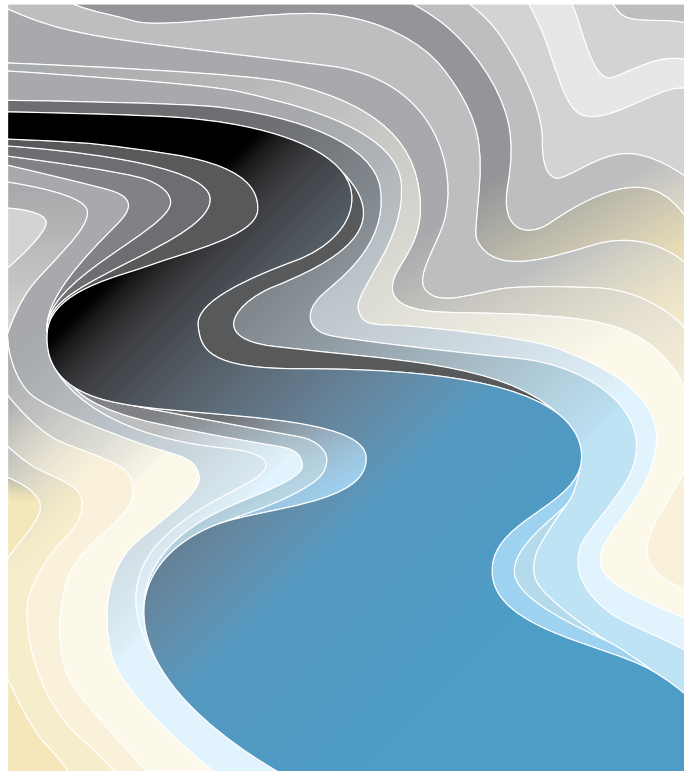


BLUE PEACE

IN THE MIDDLE EAST

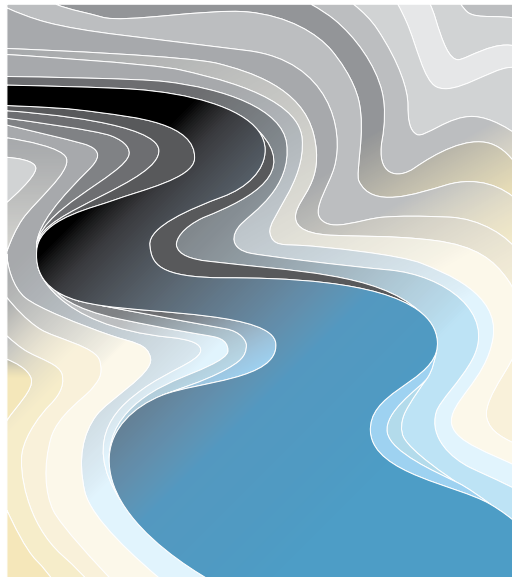
PROGRESS REPORT



BLUE PEACE

IN THE MIDDLE EAST

PROGRESS REPORT



With support from
Swiss Agency for Development and Cooperation



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The Blue Peace concept was conceived by Strategic Foresight Group in a project supported by the Swiss Agency for Development and Cooperation (SDC), Political Directorate of the Swiss Federal Department of Foreign Affairs (FDFA), and Swedish International Development Cooperation Agency (Sida) and presented in the form of a report published in February 2011.

The SDC and FDFA extended financial, diplomatic and intellectual cooperation to begin implementation of the Blue Peace recommendations made in the same report. In particular, they supported exploring the implementation of the first recommendation to establish the Cooperation Council for the Sustainable Management of Water Resources in the Middle East and to promote Cooperation Community as an interim strategy until political conditions were conducive for the establishment of the Cooperation Council. Their support included active participation of FDFA officials and Swiss diplomats in meetings and consultations. The Government of Switzerland also offered neutral venues as a meeting place for parties involved in difficult relationship. The cooperation provided by the Government of Switzerland and its agencies and departments has been comprehensive.

In particular, State Secretary of the FDFA, Director General of SDC and Members of Parliament of Switzerland have empowered the Blue Peace process with their personal commitment and strategic input.

Sida has provided very valuable cooperation to create decision making tools and introduce innovation into the Blue Peace process. Sida has supported SFG to begin an exchange of experience between the policy makers and media leaders in the Middle East and representatives of successful cooperation institutions in Africa, Asia and Europe. This exercise provides vital knowledge and inspiration to generate political will in favour of cooperation.

Sida has also enabled the Strategic Foresight Group to identify, map, and analyse hydro insecure communities in the Middle East, an initiative especially requested by HRH Prince Hassan of Jordan. This initiative, when advanced, will create a holistic framework for water cooperation covering the entire spectrum from cooperation at the political and diplomatic level to cooperation to address the plight of marginalised people.

The exchange of experience takes place in various forms. An important component is “Learning Journeys” to successful river basin organisations. It is feasible to undertake such Learning Journeys only when important river basin organisations agree to host them. So far the Rhine Hydrological Commission and Mekong River Commission have hosted Learning Journeys for policy makers and media persons from the Middle East and others are expected to do so in future.

While the Governments of Switzerland and Sweden have provided practical, diplomatic and intellectual

support to the Blue Peace process, the House of Lords of the British Parliament has extended outstanding political support. With leadership provided by The Rt. Hon. Lord Alderdice, former convenor of the Liberal Democratic Parliamentary Party in the House of Lords, the House has been a neutral venue for several meetings of stakeholders from the Middle East. The House of Lords hosted a dedicated floor debate on the Blue Peace. Ministers dealing with foreign affairs and development issues have participated in these debates, meetings and bilateral consultations with SFG.

The European Parliament has also hosted discussion on the Blue Peace process. The discussions in the British and European Parliaments have contributed significantly to building international support for the Blue Peace process.

While international support has been critical, the Blue Peace process is essentially a result of the initiative and commitment shown by several institutions and eminent individuals in the Middle East.

HRH Prince Hassan of Jordan leads the Blue Peace process. He is the Chairman of the High Level Forum and was for some time Chair of the UN Secretary General's Advisory Board on Water and Sanitation. He has led the process from the front from its initial phase providing vision, strategic and intellectual direction, moral leadership and a strong personal commitment. His emphasis on long term sustainability overriding short term expediency and his ability to blend idealism with pragmatism have been crucial for Blue Peace.

HRH Princess Sumaya, President of Royal Scientific Society of Jordan, must be also acknowledged for her personal commitment, dynamic and inspiring leadership and her enthusiastic support in innumerable ways.

HRH Prince Hassan has been supported by eminent leaders with experience of serving respective national governments in the endeavour of advancing the Blue Peace framework. These include late Dr Mohamed Chatah, former Finance Minister of Lebanon; Dr Yasar Yakis, former Foreign Minister of Turkey; Dr Bakhtiar Amin, former Human Rights Minister of Iraq. Several Members of Parliament, particularly Mr Saban Disli of Turkey, Dr Bassem Shabb and Dr Mohammad Kabbani of Lebanon, Ms Safia Al Suhail and Ms Shirouk Abayachi of Iraq and Mr Selim Batayneh of Jordan, have been at the core of the Blue Peace.

The participation of representatives of Governments, particularly ministries and authorities dealing with foreign affairs, national security, water and environment, have been most critical to make the Blue Peace framework relevant.

Important scientific institutions including the Royal Scientific Society of Jordan, Okan and MEF Universities in Istanbul, Litani Water Authority of Lebanon, and other academic institutions have provided intellectual underpinning of the process. The Blue Peace Media Network is an important part of the Blue Peace process. Turkish Review of the Zaman Media Group in Istanbul helped give birth to it and journalists from all countries in the region have nurtured it.

In the ultimate analysis, Blue Peace is a process of over 200 champions of the cause whose courage, commitment and catalytic capacity gives millions of people in the Middle East the means to transform the present context of despair into a reality of hope.



President of the Swiss Confederation launches the Blue Peace in the Middle East report

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Umayyad Mosque, Damascus

Introduction

Exactly 1300 years ago, in 715 AD, Caliph Al Walid dedicated a grand mosque to the people of Damascus. In his dedication address, he said: “Inhabitants of Damascus, four things give you a marked superiority over the rest of the world: your climate, your water, your fruits, and your baths.”

His thoughts were reflected in the beautiful mosaics of what came to be known as the Umayyad Mosque. These mosaics depicted flowing rivers, tall trees and rich greenery. Even today a visitor to the Umayyad Mosque first notices these mosaics.

The prosperity of Damascus was about water, trees and fruits.

Exactly one hundred years ago, in 1915, flowing water, tall trees and rich greenery in Caliph Al Walid’s vision could be still witnessed in Damascus.

It has all changed by the beginning of 2015. The Barada River which inspired Al Walid made it possible for Damascus to evolve as a major city for centuries. The word “Barada” means golden stream. However, by 2015 Barada has ceased to be a river and has become a stream. It looks golden or rather brown, instead of blue, on account of pollution. Tonnes of waste from household, industry and irrigation are discharged into the river. Legal and illegal wells have adverse impact on groundwater. Parts of the river have turned dry.

The depletion of Barada River has forced the Damascus elite to take baths in five star hotels. In other parts of Syria and Iraq, water crisis have deprived farmers of their livelihood and homes. Some of them have joined violent groups opposed to the state. The genesis of terrorist organisations like ISIS, Al Nusra, Al Qaeda has complex explanations. Depletion of rivers and lakes is part of it.

Elsewhere in the Middle East, the Dead Sea is dying. It has shrunk by a third in the last fifty years. It may become a pond in another fifty.

It is not about water alone. Declining availability of water has impact on agriculture, electricity generation and urbanisation, and therefore on migration, social stability, internal strife and trans-boundary conflicts. It would be an exaggeration to say that water is the cause of the present conflict in the Middle East. At the same time, it would naïve to ignore the fault lines created by water crisis.

It is easy to be depressed about the region. The Israel-Palestinian conflict seems to only get worse, the war in Gaza in 2014 being only the latest phase in mindless death and destruction. The internal strife in Lebanon, Iraq and Syria also seems to be getting worse, with the arrival of ISIS on the scene.

The countries accuse each other of meddling in their internal affairs. Some accusations are false, some exaggerated and some true but all of them vitiating the prospects of stability and peace. According to *Cost of Conflict in the Middle East*, a report published by the Strategic Foresight Group, the region lost \$12 trillion in opportunity costs from 1991 to 2010. On an average it means, their income would have doubled in the 20-year period had there been real peace and cooperation.

Yet there are realities beneath the surface which give hope. In 2010, Jordan, Lebanon, Syria and Turkey agreed on a quadrilateral free trade area with cooperation in industry, trade, transit, tourism and related spheres. In a matter of 6-7 months, the region was on the path of integration. The four countries also invited Iraq, which could not join the free trade area due to internal constitutional issues, but was expected to do so in the not too distant future. Rarely before a region would have integrated so fast anywhere in the world. It showed that the states in the Middle East are capable of cooperation. Unfortunately, the process of integration was interrupted in early 2011 due to the Arab Spring, then suspended and then reversed. Soon barriers came up and trade between countries came to a standstill. Nevertheless, the second half of 2010 demonstrated that cooperation is possible in the Middle East.

When the next window of opportunity opens, the same five countries would need to expand their spheres of cooperation to include water and environment. Since water is at the core of life, cooperation in the sustainable management of water would bring people close to each other. The framework in which such cooperation in water can be achieved has been introduced

by the Strategic Foresight Group as Blue Peace framework, in a study co-sponsored by the Governments of Sweden and Switzerland and launched by the President of the Swiss Confederation in February 2011.

The Blue Peace framework argues for opening “the water box” of decision makers from water ministries to include top political leaders and other decision makers in the water cooperation process. It proposes the creation of appropriate institutions. Once political leaders are engaged and an institutional framework is ready, it envisages trade-offs to share benefits of water resources rather than river flows.

Such a process cannot be implemented overnight. It requires well calibrated gradual steps. At the same time, it is necessary to ensure that it does not remain abstract. It requires a specific vision of measurable policy outcomes.

At its core, Blue Peace is about transforming water from a potential source of crisis into a potential instrument of cooperation and peace, through concrete actions.

The Blue Peace report of 2011 made ten recommendations for actions that could be attempted even in an apparently pessimistic situation.

This report reviews the progress in advancing these recommendations from the beginning of 2011 to the end of 2014. It demonstrates how water can flow through a path that is full of rocks of problems and challenges. It also shows that if water does manage to flow in the right direction, there is a prospect for streams of goodwill to blend into a large reservoir one day, which can transform a seemingly difficult region.

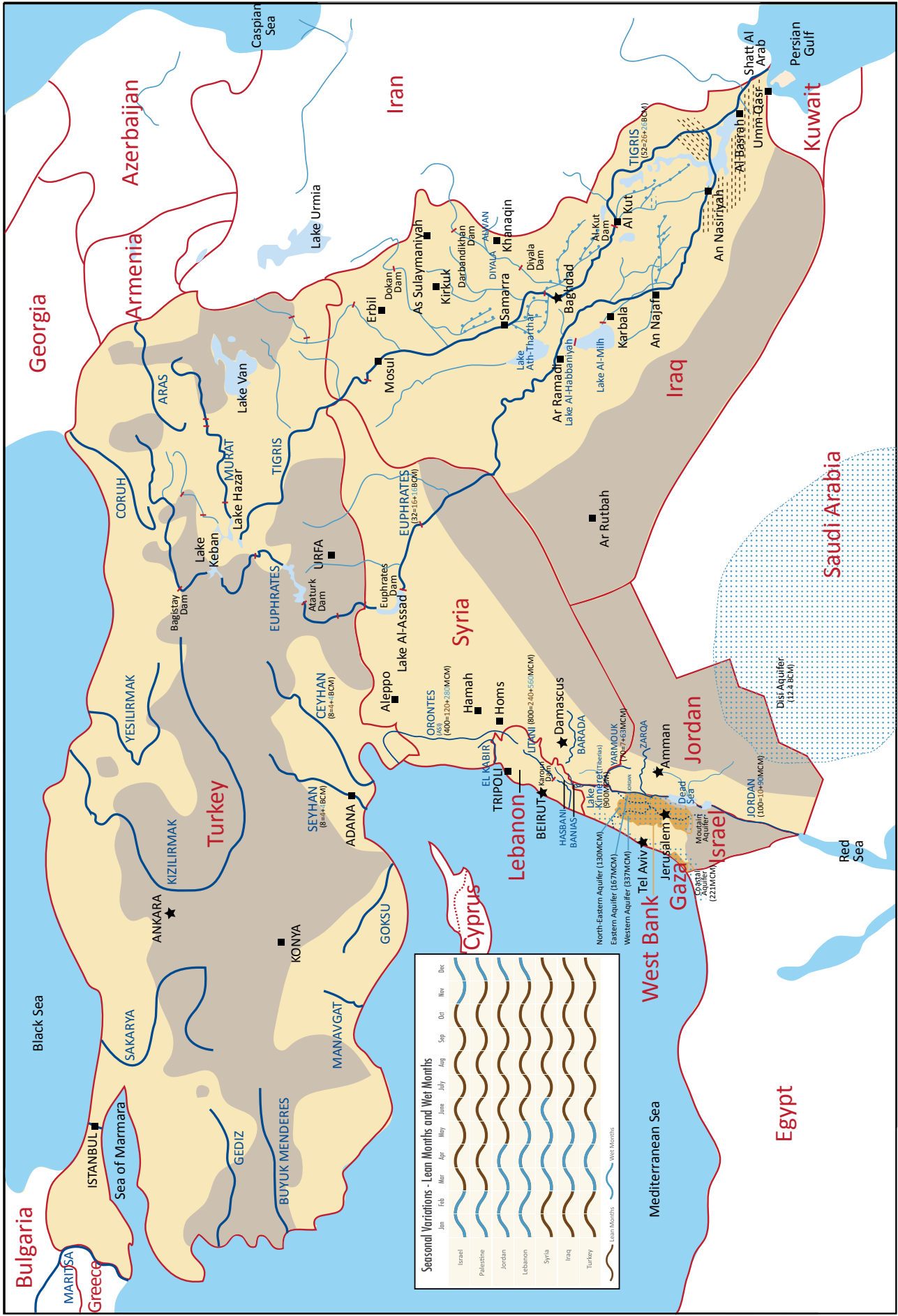
It may not be realistic to expect streams flowing



High Level Group formation meeting in Amman- Late Dr Mohamad Chatah, HRH Prince Hassan and Dr Yasar Yakis

in abundance, nourishing tall trees and lush green vegetables all over the Middle East. After all it is necessary to take into account the changes that have taken place in the last 1300 years, and particularly in the last 100 years. At the same time, it would be realistic to see several of the dead streams reviving, blame game over water resources declining and people of the region coming together to build a sustainable future. If this does happen, the mosaics of the Ummayyad mosque will not look out of place.

Water Resources in the Middle East



Seasonal Variations - Lean Months and Wet Months

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
Israel	[Wavy lines representing seasonal flow variations]											
Palestine	[Wavy lines representing seasonal flow variations]											
Jordan	[Wavy lines representing seasonal flow variations]											
Lebanon	[Wavy lines representing seasonal flow variations]											
Syria	[Wavy lines representing seasonal flow variations]											
Iraq	[Wavy lines representing seasonal flow variations]											
Turkey	[Wavy lines representing seasonal flow variations]											

Legend:
 ~~~~~ Lean Months   
 ~~~~~ Wet Months

River
 (Total = Lean + Wet)
 Flow = Months

— Main Rivers
— Tributaries
 Dry Areas
 Aquifers
 Marshlands

Disclaimer: Outlines and borders on this map are for illustrative purposes only.

Advancing Blue Peace Recommendations

1. Cooperation Council for Water Resources in the Middle East for the Northern Circle:

The idea of Circles of Cooperation would become operational if each circle has a political mechanism to define a common vision, identify priorities to translate the vision into a reality and an institutional architecture to follow up on and implement decisions taken at the political level. One such Circle of Cooperation could comprise of Turkey, Syria, Iraq, Jordan and Lebanon. Such a grouping would focus on water as a resource in a holistic perspective, rather than treating it as an issue of trans-boundary concern to any particular basin. In the future, if and when peace prevails on terms acceptable to all parties, it may expand horizontally in phases to cover other countries in the region. The European institutions, ASEAN, SAARC were all born with limited number of member countries and later on expanded in a gradual fashion. It is envisaged that the Cooperation Council may undertake the following and similar functions:

- To evolve a consensus on principles of cooperation.
- To create regional protocols, guidelines and practical measures for standardising measurements of quality and quantity of water resources by upgrading gauging stations, developing common approaches to interpret the data collected from equipment pertaining to water flows, climate and relevant environmental indicators.
- To set goals for restoration and long term sustenance of water bodies from an ecological perspective, similar to EU Framework Directives.
- To develop specific means of combating climate change and drought in a collaborative manner.
- To promote research, development and dissemination of environmentally sensitive and energy efficient water related technologies.
- To facilitate negotiation and creation of joint projects at basin or regional level including common early warning and disaster management systems.
- To prepare the ground for integrated water resource management at the basin level.

In order to implement some of the above mentioned functions, it would be necessary to understand the legal frameworks in all participating countries, attempt to streamline legal architecture within countries, and introduce commonalities between countries. This is not

to propose a new international law but rather an agreement on certain principles, which can be used as standard parameters by all countries to render their own laws effective. It may be also necessary to undertake either joint or independent assessment of availability of resources, long term supply and demand projections, and needs of consumers in the region. The Cooperation Council may decide on the importance of such tasks and authorise appropriate bodies to implement them. The Cooperation Council may also decide if such tasks are viable in short term or if they would be better addressed in the distant future once the member countries gain experience in working together on easily agreeable issues.

The Cooperation Council as envisaged here should be supported with funds from the member countries, as well as international partners. The quantum and proportion of the contribution by the countries in the region may be determined through mutual agreement. International donors may contribute agreed proportions in the early phase to enable neutrality and independence of the endeavour but there should be an in-built mechanism to reduce their contribution in a gradual manner.

Progress

The strife inside Iraq and Syria and the breakdown of the quadrilateral free trade framework have hindered the implementation of Cooperation Council as an inter-governmental mechanism in the current circumstances. But a Cooperation Community has evolved instead, forging the spirit of cooperation in the hearts of opinion makers, though not in the files of civil servants, creating soft infrastructure of regional cooperation.

Not deterred by the crisis in the region, visionary leaders of the Middle East have taken carefully structured gradual steps to create Cooperation Community for the sustainable management of water resource, popularly known as 'the Blue Peace community'.

The first step was the establishment of a High Level Group during a meeting in Amman in April 2012. Chaired by HRH Prince Hassan bin Talal,

with Mr. Yasar Yakis, former Foreign Minister of Turkey, and the late Dr. Mohammad Chatah, former Finance Minister of Lebanon, the mission of the group was to explore and harness political will at the highest levels to transform water into an instrument of cooperation between Iraq, Jordan, Lebanon, Syria and Turkey. The High Level Group led several meetings of politicians, government officials, diplomats, media leaders and experts.

In the last week of December 2013, Dr Mohammad Chatah was assassinated in a car bomb in an attempt to silence a voice of tolerance and reason by the forces of extremism. By this time, the nucleus around the High Level Group had expanded. It was therefore decided to convert High Level Group into a High Level Forum of policy makers.

The popularity of the High Level Forum meetings and actions between formal meetings have



Blue Peace Workshop at the House of Lords

demonstrated that the Blue Peace Community of Practise is growing in the Middle East. Beginning with a handful of experts committed to the issue in 2010, the Blue Peace Community has now expanded to include more than 200 policy makers, serving and former cabinet ministers, senior government officials, Members of Parliament, media leaders, scientists and experts. The sheer presence of decision makers and opinion makers in the High Level Forum meetings, including most noticeably one in Istanbul in September 2014, in an increasing number is a testament to the growing commitment of mainstream policy practitioners and catalysts to the Blue Peace principles.

At a time when multiple conflicts have led to the breakdown of communications between stakeholders, the Blue Peace Community has emerged as a rare platform of dialogue in the region.



First High Level Forum in Istanbul

Outcome

8 The High Level Forum held in Istanbul in September 2014 affirmed support to seven Principles of Cooperation that may lay the foundation of the creation of future mechanisms.

1. **Water resources should be accepted as a common and shared responsibility.** There was a discussion on the merit and feasibility of treating water resources as a regional common drawing inspiration from the Senegal River Basin. However, participants felt that the Middle East was not yet ready to take such a leap. In the immediate future, it should be possible at least to accept the Principle of

Common and Shared Responsibility, though not of common ownership.

2. **Confidence Building Measures such as data and technology exchange and the development of common methodology should be supported.** This principle is derived from a reality that you can only manage what you know, and therefore there has to be common understanding about what you know. Exchange of data is often a feasible first step on the long path of cooperation. Despite the difficulties in the Middle East, the Tigris Consensus Statement shows that there is a wide support for the principle of data and technology exchange.
3. **Benefit sharing approach should be promoted through cooperation to achieve water, food and energy security.** Water is critical for life because it is the most essential ingredient for human needs such as food and energy. Instead of focusing on quantitative allocation of water resources, it is a lot more productive to focus on how to share benefits derived from water in different economic segments, particularly food and energy.
4. **Riparian countries and communities should cooperate to manage climate risk.** The threat of climate change is real but the degree of global warming and its impact in the Middle East is debatable. Different scenarios about projected increase in temperature are projected by different scientific institutions. Despite such uncertainty about projections, there is a need to plan for response to climate risk in a collaborative manner.
5. **Each country should manage water resources efficiently.** Trans-boundary cooperation will

only be feasible if there is efficient utilisation of water resources within countries. In the absence of efficiency, risk associated with water will be exported across boundaries. Efficient utilisation also involves reducing dependence on high water intensive crops such as bananas and honouring cooperative agreements about extracting ground water. It is therefore essential to have a consensus on efficient utilisation by each country.

6. **Water should not be used as an instrument of war and water resources should be protected from terrorist activities and violent actions.** There are indications of new risks to water resources such as occupation of strategic assets by illegitimate violent actors and terrorist groups. There are also risks of destruction of dams and other infrastructure, poisoning of water, flooding of downstream population and cutting off supplies when such illegitimate actors take control of strategic hydro-assets or areas around them. The High Level Forum in Istanbul particularly discussed concerns arising from the spread of the Islamic State (DAESH) to parts of Iraq and Syria, and their control of Mosul and Haditha Dams in the past and Falluja Dam at present.
7. **Sustainable water management should particularly address the situation of vulnerable communities.** Communities are made vulnerable due to natural factors such as drought and man-made factors including inefficient management. The participants particularly expressed concern about the current drought situation in Lebanon. Initially, such communities are vulnerable to water availability, then to active access to water and then to access to good quality water.

This often results in migration. Conversely, refugees and internally displaced persons add a heavy burden to the water supply systems. In order to break such a vicious cycle, it is important to give due attention to water vulnerable communities in the planning process.

In addition to the Principles of Cooperation as a useful policy tool, the Blue Peace community has played a critical role in shaping public opinion in favour of a sustainable and collaborative approach to water management in the region. This has been done by media leaders conveying the message through articles and television programmes, political leaders directly sensitising heads of governments and ministers, and all

participants in the process addressing various audiences in the region. In particular, the role of the media leaders has been very productive. An informal Blue Peace Media Network is functional, publishing and broadcasting information, analysis and opinions on the subject.

Rough estimates indicate that through several hundred print media articles and prime time television programmes, the Blue Peace Media Network has sensitised over 30 million people in the region in the last two years.

Future challenges

Due to the current political uprising in Syria, all



At the Swiss Parliament, Saban Disli, Bakhtiar Amin and Yasar Yakis

the bilateral and regional agreements regarding water cooperation involving Syria have come to a standstill. However, considering Syria's strategic position and its stake in shared water resources, in the long term it is important to involve Syria in the Cooperation Council. Syria shares more than one river basin and aquifer with its neighbours, which are facing the threat of depletion. Any regional cooperative mechanism without Syria will not be sustainable in the long term. Thus it is important, till then, to continue to create the

space to include the country in the future, and continue engaging Syrians in discussion at the academic, scientific or grassroots level.

In the overall region, deteriorating security environment and worsening infrastructure can make meetings of the High Level Forum difficult. At times, participants face the risk of personal security. The assassination of Dr Mohammad Chatah is a sad reminder of how tough it is to be a messenger of moderation and reason.

2. Integrated Water Resource Management (IWRM) for small Cross Border Rivers in the Northern Circle:

The Swiss Agency for Development and Cooperation (SDC) has initiated a number of projects for integrated water resource management of small rivers in the Middle East in the pursuit of this objective.

3. Cooperation in the Euphrates Tigris Basin:

Once common goals, measurement standards, and gauging equipment are agreed to by all countries in the northern circle, it will be easy for Turkey, Syria and Iraq to introduce measures for basin level cooperation for long term sustenance of the Euphrates Tigris Basin (ET Basin) in a way that protects the interests of the three countries, their future generations and their environment. Once measures have been decided upon, any treaty will have to be ratified by parliaments and formalized by governments in each country. There are several mechanisms for bilateral and trilateral interaction between the three countries. The governments have used these mechanisms for exploring collaborative ideas in principle, reaching agreements of an ad hoc nature, and to build confidence. In the past many of these agreements and decisions have remained only on paper. However, there are three reasons for hope in the future.

First, political relations between the three countries have been improving since 2008 with several cooperation agreements on trade, transit and telecommunications. Second, there is a growing awareness in the governments and civil societies of all the three countries that the threat of climate change and drought is serious, and combating climate change needs a collaborative approach. Third, if a Cooperation Council is established for collaborative and sustainable water management, it will provide a politically convenient framework for basin level cooperation.

Progress

The Iraq-Turkey bilateral track was launched in 2013, to explore confidence building measures on the Tigris River basin initially by scientific experts in the two countries, later on evolving to involve senior decision makers. It was a considered decision of the experts to concentrate on the Tigris River Basin as it could be addressed at the bilateral level and not to focus on the Euphrates River.

In a series of meetings of experts in the initial stage and of experts and policy makers in the later stages, hydrology of the Tigris River Basin was discussed and it was proposed to encourage the water authorities of the two countries to institute small but specific confidence building measures.

Such a forward movement was made possible because of improving political will in the two countries. It was best reflected in the Minutes of the Meeting of government officials from Iraq and Turkey held in May 2014 proposing cooperation in data exchange and other aspects of water management.

It is in the spirit of cooperation promoted by both the governments that senior policy makers from Iraq and Turkey met in Geneva on 3 June 2014. They achieved a major breakthrough in developing consensus on pragmatic ways to achieve harmonisation of quantitative and qualitative data and standards of the flow of the Tigris River.

At the Geneva meeting a Plan of Action for promoting exchange and calibration of data and standards pertaining to Tigris river flows was

agreed on. This consensus has been referred to as the “Geneva Consensus on the Tigris River”. At the Blue Peace High Level Forum, held a few months later, further ideas were proposed to move from the statement to substantive action. Such as, for the two governments to commence the process of cooperation in exchange and calibration of data by taking immediate steps to identify one stream gauging station on each side; and to slowly expand cooperation to other areas of mutual interest and concern.

Outcome

A concrete framework of action with focus on the idea of identifying one monitoring station each in the border area in Turkey and Iraq for exchange and calibration of data is ready. It is significant because it is prepared through consensus between leading policy makers from the two countries and endorsed by a large community of practice. It has been directly presented to the two governments, who in turn will need to discuss it with their respective water authorities. Once the water authorities examine technical aspects, they can proceed by designating a stream gauging station on their respective side of the border.

Future challenges

Since 2014, a new force of terror has appeared in the Tigris basin. It is known as IS, ISIS, ISIL and Daesh. It has taken control of vital parts of the Tigris basin. At one stage it was in control of three dams. The security forces of Iraq and Kurdistan Regional Government managed to retrieve two of them but there is a huge uncertainty about the terrorist group taking over vital hydro assets again. There is also a risk of the group abusing their control over such assets to cause panic and damage. While an illegal



Geneva meeting on Tigris

violent force is in effective control of the basin, it would be very difficult for the Iraqi authorities to identify a stream gauging station in the border area and use it for the purpose of data exchange with Turkey. The situation on the Turkish side of the border is also very fragile and unstable. While the spectre of violence looms large over the Tigris Basin, the implementation of the Tigris Consensus Plan for confidence building between the two neighbouring countries will be an uphill endeavour.

CONSENSUS ON TIGRIS RIVER

Strategic Foresight Group achieved a major breakthrough in developing consensus between multiple stakeholder representatives of Iraq and Turkey on a Plan of Action for promoting exchange and calibration of data and standards pertaining to Tigris river flows. This was a result of a meeting in Geneva on 3 June 2014. It is expected that this breakthrough will contribute

significantly to the Blue Peace approach which transforms water from a source of crisis into an instrument of peace. Such a change in the role of water in a challenging region such as the Middle East requires institutional arrangements. The Governments of Iraq and Turkey have on several occasions agreed in principle to promote exchange and harmonisation of water data. The SFG initiative would help the countries to take the agreement in principle ahead to the next level of an operative plan of action. SFG, with support from the Swiss Agency for Development and Cooperation and Political Directorate of the Swiss Federal Department of Foreign Affairs had organised a meeting between senior representatives of Iraq and Turkey. The delegations comprised of senior advisers of the Prime Ministers, former Cabinet Ministers, Members of Parliament, officials of water ministries and water authorities and experts from Iraq and Turkey. Dr Yasar Yakis, former Foreign Minister, led the Turkish group while Dr Bakhtiar

Amin, former Human Rights Minister, led the Iraqi side. Dr Sundeep Waslekar, President of Strategic Foresight Group, chaired and moderated the discussion that made consensus possible.

SFG has been facilitating dialogue processes between Iraq and Turkey, involving leading policy makers and experts of the two countries. Seven meetings have been held so far:

- Bern, September 2013
- Amman, November 2013
- Mumbai, December 2013
- Istanbul, March 2014
- Geneva, June 2014
- Istanbul, September 2014
- Phnom Penh, November 2014

GENEVA CONSENSUS ON TIGRIS RIVER

Fifteen distinguished political leaders, parliamentarians, former ministers, senior government officials and water experts from Iraq and Turkey met under the auspices of the Blue Peace initiative in Geneva on 3 June 2014. The Blue Peace initiative is co-hosted by Strategic Foresight Group and the Swiss Agency for Development and Cooperation in cooperation with the Swiss Federal Department of Foreign Affairs.

This meeting welcomed the Minutes of the Meeting signed between Iraq and Turkey on water cooperation on 15 May 2014. It is in this spirit of cooperation begun by the two governments that the participants of the meeting contribute the following proposal.

OBJECTIVES

The overall objective of the project is to promote water as an instrument for peace and cooperation in the region.

The specific objectives are as follows:

- Identifying and assessing available data and fill the gaps in data collection and measurement
- Identification and implementation of common techniques and calibration for data collection, measurements, and methodologies for analysis and reporting
- Sharing available technology and relevant information, know-how and expertise in data collection and analysis

- Generation, assessment and harmonization of water quantity and quality data and information in identified sub-sections to facilitate the process of understanding the entire river basin
- Carrying out training programmes for capacity building.

Measurements, Analysis and Assessment

Iraq and Turkey currently have a number of monitoring stations that obtain hydrological and meteorological information across the Tigris River. There exists data in various forms collected by both parties, though this information, both past and current, is not shared on a regular and systematic basis.

Thus it is proposed that calibration of measurement instruments, utilization of common measurement and sampling techniques, and development of a common methodology for data analysis can be tools to enhance technical cooperation and build mutual trust and understanding. In the project, measurement instruments used by both countries can be compared with international standards and a reference water quality laboratory can be chosen to check the results. Those works will identify problems and gaps, and thus increase the confidence in the operational calibration of individual stations in both countries. This will ensure that there is little room for error and disagreement on the data. The best available measuring techniques should be used. The following initial steps can be undertaken to develop a common methodology:

- Comparison of existing flow-rate measurement techniques, statistical methods and reporting techniques in both countries, and subsequent harmonization of flow-rate measurement methods and calibration of measurement equipment
- Identification of water quality parameters being measured or to be measured, as well as the measurement techniques. Parameters can include, for example, nitrogen levels, dissolved oxygen, chloride, phosphorous, pathogens, salinity and others
- Standardization of data analysis, statistical methods and reporting techniques, where both parties can collaboratively decide the standards to be employed.

Sharing of Technology

It is proposed that both parties should share the technologies available and provide technical expertise in the following areas:

- Remote and digital measurement and monitoring systems
- Advanced sampling and measurement techniques
- Delineating the best sampling locations, deciding the procedure to take samples, optimum number of samples required, time of sampling and preservation of samples

- Employing the best available technologies to maintain the health and ecological balance of the river basin while utilizing the water for domestic purposes, irrigation, industrial use and power generation
- Using the best available technologies and upgrading the existing ones to treat point source pollution discharges into the river and reduction of non-point source pollution discharges to Tigris River.

Capacity Building

Development of expertise for the purpose of improving their performance and knowledge is an important pillar of cooperation between Iraq and Turkey on the Tigris River. This can be achieved if the two parties work on joint capacity building programmes to implement the objectives of the project. On-site training programmes on the above explained topics can be started in both countries. Capacity building programmes will also help to build relationships between people working along the river in both countries and develop trust. Relevant organizations in each country can pick the sites for training, as well as the experts and engineers to be trained. Relevant third parties with experience and expertise can be helpful in this endeavour.

GEOGRAPHICAL SCOPE

The Tigris River, originates from south-eastern Turkey near Lake Hazar (elevation 1150m), flows through the basaltic city of Diyarbakir up to the border city of Cizre. From there it forms the border between Turkey and the Syrian Arab Republic for a short distance and then crosses into Iraq at Faish Khabour. The river flows through Iraq to the Shatt al Arab and into the Gulf. The northern part is mountainous, while in the south the elevation drops to sea level. Turkey, Iran, Iraq and Syria are riparian of the river.

The project proposes that the river basin is broadly divided into to 4 subsections (not a sub-basin) from North to South, with each section representing different hydro meteorological properties.

- In Turkey, identification of two stream-gauging stations is proposed, one in the upstream part of the river and one near the border.
- In Iraq, the same pattern will be followed; one in the border region and one in the downstream part of the river.

The stream-gauging stations mentioned above are meant to be used for the measurement of both water quantity and quality. There was also a suggestion to include stations to measure melting of snow but there were differences of opinion on the merit of this proposal.

INTERNATIONAL SUPPORT

The participants appreciate Swiss facilitation to continue the dialogue process. They took note of the fact that Swiss have technical expertise and if and when the competent authorities of Iraq

and Turkey decide that they would like to avail of this expertise to implement some of these proposals, they could do so. If and when Iraq and Turkey approach Switzerland for technical input, the latter may respond according to the availability of resources and such other practical factors at that time.

CONCLUSION

This Consensus Note reflects the perspectives and views of the participants in the meeting. The participants believe that the decisions for cooperation on water resources between Iraq and Turkey are within the jurisdiction of competent Government authorities on both sides. This note is therefore presented to the Ministry of Forestry and Water Affairs as well as the Ministry of Foreign Affairs of Turkey and the Ministry of Water Resources as well as the Ministry of Foreign Affairs of Iraq and relevant authorities in Iraq and Turkey for action that they may deem appropriate.

ENDORSEMENT

The Tigris Consensus Process and the statement mentioned above was supported by High Level Forum on Blue Peace in the Middle East held in Istanbul on 19-20 September 2014 and attended by 90 policy makers and opinion makers from the Middle East. The statement was also presented by SFG to high officials of the Governments of Iraq and Turkey in personal and positive meetings.

The Blue Peace: Forging New Means of Cooperation

By Dr Hasan Z. Sarikaya, former Under Secretary of State of the Ministry of Environment and Forestry of Turkey and Ms Safia Al Suhail, Member of Parliament and Ambassador of Government of Iraq

On a bright day in Geneva, June 2014, fifteen distinguished political leaders, parliamentarians, former ministers, senior government officials and water experts from Iraq and Turkey met under the auspices of the Blue Peace initiative. The brainchild of Strategic Foresight Group, a Mumbai based policy think tank, the Blue Peace promotes transboundary water as an instrument for peace and cooperation, employing collaborative and sustainable strategies shared by riparian countries.

Home to almost 30 million people, with an irrigation potential of about 65-75 per cent, the Tigris River passes through high populated areas in both Turkey and Iraq. Little is known about the river and even less about its many tributaries. Of available scientific and academic literature, it

is known that there are severe fluctuations and variations in the flow of the Tigris River. Thus, there is an urgent need to have systematic real time monitoring of not only the main river, but of the tributaries as well, to get continuous and reliable data that can be used by all riparians. This will help in planning activities related to development of resources and population, maintaining the balance of the river and environmental concerns, as well as building trust and open dialogue between riparian countries.

Analysis of the hydro-politics in the Tigris basin tells us that while there have been a number of meetings over the years, the major riparian countries, Turkey and Iraq, have been unable to reach a basin wide agreement to jointly manage the shared river. In the last decade there has been an improvement of relations between Turkey and Iraq, despite the political uncertainties, and the high level visits and positive political statements have paved the way for future dialogue and cooperation. Despite the extreme political tensions in the region, these two countries have recognized that water and environment are important aspects of cooperation and have thus mutually agreed on moving forward in this direction.

Seizing upon the positive tone and space created by the governments of the two countries, the stakeholders involved in the Blue Peace process developed, over a series of track two meetings which began in Bern in September of 2013, a plan of action to promote exchange and calibration of data and standards pertaining to the quality and the flow rates of Tigris River.

The Governments of Iraq and Turkey have on several occasions agreed in principle to promote exchange and harmonisation of water data. The proposed plan, in line with the Blue Peace philosophies would help the countries to take existing agreements, currently only in principle, ahead to the next level of an operative plan of action. Now is the time to turn positive political statements and gestures into concrete action.

Some of the objectives outlined in the plan examine identifying and assessing available data in the river basin and filling in necessary gaps in data collection and measurement. The need to identify and implement common techniques and calibration for data collection and measurement has also been stressed upon, which will serve to reduce discrepancies in collection across the river. This will ensure that there is little room for error and disagreement on the data. It was agreed that the best available measuring techniques should be used, and technology, both existing and new, should be shared by the relevant departments in both the countries.

All of this will serve to identify problems and gaps, and thus increase the confidence in the operational calibration of individual stations in both countries. By agreeing upon techniques, statistical models, reporting techniques, quality parameters to be measured and standards of data

analysis, the two countries will ensure that the environmental and ecological balance and future health of the Tigris River is maintained.

The stakeholders at the meeting also recognized that development of expertise for the purpose of improving their performance and knowledge is an important pillar of cooperation between Iraq and Turkey on the Tigris River, and can be achieved if the two parties work on joint capacity building programmes to implement the objectives of the project.

The Iraqi and Turkish delegations were led by Former Ministers, Mr Bakhtiar Amin and Mr Yasar Yakis respectively, both of whom have been involved in this track two process for many years. In the last few months many leading experts and other government's officials have also participated in the process and provided their valuable input. In the recent meeting in Geneva, senior parliamentarians such from Iraq and Turkey have also gotten involved.

In the time of extreme turmoil, in a region besieged with problems, the consensus and plan proposed by the fifteen distinguished leaders and experts of Turkey and Iraq, offers a ray of hope and promise that cooperation is possible. The progressive thinking demonstrated by the Governments of Iraq and Turkey encourages a positive atmosphere that will hopefully expand in the future.

4. De-centralized Water Management in the Palestine Territories and 5. Confidence Building Initiative between Israel and the Palestinian Authority (PA):

(The following text is that of Recommendation 5 only. Recommendation 4 is seen as a possible future outcome of the implementation of Recommendation 5.)

There is a fundamental misunderstanding between water experts in Israel and the Palestinian Territories on the data pertaining to the availability of water, withdrawal of water from aquifers by both the parties, functioning of the Joint Water Committee (JWC), water infrastructure and pollution control. The experts from both sides have been presenting conflicting perspectives and information with regards to these issues.

However, some experts from Israel and the Palestinian Territories agree to certain principles in the form of the Geneva Initiative Annexure 2. The Annexure calls for fair management of water resources by equitable participation of both parties in the management process. It is now recommended to build on the Geneva Initiative Annexure, and to move from a non-governmental framework to a formal interaction between heads of the Water Authority of Israel and the PA, along with senior

political representatives on both sides. Such an interaction should be authorised by both the Prime Ministers for it to be meaningful. The objective of the interaction should be to have a frank and transparent discussion on differing perspectives, assessment of the real situation on the ground and clarity on the functioning of the JWC. Such an interaction for achieving clarity on major policy issues is to be distinguished from interactions on operational issues that in any case take place under the auspices of the JWC or under a trilateral technical level forum between Israel, PA and the United States which was strengthened to a quarterly meeting in late 2010. The proposed interaction should be observed by the Quartet and other members of the international community and treated as a Confidence Building Initiative.

If the two parties are in agreement on the facts, they may then decide to move to a discussion on the solutions, if and when the official peace process allows them to do so. If the peace process establishes another type of mechanism for addressing the water issue, or upgrades the Israel-PA-US technical forum to a political level, the confidence-building measure proposed here, along with the Geneva Initiative Annexure 2, will provide a sound foundation for the mainstream talks.

Progress

Soon after fragile calm returned to Gaza in the autumn of 2014 and despite official restrictions on interaction, when other communication channels had broken down, several distinguished policy makers, including former Cabinet Ministers from Israel, Palestine and Jordan met at Oxford to discuss possible ways forward in improving water relations between the three countries. The roundtable took a pragmatic approach and discussed few, specific, and modest objectives for cooperation in the water sector, which would be helpful in the improvement of overall relations. Recommendations included the reconstruction of water infrastructure in Gaza, stronger engagement with civil society and restructuring/reconstruction of the currently paralysed Joint Water Commission (JWC).

Outcome

In an extremely challenging environment, the process has produced concrete recommendations, which have the potential of eventual acceptance by political leadership of Israel, Palestine and Jordan. These are:

- a. Short Term – it will be essential to build a pipeline from Ashkelon to Gaza on an urgent basis or revisit the potential use and expansion of the existing pipeline built for drinking water. The establishment of such a pipeline should be possible within a few months. It is also possible to receive political support for this idea from the Government of Israel and the Palestine Authority, despite tensions and differences.
- b. Medium Term – considering the quality, level of salinity and pollution of water resources in Gaza, it would be necessary to work out a waste water treatment plan. The authorities



Israel Palestine Jordan Workshop at Oxford

and experts may decide whether this plan will provide for one or more large treatment plants or several smaller treatment facilities. The choice depends on availability of finances, technical specifications and other practical issues. In any case it can take up to 3-4 years to implement the plan and build plants and other facilities. It is important that such facilities will not be destroyed in the event of a military confrontation.

c. Long Term – in the long term it would be useful for Gaza to have a sizeable desalination plant taking advantage of its geographic location. This will create a new source of water. However, it would require a period of 7-8 years and significant amount of capital investment to establish such a plant. Nevertheless, this idea may be relevant as an important element in the long term.



Israel Palestine Jordan Workshop at Oxford

When other channels of communication have broken down, the Blue Peace process has taken the first steps to build a bridge of substantive and shared understanding on preferred policies.

Future challenges

The journey from ideation to implementation is bound to be hazardous. New interpretations of

the shared understanding may surface. Physical violence on the ground may prevent concrete action. Emotions are high. Confidence levels are low. The Oxford interaction provides a pathway but walking the talk will involve innumerable obstacles.

6. Red-Dead Sea Canal:

The Red-Dead Sea Canal (RDC) is a joint Israeli-Palestinian-Jordanian venture that aims to build a 112 mile pipeline from the Red Sea to the Dead Sea. The pipeline will transfer an estimated 1.8-2 BCM of seawater annually. Half of this water is intended to replenish the fast depleting Dead Sea, where the water level is dropping by one metre every year. The other half will be used in a desalination plant constructed at the Dead Sea and will serve as an additional supply of water for all three of the partner countries mentioned above. The desalination plant will use hydro-power generated by the 400 metre drop from the Red Sea to the lowest point on earth. Much information on this project is available in the public domain. While there is an immediate interest in the project by some of the key stakeholders, financial and environmental implications render it to be a medium to long term measure.

Several feasibility studies to assess economic and environmental aspects of the RDC project are underway and should be completed by end of 2011. The World Bank is the co-sponsor and coordinator of the feasibility studies. Other donors include France, Sweden, Japan, Italy, Netherlands, USA, Greece and South Korea.

In September 2009, Jordan announced that it would embark on a unilateral large-scale desalination project without Israel and the Palestinian Territories, as its water problems were worsening. Jordan's National Red Sea Project (JRSP) would bring 70 MCM of water annually to Jordan. The cost for the first stage of the project alone is estimated at \$2 billion and Jordan is still in the process of acquiring funding for the first phase. Sometimes analysts fail to distinguish between the RDC Canal and JRSP. These are two separate projects. While the former is proposed to be a trilateral venture, the latter is a Jordanian national endeavour. However, the comparison between the two projects is relevant to the extent that financing difficulties for JRSP indicate potential financial problems for the much more ambitious RDC Canal.

Progress

The Blue Peace community is not involved in advancing this recommendation in any manner, as it has been initiated, promoted and pursued by governments of the three countries in the region. It is not appropriate to report progress on this project here except noting the progress achieved by the concerned governments.

In December 2013, Israel, Palestine and Jordan signed a MOU on the first phase of the project. This MOU outlined an arrangement for conveyance of Red Sea water to a desalination plant in Aqaba in Jordan and to the West Bank. It also provided for exchange of water between Israel and Jordan in two different geographies in two different seasons to make optimum use of the resource.

Future challenges

Finances remain one of the biggest challenges of the Red-Dead Sea Canal project. The estimated cost of the project is over \$ 10 billion. Along with massive financial requirements, apprehension about environmental and seismic consequences

weighs on the minds of the decision makers. While governments are passionately supportive of the project, sections of public opinion are very critical.

7. Joint Desalination Plants

8. Export of Water of Turkish National Rivers to the Jordan Valley

9. Lake Kinneret (Tiberias) as Regional Commons

The Recommendations 7, 8, 9 are long term. They require exceptionally high level of mutual trust between parties.

With regards to Recommendation 7, some experts from Israel and Palestine see this as a feasible idea in the long term.

With regards to Recommendation 8, it has lost its political acceptance since the publication of the Blue Peace report in 2011. Earlier, there were proposals for supply of waters from Turkey's national rivers to Israel and Palestine in various forms. Turkey had even built a special terminal on its southern coast to ship water by containers to Israel. However, this idea has been shelved. The idea of transfer of water was being discussed until late 2010. However, since 2011 the idea has lost its appeal on commercial as well as political grounds.

With regards to Recommendation 9, it is at present only an ideal for long term vision of the region. When a viable and regionally as well as internationally recognized state structure is established in Syria, it may be discussed at the academic level. Until then, it is not worthwhile to discuss this idea.

10. Demand Management:

Most countries in the Middle East have some of the highest population growth rates in the world. Growing population combined with an increased standard of living will lead to a growing demand for water. Hence there is a need to put in place measures that will mitigate or control some of this growing water demand. Some of the measures included in this paper are:

- Modernization of irrigation methods including drip irrigation, changing cropping patterns and the use of treated wastewater.
- Better and more efficient water infrastructure to reduce water losses through pipe leakages.
- Measures to reduce water pollution by the industrial and urban sectors.
- Implementation of a tariff structure in the domestic sector.
- Comprehensive and total retro-fitting of water infrastructure.

This is not an exhaustive list and further measures are included in the paper. Demand management measures can reduce total demand substantially and can make a huge difference to future water deficit, water pollution and water conservation efforts.

Progress

The 2014 Istanbul High Level Forum endorsed the 'Framework of Cooperation' in which one of the principles emphasizes effective internal governance in the field of water management. – "Each country should manage water resources efficiently. Trans-boundary cooperation will only be feasible if there is efficient utilisation of water resources within countries. In the absence of efficiency, risk associated with water will be exported across boundaries. Efficient utilisation also involves reducing dependence on high water intensive crops such as bananas and honouring cooperative agreements about extracting ground water. It is therefore essential to have a consensus on efficient utilisation by each country."

Realising that demand management depends on good governance practices by governments and attitudes of citizens, it was considered critical to raise public awareness. Therefore, the Blue Peace Community has focussed on awareness building efforts. These include articles in the media advocating good governance and conservation

in the water sector, television programmes, and speeches by some of the leading public personalities. This effort is carried out on an on-going basis.

An important aspect of demand management is ensuring equity and justice in access to water. All over the world, water crisis do not necessarily affect the privileged sections of society. It is necessary to identify the precise communities which are affected by flawed demand and supply management. An SFG report, *The Hydro-insecure – Crisis of survival in the Middle East* identifies and maps the hydro-insecure people in specific governorates of Iraq, Jordan, Lebanon, Syria and Iraq and the reasons behind this hydro-insecurity. About 40 million people in thirty governorates located in Iraq, Jordan, Lebanon, Syria and Turkey are identified as hydro-insecure. 13 out of these 30 hydro-insecure governorates share international borders with each other making international cooperation on water indispensable. Across the hydro-insecure governorates of all five countries, water vulnerability does not occur in isolation. It is accompanied by one or more developmental



HRH Princess Sumaya of Jordan with Blue Peace Champions

issues such as poverty, war and conflict, low women’s development and environmental degradation. Along with this limited access to water, persistent drought, violent conflicts in the neighbourhood, unsustainable use of ground water, and imbalance of power between genders all exacerbate hydro insecurity.

Outcome

The primary outcomes addressing the key issue of governance in water sector are in the form of media products, such as television broadcasts, newspaper articles and internet publications. It is estimated that these would have reached several million people. It is obviously difficult to analyse how many of the recipients of such knowledge and information would actually change their

attitudes.

In particular, two episodes of El Ettijah television channel in Lebanon almost completely focussed on water conservation, demand management and good governance. They were broadcast at the prime time and viewed by several million people. The channel has also presented shorter programmes and news analysis advocating good governance and conservation for the optimum use of water.

The availability of new decision support tools, such as the Hydro-insecure report, will enable governments, donor agencies and civil society organisations to direct their efforts in a precise way towards the most needy sections of population.

Future Challenges

Demand management for water is a long term issue. It has been relevant in the Middle East for more than 5000 years since the irrigation was first introduced in the region. It will continue to be relevant for years to come. The goalposts will change with time and circumstances.

At this stage, when the region is facing water scarcity and drought, in a context where such issues related to natural resources are interlinked with social and political challenges, domestic good governance and interstate cooperation are both required. It is expected that any progress in regional cooperation with serious commitment from all countries will also compel better governance within the countries and equitable access to all communities.



Working Session of High Level Forum

Exchange of Experiences

The discussion on water cooperation in the Middle East faces the obstacle of “political will”. The big question is how to generate the much talked about political will. In discussion with several political leaders in the region, SFG found that they would find it politically attractive to advocate regional cooperation if it could be demonstrated that such an approach had yielded dividends in other parts of the world. It was therefore necessary to facilitate exchange of experiences between decision makers and opinion makers in the Middle East with representatives of successful organisations in trans-boundary water management.

Such an exchange has been able to generate inspiration, knowledge and legitimacy to empower the courageous and visionary advocates of cooperation and peace.

First hand exposure to examples from other parts of the world is inspiring for those in the Middle East who earlier believed that such cooperation was not possible. Secondly, the initiative gives knowledge of how cooperation is practised in reality in rich and poor regions alike. Thirdly, it provides legitimacy to the cause of cooperation, in a political and social context where ideas to overcome conventional hostility with enemies are seen with suspicion.

When decision makers in the Middle East get exposure to what people in Asia, Africa and Europe have been able to do, accruing benefits and indeed expanding the overall quantum of benefits of benefits, they asked themselves: “If others can do it, why can’t we and why shouldn’t we?”

The exchange of experiences is arranged in several different ways.

Input by external experts:

The meetings in Istanbul and Amman in 2013 and the High Level Forum in 2014 provided a platform for the experts from Africa, Asia and Europe to share their experiences of water cooperation with the policy makers, political leaders and media personnel from the Middle East.

The representatives of the India-Bangladesh Ganges Treaty, Finnish-Russian Commission, UNECE Secretariat of the Parties to the 1992 Convention, Rhine River Commission, Danube Commission, Okavango Commission, Senegal River Basin Commission and Mekong River



Danube River

Commission shared account of their experiences in the field of trans-boundary water cooperation. Some of the highlights of the lessons learnt were the importance of scenario planning, track two diplomacy, high level political commitment, creative mechanisms to resolve conflicts at the low threshold level and persistence in building cooperation over a long period of time.

The Water Cooperation Quotient (WCQ) – A Decision Support Tool:

The Strategic Foresight Group report on ‘Water

Cooperation for a Secure World’ published in 2013 introduces the Water Cooperation Quotient (WCQ), which measures the effectiveness and intensity of trans-boundary cooperation in water using certain parameters. The report concludes that “Any two countries engaged in active water cooperation do not go to war for any reason whatsoever”; which includes conflicts over ideologies, economic competition and other factors. The WCQ was developed by using the data on the 148 countries and 205 shared river basins around the world. The quotient is a measure of active cooperation by riparian countries in the management of water



Rhine Learning Journey

resources using 10 parameters including legal, political, technical, environmental, economic and institutional aspects. It is calculated on a scale 0 to 100, with 100 being the best performance. Plotting this quotient on a map that demarcates countries facing risk of war, confirms our conclusion that countries with a high water cooperation quotient do not go to war.

The report also gives insights into the nature, structure and functions of 10 successful River Basin Organizations (RBOs) around the world. Though there are no set prototypes of an organization or commission, the commonalities in various functions can be used as a basis for constructing the model of a new organisation. The RBOs usually have an established structure involving a decision making body, executive body and a secretariat. The RBOs encourage

the participation of all the concerned riparian countries in some form or the other. Though these RBOs have different working patterns they all have been successful in coordinated water management. Successful RBOs have political commitment of the Heads of Governments of the participating countries.

Learning Journeys:

The Learning Journeys are field visits for the media and policy makers to River Basins where countries have demonstrated the success of joint water management techniques. These visits provide a unique opportunity for participants to learn first-hand, about water cooperation and draw experiences on the best practices in joint management of trans-boundary water resources for their respective regions.

Rhine Learning Mission: In 2013, members of the High Level Group for Blue Peace in the Middle East, along with Members of Parliament and the Middle East Media Network embarked on a Rhine Learning Mission, conducted over three days in Switzerland and Germany. Participants travelled along the course of the river and observed joined management methods being successfully implemented. The group also had

the opportunity to see and understand the workings of measuring and gauging stations along the river. Meetings and presentations were also organized with the International Commission for the Protection of the Rhine, the International Commission for the Hydrology of the Rhine Basin, the Germany Federal Institute of Hydrology and others.



At the New International Phnom Penh Autonomous Port, Cambodia



Participants with Ms Monemany Nhoibouakong, Vice Minister, Ministry of Natural Resources and Environment, LAO PDR

Mekong River Basin visit: Leading experts, key government officials and representatives of media organisations from the Middle East visited the National Mekong River committees in Cambodia and Lao PDR in November 2014 at the invitation of the Mekong River Commission. They had interactive sessions with representatives of the Mekong River Commission and the National Mekong Committees of Cambodia and Lao PDR and Phnom Penh autonomous port and Department of Meteorology and Hydrology of Lao PDR. They discussed cooperation in data exchange, fisheries, flood management, navigation, hydro-power development, climate change adaptation and the management of environmental challenges. They visited the

Phnom Penh autonomous port managed by the Mekong River Commission and not by any national government and a hydromet station in Vientiane. They learnt about the strategy of gradual expansion of cooperation for the sustainable management of water resources in the context of poverty, economic difficulties, internal conflict, crisis of governance and interstate conflicts. They learnt how cooperation has progressed in a phased manner in the region beginning with an ad hoc committee formed in 1957 to a substantially internationally funded and full-fledged commission in 2014 to a financially independent and dynamic cooperation body envisaged in 2030.

Water Cooperation for a Secure World

HRH Prince Hassan bin Talal of Jordan and Sundeep Waslekar, President of Strategic Foresight Group wrote a joint Op-Ed on the linkages between Water, Peace and Security, which was simultaneously published by 25 newspapers in different parts of the world, including

Al Rai (Jordan),
The Daily Star (Lebanon),
Yemen Times (Yemen),
Today's Zaman (Turkey),
Dhaka Tribune (Bangladesh),
L'orient Le Jour (Lebanon),
Almada Group (Iraq),
All4Syria (Syria),
AlIqtisad (Syria),
Arab Environment Watch (Pan Arab),
Turkish Weekly (Turkey),
Al Badee (Lebanon),
Daily Radikal (Turkey),
Al Arab (UK),
Eurasia review,
Gulf News (Pan Arab),
The Atlantic Post (USA),
The Jordan Times (Jordan),
Al-Monitor which published it in 5 languages (Arabic, Hebrew, Persian, Turkish and English)

UN Secretary-General Ban Ki-moon has repeatedly emphasized the need to explore the linkage between water, peace and security. Now, new research by the Strategic Foresight Group demonstrates that he has been right to do so. Empirical evidence in 148 countries and 205 shared river basins indicates that any two nations engaged in active water cooperation do not go to war.

Of the 148 countries covered by the report "Water Cooperation for a Secure World," 37 are at risk of going to war over issues other than water, including land, religion, history and ideology. These also happen to be precisely the 37 countries which do not engage in active water cooperation with their neighbours.

The good news is that more than a hundred of those countries which promote water

cooperation in both letter and practice also enjoy peaceful and secure relationships with their neighbouring countries. Water and peace are interdependent.

Despite the growing international consensus in the international community on the significance of water as an instrument of cooperation (as reflected in the UN's designation of 2013 as the Year of Water Cooperation), many analysts continue to project water as a source of potential conflict. It is true that lakes, rivers and glaciers around the world are shrinking. Growing pressures of population, economic growth, urbanization, climate change and deforestation can further deplete water resources, thus causing social and economic upheavals, but this need not be so.

Active water cooperation can help overcome environmental challenges and usher in a new era of peace, trust and security. Beyond the essential legal agreements, active cooperation also requires sustained institutions of trans-boundary cooperation; joint investment programs; collective management of water-related infrastructure; a system for regularly and jointly monitoring water flows together with a shared vision of the best allocation of water resources between agriculture and other sectors; and a forum for frequent interaction between top decision-makers. An institutional infrastructure should enable political leaders to discuss exchanges between water and other public goods such as transit, national security or large public works. The underlying emphasis must be placed on harnessing the benefits of a river, rather than on squabbling about the shares of depleting flows.

The new Strategic Foresight Group report introduces the water cooperation quotient (WCQ), which measures the effectiveness and intensity of transboundary cooperation in water using the parameters mentioned above. The 37 countries that face the risk of war happen to have a WCQ below 33.33.

Many parts of the world witness active water cooperation between riparian countries. In the Senegal River Basin in West Africa, an autonomous body independent from any state owns the dams. In Latin America, the waters of Lake Titicaca are considered joint and indivisible by Peru and Bolivia. In the Mekong Basin, flow data is harmonized among the lower riparian countries, while the upper riparian countries, China and Myanmar, are dialogue partners. The Rhine, Danube and Sava River Basins, as well as Lake Constance in Europe and the Colorado River between the United States and Mexico, are all jointly managed on a daily basis. These countries all enjoy peaceful and stable relations.

The benefits of active water cooperation — both in terms of economic growth and in previously unknown levels of peace, as evidenced in both the developed and parts of the developing world such as Central America, West Africa and Southeast Asia — should not be denied to West Asia or other regions. Such cooperation, however, is premised on an intellectual framework for cooperation, rather than confrontation, or the “Blue Peace way of thinking” where water is seen as an instrument of collaboration rather than a cause of crisis.

We have together developed the Blue Peace approach in a process supported by the Swiss and Swedish governments over the last 3 1/2 years. It entails the development of a



Blue Peace discussion in the European Parliament

community of political leaders, parliamentarians, government officials, media leaders and experts from regions facing political discord, to encourage the use of water to promote peace and to protect and enhance the human environment. Such a community can pave the way to establish regional cooperation councils for the sustainable management of transboundary waters to facilitate joint monitoring of water flows; to harmonize standards to measure water and climate indicators; to negotiate joint investment plans in water-related large projects; and to discuss exchanges between water and other public goods. This can result in the improvement of the WCQ to a level higher

than 33.33 in Asia and Africa. Indeed, we urge all countries to use the WCQ to assess their own performance with regard to their cooperation with neighbours and thereby to enhance the prospects of peace and security for themselves.

It is our profound hope that together we can begin the process of implementing the Blue Peace framework across the world by crafting institutional instruments, globally acceptable legal regimes, dialogue mechanisms and a worldwide Blue Peace network. If we take a few steps in this direction this year, the proclamation of 2013 as the International Year of Water Cooperation will prove to be meaningful.

Emerging Crisis of Water and Environment

The following article warning of environmental crisis associated with water scarcity jointly written by journalists from Jordan and Lebanon, and including interviews with politicians and experts from the two countries is an example of collaborative public awareness building efforts made by the Blue Peace Media Network

By Sarah Mattar (Lebanon) Reem Rawasheda (Jordan), March 22, 2014, Alrai Newspaper

Both Lebanon and Jordan, like a large number of countries in the region, face unprecedented water scarcity which warns of an environmental disaster. Both countries experienced exceptionally low rainfall this year and the dams scattered along the Jordan Valley did not exceed the total of 170 million cubic meters of their total capacity of 325 million cubic meters, as of the 15th of this month, accounting for 52 percent of the total capacity.

As for Lebanon, the level of the Qaraoun Lake which usually ranges from 200 to 220 million cubic meters does not exceed the 42 million m³ today. The people of Lebanon require 180 liters of water per day, and if you include about a million and a half Syrian refugees (if not more), along with the four million citizens, the consumption requirements of this vital resource increases.

The same concerns apply this year in the case of Jordan, with the presence of more than 1.2 million Syrian refugees in the Kingdom, necessitating the development of a contingency plan to cope with the unprecedented circumstances, by identifying alternatives to deal

strictly with the reality of water, which does not bode well for the solutions being proposed on World Water Day, on the 22nd of this month.

The report titled "Water Cooperation for a Secure World", which was launched by Prince El Hassan bin Talal, the President of the Advisory Board of Water and sanitation for the Secretary-General of the United Nations, at the end of last year, calls for "consideration of shared transnational water resources depending on humanitarian grounds rather than political", warning from the "deficit of trust issues between States that share water basins, which is considered more dangerous than the deficit in the water availability".

The report by the group "Strategic Foresight Group" also warned that "water can be the cause of future conflicts due to lack of effective cooperation between countries that share transboundary river basins", precluding "the war between any two countries that share water cooperation".

In Lebanon, the current year's water situation warns of an environmental disaster, where

because of the exceptionally low levels of rainfall recorded, according to water experts, an appeal must be made to the official bodies responsible for the sector to launch a crisis cell in order to mitigate the damage and protect the rights of the people and provide the best service to citizens at the lowest possible cost.

The Chairman of the Lebanese Parliamentary Committee on Energy and Water, MP Mohammad Kabbani, considers that “the issue of water is more urgent, despite the complaints of citizens over the years of the electricity crisis”, denying the statement that Lebanon is floating on a lake of water, as this drought year revealed how much our situation needs to be treated rapidly and radically”.

Kabbani confirms that it, “is not enough to build dams, but what is required is the development of a general plan for guiding water sources and consumption, taking into account the geography for both sources or consumption. As well as developing a strategy for treatment including various sources and locations.”

Kabbani says, “We have the problem of water, and the presence of a large number of Syrian refugees intensifies the problem, because water is the first right of human rights.”

According to a World Bank study titled “Lebanon - Economic and social impact assessment of the Syrian conflict”, the social and economic costs of the Syrian conflict on the Lebanese economy, the costs to the water sector summed up to five billion dollars in 2012 and 2013, but it has become 8 billion dollars this year (2014), which means that the total cost to the water sector by the influx of Syrian refugees is 18 billion dollars.

Professor of Environmental Health Sciences at the American University in Beirut (AUB) Mey Al-Jurdi says, “Unfortunately we suffer from the lack of rainfall and snow cover. Although every 10 to 12 years precipitation decreases, we are still unprepared for fluctuations in climatic cycle; attempts to develop strategies for water management were not integrated in Lebanon, but what is required now is integrated management of water resources and updating laws and activating the partnership between the public and private sectors, and therefore disclosing the basic data base hidden in drawers as confidential information”.

Al-Jurdi regrets the fact that “the Litani River, which is one of the largest rivers in Lebanon, is nearly depleted today because of exposure to agricultural and industrial wastewater and municipal waste, which has affected the ecological environment of the river. We should focus on the project of drawing water from Lake Qaraoun on the Litani River to the capital Beirut, in which it’s necessary to ensure the quality of this water and its suitability”.

The studies record a decrease rate of a meter per year in the groundwater in the basin of the Litani and the Bekaa Valley in general, and this is a real disaster.

According to Al-Jurdi, Lebanon needs continuous rainfall and/or snowfall throughout the months of April and May considering the extreme water scarcity of previous months in order to reach a relatively acceptable rate, according to Al-Jurdi.

While the amount of rainfall until 20 March last year was 825.6 mm in Beirut and the airport, it did not exceed this year on the same day

404.6 mm, as meteorological Lebanese center reported, indicating that the Lebanon received almost half of rainfall compared with last year.

Al-Jurdi demands “rehabilitation of water networks and to compile sources that feed the networks, because water security is before food security”, wishing “to put a common agricultural map of the Arab region, which would enhance the marketing, production and specialization of each state in specific crop varieties, so as to provide water and increase productivity accordingly”.

Jordan’s many dams

In Jordan, on the occasion of the World Water Day, the importance of water was discussed. The water problems in Jordan are exacerbated by the crisis in Jordan, with the influx of Syrian refugees. In addition to an unprecedented state of no rain, the issue of Syrian refugees adds to the water woes of the Kingdom.

The estimated current demand for water for different purposes is about one billion and 400 million cubic meters per capita. The total annual deficit is estimated at 500 million cubic meters, in addition to the extraordinary demand for water for the presence of Syrian refugees.

According to the Jordanian Minister of Water and Irrigation Hazem El Nasser, “Extraordinary measures are required to overcome this situation”. He adds, “The Kingdom has witnessed the lowest precipitation in decades. Although the rain in the second half of March somehow softened situation the water did not reach the basic minimum levels of storage in the dams and the effects did not exceed the fact that it brought

us out of the negative situation to the case of zero”.

The Syrian crisis that enters its fourth year has increased the pressure on natural resources, including water. The demand for drinking water and for various other purposes, led to an urgent expansion of water networks facilities. Jordan depends for its water resources mainly on rainfall varying from one region to another, which varies greatly in quantity. The rainfall is collected in dams spread along the Jordan Valley, with a total capacity of 325 million cubic meters. The Unity Dam on the Jordanian-Syrian border is the Jordan’s largest dams with a capacity of 110 million cubic meters.

This year, the total storage of these dams until the fifteenth of this month, is 170 million cubic meters, accounting for 52 percent of the total capacity of the dam. The water from this dam is used for irrigation and household purposes.

This year also highlights the lowest point in dam storage. The influx of more than 1.2 million Syrian refugees calls for urgent measures as the current water availability is not sufficient to meet the current and future demand. The Ministry of Water and Irrigation began preparing a contingency plan to cope with the unparalleled circumstances, with the help of alternative options studied to deal with the current reality of water.

Nasser stresses that “in order to implement strategic projects to bring unconventional water sources to face water shortage in the present and future, we appeal to the international institutions and donor agencies to expedite the development of the necessary plans to deal with this reality,



Blue Peace discussion at the Doha Forum

in coordination with the management of the water sector in order to ensure the efficiency of providing refugees with their needs of water”.

The Syrian refugee camps consume about 30 to 35 liters of water per day per person. This water is supplied by international organizations through private tankers, from wells belonging to the Jordanian government and others privately owned by citizens accounting to about 4200 to

4500 cubic meters per day, a fairly large amount of water. If the extraction of water continues at this rate it may result into the depletion of the water resource. Moreover, about 80 percent of the wastewater results from this consumption.

The water expert and the Former Secretary General of the Ministry of Water in Jordan Dr Mayson Zoubi says that the “1.2 million Syrian refugees that were forced to leave their

homeland in search of security have reached Jordan and this has put sudden pressure on the water resources as well as on the State's capacity to deal with the issue. Concentrated efforts by the international community and Arab institutions are required to alleviate the negative effects of the situation."

Dr Zoubi points out that, "the Kingdom, with its population of over 6 million people, relies heavily on rainwater to meet its water needs, while the current annual water deficit exceeds 500 million cubic meters", stressing that "the provision of water sources and sanitation services are one of the challenges that require rehabilitation of networks. The establishment of the camps within the areas of water basins poses a threat to groundwater, which requires taking the necessary preventive measures to avoid contamination of these sources".

She explains that, "a study on the economic and social impacts of the crisis of displaced Syrians on the national economy of Jordan, showed that the cost per refugee up to about 2,500 dinars annually. The costs related to the water sector, borne by the Jordanian government accounted for about 2.312 million dinars in 2011 due to refugee influx".

Dr Zoubi confirms that, "the greatest challenge facing Jordan currently is the continuous flow of Syrian refugees across the borders. Water deficit is increasing steadily due to natural population growth, forced migrations and economic activities despite the implementation of major water projects, such as the Disi Water Conveyance Project, which enhances the Jordan's water budget by hundred million cubic meters annually".



Bassem Shabb and Saleem Batayneh, Parliamentarians from Lebanon and Jordan

Blue Peace Media Network Activity

Turkish Review of Zaman Media Group and El Ettejah English News Channel in Lebanon have been very proactive in producing and disseminating knowledge to create awareness and public support for Blue Peace.

Synopsis of Turkish Review Special Supplement

The Turkish Review published a special supplement on Blue Peace in the Middle East in March 2013. The special issue features articles by Dr Yasar Yakis, Sundeep Waslekar, Lord Alderdice, Dr Maysoon Zoubi, Ilmas Futehally and other water experts on the importance of water cooperation in the Middle East and the role of Blue Peace Initiative in providing opportunities for such cooperation.

Lord Alderdice and Sundeep Waslekar advocate the use of water as a tool for cooperation in the Middle East. They emphasize that water being at the centre of agriculture, energy and livelihood, active water cooperation in the Middle East can have a multiplier effect in large parts of the economy and it can eventually lead to Blue Peace in the region. HRH Prince Hassan Bin Talal of Jordan urges the Middle Eastern nations to form “a regional community for water, environment and energy committed to supra-national objective”. Dr Yasar Yakis, the former Foreign Minister of Turkey shares his longstanding experiences in trans-boundary watercourses and emphasizes on the careful use of water, the extremely scarce resource. Other important water experts from and around the region such

as Dr Maysoon Zoubi, Ms Ilmas Futehally, Ms Ambika Vishwanath, and Mr Frédéric Lasserre throw light on the importance of Blue Peace approach and its role in shaping the regional cooperation.

Synopsis of Turkish Review Special Issue

Every year the Turkish Review publishes a special issue on various topics. The 2014 Volume-4/3 of Turkish Review features the issue of water in the country and the region from a variety of perspectives: social, cultural, geo-political, environmental and economic. Former Secretary-General of the Jordanian Ministry of Water Resources Maysoon Zoubi examines Jordan’s experiences in water sharing and cooperation. Economist Riad Al-Khoury analyses the Blue Peace model of cooperation over water as a route to cooperation between states with otherwise difficult relations.

The review also touches on different aspects of water through articles of novelist Kaya Genc who analyses the role of Bosphorus, Turkey’s most famous water body in the latest creation of Maureen Freely. Dr Aalia Sohail Khan explores the importance of water in the major world religions, and how this offers new approaches to a more sustainable way of life. Meanwhile,

Dr Akgün İlhan of the Right to Water Campaign examines the socio-cultural aspects of the water shortages currently being experienced in Turkey.

Synopsis of Two Television Programmes Broadcast by El Ettejah

A Lebanese English News Channel 'El Ettejah' broadcast a special episode of the Middle East Stream, in October 2014. The episode features interviews of Dr Yasar Yakis, former Minister of Foreign Affairs - Turkey, Dr Bakhtiar Amin, former Human Rights Minister- Iraq, Dr Bassem Shabb, Member of Parliament- Lebanon and Mr Kerim Balci, Editor - Turkish Review.

The speakers discuss the Blue Peace initiative and the challenges and opportunities presented in turning the knowledge of the Blue Peace process into actions that could benefit the Middle East. Mr Kerim Balci identifies the role of media in informing the public about the looming water crisis especially in the upper stream countries and sensitizing them about the sustainable use of water for a better future. He acknowledges the fact that not only politicians but also the citizens need to take an active part in water conservation. Understanding the dire water scarcity and effects of mismanagement in Lebanon, Dr Bassem Shabb urges for optimum water usage and water cooperation through Blue Peace initiatives. Dr Bakhtiar Amin mentions that water should not be looked as a commodity but as a human rights issue and 'as a source of blessing'. He considers the Blue Peace initiative as a means to further and enhance cooperation between the peoples of Euphrates-Tigris basin. Dr Yasar Yakis states the importance of other successful River Basin Organizations around the world and the need to create a similar

organization in the Middle East by describing Turkey's share in the efforts.

In an earlier prime time episode, broadcast in December 2013, the channel interviewed late Dr Mohammad Chatah. He emphasised the importance of conservation, good governance and cooperation in water sector, concluding with the imperative for peace and reason. He was assassinated two weeks later.

Inspired by Middle East

The Blue Peace process in the Middle East has inspired similar initiatives in other parts of the world, facilitated by SFG and SDC, either together or separately. These include Nile Basin, Eastern Himalayan River Basins, Central Asia, and an upcoming worldwide initiative.

The Nile Basin countries had approached SFG and SDC to examine Blue Peace process in their basin. With active participation of the Chair of

Nile Council of Ministers, and representatives of governments, parliaments and academic institutions in 11 countries of the Nile Basin, a set of recommendations were prepared. The World Bank held discussions on the Blue Peace for the Nile report with international donors interested in the region. As the basin faces a political deadlock in the short run, the Blue Peace recommendations provide hope in the long run.



Charity Ngilu, Chairman of NileCom and Martin Dahinden, Head of SDC at the Nile workshop

SFG has used the Blue Peace formula for the Eastern Himalayan River Basin covering Bhutan, Bangladesh, Nepal, Northern India and Southern China. It has proposed the formation of a Himalayan Commission. The recommendations have been discussed in ministerial and parliamentary forums.

The Teesta River Basin shared by Bangladesh and India is a strategic component of the Eastern Himalayan River system. At the request of decision makers in the two countries, SFG has prepared a three dimensional Blue Peace formula for Teesta in a consensus building process involving both government and opposition parties in Bangladesh and India. The outcome was sought by the principal foreign policy advisers to the Prime Ministers in both countries as well as Cabinet Ministers in charge of relevant portfolios.

SDC has been approached by stakeholders in Central Asian countries to facilitate a Blue Peace process in the region, building on its huge investment and several years of experience in Central Asian republics. In response, SDC has

initiated the process in the last quarter of 2014 with a structured interaction of senior decision makers from all countries in the region.

As SFG and SDC have between them Blue Peace exposure to the Middle East, Africa, South Asia and Central Asia – the world’s most challenging hydro-political regions – they have been approached to extend the process to a global level. Such a broad exploration of the concept cannot be undertaken only by the two organisations. Sida which has collaborated with the Blue Peace process in the Middle East has worldwide experience. Also, many other institutions have a track record in collaborative water management in different parts of the world.

While there is worldwide interest in expanding the Blue Peace process, and a need to do so, it is only possible as a collective effort. If indeed Blue Peace finds acceptance around the world in years to come, it can help create a global architecture for preventing conflicts over water and transforming water from a source of potential crisis into an instrument of world peace.



Roundtable on Blue Peace between India and Bangladesh

SFG WATER DIPLOMACY PUBLICATIONS

- ≡ **The Hydro-Insecure: Crisis of Survival in the Middle East, 2014**
- ≡ **Water and Violence: Crisis of Survival in the Middle East, 2014**
- ≡ **Rivers of Peace: Restructuring India Bangladesh Relations, 2013**
- ≡ **Interactive Map: Water Cooperation for a Secure World, 2013**
- ≡ **Water Cooperation for a Secure World: Focus on the Middle East, 2013**
- ≡ **Blue Peace for the Nile, 2013**
- ≡ **The Blue Peace: Rethinking Middle East Water, 2011**
- ≡ **Himalayan Solutions: Cooperation and Security in the River Basins, 2011**
- ≡ **The Himalayan Challenge: Water Security in Emerging Asia, 2010**

CONFERENCE REPORTS AND LINKS

- ≡ **Mekong Learning Journey, November 2014**
http://www.strategicforesight.com/conference_pdf/73842Mekong%20Report%20Final.pdf
- ≡ **Blue Peace for the Middle East Roundtable on Israel-Palestine-Jordan, October 2011**
http://www.strategicforesight.com/conference_pdf/95852Oxford%20Roundtable%20-%20report.pdf
- ≡ **Blue Peace in the Middle East High Level Forum, September 2014**
http://www.strategicforesight.com/conference_pdf/76974CONFERENCE%20REPORT-%20HLF%20Istanbul.pdf
- ≡ **Geneva Consensus On Tigris River, June 2014**
http://www.strategicforesight.com/conference_pdf/47694Consensus%20On%20Tigris%20River_Revised%20Sep14.pdf
- ≡ **International Conference on “Water Cooperation for a Secure World–Focus on the Middle East”, November, 2013**
http://www.strategicforesight.com/conference_pdf/77350Amman%20Conference%20Report.pdf
- ≡ **Rhine Learning Mission, September, 2013**
http://www.strategicforesight.com/conference_pdf/41037Rhine%20Learning%20Mission%20Outcome%20Report.pdf

- ≡ **India Bangladesh Round table on Blue Peace in the Eastern Himalayas, July, 2013**
http://www.strategicforesight.com/conference_pdf/6205Microsoft%20Word%20-%20India-Bangladesh%20Roundtable%20Press%20Note.pdf
- ≡ **Blue Peace in the Middle East: Media Conference, March, 2013**
http://www.strategicforesight.com/conference_pdf/59321Istanbul%20Conference%20-Blue%20Peace%20in%20the%20Middle%20East%20-%20REPORT.pdf
- ≡ **The Blue Peace Roundtable At Westminster, November, 2012**
http://www.strategicforesight.com/conference_pdf/85046Report%20of%20London%20Roundtable.pdf
- ≡ **Blue Peace for the Nile, Zurich Workshop, February, 2012**
http://www.strategicforesight.com/conference_pdf/8041Report_on_Nile_Workshop_in_Zurich.pdf
- ≡ **Singapore Suggestions, December, 2010**
http://www.strategicforesight.com/conference_pdf/99205Singapore%20Suggestions.pdf
- ≡ **The Sanliurfa Opportunity, September, 2010**
http://www.strategicforesight.com/conference_pdf/22583Sanliurfa%20Opportunity.pdf
- ≡ **High Level Plenary - WANA Forum, May, 2010**
http://www.strategicforesight.com/conference_pdf/13712Amman_Aspirations.pdf
- ≡ **Water Security in the Middle East, Montreux, Switzerland, February, 2010**
http://www.strategicforesight.com/conference_pdf/57307Montreux%20Report-Final%20-%20Feb.%202010.pdf
- ≡ **Dhaka Declaration on Water Security, January, 2010**
http://www.strategicforesight.com/conference_pdf/31177Dhaka%20Declaration.pdf
- ≡ **SFG Workshop on Challenges of Water Stress and Climate Change in Asia, August, 2009**
http://www.strategicforesight.com/conference_pdf/31471Kathmandu%20Report.pdf

About Strategic Foresight Group

Strategic Foresight Group (SFG) is a think - tank engaged in crafting new policy concepts that enable decision makers to prepare for a future in uncertain times. Founded in 2002 to create new forms of intellectual capital, our body of work today encompasses over 50 countries, across four continents. SFG has published over 30 in-depth research reports in English with some translations in Arabic and Spanish. We currently work within three areas of focus: 1. Water Diplomacy 2. Peace, Conflict and Terrorism 3. Global Foresight.

SFG analysis and recommendations have been discussed in the United Nations, UK House of Lords, House of Commons, Indian Parliament, European Parliament, Alliance of Civilization, World Bank, World Economic Forum (Davos), and quoted in over 2000 newspapers and media sources. Several Heads of Government, Cabinet Ministers and Members of Parliament have participated in SFG activities.

SFG is known for pioneering the concept of Blue Peace to transform water from a source of crisis to an instrument of peace and cooperation. It has worked in the Middle East, Africa, Eastern and Western Himalayan rivers basins in Asia to craft the Blue Peace approach. These efforts have involved the participation of Cabinet Ministers, Members of Parliament, heads of water authorities and experts from the three continents and defined sustainable and collaborative solutions to the trans-boundary water issues. In its 2013 report, Water Cooperation for a Secure World, Strategic Foresight Group has proposed a unique formula to predict the probability of war on the basis of water and peace equation.

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Sometimes the smoke created by conflict and violence makes it difficult for us to see movements towards peace and reconciliation. If headlines in the international media are to be believed, the Middle East is witnessing nothing but a conflict between Israel and Palestine, tension between Iran and some of the Arab states, and strife involving ISIS, Al Nusra, and forces supporting and opposing President Asad of Syria. But beyond the gloom, reflected in these headlines, is a glimmer of hope. Leading policy makers and opinion makers in the Middle East are meeting and exchanging ideas on how to build long term and sustainable cooperation and peace in the region. They are forging personal bonds. They are learning, developing and refining tools for improving governance within the countries in critical sectors and overcoming age old mistrust between the countries. This journey towards a future that can embrace a region which is embattled today is made possible by the Blue Peace Initiative. This report explains how, against all odds, stakeholders in the Middle East are crafting a better future for millions of people in the region.

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