stability can be ensured countering the expected rainfall reduction due to climate change.

IF YOU CAN MAKE RAIN THERE YOU WILL MAKE IT EVERYWHERE

THE JORDAN SUCCESS STORY: THE COUNTRY IS THE WINNER – PROJECT PAYS BACK

The challenging task of our rainfall enhancement project in Jordan – the second driest country on Earth – has turned out as a great success.

During the first half of the wet season 2016/17 until December 31st we had increased rainfall by 39% compared to the 30 years' average, strongly against the negative trend. The additional rainfall of over 384 Million m³ resulted in 28 Million m³ usable water. This is enough to fill up more than 10.000 Olympic swimming pools, or a channel of 500 km.

During Summer 2016, Ionization Technology had increased cloud coverage over operational areas resulting in a

temperature decline of app. 5°C. This saved up to 5 Million € in electric power for air conditioning in the country. It is also an important relief for the inhabitants and nature when temperature is over 35°C.

All these benefits confirm the similar results of the projects we have already executed for governments on three continents during the last decade, especially in Australia and UAE.

The Impact Study, which was recently made in Jordan presents explicitly the “miracle of the project”: the cost of the produced water is much lower than any other artificial water harvesting, especially cloud seeding or desalination, but also



Dr. Helmut Fluhrer
Founder and CEO of WeatherTec Group

pumping from fossil aquifers. And most important, the financial and economic impact: the value of the additional water, the additional tax income, and savings make the project for each ordering country profitable.

RAIN MADE BY THE SUN



WeatherTec operates four stations in the Northern part of the Kingdom, along the Eastern Rim of the Jordan Valley. The whole Operation covers an area of around 10'000 km².

Each station has 3 or 4 emitters which generate trillions of ions through high voltage. Solar power, serves as environmentally friendly power source. Hightec weather stations, 4k cameras, and sensors provide now-casting information. Weather Modification is an extremely sophisticated operational process.

BIG DATA AND DIGITAL 4.0 COMMAND AND CONTROL CENTER



WeatherTec developed a worldwide unique Command and Control Center. Big Data Integration, processing, complex algorithms, own rain radar images, satellite and webcam images, own weather model forecasting and local data: all is integrated in a digital 4.0 system.

Meteorology needs operations 24/7. The experts are meteorologists, climatologists and atmospheric physicists. The now casting capabilities can become part of national civil security networks.

60 KM² OASIS LAKE FIRST TIME FILLED SINCE 1994

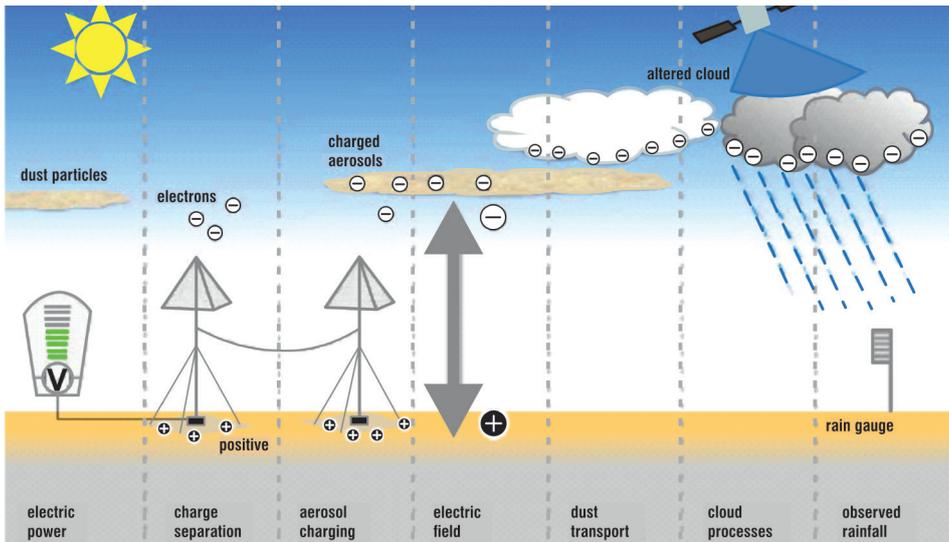


Spring this year in Jordan was noticeable greener and more humid than in the last years. The Azraq wetlands were filled for the first time within the last 25 years, reaching approximately 60 km².

WeatherTec Ionization Technology has several advantages through rainfall enhancement and additional cloud coverage:

- Increase yields in agriculture
- Safeguard groundwater
- Refill dams: King Talal had an inflow in December 2016 of 22.7 million m³, a third of the total capacity.

How does Ionization Technology work - at a glance



THE WEATHERTEC IONIZATION TECHNOLOGY: ENVIRONMENTALLY FRIENDLY, MIMICKING NATURE

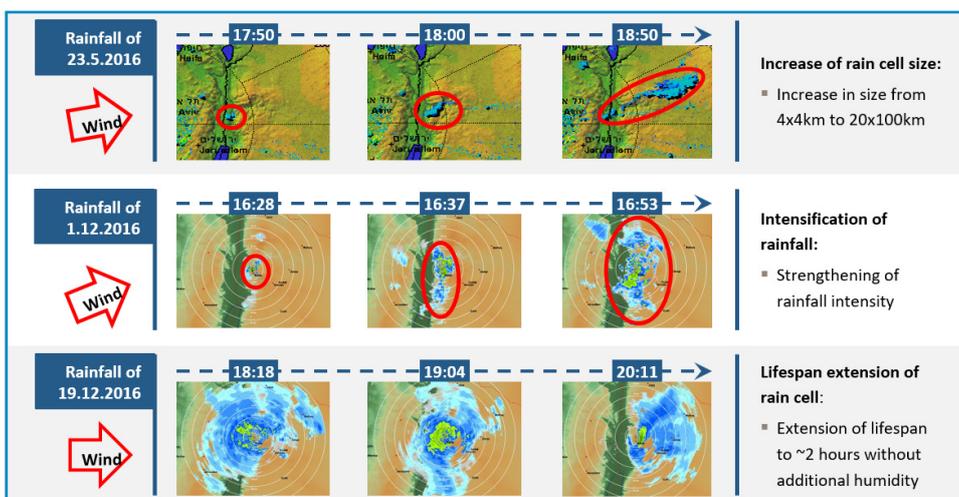
WeatherTec Ionization Technology is completely environmentally friendly as just negative ions are generated. Such negative ions are employed in hospitals and offices; they do not affect humans, animals, radio waves or airplanes.

The necessary energy is very small. The Ionization increases natural precipitation by mimicking the sun's ionization. When the operation is finished, nothing is left, except additional fresh water.

The following steps describe the process:

- 1 High voltage is provided to the emitters on the ground with solar power
- 2 They emit trillions of ions into the atmosphere that connect to aerosols
- 3 They create a plume of negative charges, which elevates by natural updrafts & winds
- 4 The Earth electric field gets slightly influenced
- 5 Cloud particles such as ice nuclei and droplets become charged near cloud boundaries growing much quicker
- 6 Enhanced clouds are developed and rainfall occurs over several 1'000 km²

Three examples of 69 rainy day cases in 2016/2017 IONIZATION INCREASES RAIN CELLS' SIZE, INTENSIFIES RAINFALL, AND EXTENDS THEIR LIFE-SPAN



These examples are representative for an arid desert region in the East. If this could be arranged over a couple of years, the old wish of „Greening the Desert“ can come true.

For the first time many more rainfalls reached to the

WORLD
ECONOMIC
FORUM

Why was Ionization Technology selected as a key innovation on WEF MENA 2017

In the first half of the rain season 2016/2017, WeatherTec increased rainfall by 39%. This additional rain had a large impact on the economics of Jordan, created new jobs indirectly and ensured social stability.

The additional rainfalls generated by WeatherTec have an extremely positive effect on the country.

Additionally, WeatherTec introduced a rain radar, weather measurement stations and a developed new weather model. All these efforts improve the meteorological analysis of the country and help to recognize severe weather events in time.

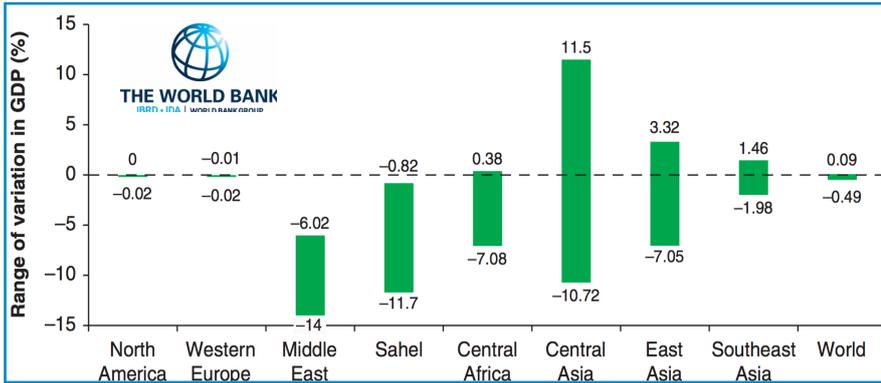
Due to the possibility to increase rainfalls, and the related economic and social impact it was decided to present WeatherTec on WORLD ECONOMIC FORUM MENA 2017.

Ionization technology is of extreme importance for the MENA region to ensure economic growth and social stability with additional water resources which are very scarce and will further decrease due to climate change.

During the conference National Leaders will have the opportunity to get to know the technology and verify if their country could profit from implementing it as Jordan does.

The WORLD BANK: The Economic Impact of Rain Water

SHORTAGE REDUCES GDP DRASTICALLY THE MIDDLE EAST WILL BE HIT WORST



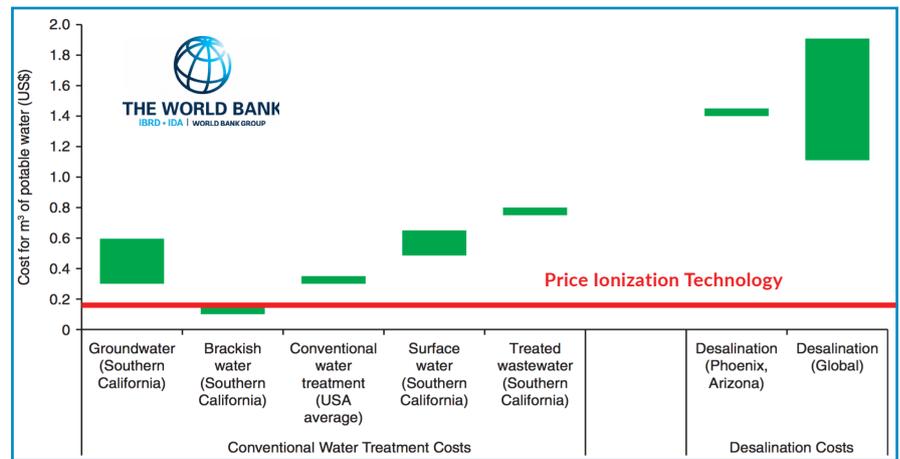
Source: World Bank 2015 A

To prevent a reduced GDP growth or even a contraction, new technologies are needed to cover all national needs.

Desalination is used most commonly but requires both very high investment and operational costs. New technologies such as Ionization can be implemented at very low costs and prevent countries from facing an economic decline due to water shortages.

Additional water offers the possibility to a country to attract new investors.

NEW UNEXPENSIVE TECHNOLOGIES ARE NEEDED TO INCREASE WATER AVAILABILITY: AVERAGE WATER PRICES



Source: World Bank 2015 Estimates

Lord Stern: The Economics of Additional Freshwater

Lord Stern's focus in the discussion with Dr. Fluhrer lies on the economic impact of reduced water sources and how additional freshwater initiated by the Ionization Technology of WeatherTec could secure economic growth in developing countries. As a former World Bank Chief Economist and Director of Policy and Research

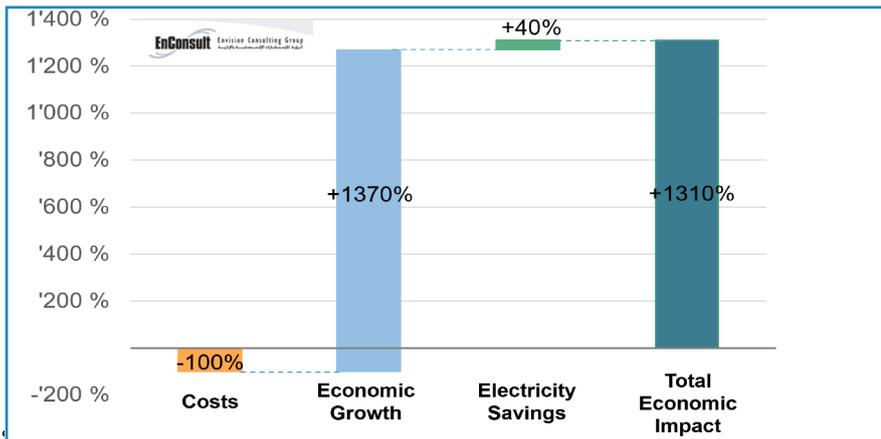
for the Commission for Africa, he has a unique experience. He is very interested how new technologies could contribute in the very complex survival strategies of countries with overlapping threats: „exploding populations and imploding water availability“.



Dr. Fluhrer in discussion with Lord Stern of Brentford, President of the British Academy. Author of the „The Economics of Climate Change: The Stern Review“.

Jordan Project: Economic Growth of ~1300% of Costs

THE RAINFALL ENHANCEMENT IS A SELF-FINANCING PROJECT



Impact analysis in Jordan of Envision Consulting showed that economic growth and electricity savings thanks to WeatherTec Ionization result in an economic impact of +1300% compared to initial costs every year.

Other effects:

- Additionally ~15'000 jobs can be created indirectly every year
- Reforestation to >200 km²
- Positive impact on agriculture and tourism
- Attracting new investors

“This Technology is a Milestone Development”

DECLARATION OF THE 2. WATER SECURITY ROUND TABLE OF THE MUNICH SECURITY CONFERENCE 2017, FEBRUARY 19TH 2017

The members of the Round Table recognized “the WeatherTec technology as a milestone development and honors the Hashemite Kingdom as an innovation leader”.

New inter- and trans-disciplinary concepts are as important as environmentally friendly political decisions: “Two important fields of development are the physical methods of weather modification and atmospheric humidity transport, as well as improved water management systems.”



left to right: On the Munich Security Conference 2017: Jean-Claude Juncker, President of the EU-Commission, former Federal Minister for Finance Theo Waigel (“Mr. Euro”) and Dr. Helmut Fluhrer, CEO WeatherTec

A team of experts by order of the Munich Security Conference has visited the WeatherTec operations in Jordan in November 2016. Their due diligence included meetings with the Royal Hashemite Court, the related governmental institutions and the German Embassy. Finally WeatherTec became the only environmental high-tech innovation company which was invited to the exclusive event of the Munich Security Conference 2017.

It is also an appreciation of the pioneer work to find a solution for the biggest security threat in many countries: water scarcity leading to national and international instability and migration of hundreds of millions of people.



left to right: Founder & CEO Helmut Fluhrer, Former Irish President and former UN High Commissioner for Human Rights Mary Robinson, Matt Sawaqed, CEO Al Qudra Environmental Consulting in discussion with German Federal Minister for Agriculture Christian Schmidt

“The most efficient way to harvest the largest additional freshwater source on Earth”

4TH ARAB WATER WEEK MARCH 19TH 2017



Helmut Fluhrer, CEO WeatherTec



Elena Davydova, CTO WeatherTec

Under the title “Managing Water Systems within Fragile Environments in the Arab Region”, the Scientific Committee was seeking contributions from the Arab Region and international water community .

They selected WeatherTec for one of the main sessions: “The Ionization technology for rainfall enhancement is recommended as the most efficient way to harvest the largest additional freshwater source on Earth. It is just a question of time that this environmental friendly, next generation German technology will roll out

in many more countries suffering from water scarcity.”

During the R&D period starting 2005 with experts from Max Planck Institute, LMU Munich University and international scientists the company (called before “Meteo Systems”) developed most valuable knowledge and IP, which positioned the team as the technology leader.

WeatherTec sponsored the 4th Arab Water Week due to the growing importance of the event for the whole Arab countries.

Munich Security Conference **msc**
Münchner Sicherheitskonferenz

From the Declaration:

“The Munich Security Conference has observed the company and its operations for a while and positions it as an extremely interesting solution for the issues of national and international security and water security, fighting droughts and its effects like poverty and migration.”



“The Ionization Technology for rainfall enhancement is recommended as the most efficient way to harvest the largest additional freshwater source on Earth.”

Issues > Crisis > Wars on Water

THE CHALLENGE OF OUR GENERATION - NOT THE NEXT ONE

The drought until 2012 in the Eastern Mediterranean was the worst of past 900 years, according to NASA. It contributed to the conflict in Syria: 75% of Syria's farms failed, 85% of livestock died, 1.5 million Syrians forced to migrate to urban centers.

The consequences are known. Today we face an additional "driver" compared to drought periods in former decades: Climate change increases such extreme droughts by 2 to 3 times. The surprising heat waves in the Arab countries,

but also in Europe have caused tens of thousands of deaths during the last years.

Until 2040-2050 several regions as in Morocco, Tunisia, Syria and Iran will have a decrease in rainfall of up to 20%, enhancing the probability of extreme droughts. The first time, since human mankind exists, some areas in extreme arid zones will be not livable any more. The constant average temperature over 37° Celsius, combined with high humidity percentage will not allow human bodies to regenerate any more.

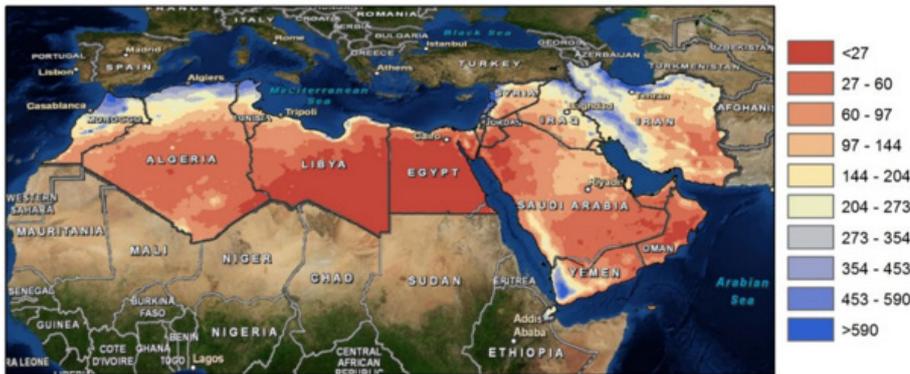
All of that is likely to contribute to regional instability and conflicts due to water shortage.

The main regions, which face those problems according to experts are:

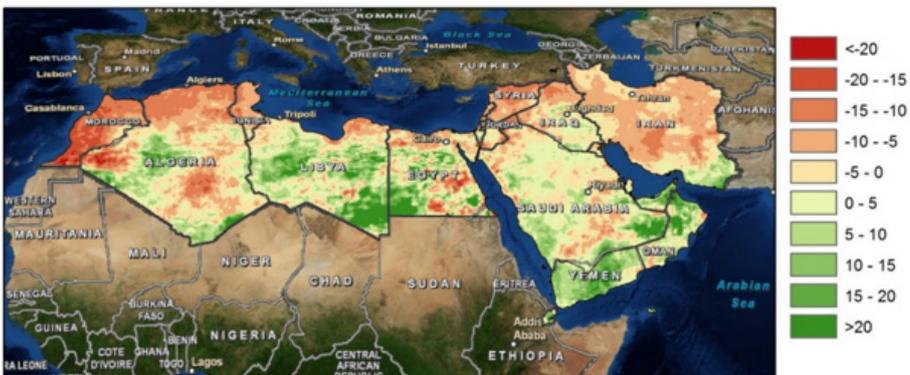
- The Sub-Sahara region with its natural catastrophes and explosion of population
- The China/India/Pakistan region, relying heavily on the waters from the Himalaya Mountains
- The Near East countries, as well as the African countries along the rivers Nile, Euphrates and Tigris
- The border areas along the USA and Mexico, also the first issues in Latin-American
- Finally Europe, especially the countries along the Alps range.

New environmentally friendly technologies, water management systems, but also distinguished methods in water diplomacy are needed to prevent further related conflicts.

Precipitation current climate [mm]



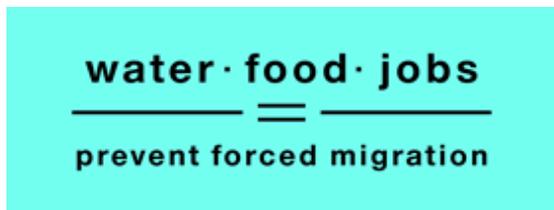
Precipitation anomaly 2040-2050 [%]



Middle-East and Northern Africa Water Outlook April 2011 Commissioned by World Bank

Water-Food-Jobs: Prevent forced Migration

INITIATIVE WILL RELY ALSO ON ADDITIONAL FRESH WATER THROUGH IONIZATION TECHNOLOGY



Prof. Emeritus of Excellence Peter Wilderer, Stockholm Water Prize laureate, the so-called "Water Nobel Prize": "I'm delighted about the success of WeatherTec in Jordan, on one side about the enormous volume of additional produced precipitation, on the other side of the precise scientific achievements".

WeatherTec Supports this Initiative

Traditional technologies like advanced water management with dams and canals, abstraction of groundwater, desalination as well as most modern technologies including fog harvesting have limited results: they all handle the existing water available. Only the ionization technology with enhancing precipitation can bring additional freshwater. As the other sources might not supply enough the exploding population on earth, This is the

right solution at the right time. The optimal mixture of state-of-the-art technologies, policies and governmental structures for reducing impact of droughts and ensuring continuous water supply for agriculture will be a solution, fast enough for many countries.

"Be fast or be Last" becomes the rule of existential security and survival for many states.

Comparison of Key Technologies for Fresh Water

			
	WeatherTec	Cloud Seeding	Desalination
Description	Charge humidity and clouds with ions Reduce required humidity to generate rainfalls	Grow cloud droplets and ice nuclei through chemical agents Agents include silver iodide, potassium iodide	Separate fresh water from seawater Several technologies based on distillation or reverse osmosis
Strength	Rainfalls cover large areas (>1000 km2) Most environmentally friendly technology	Increase probability of rain generation from existing clouds	Applicable at any sea shore Quantity of generated fresh water predictable
Key Limitations	Requires areas with > 40% humidity	Environmental concerns due to usage of chemicals Required specific clouds Uneven performance	Requires sea access Extremely expensive Generation of large amount of waste water High energy consumption
Cost per m³ of water	€ 0.11 - € 0.15	€ 0.99 - € 1.56	€ 1.02 - € 1.27
Energy per m³ of water	< 0,001 kwh	n/a	2 - 3 kwh
Annual Operating Costs	€ 11 M - € 15 M	€ 80 M - € 125 M	€ 51 M - € 64 M
Annual Capital Costs	€ 0 M	€ 19 M - € 31 M	€ 51 M - € 63 M
Capital Investment Operation	€ 0 M	€ 150 M - € 250 M	€ 410 M - € 500 M
	Service by WTS	Required aircrafts & chemicals	Install equipment. High maintenance costs
Fresh water production	 Pure fresh water 100% H2O molecules No minerals have to be added for drink water Perfect for plants	 Chemical substances Water molecules and chemical residuals like silver iodide, potassium iodide or cement powder poisoning in small quantities Enters food chain through plants and animals	 Salty water Certain percentage of salt: ~0.5g/l Tastes salty Too much salt for sensible plants Salination of dripping systems and ground

Calculation for metropolitan area covered with 6 air places
Based on Carlsbad Desalination Plant (California) and assumed technological improvements.

NEW WEALTH OF NATIONS: VIRTUAL WATER IS GIFT AND THREAT

In the nearest future, any calculations regarding the Wealth of Nations will include the major aspect of Virtual Water. The existence of a global water unbalance will be the most critical factor.

Virtual water is the water used to produce a commodity: where these commodities are traded, virtual water also changes hands. Food trade and associated virtual water is a reality and will tend to increase as the number of countries reaching absolute water scarcity level..

If a country has a scarcity of water to produce what it needs for national food security, it may be economically rational to import such product, in return for goods and services that are less water-intensive.

The coming years will show that the trade with virtual water might become an increasing bargaining chip in international trade negotiations.



Fight for Water: 21st Century



Fight for Oil: 20th Century



Fight for Gold: 19th Century

Evaluate effects of additional rain By yourself

ECONOMICS, EMPLOYMENT AND SOCIAL STABILITY IN COUNTRIES

FILL IN THE TABLE BELOW ABOUT THE CONDITIONS FOR YOUR COUNTRY

		Low	Med	High
Financial Effects	Value of generated water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Additional output from agriculture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Support of tourism and industrial sector	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Employment Effects	New jobs in agriculture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Saved jobs from avoided droughts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	New jobs in tourism and industrial sector	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social Stability Effects	Slowing down/halting groundwater level decline	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Reduced likelihood and impact of droughts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Reduce pollution and support reforestation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

WeatherTec in the Media



Al Jazeera

„WeatherTec enhanced the rainfalls more than 100 times and enhanced the average rainfalls in different countries around the world.”
 “Natural and environment friendly rain enhancement, using ionization technology without using any human harmful chemicals.”
 - news video on youtube-



Assabeel.net

“The technology will help Jordan to cope with climate change by increasing precipitation, especially in dry and semi-arid regions.” H.E. Minister Hussein Souob said. “It works to enhance our water security, indicating that WeatherTec has operated over the past days with all of its stations improving rainfall.”



Jordan Times

“WeatherTec Ionization Technology, which mimics the sun's ionization, employs solar-powered electricity without using any chemicals”
 “WeatherTec's most recent rainmaking attempt via ionisation technology was during the last weekend, when the country received its first rainfall following a long drought.”



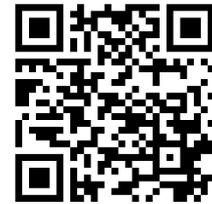
AlGhad AlArabi

“WeatherTec technology, which is mimicking nature, uses the solar energy to generate the needed electricity without using any environmentally hazardous substances.”
 “The Jordanian government has thought to provide as much water as possible through its contract with WeatherTec, which is specialized in rainfall enhancement.”



TRT World

“Between May and July (in the driest months), the company enhanced rainfalls five times and this could almost double by the end of the year.”
 “Experts believe that under the right conditions rainfall can be fully restored in Jordan”
 - news video on WeatherTec Website or youtube-



View our Videos

<http://weathertec-services.com/#video>



Visit our homepage

<http://weathertec-services.com>

PROF. DR. ANTON MANGSTL BECAME NEW MEMBER OF WEATHERTEC'S ADVISORY BOARD



Professor Mangstl's international experience and knowledge will be of important support for

the Company, especially in the field of water and food security.

Prof. Mangstl is a specialist in Information- and Knowledge Management as well as Agronomy and served from 2011 - 2016 as Vice President and Professor at the German-Jordanian University, Amman.

From 1996 - 2011 he was Director, Office of Knowledge Exchange, Research and Extension

at the Food and Agriculture Organization of the United Nations (FAO), Rome.

Prior to joining FAO, Anton Mangstl served as Director of the Centre for Agricultural Documentation and Information (ZADI) Bonn. Earlier, he was Deputy to the Head of the Working Group on Crop Production and Informatics, Centre for Life and Food Sciences in Agriculture, Freising-Weihenstephan.



GET IN TOUCH The Rainfall Enhancement Company

OFFICES

Munich
Zug
Amman



Contact info

Write to:
info@weathertec-services.com

INFORMATION

Company and Technology Videos
about Jordan Project, Statements

www.weathertec-services.com

STRATEGIC PARTNER

Boston Consulting Group



Newsletter: Design Zaid Qarout