

STOCKHOLM

**WATER**

**FRONT**

A FORUM FOR GLOBAL WATER ISSUES

No. 4 • DECEMBER 2013

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# NEW TOOLS IN OUR ARSENAL



Photo: Thomas Henriksson

Water scarcity will affect an increasing number of people in the coming decades. Global water demand is expected to increase by 55 per cent by 2050, due to growing

demands from the manufacturing industry, electricity generation and households. Today, our arsenal lacks some essential tools for handling water scarcity. We need to consider new tools as well as develop existing ones.

In this issue of Water Front, we look at two different ways of meeting the water scarcity challenge. One is water pricing. To manage the rise in demand for water and to increase water productivity, incentives for using water more efficiently will be necessary. Water pricing is increasingly seen as a necessary tool. SIWI's Mr. Jens Berggren sets the scene by describing the intricacies of potential water pricing – how does one price one of our most elusive

resources? The issue is immensely complicated, but necessary to tackle. We will continue to cover water pricing, both in the Water Front and at SIWI.

Water scarcity will also pose a major challenge to businesses, large and small, in the future. While it may have been treated with less attention in the past, the water crises in different countries are now firmly placed on the radars of corporate leaders as a potential threat to operations. Our guest contributor Mr. Stuart Orr from WWF tells us more about the status of water stewardship.

In connection with the theme for the 2014 World Water Week – Energy and Water – we will cover more aspects of mitigating the global water crisis. Keep reading!

Mr. Torgny Holmgren  
Executive Director  
Stockholm International Water Institute

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**WATER FRONT**  
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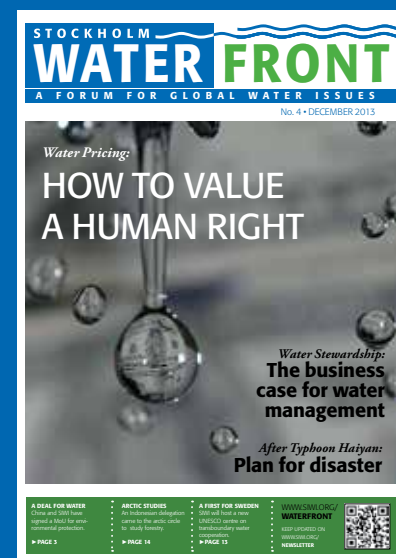
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## CHINESE ENVIRONMENT MINISTRY AND SIWI TO EXPAND WORK ON WATER

Building upon the success of the ongoing water sector capacity building programme developed by SIWI and the Ministry of Environmental Protection Foreign Cooperation Center (MEP-FECO), the two organisations have signed a Memorandum of Understanding (MoU) outlining their intentions to expand joint activities to protect the water environment in China and internationally.

The signing took place during the November 18 Sino-Swedish Environment Day Workshop, hosted in Beijing by the environmental ministries of Sweden and China. The workshop marked the phasing-out of Sweden's development cooperation with China, channeled by the Swedish International Development Cooperation Agency (Sida), which has built a solid foundation for continued and deepened cooperation based on mutual interest and close partnership.

The event highlighted the achievements made over the past years, and presented new initiatives for future environmental cooperation between Swedish and Chinese actors. During the workshop, SIWI and MEP-FECO experts also presented the results of some of their on-going activities, noting their impact to support senior policy



Mr. Björn Druse, Managing Director, Finance and Administration of SIWI, and Ms. Li Pei, Deputy Director of the Ministry of Environmental Protection Foreign Cooperation Center (MEP-FECO) sign the MoU at the Sino-Swedish Environment Day in Beijing.

Photo: Yang Ming

makers in MEP through technical guidance on the evaluation and use of economic instruments and tailored training programmes on integrated water quality management.

► **Read more:** [www.siw.org/chinaenvironment](http://www.siw.org/chinaenvironment)



Photo: Sören Vilks

## SIWI HONoured SWEDEN'S KING WITH ENVIRONMENTAL PLAY

**The environmental challenges faced by our planet were in focus as guests from the arts, science, politics, business as well as royalties assembled at Sweden's Royal Dramatic Theatre on November 23 to see a unique play recognising H.M. King Carl XVI for his environmental engagement during his 40 year reign.**

Participants in the play included Sweden's first environmental minister Birgitta Dahl, world renowned photographer Mattias Klum, artist Sofia Jannok and Johan Rockström, professor at Stockholm Re-

silience Centre. SIWI organised the play together with a group of leading institutions on environment and sustainable development.

The play took Dramaten's audience on an emotional journey through four decades and into the future. Dialogue was mixed with acting, music and film clips to illuminate the most pressing environmental challenges.

Professor Johan Rockström emphasised that we are at a point when the earth has started sending us signals indicating we have to change our unsustainable habits. "We have developed from a small world

on a big planet to a big world on a small planet."

By mixing arts and science, the play endeavoured to send a forceful message to the audience and beyond. In the words of photographer Mattias Klum, "Facts are not enough to make people leap from insight to action, and this is where art can play a key role. Picture and film are effective means to link the head and the heart and to touch people's souls."

► **Read more:** [www.siw.org/news/dramaten](http://www.siw.org/news/dramaten)



Photo: Peter Tjärberg, SIWI

## GOAL WASH: SMALL, BUT BEAUTIFUL

The first ever global GoAL WaSH (Governance, Advocacy and Leadership for Water Sanitation and Hygiene) workshop was held in Stockholm in November, bringing together focal points from 11 countries.

The week-long event, organised by the Water Governance Facility at SIWI, concluded the first five-year phase of the GoAL WaSH programme, initially established in 2008 with the aim of accelerating the achievement of the water and sanitation targets in the Millennium Development Goals (MDGs).

The aim was to share knowledge and lessons learnt and develop a way forward for the anticipated next phase of GoAL WaSH. Discussions during the week were inspired and lively, and several participants praised the frank atmosphere.

"I feel strong and confident to be part of such an experienced team," said one

participant, while others described the emerging GoAL WaSH community as a family, a tight network where advice can be offered and received with open minds.

Although the programme has limited funds, ambitions are high. Key issues discussed in Stockholm were decentralisation, tariff systems, supporting establishment of regulatory bodies, sector monitoring and databases, and involvement of consumer groups.

"I will bring home the confirmation that great results can be achieved with limited resources", one member concluded, while a comment from Laos coined a potential slogan for GoAL WaSH, a programme that is "small, but beautiful".

► **Read more about GoAL WaSH and the programme countries on:**  
[www.watergovernance.org/goalwash](http://www.watergovernance.org/goalwash)

## NEWS FROM COLLABORATORS

### RAGN-SELLS TAKES THE LEAD IN TRANSITION TO CIRCULAR ECONOMY

As the first recycling company, Swedish Ragn-Sells has joined "The Circular Economy 100" network, an initiative that brings together leading companies such as Coca-Cola, H&M and Philips as well as emerging innovators to accelerate the transition to a circular economy.

Circular economy focuses on business opportunities in circular orbits rather than linear processes, with a goal to develop more resource efficient business models.

Raw materials and energy must be used over much longer cycles than today.

"Recycling principles are at the heart of our business and we are thrilled to be part of driving development towards a circular economy," said Mr. David Schelin, CEO of Ragn-Sells Sweden.

► **Read more (in Swedish):**  
[www.ragnsells.se/Om-foretaget/Press/Pressmeddelande-2013-08-281](http://www.ragnsells.se/Om-foretaget/Press/Pressmeddelande-2013-08-281)



## SIWI WELCOMES NEW DIRECTOR FOR TRANSBOUNDARY WATERS

Dr. Therese Sjömander Magnusson has taken up the post as Director for SIWI's Transboundary Waters Programme starting December 1.

Dr. Sjömander Magnusson is a geographer and water resources expert with a research background from Linköping University. She has extensive experience from working on transboundary water resources in Africa, and joins SIWI from the Swedish International Development Cooperation Agency (Sida), where she was Senior Water and Sanitation Advisor and Deputy Head of the Policy Support Unit.



Photo: iStock Photos

## SIWI IN STARTING BLOCKS FOR 2014 WORLD WATER WEEK

The theme for next year's World Water Week in Stockholm (August 31-September 5) will be *Energy and Water*, addressing some of the most urgent challenges our world faces. The two sectors are inextricably linked and inter-dependent. We need water for energy, and energy for water. SIWI believes that this is just the beginning of a closer cooperation: it is only by thinking and acting together that we can solve some of our time's most pressing problems. The recent SIWI publication **2014 Call for Abstracts and Event Proposals** offers a thorough presentation of the 2014 World Water Week theme. There are also instructions on how to submit event proposals and abstracts.

► **Read more:**  
[www.worldwaterweek.org](http://www.worldwaterweek.org)

**SUBMISSION DEADLINE:**  
**JANUARY 19**



**WATER PRICING:**

# HOW TO VALUE OUR MOST ELUSIVE RESOURCE

.....  
**TEXT** Mr. Jens Berggren, SIWI

**PHOTOS** iStock Photos, Manfred Mats and Michael Moore  
.....

**Around 2,500 years ago the Greek philosopher Plato stated that “Only what is rare is valuable, and water, which is the best of all things...is also the cheapest”. In 1779, Adam Smith coined a famous paradox between value and utility, comparing diamonds, valuable but useless, with water, useful but worthless. But in the last few decades, something happened.**

As we approached the new millennium, the world realised that water is a finite resource and that our activities, including the economic ones, demand increasing volumes of water. Hence, at the 1992 International Conference on Water and the Environment, in Dublin, it was agreed that “Water has an economic value in all its competing uses and should be recognised as an economic good”.

But there was another part of the principle agreed in Dublin that received more attention, stating that access to water at an affordable price is a basic right of all human beings. At the time, there were several instances of private companies buying municipal water utilities and some-

times initiating significant price hikes on water services. This led to a situation where most of the attention on water pricing evolved around pricing of water for domestic uses. In 2010, the UN General Assembly recognised the human right to access to safe drinking water and sanitation, which seems to have contributed to loosening some of the knots of the pricing debate.

The human right to water stipulates that states have an obligation to ensure that their citizens have access to water for their basic needs. This does not necessarily mean that water for direct human use, such as for drinking or cleaning, shall be free of charge. Nor does it mean that water use for ►

other purposes, for example for producing food, electricity or industrial goods, shall be free.

When discussing a potential price on water, it is important to keep in mind that the water resource and the use of it have some characteristics that make it different from many other types of traded resources and goods.

**Water moves:** The liquid freshwater on our planet is in constant movement; it falls and flows and seeps. This makes the establishment and enforcement of ownership of water difficult, which has led to a discussion of a right to access rather than a property right over water. This in turn means that the right to access can be limited; e.g. in volume, in time or in the type of usage.

## HUMAN RIGHT TO WATER

Access to safe drinking water is not explicitly recognised as a self-standing human right, but is derived from the right to an adequate standard of living, which is contained in several international human rights treaties and therefore legally binding. It requires States to ensure universal access to safe water for drinking, personal sanitation, washing of clothes, food preparation, and personal and household hygiene. According to the right, the price of water services must be affordable for all without compromising the ability to pay for other necessities guaranteed by human rights, such as food, housing and health care.



**Water revolves:** When we use water it is not consumed. Instead we rather change its quality or its phase, i.e. we convert it to vapour. In many cases, nature cleans and condenses the water back to its original state, albeit often in another location and at another time.

**Water varies:** Freshwater is unevenly distributed across the world and there is great intra- and inter-annual variability in rainfall, leading to a vast variation in supply in addition to a very variable demand. As market prices are generally set by supply and demand, the significant and unrelated changes in both would mean that market prices would vary a lot over time.

**Water is local:** Liquid water is incompressible, heavy and often needed in large volumes. In addition, the biggest user, agriculture, would not be able to pay much per volume. With high transportation costs, the price for the water per se would have to be very low to allow for its conveyance. This means that water to a large extent is and will continue to be a local resource.

**Water is essential:** For most uses of water, there is no substitute. For all biological needs, of humans, animals and plants, water is vital. Hence, the only alternative to using a lot of water is to improve the water efficiency in order to use less.

With demand for water expected to increase by 55 per cent by 2050, there is an urgent need to find effective incentives for managing demand. While there are several measures in addition to pricing that can contribute to moderating the global demand for freshwater, it is likely that economic incentives will play an increasingly important role. The discussion about how, and how not to translate the elusive values of our precious water to monetary measures for managing demand is becoming more important than ever. As for Plato and Smith, water is still the best and most useful of things, but we may have to price it to start recognising its value. ■



## WATER MARKETS



There is archeological evidence of Aflaj systems in **Oman** as early as 2,500 BC and they are still in use today. Water rights for irrigation in the Aflaj systems are inheritable and tradable while water for drinking and ceremonial washing is free. A system of auctions for time allocations of irrigation water was practiced in Southern **Spain** from mid-13th century to the 1960's.

Today, formal water markets are established in Australia, parts of the United States, South Africa, Chile, China, Great Britain, Mexico, Oman and the Canary Islands.

## IMPORTANT ASPECTS OF

Water is not a single, homogenous commodity. A correct price on water would have to include all the aspects that we value in it. Water is used for so many purposes by so many actors that an exhaustive list is impossible to compile. Some important features include:



# THEN AND NOW



In **Australia**, water rights were separated from land rights in 1994 to allow for a separate market for water. The trade in water rights has since been expanded to allow for trading of permanent and temporary licenses across the state borders of New South Wales, South Australia and Victoria.

Water trading in the **United States** is mainly practised in the arid south-western states of Arizona, California, Colorado and New Mexico under different regulatory frameworks.

In **South Africa**, water rights were separated from land rights in 1998,

partly as a means to correct previous injustices where the white minority controlled 87 per cent of the freshwater.

The **Chilean** water markets were established in 1981 and are considered very liberal. The water rights are defined as a percentage of the water available in the catchment, so the volumetric risk is borne by rights holders. In response to fears of unproductive speculation in water, a tax on unused water rights was introduced in 2005.

## PRICING TRANSBOUNDARY WATERS

As our administrative boundaries, national as well as local, often transect the natural flow of water, the regulatory frameworks for market prices on water would have to be agreed across jurisdictions. With over 50 per cent of available freshwater resources and 145 countries in shared river basins, this is a significant political and legal challenge.



## A PRICE ON WATER

- **LOCATION;** water in one stream does not turn the turbines in another.
- **TIMING;** both a dry spring and a wet autumn can destroy a harvest.
- **AMOUNT;** floods and droughts are among the world's deadliest disasters.
- **QUALITY;** how the water can be used is decided by its chemistry, biology and temperature.
- **VARIABILITY;** any variation in the aspects above can have serious consequences for all activities involving the use of water.
- **CULTURAL/AESTHETIC VALUES;** water carries significant emotional and cultural values, not least by being a holy substance in most religions.



# AFTER TYPHOON HAIYAN: PLAN WATER INFRASTRUCTURE WITH DISASTER IN MIND

.....  
**TEXT** MS. VICTORIA ENGSTRAND-NEACSU, SIWI  
**PHOTOS** IFRC and UNICEF  
.....

**On November 8, the most powerful typhoon ever to hit land wrought havoc on The Philippines. Several weeks after the disaster struck, initial relief efforts were still underway. Most important of all, says Dr. Patrick Fox, Senior Natural Resources Advisor at the Swedish Red Cross, is to uphold access to clean water.**

“It is proving very challenging to reach all locations due to the vast physical destruction and consequent amount of debris lying around everywhere – and potential corpses underneath,” says Dr. Patrick Fox, who is central in the Red Cross response to the disaster.

According to the The UN World Water Assessment Programme’s Global Trends in Water-Related Disasters (2009), disasters triggered by hydro-meteorological events outnumbered all other disasters

combined. Floods, droughts and wind-storms have been the most frequently occurring disaster events since 1900. They account for 88,5 per cent of the thousand most disastrous events.

The Philippines hosts some of the most prepared people in the world as a result of frequent natural disaster. As part of that preparedness, communication systems, early warning systems and evacuation plans exist. “The fact that they were used, and some 700,000 people evacuated





**87.5m/s**

Haiyan's highest  
recorded wind speed

**15  
million**

Affected people

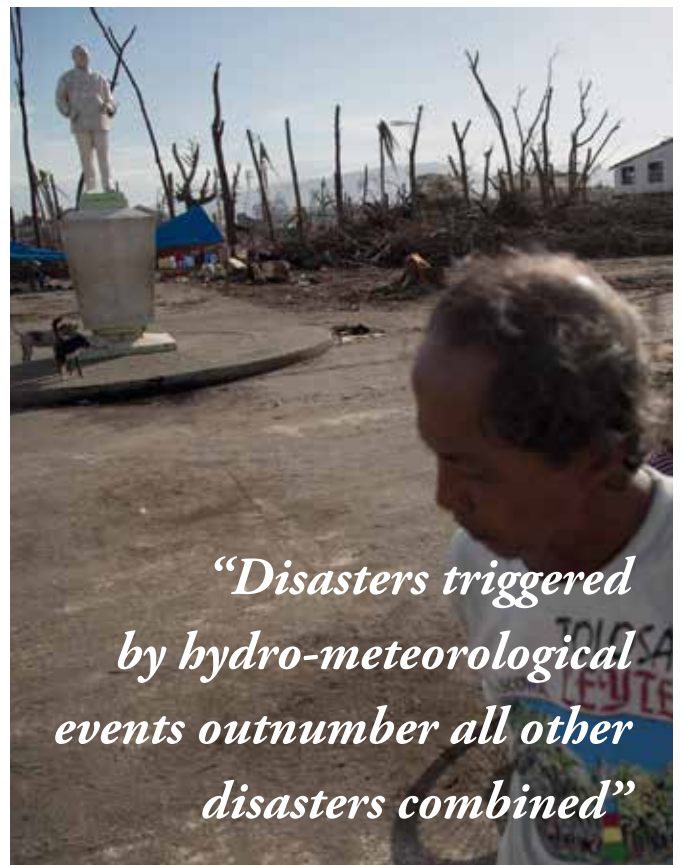
**5,759**

Reported dead

**1.2  
million**

Damaged houses

Sources: UN-OCHA and Joint Typhoon Warning Center (JTWC)



*“Disasters triggered  
by hydro-meteorological  
events outnumber all other  
disasters combined”*

prior to the arrival of Haiyan, certainly saved many lives,” according to Dr. Patrick Fox.

The most important issues to consider when building resilience to water and climate disasters are to ensure access to health care, water and sanitation, shelter and food in order to uphold physical and psychological health. Access to clean water needs to

be upheld no matter what, says Dr. Patrick Fox, and underlines that in such a disaster-stricken nation as The Philippines, the planning of water infrastructure needs to apply Disaster Risk Reduction concepts to its structural design in order to make the water delivery systems immune to disasters. ■



# WATER STEWARDSHIP THE BUSINESS OF WATER MANAGEMENT

.....  
TEXT Mr. Stuart Orr, WWF  
PHOTOS iStock Photos  
.....

**Frequent visitors to World Water Week in Stockholm will have noticed common themes over the years. Some challenges around water seem intractable. Yet in other areas we have seen dramatic change – and the interest around water for business, or ‘water stewardship’, is one of them. Five years ago, there was one main session on water stewardship in Stockholm. In 2013 we saw 26 main sessions. What has changed?**

One place to look for answers is the Carbon Disclosure Project’s (CDP) water disclosure report for 2013 (in fact, the reality that CDP now does a water disclosure report is part of the answer). This year, 70 per cent of companies report exposure to one or more water-related risks that could substantively affect their business. Two-thirds of the risks that are expected to affect both direct operations (65 per cent) and supply chains (62 per cent) may materialise now or within the next five years.

This combination of increasing incidents and awareness around water risks is driving the discussion of stewardship. Over the past five years, companies have taken the opportunity of World Water Week to open up about their own water risk experiences and responses – highlighting what happens when their business pollutes or takes too much, or when water mismanagement, social and environmental issues significantly affect them.

## **From rhetoric to action**

There is a huge collaborative effort underway (principally within the CEO Water Mandate) to establish water accounting



SHIP:

# BUSINESS CASE FOR MANAGEMENT

metrics, re-think public policy and define opportunities for companies looking to take action outside their factory fence line. These new tools and platforms are creating grounds for more sophisticated water targets and messages from companies. Until a few years ago companies discussed their targets in terms of water efficiency at a factory level; pollution reduced, water 'saved'. Today, the concept of water stewardship is moving from rhetoric to action, and commitments such as the following are becoming the new norm.

Anheuser-Busch InBev talks of 'reducing water risks and improving water management in risk areas'; H&M seeks to 'work together on collective stakeholder engagement and water management forums in prioritised river basins', while General Mills speak of "implementing changes in high-risk watershed areas" and 'developing public commitments, public education and advocacy with watershed neighbours'. This shift in commitments paves the way for others to follow bringing company actions into more 'mainstream' water debates.

## Awakening to water risk

Clearly not all companies are this far ahead, and in fact it is arguably the small and medium enterprise (SME) companies in supply chains and high risk areas that are leading the way on implementation. There is a long way to go for everyone involved, but with financial investors awakening to their own water risk exposure through their clients, companies are more attuned to their lost revenue wherever water stops flowing into the factory. As media and social scrutiny of company water use increases and exposés go viral – the focus on water stewardship will be trained to highlight solutions. It is one area of water

resource management where the business cases and the incentives for action are being made more clearly.

## Guiding corporate actions

A strengthened voice for the private sector has not necessarily seen a parallel strengthening of less powerful voices in resource management and decision-making. While it is easy to become enthusiastic about this new emphasis on company participation, this new interest is not without its challenges. At one end of the spectrum are companies claiming credit for actions based on weak and often inconsequential efforts. At the other end are accusations of policy and regulatory capture. Guiding corporate actions so that they deliver beneficial outcomes will be a formidable task, yet given the significant challenges facing freshwater management, strong positions for or against corporate engagement are likely to be counter-productive.

Projections on the future of freshwater mean that we face increasingly difficult choices as we strive to meet our needs for food, energy and water, while maintaining the other services that freshwater ecosystems deliver. Optimising water use for one sector can have dire consequences for others – and history tells us that nature will usually draw the short straw. The growing interest from companies and investors in water is a positive trend; if interest turns into principled action, we may be able to reverse troubling trends in freshwater. ■



## ABOUT THE AUTHOR

Mr. Stuart Orr is Head of Water Stewardship at WWF International. He has a special expertise in water resource management and corporate engagement on water policy.

## FURTHER READING

***Corporate Water Stewardship – New Paradigms in Private Sector Water Engagement.***  
Hepworth, N and Orr, S. (2013).

***Water Security: Principles, Perspectives and Practices.***  
B.A. Lankford, K. Bakker, M. Zeitoun and D Conway (Eds). Earthscan Publications, London.

***Guide to Responsible Business Engagement with Water Policy Pacific Institute/The CEO Water Mandate, UN Global Compact, Oakland.***  
Morrison, J., Schulte, P., Orr, S., Hepworth, N., Pegram, G., Christian-Smith, J. (2010).

***Collective Responses to Rising Water Challenges.***  
CDP (2012). CDP Global Water Report 2012. London. [www.cdp-project.net/CDPResults/CDP-Water-Disclosure-Global-Report-2012.pdf](http://www.cdp-project.net/CDPResults/CDP-Water-Disclosure-Global-Report-2012.pdf) (accessed 20 November, 2013).

► **INTERVIEWS ON NEXT PAGE**

**As water scarcity is becoming a reality for many global companies, mitigation of water-related risks is working its way into business strategies. We asked two global companies how they work with water stewardship.**



**Mr. Simon Henzell-Thomas**  
Sustainability Policy and Stakeholder  
Engagement Manager,  
IKEA Group

## STEPPING UP THE WORK

### How important is water to your company's operations?

IKEA is reliant on water for many aspects of our operations. Whilst we have a relatively small direct impact, our indirect impact in the supply chain, particularly through agricultural crops like cotton, is significant.

### How has thinking around water stewardship evolved in IKEA/Nestlé?

Our work on cotton with WWF, Better Cotton Initiative (BCI) and other partners is a good example of water stewardship and will be an important achievement if we can contribute to transforming the cotton sector. It does not, however, address all our impacts and much more needs to be done. We have worked closely with some of our suppliers on water issues, mainly in the textile sector. Following the launch of our sustainability strategy People and Planet Positive, we are ready to expand our work on water and make some firm commitments around IKEA's role as a good water steward. We are currently formulating our objectives around water stewardship and aim to release our Water Positive plan soon. We will focus on high impact raw materials such as cotton, suppliers in critical sectors like textile, and how we can help our customers live a more sustainable life at home.

### Have you entered any partnerships in order to better implement or influence water stewardship?

Along with our partners, WWF and others, we played an important role in setting up the Better Cotton Initiative and are committed to sourcing 100 per cent of our cotton from more sustainable sources 2015. We have worked with partners like WWF to help over 100,000 farmers learn more sustainable farming practices, including efficient water use. We are talking to a number of organisations about widening the scope of our water partnerships and expect this area to grow in the near future. We cannot achieve all our objectives or long-lasting systemic change without collaborating with NGOs, businesses, governments or our suppliers.

### How will water scarcity affect IKEA/Nestlé in the future?

We have recently performed a water stress and scarcity analysis of large parts of our supply chain. A number of our stores, distribution centres and suppliers are situated in water scarce and stressed areas. For some of those sites, the effects of climate change will further worsen the situation in the future. IKEA has an opportunity to make a positive difference in these areas, improving availability of water for people and contributing to a better environment. Our Water Positive plan will address key impacts in these critical areas. ■

### FURTHER INFORMATION ABOUT WATER STEWARDSHIP

2030 Water Resources Group, UN Global Compact, CEO Water Mandate, Alliance for Water Stewardship, World Business Council for Sustainable Development, Sustainable Agriculture Initiative, Better Cotton Initiative.



**Mr. Carlo C. Galli**  
Technical and Strategic Advisor  
for Water Resources,  
Nestlé Corporate Head Office

## WANT TO WORK ALONGSIDE LOCAL PARTNERS

Water is a critical factor for Nestlé because it transverses our entire value chain: farmers need water to grow the agricultural raw materials we buy, we use water in our manufacturing facilities, and finally our consumers need water to prepare the products they buy.

We have carried out water stewardship initiatives for decades, e.g. the "Agrivair" project in Vittel, France, where for more than 20 years we have been active protecting our mineral water resources by means of a collective action involving our key local stakeholders; local authorities, civil society and farmers. Through the years, we have moved into a more structured water stewardship approach across our operations. Our policy was recently crystallised with the publication of the Nestlé Commitments on Water Stewardship. Our commitments speak about our efforts in critical areas such as water use efficiency, wastewater quality targets, policy dialogue and collective action, engagement across our entire value chain (employees, communities, suppliers and consumers) and access to water and sanitation.

We have entered several partnerships, for example with the Swiss Agency for Development and Cooperation for a water conservation initiative for sustainable coffee farming in Vietnam. We also engage in and actively support public policy and water stewardship dialogues on several platforms. Nestlé was one of the first signatories of the WBCSD Pledge for Access to Safe Water, Sanitation and Hygiene (WaSH) at the Workplace, and we have WaSH programmes within the rural communities in our agricultural supply chain network, e.g. the "Drinking Water Fountains" at village schools in India and Sri Lanka and a partnership with the International Federation of Red Cross and Red Crescent Societies (IFRC) to support coffee and cocoa growing communities in Ivory Coast.

Our operations are spread across the world, thus we share water related risks with our consumers and customers. People around the world have started to experience how water scarcity can significantly affect their lives. We want to work with our local stakeholders to improve the shared management of water resources, acknowledging that working in an isolated manner, within our premises, on water use efficiency will not be enough to minimise our risks. ■





# SIWI to Host First UNESCO Centre in Sweden

**TEXT** Ms. Maya Rebermark and Ms. Victoria Engstrand-Neacsu, SIWI

**PHOTOS** iStock Photos

**The UNESCO General Conference has decided to establish a research centre in Sweden with a focus on international water issues. The centre will be run by SIWI in collaboration with Uppsala University and the University of Gothenburg. With its focus on transboundary water cooperation, the centre will be one of a kind.**

The majority of the world's countries share water resources in some form, such as rivers and lakes. Consequently co-operation with other states on this vital resource is essential. The Swedish UNESCO Category II Centre will focus on equitable water cooperation and aims to develop research and knowledge on transboundary water resources. The centre, which will be located at SIWI, will also concentrate on how to establish and develop effective water partnerships despite contexts of political conflict.

"The global population is growing. By 2050 we expect to be 9 billion people. However, we are unable to increase the quantity of water resources available to us. Consequently, it is important to ensure

we create good cooperation mechanisms around water for the future, and especially in relation to transboundary waters. Together with the universities of Uppsala and Gothenburg, we celebrate the decision to establish a UNESCO Centre on water cooperation in Sweden," said SIWI's Executive Director Torgny Holmgren. There are 81 UNESCO Centres in different parts of the world, with 18 of them focusing on water-related issues. This is the first time that a UNESCO Centre has been established in Sweden and the first time a centre will focus on transboundary water cooperation. This new UNESCO Centre will help Sweden deepen its involvement in water issues and disseminate Swedish research in this area. The focus will draw from the strong tradition of research on water conflict and cooperation that exists in Sweden today.

"Access to clean water is a critical global issue for the future. The establishment of a UNESCO Centre for Water Cooperation in Sweden will assist in increasing UNESCO capacities on water cooperation and provide concrete support in regions where conflict over shared waters is strong," said Ms. Inger Davidson, president of the Swedish National Commission for UNESCO. ■

## Supporting UNESCO Strategic Objectives

United Nations Educational, Scientific and Cultural Organization (UNESCO) Category 2 Institutes and Centres are a modality without precedence in the United Nations system: they are provided and funded by member states and are committed to engage in support of UNESCO's strategic programme objectives. These entities render technical assistance in areas of UNESCO's competence through capacity-building and training, research, networking, knowledge-sharing and exchange of information in their respective sphere of programmatic competence and specialisation and hence represent a valuable resource for UNESCO.

*Source: UNESCO*



# A TASTE OF THE SWE FORESTRY MODEL

TEXT and PHOTOS Ms. Sanna Gustafsson, SIWI

The sun set over the pine tree forest in Rautirouva Eco Park, a few kilometres north of the arctic circle. A group of 20 Indonesian officials from the forestry, tourism and education sectors, dressed in borrowed overalls to endure the cold of approaching winter, curiously inspected the flora and fauna of the Swedish forest. They had all come to Sweden on the hunt for insights in sustainable forest management to bring back home.

Stockholm Water Front got the opportunity to join the trip that took the Indonesian delegation from Övertorneå in the far north to Åtvidaberg in the south. The week-long study visit was part of a Partner Driven Cooperation (PDC) project between Sweden and Indonesia, facilitated by SIWI and focused on forestry, climate and eco-tourism.



**Mr. Tambang** Buntoi village in Central Kalimantan province and member of the Indonesian delegation.

In Indonesia, all land is owned by the government. Concessions for use of forests are often given to industries, and local communities rarely have the power to influence this. Buntoi is one of few villages that was recently been given the right by the Ministry of Forestry to manage the forest they live in.

While Chief Tambang and his fellow participants hope for greater decentralisation of the right to manage forests, he recognises that such a reform requires strengthened and better governed communities. "Our forest is rich in natural resources with a great multitude of species. I see great potential, but we lack the right governance", he explained.

In this work they believe that Sweden, with a long history of sustainably managing natural resources through innovation and entrepreneurship, is a good example to follow.

In the words of the Governor of Central Kalimantan, Mr. Agustin Teras Narang; "The Swedish model has the whole package: the knowledge, the technology, and the right human resources." He expressed the value of learning about it with his own eyes, and was keen on going back home to spread the knowledge. "As Governor, I have to be a role model for my people. I have to show the benefits of using our forest in an ecological way, so that everyone understands why change is so utterly needed."



**Mr. Agustin Teras Narang**

## Transformation is challenging work

There was a strong sense of dedication and determination among the Indonesian participants, united by the vision to steer a shift towards sustainable forestry in Indonesia. Considering the extreme level of deforestation the eagerness for change is easily understandable.

"Now we have a government that is ready to change the course to combatting deforestation and land degradation," said Mr. William Sabandar, Chairman of the REDD+ Special Team, with an optimistic look in his eyes.

"However, we are aware that transformation is challenging work. The Indonesian governance structures must be changed to better support sustainable use of forests," he said, and continued "the key is giving rights to the people. We need to find ways to diversify incomes for people living in remote areas or forests. It would enable them to manage the forests sustainably."



**Mr. William Sabandar** The relationships formed between Swedish and Indonesian stakeholders during the visit are expected to grow into self-sufficient partnerships. The Indonesian delegates have already formulated future cooperation ideas focused on capacity building in rural communities, research stimulation and policies for increased eco-tourism. Following further Indonesian-Swedish discussions and fine-tuning of the suggestions, implementation is expected to start in the near future. ■

## MORE FROM THE TRIP

### ► Photos:

[www.flickr.com/photos/51218237@N08/sets/72157636826384993/](http://www.flickr.com/photos/51218237@N08/sets/72157636826384993/)

### ► Blog article:

[www.swedishwaterhouse.se/en/blog/](http://www.swedishwaterhouse.se/en/blog/)

### ► News on SIWI web:

[www.siwi.org/news/indonesian-visit](http://www.siwi.org/news/indonesian-visit)





## Partner Driven Cooperation (PDC)

Partner Driven Cooperation is a development method based on mutual interests for cooperation, supported by the Swedish International Development Cooperation Agency (Sida).

PDC facilitates collaboration between Swedish and corresponding partners in selected countries to build lasting relations that contribute to poverty alleviation and sustainable development. The cooperation is characterised by shared responsibility and is meant to be self-supporting in the long term.

The goal of this type of development cooperation is to stimulate a so-called "win-win-win" situation. The winners will eventually be people in poor conditions, actors in partner countries and actors in Sweden.



## Sustainable Forestry in Indonesia

Indonesia is a country endowed with abundant natural resources: 70 percent of the land is covered by tropical rainforest. However, state figures from 2010 showed that a high level of deforestation and forest degradation made Indonesia the world's third largest emitter of carbon dioxide in the world, after USA and China. 41 percent of Indonesia's emissions resulted from forest degradation and 37 percent from deforestation.

Indonesia is determined to reduce emissions and prevent further deforestation. In this effort, an important part is the country's implementation of REDD+, a mechanism under UN's REDD (Reduction Emissions from Deforestation and Forest Degradation) programme.

► Read more about REDD+: [www.un-redd.org](http://www.un-redd.org)



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