

#### **COVER STORY**

#### SIWI World Water Week 2015:

(Dr. Arvind Kumar)

The 2015 World Water Week – themed Water for Development – was hosted and organized by the Stockholm International Water Institute (SIWI) in the Swedish capital Stockholm on August 23-28, to exchange views, experiences and shape joint solutions to global water challenges. Over 3,300 participants from 125 countries, representing governments, academia, scientific community, civil society, international organizations, the private sector, and many others took part in this, which also marked the 25th jubilee of both World Water Week and Stockholm Water Prize celebrated.

Apart from water, other topics covered, *inter alia*, included: climate change, food and nutrition, water and conflict, social instability and health. The theme of Water for Development was in tune with the United Nations Millennium Development Goals (MDGs), which expire this year, and which for the past 15 years had focused attention on the needs of poor nations, including boosting access to clean water and sanitation. A new set of goals called the Sustainable Development Goals (SDGs), to be adopted at the UN next month, will build on the MDGs for the next 15 years.



Sweden's Minister for Climate and Environment and Deputy Prime Minister, Dr Åsa Romson, echoed SIWI's message: "If waters are not managed properly and water resources management is not well integrated in climate efforts, climate impacts will have a significant effect on our societies – it is a challenge for all countries." She added that "I want to encourage further discussions on how to strengthen water resilience as part of the Action agenda and to make sure that climate investments, including through the Green Climate Fund, can support water resilience."

Dr Benedito Braga, Secretary of State for Sanitation and Water Resources for the state of São Paulo in Brazil and President of the World Water Council, said that "Water security is probably the greatest human challenge of this century." Struggling with extreme water shortages in a metropolitan area serving over 20 million people, he added: "Today I strongly believe that the stakes are higher than ever."

In a passionate plea to negotiators in Paris, the President of Marshall Islands, Christopher J Loeak, earlier in the week said he was not sure if he dared hope for the strongest possible wording in the climate agreement, but said he expected the world to make a historic pledge that would not only save his country, but also the world. "We (Marshall islands) are quite literally contemplating a future where we are being wiped off the world map," he said.

"It is of utmost importance to integrate and address water in the global climate discourse and this World Water Week has been an important platform for such collaborative discussions towards Paris," Minister Åsa Romson concluded.

SIWI is a Stockholm-based policy institute working for a water wise world. SIWI does independent research, generates knowledge and provides expert analysis and advice on water issues to decision-makers and other agents of change. SIWI organizes the World Water Week in Stockholm – the leading annual global meeting place on water and development issues – and hosts the Stockholm Water Prize, the Stockholm Junior Water Prize and the Stockholm Industry Water Award.

#### **Focus on Water**

According to the UN's children's fund UNICEF and the World Health Organization (WHO), some 2.6 billion people have gained access to clean water since 1990, but more than 660 million still live without access. A UN report in March said the world faces a 40 percent shortfall in water supplies in 15 years due to urbanization, population growth and growing demand for water for food production, energy and industry.

With droughts affecting places like California and São Paulo, the effects of climate change on the water supply has never been more evident. The urgency of the issue has led delegates at the latest World Water Week, organized by the Stockholm International Water Institute, which ended last Friday, to call it a defining element of climate change. Most of the expressions of climate change are felt through water, through floods, altered rain patterns, droughts and other extreme weather events. Besides, climate change mitigation efforts depend on access to water resources.

# SIW Valkommah & Valkommah

#### **UNESCO** Initiative

The occasion of World Water Week was utilized by UNESCO to announce, together with the Swedish International Development Cooperation Agency (Sida), the official public launch of the UNESCO project on "Emerging Pollutants in Wastewater Reuse in Developing Countries", funded by Sweden for 0.6 million USD for the next three years, at an official event of the annual World Water Week. Selected case studies of the project were also presented at the event, describing various aspects of the problem in different regions of the world such as hydrological modelling of the fate of emerging pollutants, potential ecological and human health risks, and socioeconomic and policy issues.

This ground-breaking global project aims to support UNESCO Member States to strengthen their scientific research and technical and policy capacities to manage human health and environmental risks caused by new and emerging water pollutants and consequently to improve water quality and wastewater management, including safe reuse of wastewater, and enhance water and food security. The project also contributes to the post-2015 Sustainable Development Goals, including the goals on water, health, hunger, ecosystems, chemicals management, among others.

A growing water quality concern facing both developed and developing countries is a wide variety of new and emerging pollutants found in water resources, threatening human health and the environment. New and emerging water pollutants include a broad range of substances, including pharmaceuticals, personal care products, endocrine disrupting compounds, pesticides, domestic- and industrial-use chemicals, etc. These pollutants are released to water bodies and the environment because they are usually not removed in conventional wastewater treatment facilities.

Scientific knowledge and understanding on potential human and ecosystem health risks posed by emerging water pollutants is still very scarce, as well as on their presence in water resources and wastewater and their pathways and accumulation in the environment. Most emerging pollutants are not regulated in environmental, water quality and wastewater discharge regulations—even in developed countries with stringent water quality and pollution regulations.

Hence, there is an urgent need to strengthen scientific knowledge and adopt appropriate technological and policy approaches to monitor emerging pollutants in water resources and wastewater, assess their potential human health and environmental risks, and prevent and control their disposal to water resources and the environment. Furthermore, it is essential to enhance capacity building and awareness raising of water professionals, as well as other stakeholders such as policy-makers and the public, on emerging water pollutants, given the very limited information available.



The UNESCO project responds to these needs and priorities in order to help countries to put in place effective policies and strategies to tackle this new water quality challenge, with specific focus on developing country needs for sharing and disseminating scientific knowledge. Towards this end, the project comprises three specific components aimed at strengthening scientific research and policy (2015-2016), promoting scientific exchange and collaboration (2015-2016), enhancing capacity building and awareness raising on emerging pollutants (2016-2017). The project will conclude by presenting its final results at an international conference (2017-2018).

This project complements core activities of the International Hydrological Programme (IHP) of UNESCO in the area of water quality. Water quality is one of key thematic areas of UNESCO activities in the field of water sciences. During the Seventh Phase of International Hydrological Programme (IHP-VII, 2008-2013), water quality issues were addressed with a renewed focus on "Protecting water quality for sustainable livelihoods and poverty reduction" (IHP-VII Focal Area 4.1).

The significant contribution made by UNESCO during IHP-VII in promoting scientific knowledge, research and capacity building in this area has brought water quality issues to the forefront of IHP activities and has led to the prioritization of water quality as one of the main themes of the ongoing Eighth Phase of IHP (IHP-VIII, 2014-2021) through the dedication of IHP-VIII Theme 3 on "Addressing water scarcity and quality".

The project is implemented under the *UNESCO-IHP International Initiative on Water Quality* (*IIWQ*). Established by endorsement of UNESCO Member States at the IHP Intergovernmental Council of UNESCO at its 20th session in 2012, the Initiative provides a platform to mobilize and promote scientific knowledge, research and science-based policies to respond to water quality challenges, including safe water, wastewater and sanitation issues, towards ensuring water security for sustainable development. It is a comprehensive scientific cooperative programme to address water quality and wastewater issues in a holistic and integrated manner. It also aims to facilitate collaboration on water quality and wastewater issues among researchers, practitioners, policy—makers and other stakeholders in both developed and developing countries.

#### The WASH Initiative

During the 25th World Water Week in Stockholm, the WASH Alliance International launched Accelerating WASH, an approach, which is focused on stepping up and meeting the needs of a growing population. Undoubtedly, much has been achieved under the Millennium Development Goals; nevertheless, 700 million people still lack access to clean water and 2.5 billion people do not use improved sanitation facilities. This has driven the WASH Alliance International to strive to achieve universal access to WASH by 2030.

With more than 100 partner organisations worldwide, the WASH Alliance International runs WASH programmes in eight countries in Africa and Asia. Since its inception in 2011, funded by the Dutch government, the alliance aims at reaching full coverage while creating systems for sustainable and affordable WASH services that can accelerate. Hanny Maas, programme manager of the WASH Alliance explains: "We believe this is the only way to adapt to newly emerging challenges such as the fast population growth. A guiding principle in our work is to facilitate the development of a system in which all stakeholders, such as businesses, governments, citizens and NGOs effectively work together"

To achieve the ambitious goal, the Alliance contributes to a shift from hardware-construction towards WASH Sector development. The Alliance trains WASH businesses and financial institutions to build functioning WASH markets, it works closely with governments to create a supportive environment for the provision of water and sanitation. The Alliance also empowers and organizes citizens so that they are able to demand and pay for sustainable WASH services and practice healthy behaviour. In the words of Tobias Omufwoko, Country Coordinator of WASH Alliance Kenya: "When these stakeholders work effectively together, the systems takes over, making external subsidies redundant over time and accelerating access to safe sanitation for a growing urban population."

For the WASH Alliance International, acceleration is a mindset focused on exponential growth of sustainable access to WASH, it is a way of thinking about scale and continuously reducing costs per person. Over the first three years of the programme, access to WASH services cost €3 per person. In year five, the costs declined to an average of €20 per person. And the financial leverage of funds in the countries the Alliance is active in, continues to increase, as more consumers start building their own water and sanitation facilities with savings or by accessing a loan.

#### **Prizes**

During the Week, several prizes were awarded for excellence in water-related issues. The Stockholm Industry Water Award was awarded to the engineering company CH2M for developing and advancing methods to clean water, and increasing public acceptance of recycled water. Perry Alagappan from USA received the 2015 Stockholm Junior Water Prize for inventing a filter through which toxic heavy metals from electronic waste can be removed from water. And finally, the prestigious Stockholm Water Prize was awarded to Shri Rajendra Singh of India, for his innovative water restoration efforts, improving water security in rural India, and for showing extraordinary courage and determination in his quest to improve the living conditions for those most in need.

#### Plea to Paris Conference

As World Water Week came to a close, water policy experts urged climate negotiators to ensure that water is thoroughly integrated in the forthcoming global 2015 climate agreement, which is expected to be reached at COP-21 scheduled to be held at Paris in December this year. SIWI's executive director summarized the voices of the World Water Week when he said, "Water is what binds together all the aspects of climate change. Climate change is water change."

The impact of climate change is felt through water, with flooding, erratic rain patterns, pro-longed droughts and other extreme weather events. Water is also critical for successful climate change mitigation, as many efforts to reduce greenhouse gas emissions depend on reliable access to water resources. Karin Lexén, Director of World Water Week, International Processes and Prizes said: "It is absolutely vital that water is a part of both voluntary initiatives to mitigate and adapt to climate change, as well as of the Climate Convention itself."

It is earnestly hoped that Paris Summit on Climate Change will heed this clarions call from SIWI World Water Week and address the issue accordingly.

## **Highlights**



While dealing briefly with the concept of Ecosystem-based adaptation, the Presentation also focused on the unprecedented significance which the water had come to assume in the development discourse of South Asia in general and India in particular. The major focus of the presentation was on application of EBA approach in Meghalaya, a state in India's northeastern region and it is summarized as follow:

Meghalaya is topographically and geographically a fragile state vulnerable to vagaries of climate. Some years ago, Meghalaya was faced with major climate and water related problems viz. pollution of surface and groundwater resources; absence of clear cut water policy; lack of long-term water policy measures regarding flood control and rainwater harvesting; dearth of mechanism for water quality monitoring; and capacity building of the stakeholders & sharing of water data etc.

With the cooperation of and inputs from India Water Foundation (IWF), a New Delhi-based civil society, Meghalaya has undertaken many major measures for ensuring water, energy and food security via ecosystem-based adaptation like: enactment of a state water act and state water policy, adoption of Integrated Basin Development and Livelihood Programme (IBDLP) to improve livelihoods of the people; Institutional mechanism for regulating and rationalizing water policies; Adoption of water-energy-food nexus approach as the key to sustainable development etc.

Meghalaya's Environment-Plus Model (with inputs from IWF) visualizes a holistic approach encompassing capacity-building of sector and actor, identification of goals, strategies, success indicators, funding sources, deliverables and milestones to accomplish the strategic priorities. Green Mission focuses on promotion of institutional, financial, and technological innovation; designing of policies and institutions for water supply and sanitation service delivery; promotion of 'green' Energy and eco-friendly tourism; and emphasis on Government, civil society and private sector partnership in promoting water and sanitation technologies and services.

The ecosystem-based adaptation along with water-energy-food nexus constitute the integral components of the Integrated Basin Development and Livelihood Programme (IBDLP) launched by Meghalaya government in 2012 and its successful implementation in Meghalaya entails the potential of its being replicated in other states of India as well as neighbouring countries.

## **Highlights**



DR. Kumar stress on water conservation for Sustainably increase agricultural productivity, to support equitable increases in farm incomes, food security and development also explain the Achievements and Negative effects of the First Green Revolution and also ask the policy maker that "Do We Have The Resources To Implement CSA To Spur A Second And Environment Friendly Green Revolution In India?" in panel discussion on the occasion of 66th ICID Foundation Day.............for more <a href="http://www.icid.org/66fd\_report.pdf">http://www.icid.org/66fd\_report.pdf</a>

agenda

## **UNGA Transmits Post-2015 Agenda for Summit Action**

(Dr. Arvind Kumar)

On 1 September 2015, the 69th session of the UN General Assembly (UNGA) adopted a resolution transmitting the outcome document of the UN Summit for the adoption of the post-2015 development agenda, titled 'Transforming Our World: The 2030 Agenda for Sustainable Development,' to the UNGA's 70th session, for action during the Summit. The resolution (A/69/L.85) also welcomes the "successful conclusion" of the negotiations on the post-2015 development agenda and the outcome document, which was agreed by consensus at an informal meeting of the plenary on 2 August 2015.

Opening the meeting to adopt the draft resolution on 1 September 2015, UNGA President Sam Kutesa said the outcome document is "a triumph of multilateralism." He thanked Member States and all stakeholders who provided input.



After the UNGA adopted the document as orally revised, UN Secretary-General Ban Ki-moon said the moment represented the beginning of a new era and the 2030 Agenda for Sustainable Development marks a paradigm shift in development. He expressed his expectation that, during the Summit, world leaders "will not only endorse the new agenda, but strongly commit to its implementation."

South Africa for the Group of 77 and China (G-77/China), Maldives for the Alliance of Small Island States (AOSIS), Jamaica for the Caribbean Community (CARICOM), Paraguay for the Landlocked Developing Countries (LLDCs), Tonga for the Pacific Small Island Developing States (P-SIDS), the EU, China, Colombia, Hungary, India, Israel, Japan, Kazakhstan, Norway, Panama, Peru, and the Republic of Korea welcomed the adoption. Brazil, Egypt and India specifically welcomed the creation of the Technology Facilitation Mechanism (TFM).

The US underlined that: the understanding of the reference to "each state's permanent sovereignty on natural resources" needs to be consistent with existing international agreements; the outcome document does not represent a commitment to provide access to new products, and the World Trade Organization (WTO) and the Doha Round remain the appropriate foray for discussing trade issues; the principle of common but differentiated responsibilities (CBDR) is explicitly and solely related to specific environmental aspects; resource efficiency represents the core of sustainable consumption and production (SCP), which requires a universal approach to SCP, with developed countries taking the lead on knowledge sharing of best practices; the transfer of technology refers to voluntary transfer on mutually agreed terms; "broadening and strengthening the voice and participation of developing countries in global economic governance" refers to increasing the effectiveness of their voice but does not imply changes in the governance of international financial institutions such as the International Monetary Fund (IMF) and the World Bank; targets 2.5 (genetic diversity of seeds) and 15.6 (genetic resources) are not related to intellectual property rights (IPR); and the Addis Ababa Action Agenda (AAAA), the outcome document of the Third International Conference on Financing for Development (FfD3), provides the context for the means of implementation (MOI).

Qatar for the GCC, Senegal for the African Group, Chad, Ecuador, Egypt and Iran expressed reservations regarding target 5.6 on sexual and reproductive health and rights (SRHR) and target 3.7 on access to sexual and reproductive health care services. The GCC, the African Group, Chad, Egypt and Iran further stressed that "family" refers solely to "man, woman and children," with the GCC, the African Group and Iran noting that they understand references to "gender" only as meaning "sex."

Iran said there should be a single follow-up mechanism, at the national level, and any reporting template, mechanisms and indicators should be agreed and adopted through intergovernmental negotiations so that they do not contradict national laws and cultural values. The African Group, Chad and Sudan offered Explanations of Positions (EOPs) on the reference to "other status" in paragraph 19 (human rights), saying that in their understanding it does not include LGBT people.

Venezuela expressed reservations to the preamble, noting that it reflects only one vision of sustainable development aligned with the vision of the Western world, and does not cover other models that contribute to sustainable development. She further expressed reservations to targets 7.1 and 7.b on "modern energy;" 12.c (phasing out fossil fuel subsidies), and, supported by Turkey, target 14.c, mentioning that Venezuela is not a party to the UN Convention on the Law of the Sea (UNCLOS).

Venezuela further expressed reservations to any references to the elimination of fossil fuel subsidies, low carbon economies, and mechanisms for establishing carbon pricing. She stressed that Venezuela cannot accept any monitoring or assessment of its energy measures. Ecuador also expressed reservations on target 12.c.

Mexico underscored the need to respect the rights of migrants regardless of their migratory status. The UN Summit for the adoption of the post- 2015 development agenda will take place from 25-27 September 2015, in New York.

**SucceSS Story** 

## **India's Waterman: Messenger of Peace**

(Shweta Tyagi)



Rajendra Singh, renowned as the Waterman of India was conferred with the 2015 Stockholm Water Prize on 26 August 2015. King Carl XVI Gustaf of Sweden, Patron of the Stockholm Water Prize presented the prize at a Royal Award Ceremony during World Water Week in Swedish Capital Stockholm. Singh was named for the prestigious award for his innovative water restoration efforts, improving water security in rural India, and for showing extraordinary courage and determination in his quest to improve the living conditions for those most in need.

The Stockholm Water Prize is a global award founded in 1991 and presented annually by the Stockholm International Water Institute (SIWI) to an individual, organisation or institution for outstanding water-related achievements. The Stockholm Water Prize Laureate receives 150000 US Dollars and a specially designed sculpture. King Carl XVI Gustaf of Sweden is patron of the prize.

Singh has invested several decades of his life to defeat drought and empowering communities of Rajasthan through his organisation Tarun Bharat Sangh (India Youth Association). He is credited to have revived an ancient dam technology in his hot, dry home state of Rajasthan in north-west India. Working with local people he has returned water to more than 1,000 villages. The landscape and climate have been transformed; five long-dead rivers have begun to flow, wells are full and onceparched fields are now fertile.

He addressed the problem of waters in villages of Rajasthan through building Johads or traditional earthen dams. These Johads, by now about 8600 in number, helped 1000 villages of the state in revival of water. His efforts also helped in increasing the forest cover in the state, which helped the return of antelope and leopard in the state.

While talking to media persons on 24 August at World Water Week in Stockholm, Singh is reported to have said that nature cannot fulfill human greed. While arguing that communities facing water crises should resist the money and technological solutions offered by corporations, Singh told the British daily the Guardian that rather they must find ways to help themselves. : "The companies always bother about the profit; they are not bothered about our common future. They use the name of social corporate responsibility – but this is not sufficient for life. This is not sufficient for a better common future. They are using very good jargon. But they are only meeting, eating and cheating."

Singh told *The Guardian* that said he would now embark on a five-year odyssey across five continents in the tradition of his hero, Mahatma Gandhi, who had long advocated the technique of walking through landscapes, "*Walking connects you to the heart of the earth and the heart of the human.*" Each of his World Water Peace Walks will visit grassroots solutions to water challenges. In 2017, Singh will visit the office of the United Nations high commissioner for human rights in Geneva to push for the recognition of the right to river water and access to nature.

Making a pointed reference to the recently recognised human right to water and sanitation, which is dependent on a clean environment and flowing river, Singh said. "On paper, you have declared water is a human right. But water as a human right is only possible after river rights and nature rights. Without the clean flow of the river you can't ensure the human right."

According to the media report, a draft text of the rights Singh is campaigning for will be written in the coming months. But in practice, Singh said it would require industry to declare the resources they used and replace them. Key to Singh's success in India has been a reinvigoration of local democracy, centred on the collective ownership and management of river water. He said the government of Uttar Pradesh had called him recently to tell him the state would recognise river rights by law.



According to the report, Singh quietly began the walks in the UK earlier in August this year. The first took place on the island of Lindisfarne, where St Cuthbert is said to have raised a spring to save the islanders from a seventh-century drought. He then met communities in the Derwent Valley in Yorkshire, who have developed a cheap, effective system of "bunds" to protect themselves from flooding.

Singh said, "The problem is climate change. Our problem is global, but the solution is local. The solution is traditional." The director of the Stockholm Water Prize, Jens Berggren, said he agreed that local people must play a bigger role. However "the private sector can contribute with a lot of resources, with a lot of know how. At the same time they must be [subject to] regulation and enforcement."

While talking about his future plans, Singh told *The Guardian* that would return to India, to the memorial site of Mahatma Gandhi in Delhi, and journey to the forthcoming Kumbh Mela. In September Singh is expected to go to the US, followed by Germany and Morocco. He said the need for the project was urgent, because water was already driving conflict across the globe towards a "thirdworld water war".

The report further adds that since first picking up a shovel alongside a village elder 35 years ago, Singh has been a passionate advocate for community driven, low-tech solutions to the global water crisis. A system of *johads*, earthen dams that hold water and allow it to percolate down replenishing the aquifer, had once allowed the region to stay green despite minimal rainfall. But the *johads* fell into disrepair a century ago during the consolidation of British rule and land management in India.

Adding that to repair them had been his life's work, he said: "You can change history very quickly, but changing the geography takes time." Now, with Rajasthan green, it was his ambition to spread his techniques across the world. "I'm spending the rest of life on this. It's my motivation to change war to peace. I don't know if it is possible in my life or not. But we will try."





#### article

## **Food Safety and Nutrition: Need for Convergence**

#### **Dr. Arvind Kumar**

As the world's population grows, the intensification and industrialization of agriculture and animal production to meet increasing demand for food creates both opportunities and challenges for food safety. Climate change is also predicted to impact food safety, where temperature changes modify food safety risks associated with food production, storage and distribution.



According to WHO Director-General Dr Margaret Chan, food production has been industrialized and its trade and distribution have been globalized and these changes have introduced multiple new opportunities for food to become contaminated with harmful bacteria, viruses, parasites, or chemicals. He further adds, "A local food safety problem can rapidly become an international emergency. Investigation of an outbreak of food borne disease is vastly more complicated when a single plate or package of food contains ingredients from multiple countries."

Millions of litters of untreated sewage water and industrial waste water with effluents enter the major rivers daily, thereby polluting it with toxic chemicals and high level of coliform and other bacteria. The high level of coliform bacteria increases the incidence of water-borne diseases. Unsafe food containing harmful bacteria, viruses, parasites or chemical substances is responsible for more than 200 diseases, and is linked to the deaths of some 2 million people annually, mostly children.

#### Malnutrition

Food is vital to our lives, like air and water, providing pleasure and much more. The first food a human being consumes—breast milk—is one of the safest for newborn babies, providing all essential nutrients, offering immunological protection, and creating an emotional bond between mother and child. All foods introduced later belong to our respective cultures. For decades, the WHO has advocated safe and hygienic practices for food preparat

Despite progress in reducing under-nutrition, our planet's population is still affected by many food-related challenges, including vitamin and mineral deficiencies, obesity, and non-communicable diseases. These challenges are fuelled, in part, by cheap, convenient, and highly-processed foods that are appealing to the taste. But food threats do not stop there. One area to which the international community has given substantial, but less visible, attention is ensuring the safety from infection and contamination of the food we produce, trade, and eat.

That food must be nutritious—and safe. Yet food safety is a hidden and often overlooked problem. Most people suffering from diarrhoea do not consult a physician. Diseases and deaths might be attributed to other causes, even when the food that people have eaten is the culprit. How often do we hear the phrase "It must be something I ate"? Food borne diseases caused either by an acute infection with a pathogen or by chronic exposure to chemicals, are largely under-reported. Nobody has precise figures on their societal effect.

All we know is that the most vulnerable populations, infants and elderly people, are increasing in number, and hence the pool of those people at greatest risk of disease is expanding. A global scandal is often needed to stir the collective consciousness on food safety, such as the bovine spongiform encephalopathy crisis in the 1990s or the adulteration of milk with melamine in 2008, which hit some countries badly.

The threat of food safety is then largely forgotten until the next emergency. It is high time for a sustainable response to the core problems, which are fragmentation of food safety authorities, unstable budgets, and a dearth of convincing evidence on the effect of food borne diseases.

#### **India's Case**



India's Food Security Bill (FSB) fails to address the problem of malnutrition, especially among the children. On the one hand, India's economy has been growing at 6-9% for over decade now: on the other hand, under nutrition among children has dropped a mere 1% in the eight-year period 1998-99 to 2006. Should we accept a token 0.1% decline in childhood hunger per year? There is a need to understand that underfed people are unable to contribute, even if provided with opportunities, because of lack of capability. Therefore, there is need to build an environment of empowerment with nutritional security.

Prevalent levels of malnutrition result in a 2-3% decline in GDP. It causes delays in education, triggers learning disabilities, affects the overall physical and cognitive development of children at an early age. Every year, India loses 1.3 million children under the age of 5 due to under-nutrition and non-availability/inaccessibility to basic healthcare.

All these factors are at the root of hunger. Professor Arjun Sengupta, in his report on the unorganised sector, mentions that 77% of India's population survives on Rs 20 a day. On the other hand, NNMB (National Nutrition Monitoring Bureau) figures show that 76.8% of the population does not receive the prescribed amounts of nutrition!

India contributes 40% to the world's overall maternal, neo-natal, infant and child deaths. It has half the world's undernourished children. Fifty-four per cent of women in the country suffer from anemia. There is need to end this 'domestic variety of colonialism' where corporations rule over our farmers and labourers and traders indulge in the business of education and health services and keep people deprived of the very basic services in the name of growth. The resources generated through growth should go towards the wellbeing of all people. Not to subsidise corporations.

WHO has dedicated its 2015 World Health Day to food safety, to catalyse collective government and public action to put measures in place that will improve safety of food from farms, factories, street vendors and our kitchen. Also in 2015, WHO will, for the first time, publish estimates of the global burden of food-borne disease, finally showing the scale of the problem.2 new methods will allow countries to estimate their own food borne disease burdens to inform policies and mobilise badly needed resources.

Today, the food chain extends over thousands of kilometers, crossing many national borders, and containing many steps from production to consumption. An error by a food producer in one country can affect the health of consumers on the other side of the planet. In our globalised world, not only people but foods, as well, travel far and fast. The WHO is working to ensure access to adequate, safe, nutritious food for everyone. It supports countries to prevent, detect and respond to food-borne disease outbreaks—in line with the Codex Alimentarius, a collection of international food standards, guidelines and codes of practice covering all the main foods.

Food safety, nutrition and food security are inextricably linked. Unsafe food creates a vicious cycle of disease and malnutrition, particularly affecting infants, young children, elderly and the sick.

#### **Need for Holistic Approach**

Safe food supplies support national economies, trade and tourism, contributes to food and nutrition security, and underpins sustainable development.

The global warming and climate change pose a big threat to food production in India. As pointed out by Dr Swaminathan, "It is now clear that the mean temperature may rise by at least 2 degrees centigrade during the next few decades. Adverse changes in temperature, precipitation and sea level are all causes for concern. Both anticipatory research to checkmate the adverse consequences of climate change, and participatory research with farming families for developing adaptation and mitigation measures will be important."

Ensuring adequate food security and safety ordains inter-sectoral convergence. There is an annual tug of war between the ministries of food and agriculture. The former, as the purchaser, does not want the MSP increased. The latter, representing farmers, insists that it must be. Synergy between various ministries including health at the Centre and between the Centre and the states is a *sine qua non* for effective implementation of the provisions of the FSB for sustainable food security and safety.

As water and energy are essential for food production, hence water-energy-food nexus approach assumes tremendous significance in ensuring food security. This approach calls for coordination, cooperation and convergence between various ministries and the FSB in its present form does not emphasize on this aspect.

#### Is 'Food Security Act' the Answer?



Climate change can have both direct and indirect human health impacts. Direct impact is heat and cold related stress. Indirect impacts arise from changes in temperature patterns, which may disturb natural ecosystems, change the ecology of infectious diseases, harm agriculture and fresh water supplies, exacerbate air pollution levels, and cause large-scale reorganization of plant and animal communities.

Challenges like absence of convergence, yawning gaps in the formulation and implementation of policies and lack of collective approach to address Health Water Sanitation sectors can be transformed into opportunities through judicious management of these sectors with the help of local communities and the civil society. World Health Day 2015, the theme is "From Farm to Plate Make Food Safe". Safe food underpins but is distinct from food security. Food safety is an area of public health action to protect consumers from the risks of food poisoning and food borne diseases, acute or chronic.

Unsafe food can lead to a range of health problems: diarrhoea, viral diseases (the first Ebola case was linked to contaminated bush meat); reproductive and developmental problems, cancers etc. So, food safety is thus a prerequisite for food security.

#### Conclusion

Consequently, a new paradigm is required to focus on rational and judicious use of these resources with adequate emphasis on water-energy-food nexus approach, synergy between the major implementing agencies with a deep sense of commitment, transparency and accountability. Adequate storage and systematic distribution infrastructure is the need of the hour. There is also need for convergence of traditional and modern methods of storage.

India is endowed with abundant natural resources, especially in terms of land and water. However, the onus for failure to turn these endowments into sustained wealth for the well-being of the people lies with the government and agencies assigned with the task to extract natural resources.

#### From the Editor's Desk

Dr. Arvind Kumar

#### **Countdown to Paris Climate Summit**

Countdown to Climate Change Summit scheduled to take place between November 30 and December 11, 2015 at Paris, France, has already begun. In the wake of recently concluded latest round of pre-Paris negotiations held in Bonn (Germany) where many key issues were left open, the world leaders have been called upon to step into the ongoing negotiations to remove roadblocks and ensure their negotiating teams can lay the groundwork for an agreement at landmark talk in Paris in December this year. The continuation of the stalemate would leave only five official negotiating days before the Paris climate conference, at which governments are supposed to forge a new global climate change agreement to take effect from 2020.

As per media reports, at the climate negotiations in Bonn, the latest in a series of pre-Paris talks that have been taking place at intervals since 2012, participating countries worked on a new form of text for the proposed Paris agreement. In this, the basic text of a legal form of agreement is separated from ancillary sections containing some of the most controversial issues, including questions surrounding the provision of finance to developing countries. Reports indicate that the format is aimed at making the talks more manageable, as previous texts grew to scores of pages that were hard to prune, but the question of what should be in the core agreement has not yet been settled.

Undoubtedly, some progress at Bonn meeting has been made: possibility of a compromise on the thorny issue of "loss and damage", by which developing countries would receive assistance to help them cope with extreme weather events; progress made in the tabling of emissions targets by leading developed and developing countries, most of which have now set out goals on reductions or curbs on emissions for the decade following 2020 etc.

Nevertheless, these are still regarded as falling short of scientific advice and some of the unresolved problems include: what measures could be used to scale up countries' emissions targets in the years between 2016 and 2020, when the new targets come into effect; how the preservation of forests should be treated under the text; how to review national targets to ensure they are fair and are monitored etc.

In the wake of these developments, some observers called on negotiators to continue their work outside the official negotiating sessions, the next – and final – week of which will be in October this year. It has been suggested that since Governments and the UN routinely hold informal meetings, in small and larger groups, to reach compromises on disagreements, the same process could be supercharged when world leaders meet at the UN general assembly in New York in the last week of September this year, with opportunities for high-ranking officials to hold discussions on the fringes, as well as set-piece meetings of prime ministers and presidents.

Undoubtedly, some world leaders, including UN secretary-general Ban Ki-moon, have lamented at the 'snail's pace' of progress on an agreement to combat climate change; nonetheless, most of the officials connected with the negotiations are hoping that the ensuing Paris Summit will reach an agreement on ways to fight global warming beyond 2020. UN Climate Change Secretariat head Christiana Figueres has said: "We all would want to see this baby born... Of course we are all impatient; of course we are all frustrated... We are on track with the Paris agreement." We are sanguine about the successful outcome of Paris Summit.

#### **Article**

## Climate Change effect on Health: Has India highest burden of malnutrition?

#### By Dr. Arvind Kumar, President India Water Foundation

In South Asia, the pace of sanitation improvements has not kept up with population growth: in 2010 the region had about 1,057 million people without improved sanitation. Worse, 692 million people in South Asia have no toilet at all, and defecate in the open. In India alone, some 625 million people practice open defecation. The objective of achieving the sanitation MDG target appears apparently a near-impossible task given the trend over the past 20 years. Lack of sanitation facilities, open defecation and pollution of water resources affect the quality of water. Consumption of contaminated water leads to water-borne diseases which claim heavy toll on human health.

#### **Water and Challenges of Health Hazards**

Millions of litres of untreated sewage water and industrial wastewater with effluents enter the major national rivers of India daily, thereby polluting it with toxic chemicals and high level of coliform and other bacteria. The high level of coliform bacteria increases the incidence of waterborne diseases. These microbes grow in the intestines of humans and animals, where they multiply and thereby cause disease. These water-borne pathogens survive under low temperature, low salinity and low intensity of light. Warm temperature is favourable for their rapid growth.



Chemical contaminants (fluoride, arsenic, and selenium) pose a very serious health hazard in India. It is estimated that about 70 million people in 20 states are at risk due to excess fluoride and around 10 million are at risk due to excess arsenic in groundwater. Apart from this, increases in the concentration of chloride, TDS, nitrate, and iron in groundwater are of great concern for a sustainable drinking water programme. With over-extraction of groundwater the concentration of chemicals is increasing regularly.

Pollution of ground and surface waters from agrochemicals (fertilizers and pesticides) and from industry poses a major environmental health hazard, with potentially significant costs to the country. The World Bank has estimated that the total cost of environmental damage in India amounts to US\$9.7 billion annually, or 4.5% of the gross domestic product. Of this, 59% results from the health impacts of water pollution.

Despite its growing prosperity, India has the highest burden of malnutrition in the world. Malnutrition is an underlying cause of almost half of all child deaths, and, for those children who survive, leads to cognitive impairment that prevents tens of millions of children from ever reaching their potential due to water quality and depletion of water resource, lack of nutrition in soil and food items. The World Bank estimates that India is one of the highest ranking countries in the world for the number of children suffering from malnutrition. The prevalence of underweight children in India is among the highest in the world, and is nearly double that of Sub-Saharan Africa with dire consequences for mobility, mortality, productivity and economic growth.

Currently, the country is undergoing a rapid socio-economic, demographic, nutritional and health transition. Although India has not yet overcome the **problems of poverty**, under nutrition and communicable diseases, it is increasingly facing additional challenges related to the affluence that results from industrialization, urbanization and economic betterment. Over the last two decades, over nutrition and obesity have emerged as public health problems; there have been increases in the prevalence of diabetes and cardiovascular disease (CVD), especially in urban areas. The magnitude of these problems varies among states and socio-economic strata and between urban and rural areas, and it is a matter of concern that these diseases occur a decade earlier in India than elsewhere and that they affect poor segments of the population and those in rural areas. Case fatality rates are reported to be higher in poor and rural populations, probably because of poor access to health care and consequent delayed diagnosis and treatment. The impact of ongoing socio-economic, demographic and life style transitions on nutritional status, and the health implications of the ongoing nutrition transition.

One of the major causes for malnutrition in India is gender inequality. Due to the low social status of Indian women, their diet often lacks in both quality and quantity. Women who suffer malnutrition are less likely to have healthy babies. In India, mothers generally lack proper knowledge in feeding children. Consequently, new born infants are unable to get adequate amount of nutrition from their mothers.

According to the WHO constitution, the highest attainable standard of health is a fundamental right of every human being. Despite being one of the world's fastest growing economies during the past decades, India's health-care indicators are among the worst among developing countries. India's various health-care challenges need to be tackled efficiently and urgently to sustain economic growth and decrease inequalities.

#### **Malnutrition and Looming Health Care**

In India's health-care system, nearly 70% of overall health spending is incurred by private out-of-pocket expenditure, and 70% of this is spent on medicines. Private out-of-pocket expenditure on health pushed 60 million Indians below the poverty line in 2010. The government should constitute a National Medical Service Corporation with mandate to procure and provide generic medicine, surgical, and suture goods to all public health institutions across the country. Furthermore, the government should institutionalise the National Health Regulatory and Development Authority (NHRDA) for setting normative standards to be followed, including standard treatment guidelines, prescription audits, and quality assurance methods. Improved integration of the health and social development sectors is urgently needed.

The government should address the causal factors responsible for ill health and start campaigning for a healthy India and a health in all policies approach, with increasing access to basic services, such as water and toilets, nutrition, public health at the community level, and promotive health.

Malnutrition refers to the situation where there is an unbalanced diet in which some nutrients are in excess, lacking or in wrong proportion. Simply put, we can categorise it to be under-nourished and over-nutrition. Despite India's 50% increase in GDP since 1991, more than one third of the world's malnourished children live in India. Among these, half of them under 3 are underweight and one third of them from wealthy background are over-nourished. In general, those who are poor are at risk for under-nutrition, while those who have high socio-economic status are likely to be over-nourished. Anaemia is negatively correlated with wealth.

#### **Government Initiatives**

India has been struggling to achieve universal sanitation coverage since 1986 when it launched the Central Rural Sanitation Programme, a supply-driven scheme with subsidy. In 1999, the programme was recast as demand-driven Total Sanitation Campaign (TSC), but again with subsidy. In 2012, it was re-christened Nirmal Bharat Abhiyan (NBA) with the focus on community-led, demand-driven approach, but with even more subsidies. The fact remains that India has the world's largest population that defecates in the open. According to data released by the National Sample Survey Office (NSSO) in December 2013, 59.4 per cent of rural India defecates in the open. Jharkhand and Odisha are the worst performers with 90.5 per cent and 81.3 per cent of their population without toilets. Indeed, different government agencies provide different data on the number of rural households with toilets. The 69th survey conducted by the National Sample Survey Office between July and December 2012 has put the figure at 41 per cent, the Baseline Survey's abstract report accessed on December 2013 at 40 per cent, and the 2011 Census at 31 per cent.



"Currently, different ministries running nutrition related schemes were working in silos. It was felt that convergence between ministries with sectoral commitment to nutrition will be more effective in addressing the problem," said a WCD ministry official.



According to UNESCAP report: However, India has not been spending enough on human development resulting in generally poorer outcomes in such areas as health, nutrition, quality of education (including skills development), and sanitation and hygiene, compare to developing Asia as whole and particularly compared to East Asia, which has surged far ahead. In health, for example, where India is particularly underperforming, it spend 4.05% of its GDP, compared to 6% to 12% in upper middle and high income countries, respectively. Only a third of India's health spending comes from public funds (1.34% of GDP) and the gap is funded by households, Out of their pockets. It has been estimated that 6.2% of households in India fall below the poverty line, due to health spending that they cannot afford. 12

In education too, India's performance is less than satisfactory, with public expenditure on education at 3.34% of GDP against the UNESCO norm of 6% of GDP.<sup>13</sup>

#### **Human Health Impacts & Climate Change**

Climate change can have both direct and indirect human health impacts. Direct impact is heat and cold related stress. Indirect impacts arise from changes in temperature patterns, which may disturb natural ecosystems, change the ecology of infectious diseases, harm agriculture and fresh water supplies, exacerbate air pollution levels, and cause large-scale reorganization of plant and animal communities.

As the economist **Dean Spears** has written, "Because the problems that prevent children from growing tall also prevent them from growing into healthy, productive, smart adults, height predicts adult economic outcomes and cognitive achievement." In short, India's malnutrition crisis is not just bad for India's malnourished children; it also limits the country's economic progress. Moreover, India has the schemes in place to drive rapid improvements in health. The National Rural Health Mission was created in 2005 and provides a framework by which the government can support the health goals outlined at the sub-district, district and state levels.

But there is more India can do to advance health. First and foremost, public spending on healthcare in India is extremely low -1.1% of GDP. That compares to 2.4% in China and 4.9% in Brazil, two other rapidly growing countries that are wisely betting on health as a key component of growth.

Undoubtedly, meeting the challenges of climate change is a formidable task and any delay in curbing greenhouse gas emissions can be perilous; nevertheless, solutions are also nearby. The alternative sources of clean energy which have registered tremendous strides can be harnessed judiciously. Besides, judicious use of water and other natural resources along with eliminating deforestation can be helpful in limiting warming to two degrees Celsius over pre-industrial levels.

The global climate is now changing faster than at any point in human civilization, and many of the effects on health will be acutely felt. The most severe risks are to developing countries, with negative implications for the achievement of the health related Millennium Development Goals and for healthy equity. Change in world climate would influence the functioning of many ecosystems and their member species.

#### **Challenges and Way Forward**

Challenges like absence of convergence, yawning gaps in the formulation and implementation of policies and lack of collective approach to address Health-Water-Sanitation sectors can be transformed into opportunities through judicious management of these sectors with the help of local communities and the civil society. It has been amply demonstrated that projects with community inputs are more successful in reaching the greatest number of affected people with long-lasting services. Other benefits include lower costs, greater acceptance of the technology, and better maintenance of facilities by the users. In order to regulate pollution, changes in government policies are required; community participation along with civil society inputs is also necessary to ensure the success of policies in Health-Water-Sanitation sectors.

### AsiA RepoRt

## UN-ESCAP's Economic and Social Survey of Asia and the Pacific 2015 Launched

(Garima Mishra)

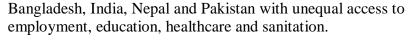
**UN-ESCAP's** Social and Economic Survey of the Asia and the Pacific 2015 was launched in New Delhi on 14 may 2015. It is the most comprehensive and oldest annual review of economic and social development in the region. In this year when the UN Secretary-General is forging international consensus on the difficult theme of sustainable development, the Survey was subtitled: Making Growth More Inclusive for Sustainable Development.

UNIC Director Kiran Mehra-Kerpelman, Dr. Subir Gokarn, Director of Research at Brookings India and Dr. Nagesh Kumar, Director, ESCAP's South and South-West Asia Office jointly released the ESCAP Survey.

While contextualizing the key findings for India in his overview of the Survey, Dr. Nagesh Kumar lamented at the growth of the region that was impeded by infrastructural challenges and commodity dependence. However, he seemed optimistic about India's forecast, which pointed towards low inflation- partly because of lower global energy prices - and a growth rate of 8.1% in the coming year.

The 2015 edition of the *Economic and Social Survey of Asia and the Pacific*, introduces a new multidimensional index of inclusiveness that captures the economic, social, and environment dimensions of development. The Index allows comparative scoring of the multidimensional aspects of inclusiveness across different time periods, thus assisting policymakers to better review and monitor progress on inclusive growth.

Based on 15 indicators, which ranked countries based on economic, social and environmental aspects of growth, the Survey found the most inclusive growth in Kazakhstan while it was least inclusive in





Dr. Subir Gokarn noted the "sharp sub-regional divide" in the ranking, particularly low in South Asian countries, "which was obsessed with a labour intensive, export-led growth." He also drew attention to the technology boom, which risked broadening the chasm towards inclusive development if young people were not adequately trained, skilled and employed to meet market demands. While looking east towards models for inclusive growth that

focused on skilling labour and healthcare access, he remarked on the excessive "reliance on the private sector to shield risk" in Public Private Partnership (PPP) in India. He advised a "First Public, then Private" model that clearly defined roles and responsibilities towards holistic socio-economic development.

#### **EnvironmEnt**

## **India's Indigenous Model to Predict Rainfall**

(Dr Arvind Kumar)

According to recent media reports, India is reportedly finally ready with an indigenous model to predict long range and seasonal rainfall. It is also revealed that the Pune-based Indian Institute of Tropical Meteorology (IITM), in the next six months, will be able to operationalise a dynamic numerical climate model it has developed to forecast extended-range rainfall for a timescale of 15-20 days after results from the experimental stage were found to be reliable.

A media report citing the statement of IITM director says: "For the first time, we have indigenously developed a prediction system that was not available in India. The tests have been done, the performance of the experimental model was found to be good and can be operationalised. We can now forecast rain every five days for 15-20 days especially for the agriculture sector which is the mainstay of the economy."

It is further learnt that India Meteorological Department (IMD), the official agency to disseminate weather forecast, will, however, validate the operationalisation of the model. Currently, the IMD uses statistical model that needs lengthy calculations to make predictions of the southwest monsoon. Scientists at IITM tasked with improving long range and seasonal scale forecasts (16 days to a season) have localised the indigenous model factoring Indian climatic conditions using the Climate Forecast System (CFS) developed in the US.



Reports indicate that development of the CFS-based Grand Ensemble Prediction System (CGEPS) is part of the National Monsoon Mission that was launched by the Government of India in 2012 to improve accuracy of monsoon prediction especially since 60% agriculture in India is rain-fed.

Some experts feel that the skillful and timely forecasts of intra-seasonal monsoon rainfall entail a greater potential utility for agriculture and water resource management. In the extended range, especially beyond the weather scale (two-three weeks), a single deterministic rainfall forecast is not sufficient thus the user community should also be given probabilistic forecasts that quantify the uncertainty.

It is also learnt that after the monsoon mission, the model in the next phase would incorporate hydrological forecasting that would help in decisions relating to management of dam water - how much water can be released or whether the water can be used to generate hydropower.

#### **InItlatives**

#### **Skill India Mission**

(Pankaj Sharma)

On 15 July 2015, Government of India launched SKILL INDIA Mission on the occasion of the first-ever World Youth Skills Day. Prime Minister Narendra Modi was the Chief Guest for the event, which was held in the Plenary Hall of Vigyan Bhavan. The Minister of State (Independent Charge) for Skill Development and Entrepreneurship Rajiv Pratap Rudy was the Guest of Honour on this occasion. Many Union Ministers were also present on the dais.

Several Chief Ministers, State Ministers, Secretaries to the Government of India and other representatives from central and state governments were also present at the event. Foreign dignitaries, including Ambassadors and High Commissioners, senior industry leaders, representatives of multilateral organizations and from industry associations also attended the two-hour long main function. ITI faculty, skill trainers and trainees from a range of training programs also participated.

While unveiling the Skill India logo, the Prime Minister also launched four landmark initiatives of the Ministry of Skill Development and Entrepreneurship: National Skill Development Mission, National Policy for Skill Development and Entrepreneurship 2015, Pradhan Mantri Kaushal Vikas Yojana (PMKVY) scheme and the Skill Loan scheme.



The Skill India logo depicts a clenched hand in which a spanner and pencil are held, exemplifying firmly empowerment of the individual through skilling. The spanner and pencil are held together, suggesting that both skill and general education are at parity and aspirational for India's youth. The 'Kaushal tagline, Bharat, Kushal Bharat' suggests that skilling Indians ('Kaushal Bharat') will result in a happy, healthy, prosperous and strong nation ('Kushal Bharat.') A short film unveiling the logo was shown, which featured the Sanskrit chant 'SarvadaVigyataVijaya,'meaning 'Skill Always Wins.'

The Pradhan Mantri Kaushal Vikas Yojana (PMKVY), the Ministry's flagship, demanddriven, reward-based skill training scheme will incentivize skill training by providing financial rewards to candidates who successfully complete approved skill training programmes. Over the next year, PMKVY will skill 24 lakh youth, across India. For the first time, the skills of young people who lack formal certification, such as workers in India's vast unorganised sector, will be recognised. Through an initiative known as 'Recognition of Prior Learning' (RPL), 10 lakh youth will be assessed and certified for the skills that they already possess.



Prime Minister also launched the Skill Loan scheme. Loans ranging from Rs 5,000-1.5 lakhs will be made available to 34 lakh youth of India seeking to attend skill development programmes over the next five years. Sanction letters for the first ever Skill Loans were handed out by the Prime Minister to aspiring trainees.

During the function, PM Modi awarded Skill Cards and Skill Certificates to trainees who had recently completed training through the Pilot Phase of PMKVY, which started in May 2015. Such Skill Cards and Skill Certificates will allow trainees to share their skill identity with employers. Each Skill Card and Skill Certificate features a Quick Response Code (QR Code), which can be read through a QR reader on mobile devices. Trainees can use these to share their skill qualifications with employers in a quick and reliable way during the job search process.

The Prime Minister addressed the audience, articulating a clear overarching vision for Skill India. He highlighted the centrality of skills to India's development and called on government, private sector and India's youth to work together to make this vision a reality. The Prime Minister also highlighted the potential for skilled Indian youth to be recognized around the world. He congratulated six award winners from World Skills Oceania, an international skill competition and wished them success as they go on to compete at the World Skills Competition in Sao Paolo next month.

Across the country, 2,33,000 youth were awarded certificates from ITIs, and 18,000 plus graduating students received job offer letters on the occasion of World Youth Skills Day. The Prime Minister personally presented industry job offer letters to five female ITI graduates at the event.

The Minister of State (Independent Charge) of Skill Development and Entrepreneurship welcomed the audience at the outset of the event. He outlined the steps the Ministry of Skill Development and Entrepreneurship is taking to turn the Prime Minister's vision of a skilled India into reality. He also underscored the importance of strategic partnerships in achieving the Skill India vision, showcasing inter-Ministerial initiatives to scale up skill development efforts.

World Youth Skills Day and the launch of SKILL INDIA were celebrated nation-wide. State Governments organized events to emphasize the importance of skill development for the youth in their states, mobilizing candidates, launching fresh training programs and felicitating successful trainees. ITIs across the country also participated in the event through a live feed of the event.

Across India, special PMKVY mobilization camps are being organized at 100 locations with Nehru Yuva Kendra Sangathan (NYKS). A national SMS campaign is being rolled out to build awareness of the program, reaching about 40 crore subscribes. Fresh PMKVY training was initiated in 1,000 centres across all States and Union Territories in India today, covering 50,000 youth in 100 job roles across 25 sectors. In New Delhi, Rajiv Pratap Rudy flagged off 150 Skill Vans to create awareness among people of Delhi and NCR region on government's policies and initiatives on skill development. He said that the government has set a target to provide skill training to 40.02 crore people by 2022.



## Regional Development

# **Sustainable Development in South and South-West Asia**

(FGR Bureau)

In honour of the delegations of South and South-West Asia attending the 71st Commission Session a luncheon on Sustainable Development in South and South-West Asia was organized on 25 May 2015 at Bangkok, Thailand, on 25 may 2015. Delegations from the member States of Afghanistan, Bangladesh,



Bhutan, India, Islamic Republic of Iran, Maldives, Nepal, Pakistan and Sri Lanka participated in the luncheon. A delegate from the Secretariat of the South Asian Association for Regional Cooperation (SAARC) also participated in the luncheon.

The Chair of the luncheon, H.E. Mr. Kesang Wangdi, Ambassador Extraordinary and Plenipotentiary of Bhutan to Thailand and the Permanent Representative to ESCAP, gave some introductory remarks and invited Dr. Nagesh Kumar, Head of the ESCAP South and South-West Asia Office to

make a presentation on the outcomes of the Asia Pacific Forum on Sustainable Development (APFSD) and the implementation and relevance of the outcomes of the Forum for accelerating Sustainable Development in South and South-West Asia.

The APFSD, mandated by resolution 70/11, was held on 21-22 May 2015. The Forum provided perspectives on the priorities, challenges and opportunities for the international and regional development agenda beyond 2015 and the implementation of the proposed Sustainable Development Goals being negotiated for adoption by world governments in 2015. The Forum considered issues of managing the transition from the end of the Millennium Development Goals to the Sustainable Development Goals and considered the institutional architecture including regional review mechanisms and the functions and objectives of the APFSD beyond 2015.

Delegations at the Forum highlighted the priority of the need to ensure greater assistance to countries with special needs, including least developed countries, landlocked developing countries and small island developing states, through actions including targeting increased financial assistance, technology transfer and capacity building support. Countries also agreed that the Forum should continue as the key regional platform for assessing the implementation and progress of the sustainable development agenda and sustainable development goals for Asia and the Pacific as an input for the regular meetings of the High-level Political Forum on Sustainable Development (HLPF).

The Forum also included active participation and discussion from South and South-West Asia countries on the post-2015 and sustainable development agenda. Bhutan shared its development paradigm of gross national happiness as a good practice model for a people centric and inclusive development. The Forum also included a briefing on the outcomes of the South Asian Consultation on the Post-2015 Development Agenda, and the South Asia perspective and priorities for sustainable development as specified in the Nagarkot Statement of August 2014. The Statement highlighted key development priorities for the subregion including poverty alleviation, gender inequality, and access to decent employment. The Statement also emphasized the means of implementation especially strengthened global partnership in finance and technology, strengthened accountability backed by data and the relevance of regional cooperation to facilitate such strengthening.

The 2015 APFSD resulted in the adoption of a Chair's Summary and report that will serve as an important input to the Third HLPF to be held in June-July, 2015.

In his presentation, Dr. Kumar noted that additional sustainable development priorities particular to the subregion may include pursuing higher, inclusive and sustained economic growth, addressing structural inequalities (education, labour markets, access to modern energy, food security and nutrition), building resilience to disaster and disaster risk reduction strategies and adequate planning for sustainable urbanization. Dr. Kumar also informed delegations of the subregion of the alignment of the work programme of the ESCAP subregional office with the subregional sustainable development priorities. In particular, he noted that the work programme of the subregional office included four key thematic pillars of; (1) MDG achievement, job creation and sustainable development; (2) transport connectivity and regional economic integration; (3) regional cooperation in food security, energy security and disaster-risk reduction; and, (4) assisting the countries with special needs in South Asia including the four least developed countries, three of which are also land-locked developing countries, and the Maldives as a small island developing state.

The representative from the SAARC Secretariat noted that the SAARC Development Goals were the subregional expression of the priorities and implementation of the Millennium Development Goals. She also informed the subregional delegations of the preparation of the publication of the SAARC regional poverty profile that will be considered the South Asia report on assessing the progress of countries towards the Millennium Development Goals at the end of 2015. The SAARC representative noted the integration of the three pillars of sustainable development within the perspective of the Nagarkot Statement and outcome of the South Asia consultation on the post-2015 development agenda. The representative also informed delegations of the upcoming Fourth SAARC Poverty Alleviation Minister's Meeting to be held in Thimpu in July. The SAARC representative thanked ESCAP and the Secretariat for the opportunity to participate in the luncheon. The SAARC representative emphasized that SAARC and the SAARC Secretariat welcomes the opportunity to continue to work with ESCAP and the ESCAP Secretariat and looks forward to increasing closer ties with ESCAP, especially in areas where ESCAP can support SAARC's member State-led implementation of priorities, such as in offering technical assistance and expertise to SAARC and SAARC Member States.

Mr. Donovan Storey, Officer-in-Charge of ESCAP Environment and Development Division thanked the member States for their enormous support at the recent Asia Pacific Forum on Sustainable Development that was critical to the event's success. Mr. Storey noted that the representation from South and South-West Asia at the APFSD was the strongest of any subregion and he especially thanked

the delegations and Excellencies from the Islamic Republic of Iran and Sri Lanka for their leadership in key segments of the Forum. Mr. Storey recalled the recent ESCAP policy dialogue on sustainable urbanization in South Asia as a good practice example of a successful policy oriented activity held in the subregion to engage with more subregional policymakers. He noted that ESCAP will definitely take on the challenge of engaging in activities in the subregions directly.

The Chair of the luncheon provided some closing remarks noting the subregion's delegations at the luncheon had emphasized the key issues including; the importance of considering sustainable development pathways that build upon GDP dimensions to measure development progress; that the subregional process and SAARC in particular requires far greater support and institutional cooperation from ESCAP; that a key challenge in the subregion's pattern of sustainable development is the unequal access to the benefits of growth and access and control over resources.

The Chair noted the importance of information and communications technologies, security and stability, and inclusive growth as essential foundations for sustainable development pathways. The Chair also thanked ESCAP on behalf of the delegations for arranging the luncheon and congratulated the Executive Secretary for her sterling leadership of ESCAP. He also congratulated Dr. Kumar, Head of the South and South-West Asia Office, for his impeccable leadership and support of his office and capacity to ensure that a full range of activities are implemented in the subregion.

Dr. Nagesh Kumar, Head of the ESCAP SSWA Office, thanked the delegations of the subregion for their important contributions and perspectives that helped provide insight into the needs and challenges of countries in South and South-West Asia for sustainable development, and provided the basis for improving ESCAP implementation and delivery of technical assistance, analysis and capacity building for subregional member States and their subregional organizations.

In particular, Dr. Kumar noted the importance of priorities of ensuring greater resilience for the economies of the subregion in the face of economic and external shocks; the underlying precondition of security and stability for sustainable development; the critical nature of regional cooperation to share good practices, identify lessons learned and take a common approach to mutually beneficial development through regional infrastructure and regional public goods; and also the importance of considering inequality and vulnerability as key obstacles to sustainable development.







## **AfricA report**

## **Harnessing Rainwater Harvesting**

(Shweta Tyagi)



<u>Families collect harvested rainwater from a communal tank to water their vegetable gardens in</u>

<u>Mali.</u> (Photo Source: Flickr /Alina Paul-Bossuet/ICRISAT)

It is widely recognized that rain is a precious resource, providing water for crops around the world. However, it doesn't always come when it's needed and sometimes it doesn't rain at all, and sometimes it pours, eroding the land and even causing floods that can damage fields and villages and spread disease.

This is why rainwater management is so important. By collecting and storing rainwater when it comes, communities can secure water for drinking and to give to livestock and irrigate crops. Rainwater harvesting also helps protect ecosystems, as it eases pressure on the water supply. Development experts have recognized the value of rainwater harvesting for years.

Yet progress in scaling up these practices has been slow. Aiming to build momentum, the RAIN Foundation convened the first International Symposium on Rain Water Harvesting and Resilience on 1–12 June 2015 in Addis Ababa, Ethiopia.

Participants in the first International Symposium on Rain Water Harvesting and Resilience, including SEI, are urging policy-makers to develop effective measures to better use rainwater to improve food security and rural livelihoods.

On 17 July 2015, participants issued a joint declaration, "Unlocking the potential of rainwater", which SEI Africa Centre Director had endorsed. The declaration calls on policy-makers, donors and development practitioners to acknowledge the "huge positive impact" that rainwater management at the watershed and landscape level can make on climate resilience, food security, and water, sanitation and hygiene (WASH). "This declaration is based on the premise that rainfall is an important manageable resource that is available for wider use," it reads. "Rainwater harvesting should be scaled up and integrated into broader policies, strategies and plans to increase its potential impact. We urge the immediate development of effective policy actions at local, national, and regional level in order to support the mobilization and use of rainwater for food security and rural livelihood improvement."

The symposium where the declaration was drafted drew more than 70 participants from government ministries and departments, academia, international and nonprofit organizations, and the private sector. Keynote addresses were given by Kebede Jerba, State Minister for Water Resources of Ethiopia; Seleshi Getahun, State Minister of Natural Resources for Ethiopia, Peter de Haan, director of the RAIN Foundation, and Dennis Garrity, Drylands Ambassador for the United Nations Convention to Combat Desertification (UNCCD) and a senior research fellow at the World Agroforestry Centre.

Noel says she was pleased to endorse the declaration because, as highlighted by the SEI-UNEP report, "rainwater harvesting has huge potential to improve access to water and sanitation at the local level". In fact, she adds, "it should be included in the discussions on the emerging Sustainable Development Goal on ensuring availability and sustainable management of water and sanitation".



## **Neighbors**

## **Developing basin management solutions of Myanmar's Chindwin River** (FGR Bureau)



The Chindwin River at Monywa (Photo Source: Flickr / Richard Well)

The Chindwin River, the biggest tributary of the Ayeyarwady River, rising in northern Myanmar at the junction of several smaller rivers in the Hukawng Valley, flows south about 1,200 km. The journey of this river in the upper reaches is characterized by sheer cliffs, forested mountains and sandbanks that are frequently shifting the shape of the river in the dry season. The lower segments of the river are densely populated, dotted with villages among cleared out patches of forests alongside tea gardens and rice fields.

In the wake of economic development gathering momentum in Myanmar, the Chindwin River is facing gigantic problems of pollution, river bank erosion, sedimentation and decreasing river flows. The mounting problem of pollution along with rapidly changing pace of the process of climate change has resulted in causing grave environmental impacts leading to the deterioration of water quality of Chindwin River owing to heavy metal contamination from jade, copper and gold mining upstream. The resultant impact is discernible in rendering the water of the river dangerous for the native population to continue to use it for drinking, bathing or washing.

Stockholm Environment Institute (SEI) in cooperation with Myanmar government is providing scientific assessments and trainings to support water governance. SEI's Ayeyarwady Futures Partnership (AFP) programme is designed to deal with pressing environmental problems of Myanmar. Some media reports indicate that SEI is building a model of the Chindwin River by using the Water Evaluation and Planning (WEAP) tool and this process, *inter alia*, includes scientific assessment studies of water flows and hydrology, consultation meeting, field surveys and in-depth interviews, as well as a series of trainings for government agencies to support the water resources management and planning processes.

It is revealed that the Chindwin River was as a pilot study area for modelling. The assessment was completed in 2014, but at the request of the Myanmar partners, SEI held another stakeholder consultation in May, in Monywa in the Sagaing Region in May 2015. The focus of the meeting was the establishment of a Chindwin River Basin Organisation (RBO). Under the prevalent scenario, urgency is felt to improve the knowledge and capability of relevant local stakeholders for better river basin management.

The contamination of water in the river, on nearby farmlands, and in wells used for drinking water has affected many villages near Monywa, as well as fisheries downstream. The continuing loss of river water quality is of major concern for people in this region. The Chindwin RBO is designed to achieve a healthy Chindwin River and to manage the water and river systems of the Chindwin Basin sustainably for future generations. The issue of unregulated mining and loss of water quality is regarded as the issue of immediate concern.

Some experts feel that the gaps in Myanmar's institutional resources affect the country's capacity to implement and enforce effective laws and regulations and as such there is also a need to raise awareness of existing laws and regulations and to increase the engagement of stakeholders in river basin management.



## **Activity**



Dr. Arvind Kumar trained the engineers of different departments of Tripura Government in advance course of Water Scarcity: Pollution and Need for Harvesting and Conserving Water, From 2nd to 4th of July 2015, Sponsored by DoPT, Government of India, Conducted by: SIPARD, Agartala

