

"Water for sustainable development": António Guterres, UN Secretary-General's message at launch of international decade for action

I AM pleased to be with you on World Water Day to launch the International Decade for Action on Water for Sustainable Development.

of Tajikstan for spearheading this effort at the General Assembly.

I recall my trip to Tajikistan last year, when I had the opportunity to see the impact of receding glaciers in the Pamir mountains.

During my visit, I also had the chance to attend the forum on the Sustainable Development

And it is clear these 17 global of life and death. Goals are inter-related, interdependent and mutually reinforcing.

Safe water and adequate sanitation for all – the object of Sustainable Development Goal 6 -- are indispensable to achieve many other goals.

Safe water and adequate sanitation underpin poverty reduction, economic growth and healthy ecosystems.

They contribute to social sustainable livelihoods.

But, growing demands for water, coupled with poor water world.

Climate change is adding to faster than we are.

With demand for freshwater projected to grow by more than ficient hygiene practices. 40 per cent by the middle of the having a growing impact, water scarcity is an enormous con-

By 2050 at least one in four facilities. people will live in a country where the lack of fresh water will cilities found that more than half be chronic or recurrent.

Without effective management of our water resources, we risk intensified disputes between communities and sectors and even increased tensions among prolonged hospital stays and nations.

So far, water has historically proven to be a catalyst for cooperation not for conflict.

From my own experience, the Albufeira Convention, agreed during my time as Prime Minister of Portugal, continues to promote good relations on water I commend President Rahmon management between Spain and Portugal.

> And, there are many more examples of cooperation on water - between India and Pakistan, Bolivia and Peru, and several

> But we cannot take peace - or our precious and fragile water resources -- for granted.

Quite simply, water is a matter

Our bodies are 60 per cent water.

Our cities, our industries and our agriculture all depend on it.

Yet, today, 40 per cent of the world's people are affected by water scarcity; 80 per cent of wastewater is discharged untreated into the environment, and more than 90 per cent of disasters are water-related.

More than 2 billion people lack well-being, inclusive growth and access to safe water, and more than 4.5 billion people lack adequate sanitation services.

What these numbers mean is management, have increased a harsh daily reality for people water stress in many parts of the in rural communities and urban slums in all regions of the world.

Many of the most serious disthe pressure – and it is running eases in the developing world are directly related to unsafe drinking water, poor sanitation, and insuf-

Today, I am using the launch century, and with climate change of the Water Action Decade to make a global call to action for water, sanitation and hygiene – or WASH -- in all health care

> A recent survey of 100,000 falack simple necessities, such as running water and soap - and they are supposed to be healthcare facilities.

The result is more infections, sometimes death.

We must work to prevent the

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# Actions are needed to tackle water challenges

**ISLAMABAD:** Each year, the World Water Day (WWD) brings attention to and highlights a specific aspect of water. This year's theme "Nature for Water" provides an important opportunity of exploring nature-based solution for various water challenges including floods and droughts. To celebrate the World Water Day 2018, IUCN joined hands with PCRWR, UNE-SCO, ICIMOD, ICARDA, ECOSF, CCRD and Riphah International University to commemorate the day, the theme of which for this year was Nature for Water.

Muhammad Chairman Pakistan Council for Research in Water Resources (PCRWR), in his welcome speech remarked that Nature itself possesses a balance of resources and any imbalance may cause shortage of these resources; the current water crisis is the most critical example.

Speaking on the occasion, the Chief Guest Vibeke Jensen



brief picture of the global water crisis. She remarked that resolution of the issues faced by the World lies in the preservation of nature which is degraded by enhanced anthropogenic activities. She further elaborated that she was well aware of Government of Pakistan's efforts on getting the national water policy approved and research and development

the year's WWD theme.

Water issues and crisis have multiple impacts, said Lt. Gen Omar Mahmood Hayat Chairman, NDMA. Under the changing climate, water related disasters are becoming very common affecting every aspect of life.

Mahmood Akhtar Cheema,

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# Stop water wastage to revent further dive into the pool of scarcity'

**KARACHI:** Experts at a seminar behaviour, social customs, institutions, and government policies heavily influence conservation of

The seminar was arranged in connection with World Water Day to find a way forward towards highest rate of water consumpwater conservation. A large number of stakeholder, academicians and government officials participated in the seminar.

Ensuring availability and sus- suggesting that the country's unanimously said that human tainable management of water and sanitation for all is also goal number six of sustainable development goals (SDGs) by United Nations which signifies its importance.

> Pakistan has the world's fourth tion. The water intensity rate, which is the amount of water in cubic meters used per unit of GDP, conservation combined." is also the highest in Pakistan,

economy is more water-intensive.

World Wildlife Fund-Pakistan (WWF-Pakistan) Chief Executive Officer Hammad Nagi said, "The WWF-Pakistan is committed to promoting nature-based solutions to conserving and restoring water resources of Pakistan. This encompasses a holistic approach of water stewardship, security and

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Reema Shaukat

#### **Operative water policy**

World which marks March 22 every year as international water day, tries to overcome the water challenges erupting with the passage of time. Apart from being one of the significant element for existence of life on earth, water is vital for economic development and human resource. Unfortunately, with every passing second, this .....



# Operative water policy

"Water is the true wealth in a dry land; without it, land is worthless or nearly so. And if you control water, you can control the land that depends upon it." (Wallas Stegner)

March every year as international water day, tries to overcome the water challenges erupting with the passage of time. Apart from being one of the significant element for existence of life on earth, water is vital for economic development and human resource. Unfortunately, with every passing second, this component is wasted and the water politics is emerging as a root cause of conflict among nations. Where the globalisation is making world rapidly linked, more serious issues and challenges are coming up to tackle energy depletion, water scarcity, human resource management and other menaces.

In case of Pakistan, we see that this god gifted country is blessed with minerals and other resources particularly water is in abundance. But because of inefficacy in managing water resources, it is emerging as a real threat in times to come. Climate change is also one of leading factor which is effecting water resources. With the approaching hot summers, lack of water is definitely going to muddle situation for normal livelihood of Pakistanis. Water scarcity, shortage of electric supply and later mon-

are always troublesome for common man. Historically Pakistan was at the suffering end after partition and dispute between both India and Pakistan over water is never considered seriously. Pakistan, in initial years after independence faced lot of problems particularly in agriculture because of stoppage of water by India. As the major rivers flowing towards Pakistan originate from India, dispute and sharing over water always came up issue for Pakistan because of Indian stubbornness. To overcome problems an Indus Water Treaty was signed between India and Pakistan with the help of World Bank in 1960. Apparently it seemed that this agreement will put an end to water issue between two neighbours but with passage of time it is observed that this treaty is often violated by India and it causes serious water shortages for Pakistan.

Apart from water issues with India, Pakistan also needs to review its policy about water at national level. Unfortunately, water issue was never considered important by any of regime in history. Though it was always put on agenda for consideration but there was no particular policy on water management and crises. Nevertheless the drafts on National Water Policy were prepared in past, but it was never measured as a serious issue to

which soon rains and it's after effects be placed on table by all stakeholders. Policymakers are now utilizing all resources to have an effective water policy as according to the recent summary presented to Council of Common Interests by Ministry of Water & Power where Pakistan is going to face acute water shortage by 2025. Summary highlights that "with increasing population, Pakistan is fast heading towards a situation of serious water shortage, putting the per-capita water availability at 940 cubic metres per year in 2015 — down from 5,260 cubic metres in 1951 despite the addition of two major reservoirs, i.e. Tarbela and Mangla. It will drop to 860 cubic meters by 2025 thus creating acute water shortage where people fight for every drop of water".

Few weeks back Sartaj Aziz, Deputy Chairman Planning Commission proposed National Water Policy which has been drafted for the purpose of putting in place a policy framework for ensuring effective management and conservation of existing water resources, improving availability, reliability, and quality of fresh water to meet critical municipal, agricultural, energy and food security needs besides addressing the environmental concerns. The draft policy addresses critical issues of reduction in wastage of water, enhancement of water storage capacity from 14 MAF



to at least 28 MAF through a bilities, accessibility of clean wanetwork of small, medium and large-sized storage reservoirs, increasing efficiency of water use by producing more crop per drop, gradual replacement and refurbishing of irrigation infrastructure and setting up of realistic and achievable targets in consultation with provinces.

Though the comprehensive water policy covers all the aspects including droughts, floods, climate change, energy sector requirements, conditions and need for more reservoirs, industries and waste water management but the modus operandi is the effective execution of chalked out policies at every level. Not to forget that Goal#6 of Sustainable Development Goals by UN also calls for ensuring availability and sustainable management of water and sanitation for all, water use efficiency, and integrated water resources management. Pakistan's vision 2025 also stresses on enhancing agriculture capa-

ter to all and overcoming water scarcity challenges. But effective contribution must come up by all stakeholders if Pakistan is aiming to be one of largest economy in years to come, CPEC holding its grounds efficiently, industrial and energy sector looking forward for future prospects. Apart from water terrorism by India, there is a dire need that Pakistan should take stand on its water resources as soon as possible. Pakistan must also work on steady basis to construct more dams to overcome problems related to water scarcity and power generation. Water is not only the apparatus of any country's economy but the existence of life too. Therefore it is pragmatic for Pakistan to have National Water Policy on urgent basis, with robust management and effective implementation.

- The writer works for Pakistan Institute for Conflict and Security Studies, a thinktank based in Islamabad. Courtesy: http://pakobserver.net

#### From page 1: Message António Guterres, UN Secretary-General

spread of disease.

Improved water, sanitation a country like France. and hygiene in health facilities is critical to this effort.

Ladies and gentlemen,

We cannot continue to take water for granted and expect to achieve the Sustainable Development Goals.

Solutions exist and new technologies are in the pipeline to improve how we manage water for nations, communities and households.

But often these solutions are and inspiring for us all. inaccessible for those who need them most, perpetuating inequity ready to help countries to imwithin and among countries.

As with most development challenges, women and girls suffer disproportionately.

For example, women and girls in low-income countries spend some 40 billion hours a year collecting water.

That is equivalent to the annu-

al effort of the entire workforce of

The time spent could be much better invested in earning a live- lo-based approach to water lihood or - in the case of girls attending school.

It is time to change how we value and manage water.

Last week, the High-Level Panel on Water delivered its outcome report, "Making every drop count: An agenda for water ac-

Their work is deep, serious

The United Nations stands plement the Panel's recommendations, including by promoting policy dialogue, exchanging best practices, raising awareness and forging partnerships.

Member States have also asked me to prepare an Action Plan for the Water Decade, with the support of UN-Water - which I am determined to strengthen.

My plan sets forth three core objectives.

First, to transform our sisupply, sanitation, water management and disaster risk reduction to better tackle water stress, combat climate change and enhance resilience.

Second, to align existing water and sanitation programmes and projects with the 2030 Agenda.

Third, to generate the political will for strengthened cooperation and partnerships.

I look forward to implementing this plan.

The growing water crisis should be much higher on the world's radar.

Let us work collectively towards a more sustainable world. and an action-packed Decade of "Water for Sustainable Development".

Thank you.

#### From page 1: 'Stop water wastage to prevent further dive into the pool.....

He said that the WWF was working with companies like Nestlé to implement an international water standard that promotes the use of water in a socially equitable, economically beneficial, and environmentally sustainable way, through a stakeholder inclusive approach.

Memon, chairman of Water Environment Forum, talked about water governance in Pakistan. He said, "People and governments of Pakistan should work together to protect, preserve and plan water assets of Pakistan, including 7,235 glaciers and our major rivers.

Dr Zakir Hussain, principal scientific officer at the Pakistan Agricultural Research Council said, "Pakistan's agriculture has become vulnerable to the vagaries of climate change. Improving farmers' resilience to climate change requires more efficient use and equitable distribution of irrigation water, agricultural insurance to protect farmers against losses,



and support from the government in adopting climate-smart agricultural practices."

Dr Abubakar from the Centre of Water Informatics and Technology, LUMS, talked about how technology could be used in agriculture for efficient water management. He also stressed the need for industry working with academia to find solutions, using Nestlé-WIT relationship as a model. The two partners are working on smart soil sensors that can help farmers to reduce water usage in agriculture and also avoid crop stress due to over and under irrigation.

Courtesy: http://dailytimes.com.pk



Ali Salman Andani

#### Pakistan could face an "absolute water scarcity" by 2025!

Pakistan is going to face an "acute water shortage" by 2025. This is what a recent United Nations agency report has warned. Pakistan Council of Research in Water Resources (PCRWR) already created the grim .....



# Pakistan could face an "absolute water scarcity" by 2025!

Ali Salman Andani

to face an "acute water shortage" by a recent United Nahas warned.

Pakistan Council of Research in Water Resources (PCRWR) already created the grim forecast report claimed that the country 1990 before crossing the "water inadequacy line" in 2005.

Pakistan's largest province, Balochistan, is already facing a severe drought and unreal famine

akistan is going because of scarce downfall and dropping groundwater levels. The metropolis, Quetta, is facing 2025. This is what associate displeasing scenario because the water level is detions agency report creasing by three-and-a-half feet once a year.

> Scarce water could be a major issue in Pakistan as per capita Pakistan wastes water value

water handiness has fallen from in a report issued in 2017. The more or less five thousand cubic meters to some one thousand touched the "water stress line" in cubic meters annually, which implies the country is water-scarce. Rs25 billion once a year, according to Water and Power Development Authority (WAPDA).



Pakistan has the world's money (IMF), Islamic Republic fourth-highest rate of water usage and specialists believe that poor management could be a larger issue than depleting water reserves.

A recent study by the PCRWR conjointly found that concerning sixty nine percent of water suppliers don't meet the National Standards for Water Quality, putting millions of lives in danger.

Some politicians have warned of "massive corruption" within the water sector with some seeking to profiteer from the inadequacy of a significant resource.

Use of water has been inflated within the daily lives for varied purposes such as domestic, agriculture, industrial, energy & power generation and conjointly for recreational activities. Because of increasing use of water and the rising of the population, per capita handiness of water will be lowered up to 858 in 2025.

Pakistan depends on water from one supply — the Indus River Basin in India — and dynamical climatic conditions has led to reduced rainfall, thus making Pakistan a water-stressed

According to the International

of Pakistan is already the third most water-stressed country in the world. Its per capita annual water handiness is 1,017 cubic meters dangerously getting close to inadequacy threshold of 1000 cubic meters. Back in 2009, Pakistan's water handiness was concerning 1500 cubic meters.

The bulk of Pakistan's farmland is irrigated through a canal system. However, the International Monetary Fund says in a report that canal water is immensely underpriced, recovering only one-quarter of annual operative and maintenance prices. Meanwhile, agriculture that consumes most annual obtainable surface water, is essentially nontaxable.

Under the funding of the World Bank, Sindh has got to irrigate 35 thousand acres whereas Punjab has got to irrigate 110 acres of un-irrigated land through the drip irrigation system, not only latest mechanized irrigation but however the modern mechanized cropping has to be adopted like raised bed planting and zero tillage.

Most households in the Islamic Republic of Pakistan depend

upon groundwater however the standard and amount of groundwater has depleted over the

Experts say that population explosion and urbanization are the main causes of this severe scarcity of water. Temperature change, poor water management, and lack of interest shown by politicians are also some of the highlighted reasons for acute water shortage.

Dams seem to be the only way that can prevent a severe drought to occur in the country. It surely is a high time for Pakistan to come up with a water policy. We need to build water storage and develop a mechanism to save and maintain the quality of groundwater.

Ali Salman Andani is a blogger & Social Media Activist. He is studying Global **Economics & International Relations and** has deep interest in World Politics. He writes on Socio-economic issues, Foreign Policy, Global Politics, Scientific Research, Finance and Entertainment. His writings frequently get published in many top-notch newspapers including Express Tribune, Dawn, Daily Times and The News. He tweets @an alisalman. Coutesy: http://blogs.dunyanews.tv

From page 1: Actions are needed to tackle water challenges

Country Representative IUCN Pakistan traced the declining per capita water availability figures in Pakistan since independence and stated that the declining water quality was a direct result of damage to the ecosystems health. "IUCN Pakistan believes that the solution lies in green infrastructure. He remarked that ecosystems are transboundary in nature and have a major impact on the occurrence and status of water resources. It is in this sense that IUCN is actively engaged in concerted efforts on protecting degraded ecosystems with reforestation activities," he added.

Quoting some examples of such efforts, he particularly mentioned the herculean efforts of IUCN in restoring the coastal ecosystem by planting millions of mangroves with the collaboration of Pakistan Navy and involving local communities, who were the major beneficiaries of the activities. The efforts are still on-going



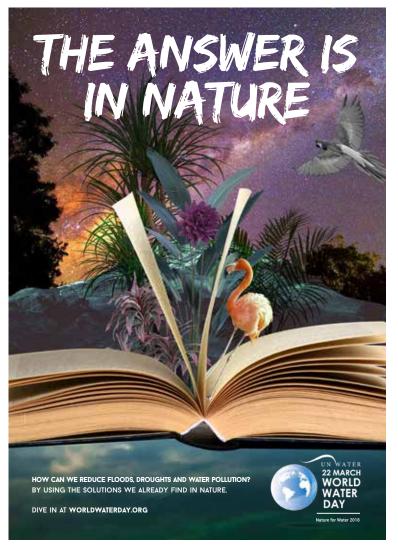
Pakistan Navy who have pledged over one Million mangrove plants for greening the ecosystem.

Dr. Abdul Majid, Country Director, ICARDA remarked that importance of water lies in how we use water resources. In order to save the nature, water must be conserved in all consumer sectors. A healthy eco-system ensures protected and well managed water resources.

A panel discussion was also held circling around preservation of "eco-system and water resources". Ahmad Kamal Chairman Federal Flood Commission,

with more commitments from the Dr. Abdul Wahid Jasra Country Representative, ICIMOD, Dr. Ghulam Rasool Director General PMD, Hassan Muhammad Khan Chancellor, Riphah International University and representative of ECOSF shared their expert opinion around the theme of world water day 2018.

A Poster Competition among university students was also organized. The event was held in PCRWR premises and was well attended by representatives of various institutions and University students. At the end, awards were distributed to the first three positions among the students who participated in the competition.



04 — TechnologyTimes.Pk



#### Pakistan needs global climate funds to combat shifting weather patterns

As shifting weather patterns and extreme climates become the norm, access to climate funds are deemed essential for developing countries, such as Pakistan, that are facing the brunt of climate change.....



# Pakistan needs global climate funds to combat shifting weather patterns

**Inter Press Service** 

s shifting weather patterns and become the norm, access to climate funds are deemed essential for developing countries, such as Pakistan, that are facing the brunt of climate change.

Change profile of Pakistan, a proposed fund. number of mitigation and adaptation measures have been taken by the government using domestic resources.

international funding required to intensify its efforts using capacity building and technology for its National Adaptation Plan, says Fatima Fasih, Program Manager for Sustainable Development at the Centre of Excellence in Responsible Business (CERB).

According to UNFCCC, climate finance is critical in addressing climate change because largescale investments are required to adapt to changing climates, reducing emissions, and shifting to a more sustainable future.

Pakistan's Nationally Determined Contribution (NDCs) submitted to the 2015 Paris Agreement, aims to reduce up to 20% of its 2030 projected GHG emissions — using international grants for adaptation and mitigation of approximately \$40 billion.

The Paris Agreement commits countries to pledge not to just keep global warming "well below two degrees Celsius", but also to "pursue efforts" to limit warming to 1.5 degrees C by 2018.

Several researches including one carried out by Daniel Mitchell and others at Oxford University states that while the difference between 1.5 degrees and 2 degrees will be marginal in annual average temperature, it would have a significant impact on reducing the probability of destructive weather events like floods, droughts, and heat waves.

"It is very important for temperatures to remain below 1.5 degrees because natural extreme weather events are going to become the norm - especially in Pakistan and other mid-latitude countries," says Sidra Adil, an environmental engineer and GIS analyst.

Over the past 50 years, the

annual mean temperature in Pakistan has already increased by extreme climates roughly 0.5 degrees.

The government expects to get international grants worth \$7 billion to \$14 billion every year to be able to adapt to climate change and the senate passed a policy in 2017 that called upon the creation of Pakistan Climate Based on the ADB Climate Change Authority to manage the

But not only has little has come out of it, so far, and there is no concrete indication that the Global Climate Fund will be But Pakistan is still awaiting providing the required financial resources.

> 'There is little or no knowledge of any such funding from the GCF (Global Climate Fund) to help in the mitigation and adaptation against climate change," says Fasih.

According to some statistics, between 1997 and 2016, Pakistan suffered from 141 extreme weather events and lost an average of 523.1 lives per year due to climate change effects.

The super-flood in 2010 killed 1,600 people, affecting an area of 38,600 square kilometers and caused a financial loss of more than \$10 billion and the heatwave in Karachi in 2015 lead to the death of more than 1,200

And as average global temperatures rise, impacts across the country will vary widely from glacial melting in the North to increase in sea levels at coastal

Many of these will be unpredictable and possibly volatile -"such as increase in number of extreme events, such as droughts and hurricanes," explains Fasih.

But some of the repercussions can be predicted.

"The impacts of rising temperatures are huge as increase in glacial melt will increase in flooding around the flood banks of River Indus over the next few decades," says Fasih.

Based on ADB's Climate Change profile of Pakistan, the sea level is expected to rise by an additional 60 centimetres by end of the century. The melting glaciers will also lead to more freshwater converting to seawater and worsen water scarcity.

"Even a rise of 1.5 isn't desir- enon and none of the countries

able but that extra 0.5 degrees will make the situation a lot more dire," says Adil. "We don't have enough water storage options and are well on the way to becoming a water scarce nation."

For a country where more than 50 per cent of the population is directly or otherwise dependent on agricultural activities, the impacts of this would be detrimen-

"The [difference of] 0.5 degrees increase in temperatures means a lot for people that depend largely on the weather cycles for their business and farms – which is majority of our business sector and rural areas," Fasih says.

The loss of freshwater supply will also lead to production of hydropower at dams, such as Mangla & Tarbela.

"Considering how big the issue of energy is to us Pakistanis, this impact will surely hit across the country," adds Fasih.

Adil states that while no rise in temperatures is ideal – that 0.5 degree difference is trivial.

"It won't be as bad or as intense as 2C of course," she says. "1.5 degrees gives us the room for a trade-off to work on climate strategies."

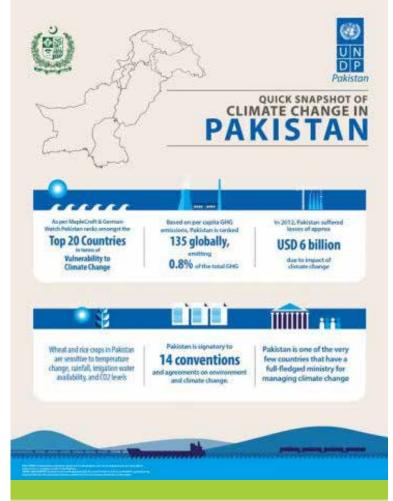
According to a report by Yale University, should global emissions continue to rise beyond 2020, or even remain level, the temperature goals set in Paris become almost unattainable.

"It is very important to transition to renewable energies but our emissions aren't that high - the main problem right now is that we are on the receiving end of high emissions from other countries," says Adil.

The Federal Minister for Climate Change Zahid Hamid pointed out at the 2016 United Nations alone can deal with the issue. Climate Change Conference thatdespite ranking amongst the top 10 countries most vulnerable to climate change- Pakistan emits less than 1% of total annual global greenhouse gases.

"Climate influences us as a whole - it is not a region concept. It is a global concept," Adil global emissions of carbon di-

This is an almost unanimous international agreement -that climate change is a global phenom-



The (difference of) 0.5 degrees increase in temperatures means a lot for people that depend largely on the weather cycles for their business and farms - which is majority of Pakistani business sector and rural areas

And the technology-driven transition to 100% renewable energy globally is well under way, a trend that made the 2015 Paris climate agreement possible -and there are already signs that this is paying off.

Just in the past three years, oxide from the burning of fossil fuels have levelled after rising and other nations are starting to boost renewable energy sources.

According to Mission 2020, the installed capacity of renewable energy set a new record of 161 gigawatts in 2017; in 2015, investment levels reached \$286 billion worldwide, more than 6 times that in 2004.

And over half of that investment, \$156 billion, was for projects in developing and emerging economies.

"This is a sign that policies for decades as major polluters and investments in climate mitigation are starting to pay off,"

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Raheel Hassan

#### Water scarcity in Pakistan

Pakistan has been facing a magnitude of problems since its inception. There is an immediate need to work towards those problems in various sectors. Pakistan has a very fragile condition; it lacks a proper plan for its political, economical, foreign, health and environmental fronts, except the defense and strategic. The culture .....



## Water scarcity in Pakistan

facing a magnitude of problems since its inception. There is an immediate need to work towards those problems in various sectors. Pakistan has a very fragile condition; it lacks a proper plan for its political, economical, foreign, health and environmental fronts, except the defense and strategic. The culture of proper policy making does not find anywhere else. Nations progress to pursue their priorities and policy planning.

There are hundreds of thouon the political and economical conditions today. We will take a residents suffering. look at the feeble environmental condition which required a a proper policy to accommodate comprehensive policy making. We have just neglected the grim environmental changes that have occurred in the recent past. Rivers and dams are running short of water...

drought by 2025, this estimation is not new, the Pakistan council of research in water resources (PCRWR) and metrology department have warned several times before. Rainfall has steadily declined due to climate change therefore the groundwater level is decreasing gradually. If groundwater depletion continues at its current rate, the country is surely headed for widespread water poverty in next few years.

People should also manage the consumption of water in their individual capacity. This is a ma-

akistan has been plish together responsibly so as wars might be fought over water; to avoid water-related problems. Government should focus on "greener" policies to improve the situation of water and climate change.

The rapidly excelling population and urbanization are key players behind this snag. Karachi and Lahore have been facing two decades, and the residents are being exploited by the tanker mafia. Islamabad, recently, has been thrown in the ring against the water tank mafia as well. The two dams, "Rawal and Simly", have scarce levels of water due sands of articles being written to which ground water in Islamabad is also diminishing and the

It seems the government lacks people with water. Due to the lack of political will, Pakistan has not made new dams since 1960s and this is also a violation of Indus water treaty. The treaty was signed in 1960s is about the possession of Pakistan could face severe water of the western and eastern rivers between Pakistan and India. The conflict emerged when India built the Kishenganga and Ratle hydro-electric power plants within the framework of Indus Water Treaty.

However, the dispute is yet to be resolved through arbitration of the World Bank, which is a signatory to the water sharing treaty between the two adversaries. Water crisis is not just confined to Pakistan; it is becoming a global issue. According to report published annually by the International Institute of Strategic ior task all of us need to accom- Studies in London, The next big

clashes are still or could soon occur over access to water. The UN World Water Develop ment Report 2018 calculated that an estimate of 3.6 billion people, nearly half of the global population, live in areas where water levels are decreasing.

And this number could rise to water shortage since the last 5.7 billion by 2050. The countries currently facing with extreme water scarcity are Yemen, Libya, Jordan, Djibouti, Cape Town and some other African countries. According to ISRA (Indus river system authority), due to the less capacity of water storage, Pakistan wastes 30 million acre-feet water worth \$21bn annually in the sea. Storage capacity of this country is just 15.75 million acre feet, which is equivalent to 30 days of consumption. Glaciers are also affected by the climate change, dams are necessary to be built to conserve the amount of water that goes to sea.

> It lacks a proper plan for its political, economical, foreign, health and environmental fronts, except the defense and strategic. The culture of proper policy making does not find anywhere else. Nations progress to pursue their priorities and policy planning.

> The current daunting condition can lead a severe drought and the impact could be worse for an agricultural country like Pakistan. It is in need of a large amount of water supply for agricultural production: approximately seventy percent of the world's usable water is consumed in agriculture.

In Pakistan, particularly, small farmers use sewage water for



cultivation of vegetables which is causing a number of diseases and deaths. Water contamination is also a serious problem, those areas which have easily availability have contaminated water. Due to rapid industrialization, drinking water quality is deteriorating day by day. According to a report the water of world's leading brands of bottled mineral water are contaminated.

Government has nothing to do with this issue even the issue is not a part of any political party's manifesto except Imran Khan, his promises regarding the cleaning of rivers and building dams yet to be fulfilled Any delay in reforms would thrive the severe challeng-

es because water needs are expected to rise significantly due to the rapid population growth, economic development and changing consumption patterns.

People should also manage the consumption of water in their individual capacity. This is a major task all of us need to accomplish together responsibly so as to avoid water-related problems. Government should focus on "greener" policies to improve the situation of water and climate change.

The author studies journalism at National University of Modern Languages (NUML), Islamabad.

Coutesy: https://globalvillagespace.com

#### From page 4: Pakistan needs global climate funds to combat shifting weather patterns

Mission2020, in a report. "But there is still a long way to go to decarbonize the world economy."

For Pakistan, this transition to renewable energy could take at Climate Change, there is very litleast a decade, if not more but experts states that implementation of natural climate solutions on a smaller scale is as important a step today.

ty to 60% of our population through may be moving in a different dicoal – that we have an abundance rection. of," says Adil. "So it is impossible for us to transition to renewable energy right away. Policies have to change and this will take 10-15 years for the very least."

viduals, lose short-sightedness in Pakistan.

says Andrew Higham, CEO of for projects that bring quick profits at the expense of sustainability, and create awareness about the triviality of the issue.

> "Despite having a Ministry of tle that it has done thus far, since most of its powers and budget has been slashed by the current elected government," says Fasih.

But that is not speaking for the "We can't even provide electrici- entire country- the private sector

Fasih, who works on the private sector's track record on the UN Sustainable Development Goals (SDGs) in Pakistan says that a lot of efforts being made But for that to take place, the by the private sector – both by government needs to allocate the big business, as well as entrepreright resources, hire trained indineurs to combat climate change



companies, for instance, that comply to standards abroad are now actively pursuing environmental stewardship, via waste reduction, ethical consumption, water conservation and reduction in emissions.

Many NGOs, such as Climate 50, founded by Adil, are adapt natural solutions to climate

networks to work on awareness and implementation of natural climate change solutions.

But Fasih adds that it is necessary at present is to engage local communities (both urban and rural) to understand climate change, mitigate against it, and

Textile and agriculture based also working on building expert using citizen and civic movements.

> "Unless the government does not prioritize increasing awareness amongst the citizens, very little difference can be made by projects that require billions of dollars in funding," adds Fasih.

> > Courtesy: www.southsouthnews.com



#### Coca-Cola returned 60 million liters of water to nature and communities.....

In recognition of World Water Day, the Coca-Cola Company announced that it has returned 60 million liters of water to nature and communities in Pakistan. Coca-Cola's Replenish goal, a first for the beverage-producing.....



# Coca-Cola returned 60 million liters of water to nature and communities

## in Pakistan

The Coca-Cola Company

communities in Pakistan.

Coca-Cola's Replenish goal, a first for the beverage-producing private sector, seeks design and scale, but all operto replenish, or return through water access, productive use and conservation activities, 100 percent of the water Coca-Cola uses in its global sales volume by 2020. To achieve this, Coca-Cola System entities support degradation and depletion. community-based water projects around the world, with a specific focus on water stressed regions and those locations experiencing or recovering from humanitarian crises.

"Pakistan remains one of the most water stressed states globally, which gives us another reason for reinstating our mandate as a responsible corporate citizen; as a Company we are on track to replenish 100% water back into the communities • Khanpur Dam Project: As the where our business operates. Although scarcity of potable water resources, high rate of unhygienic practices and local governance clauses pose as a strong challenge for us, but over the past decade we have developed

n recognition of World a strong network of partners, Water Day, the Coca-Cola NGOs and provincial authori-Company announced that ties who have been supportive it has returned 60 million towards our water stewardship liters of water to nature and practices," said Rizwan Khan General Manager, Coca-Cola Pakistan & Afghanistan Region.

> Each of the projects vary in ate to either provide people with access to sustainable water and sanitation services, provide water for productive use such as irrigation, or protect environments and natural water sources from

To date, Coca-Cola and its philanthropic Foundations have implemented over 25 replenishment projects throughout the MENA region, the most water-stressed region in the world. In Pakistan alone, Coca-Cola and its partners have launched and implemented nine water replenishment projects that resulted in the return of 60 million litres of water to nature and communities, including:

newest project in Pakistan, Coca-Cola recently partnered with WWF to help create a sustained flow of freshwater in local springs and streams feeding into the Khanpur Dam



reservoir. This project is expected to benefit over 50,000 people in the region.

- with UNDP and Rotary International, this project provides water filtration plants in high risk areas and provide clean 70 countries. drinking water to communities, benefiting over 75,000 people.
- Paani Safe Water Initiative: In partnership with WWF, this project aims provides clean water to over 750,000 people use of community outreach and infrastructure building.
- Environmental Conservation and Watershed Management: In partnership with WWF, this project provides safe drinking water to communities in addition to restoring the ecology of Ayubia National Park through watershed management practices and infrastructure building. It resulted

in improved water access for 12,235 people.

Globally. Coca-Cola and its Zindagi project: In partnership Foundations are currently contributing to nearly 250 community water projects in almost 2,000 communities across more than

Replenish is only one element of the Company's overall water stewardship framework, which also includes Source Water Protection; efforts to reduce water consumption in bottling plants as measured by the Water-Use-Raacross Pakistan through the tio (WUR); and Waste-Water treatment activities, which clean waste water to a standard that can support aquatic life before it leaves a bottling plant. All of these efforts aim to balance Coca-Cola's impact on finite water sources, in recognition of growing population and climate change related pressures on the long-term availability of water around the world.

Courtesy: https://coca-colajourney.com.pk

# UN 🐽 #KEEPITCLEAR Let's quench our thirsty planet WHERE DOES OUR FRESHWATER COME FROM? UN Environment estimates that rivers in Latin America Asia and Africa face pollution threats in various forms ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT

environment

**United Nations** 

## Dams' construction to help meet demand of water: Minister

ISLAMABAD: Like other parts ed as 34 million in 1951, 43 mil-incumbent government decided talking to a news channel he said of the world, water scarcity is also looming large in Pakistan as since 1951, the per capita water availability has been drastically shrunken from 5,600 cubic meters to the current level of 909 cubic meters. As per Population Census Organisation data, per capita water availability was 5,260 cubic meters in 1951, 4159 cubic meters in 1961, 2838 cubic meters in 1971, 2129 cubic meter in 1981, 1611 cubic meters in 1991, 1259 cubic meters in 2001 and around 909 cubic meters in 2017.

However, the population also witnessed sharp increase during the said period and it was record-

lion in 1961, 63 million in 1971, 84 million in 1981, 111 million in 1991, 143 million in 2001, 197 million in 2016 and 210 million in 2017, the data revealed. Official sources told that around 29 million acre feet (MAF) water wasted every year in the country due to poor storage facilities and accumulation of silt in the main water reservoirs of Tarbela and Mangla. They were of the views that only rapid increase in the population was not the sole factor of decrease in per capita water but lack of water storage capacity and conservation were also adding to this issue.

Cognizant of the issue, the

to build much awaited big water reservoirs including Diamer Basha and Mohmand dams etc from its own resources in order to increase water storage in the country. The Mangla dam raising project and Gomal Zam dam had already been completed to store additional 2.88 MAF and 1MAF water respectively.

Meanwhile, Minister for Water Reservoirs Syed Javed Ali Shah on Thursday underlined the need for construction of dams to meet growing demand of water in the country. With the construction of dams, wastage of rainy and flood water could have been avoided in a befitting manner, he said while

the work on some reservoirs was in progress due to consensus among the stakeholders. Upgradation of Mangla dam had been completed while the projects of Neelum-Jehlum and Diamer-Bhasha would be accomplished in near future, he added.

To a question regarding water issues with neighboring country, he said India was involved in violation of Indus Water Treaty. Pakistan would again seek help from International Court of Justice regarding Indian violations, Syed Javed Ali said. He expressed hope that India would come forward for resolving the issues with Pakistan regarding Indus Water Treaty. •

Pakistan ranks third among countries facing

water shortage

amongst countries facing water shortages, according to an International Monetary Fund (IMF) report.

An important reason behind this is the excessive use of water without any mechanism to save it. There is a dire need to divide water into parts the way developed countries have mechanised their system. One part should be of clean water, which should be utilised for drinking and cooking, while the other part should be used for polluted or dirty water, which should be used for household needs.

These views were expressed by the organisers of an awareness seminar on World Water Day held at the Federal Urdu University of Arts, Science and Technology's department of geology. Chairperson of the geology department, Seema Naz Siddiqui, said that climate change climate, poor strategy of government institutions, the policies of neighbouring countries and poor distribution of water within the country are reasons behind the escalating water crisis and, if the situation persists, there will be no or very little clean water available in Pakistan by 2025.

Retired professor from the University of Karachi, Professor Dr Waqar Hussain, LUMS Professor

KARACHI: Pakistan ranks third Dr Mehmood Ahmed, Dadabhoy Institute Rector Dr Shahana Urooj Kazmi, Professor from KU's environment science department Dr Amir Alamgir, Dr Mirza Naseer Ahmed Murad from Abdul Salam University, Faisalabad, Mehran University professor Dr Ahsan Siddiqui, programme organiser Sohail Anjum and Sheela Bano addressed the seminar. Irfan Abbasi, Dr Ghirlandaio Murtaza, Dr Mehmood Ahmed and Dr Syed Baseer Hassan took part in the panel discussion. Student adviser Muhammad Afzal, Taji Shah, Shahid Anwar, Dr Umme Hani, Dr Adnan Khan, teachers and students participated in the seminar.

> Addressing the seminar, Dr Hussain said that water affects the economy of developing countries and Pakistan is an agricultural country which needs a huge reserve of water. He lamented that people do not even have clean drinking water available to them. Dr Kazmi said that not only do several people in Pakistan die after consuming polluted water, they also contract diseases such as cancer, hepatitis A, B and C, typhoid and diarrhoea, as well as teeth and bones diseases.

> Water serves as an engine for metabolism. Provision of clean drinking water to people is a basic human right. Dr Mehmood Ahmed said that only 2.5% of the world's water is pure while



97.5% is salty water. Glaciers are melting fast due to which astonishing climate changes are taking place in the world. A mechanism to save water has not yet been determined in Pakistan, due to which the water gained through natural resources gets wasted. which is one of the major issues in Pakistan, explained Dr Ahmed.

Dr Siddiqui said that globally 14 billion gallons of water are dumped into the sea and annually around 1.8 million people die due to consuming polluted water. According to UNICEF's report, clean drinking water is not available to 50% of schools and school-going children.

Globally 5,000 children die of diseases after consuming impure drinking water. In Pakistan, clean drinking water is available to only 30% of the population.

People should take care of the cleanliness of water tanks in their homes and should avoid excessive use of water. Dr Siddiqui said that 81% of water in Sindh is undrinkable.

The water of the Indus River is the best drinking water, according to the World Health Organisation (WHO) but we have been destroying it, he said.

Dr Ahmed said that if we do not use water carefully, not only will the availability of agricultural products be affected but we will also be deprived of drinking water.

Not even one sewerage water treatment plant is working in Sindh and as a result, polluted water is being dumped in canals, rivers and the sea, which is destroying the environment rapidly, he lamented.

Anjum, thanked the participants of the seminar. After the seminar concluded, shields were distributed to participants. An awareness walk was also held to the Abdul Qadeer Auditorium from the administration block. ◆

#### Call to exploit water resources

PESHAWAR: The speakers during a World Water Day seminar here called on stakeholders to strengthen academic linkages and networking for water and environment-friendly actions and research.

The event was held at the University of Peshawar, said a news release issued here.

Chairman of the department of environmental sciences Prof Hizbullah Khan called the need for exploiting water resources in the province.

He said 30 per cent of the country's river water was used, while the rest was lost in the Arabian Sea.

Prof Hizbullah said it was time to store that water for increasing supply for irrigation and other purposes.

Water and Sanitation Services Peshawar manager Saeed Khan said his organisation was striving for providing the people with excellent water supply and sanitation services.

He said 250,000 water connections in Peshawar was the civic agency's target.

Mr Saeed said a GSM system was operational in the provincial capital to monitor the WSSP employees' efficiency and punctuality.

He regretted that none of the city's four sewage treatment plants was operational.

## Water Day celebrated at PMAS-AAUR

RAWALPINDI: Pakistan may face shortage of 31 Million Acres Feet of water by 2025 which can pose a grave threat to Pakistan's economy said the speakers while addressing a seminar organized here on Wednesday in connection with World Water Day at Pir Mehr Ali Shah Arid Agriculture University Rawalpindi (PMAS-AAUR).

They speakers underlined the need of individual and collective efforts for the conservation of water. They were of the view that water availability is not the issue of Pakistan and many more countries vet integrated water management approach for conserving and saving water is need of hour to cope with the problem of water scarcity in near future.

The seminar was arranged under the theme 'Nature for Water" by Faculty of Agriculture Engineering in collaboration with Rural Areas Water Association Pakistan (RAWAP) for focusing the attention on the importance of water.

Dr. Manzoor Ahmad Malik, Director Pakistan Council of Research in Water Resources (PCRWR) was the chief quest while Prof. Dr Sarwat N. Mirza Vice Chancellor (VC) PMAS-AAUR was the quest of honor at the seminar.

Dr. Jahangir Khan Sial, Prof. Agriculture Engineering, Engr.



rector (Water Resources) Ministry of Planning, Development and Reform, Dr. Amjad Nabi and Engr. Rehan Zeb, CEO RAWAP also addressed the audience while deans, directors, faculty members, administrative staff and a large number of students attended the seminar.

Dr. Manzoor Ahmad Malik stressed the need for adaptation of interventions that are compatible with nature and suits the nature. He emphasized on balance of nature-approach and said, "Alternate source of energy such as solar energy can be use instead of deforestation." Talking on the availability and utilization of water he said, Pakistan depends upon Indus Basin Irrigation System and 90 percent food production rely on this water.

The farmers should save water up to 25 percent instead of cropping rice, he said adding, "Exporting rice means exporting water." He suggested the rainwater harvesting and high efficiency water challenges. ◆

Fazal Akbar Afridi, Deputy Di- irrigation systems for maximum growth and more water for stor-

> Prof. Dr. Sarwat N Mirza spoke on the problems related to water security and informed the gathering that Pakistan is at 17th position in the list of the countries which are facing water crisis. According to Pakistan Water Partner (PWP) the total available surface water is about 153 Million Acres Feet and total ground water reserves are approximately 24 Million Acres Feet of which a substantial part is pumped out allowing for a natural research.

> Talking on the bitter facts he said, "Pakistan is expected to face shortage of 31 Million Acres Feet of water by 2025 which would pose a grave threat to Pakistan's economy and according to the media reports, India has ventured upon an ambitious plan worth \$120 billion to divert water of the Pakistani rivers." He said, "Nature-based solutions have the potential to solve many of our

## Per capita water availability declines to 909 cubic meters

**ISLAMABAD:** Like other parts of the world, water scarcity is also looming large in Pakistan as since 1951, the per capita water availability has been drastically shrunken from 5.600 cubic meters to the current level of 909 cubic meters.

As per Population Census Organisation data, per capita water availability was 5.260 cubic meters in 1951, 4159 cubic meters in 1961, 2838 cubic meters in 1971, 2129 cubic meter in 1981, 1611 cubic meters in 1991, 1259 cubic meters in 2001 and around 909 cubic meters in 2017.

However, the population also witnessed sharp increase during the said period and it was recorded as 34 million in 1951, 43 million in 1961, 63 million in 1971, 84 million in 1981, 111 million in 1991, 143 million in 2001, 197 million in 2016 and 210 million in 2017, the data revealed.

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only rapid increase in the population was not the sole factor of decrease in per capita water but lack of water storage capacity and conservation were also adding to this issue.

Cognizant of the issue, the incumbent government decided to build much awaited big water reservoirs including Diamer Basha and Mohmand dams etc from its own resources in order to increase water storage in the country. The Mangla dam raising project and Gomal Zam dam had already been completed to store additional 2.88 MAF and 1MAF water respectively.

## Call made to conserve water to meet needs

LAHORE: To mark World Water groundwater and adopt strate-Day 2018, WWF-Pakistan hosted a panel discussion on the issue of mismanagement of water resources of the country.

The discussion was hosted in collaboration with LUMS and a multi-national company. Muhammad Mahmood, Secretary, Punjab Agriculture Department, Hammad Naqi Khan, Director General, WWF-Pakistan, Dr Water Day is being celebrated Abid Suleri, Executive Director, Sustainable Development Policy Institute (SDPI), Dr Abubakar damage, together with climate Muhammad, Director, Centre change, is driving water-related for Water Informatics & Tech- crises seen around the world. nology, LUMS, Dr Yousaf Zafar, Chairman, Pakistan Agriculture Research Council, and Zamir Ahmed Somroo, Regional Director PCRWR were the panelists.

The aim of the panel discussion was to bring stakeholders from different backgrounds together to discuss issues related to groundwater availability and quality in Pakistan. Alarmingly, the groundwater level is declining in Lahore with a depletion rate of approximately 2.5 to 3.0 feet per year for the district. The water table depth in the central part of the city has fallen below 130 feet (40 metres) approximately and is projected to drop below 230 feet (70 metres) in most areas by 2025.

If the present trend continues the situation will become even worse by 2040. Therefore there is an urgent need to conserve

gies at the earliest. World Water Day is celebrated globally to highlight the importance of water related issues by raising awareness and encouraging policymakers to look into sustainable development initiatives in cities as a support to lessen stress on urban water systems.

This year, international World with the extended theme of 'Nature for Water.' Environmental

pollution are all made worse by degraded vegetation, soil, rivers and lakes. When ecosystems are neglected, it becomes harder to provide the public with water needed to survive and thrive.

Hammad Naqi Khan, Director General, WWF-Pakistan said, "Pakistan is a water stressed country and is nearing the threshold of water scarcity. Access to safe drinking water in rural and urban areas is declining and the provision of potable water is a key issue that people face."

He noted that the implementation of laws pertaining to industrial effluents generated from the textile and leather industries are very weak. Further, industrial waste from these industries contains heavy metals such as copper, chromium, and nickel.



A large population of people do not have access to safe drinking water as freshwater resources are being contaminated due to multiple reasons. Dr Sohail H Nagvi, Rector LUMS, said that the Indus water captures the path of a water droplet melting at glaciers and making its way through the complex domain. WWF-Pakistan in partnership with LUMS should extend its work on awareness campaigns with students who are the future of the country.

Zamir Ahmed Somroo, Regional Director PCRWR said, "The stress on safe drinking water is a basic right for humans but water is a fast depleting resource that is shared among all of us as individuals, farmers, industry, the environment and communities and attended as guest of honour. ◆ therefore needs to be protected in public-private collaborations."

WWF-Pakistan and the Faisal-Floods, drought and water living in major cities of Pakistan abad Chamber of Commerce and Industry (FCCI) also organised a seminar on World Water Day to promote water conservation and discuss solutions to cater to the issue of wastewater in the city, the situation of Pakistan and different methods to treat wastewater specifically for the city of Faisalabad.

> Representatives of different institutions such as the Environmental Protection Department, Irrigation Department and National Institute for Biotechnology and Genetic Engineering (NIBGE) presented at the Faisalabad event while representatives of industries, universities and government departments participated. Shabir Hussain Chawala, President, FCCI,

> > Courtesy: thenews.com.pk

### 21m people don't have access to clean water in Pakistan: report

ISLAMABAD: Pakistan among top 10 countries with the lowest access to clean water, according to the study "The Water Gap — the state of the world's water 2018" by Wate-

The study was released to mark World Water Day. Pakistan ranks nine in the list of top 10 countries with lowest access to clean water where 21 million of the total population of 207 million does not have access to clean water. India, Ethiopia and Nigeria are the top three countries without access to safe water.

"Pakistan is facing severe challenges; industrialisation and the demands of agriculture, depleted and increasingly saline groundwater, rapid urbanisation and drought have all taken their toll," the report stated.

Highlighting the disparity between the rich and poor, the report added, "While nearly all of the country's wealthiest have access to clean water, this applies to only 79% of its poorest". Pakistan, is also, however, one of the most-improved nations for reaching more people with safe water by numbers since 2000, the report revealed.

"Pakistan has reached water to 44 million people since 2000 — yet we see that while almost all its wealthy ones have access to clean water close to home, one in five people living in poverty do not," it said. ◆

## IUCN, Ministry of Climate Change, Serena Hotel, celebrate World Water Day, International Day of Forests

ISLAMABAD: IUCN, International increase the forest cover in the work on mangroves conserva-Union for Conservation of Nature, in collaboration with the Ministry of Climate Change and the Serena Hotel, celebrated the World Water Day and the International Day of Forests, at the Serena Hotel in Islamabad.

sector, as well as the media and environment experts.

Romina Khurshid Alam, Parliamentary Secretary and Member of National Assembly in her remarks emphasized the importance of forests in human life. forests' threats, issues and suggestions to mitigate threats to the national forest cover.

Khizar Hayat Khan also explained that "due to the loss of forest cover in the watersheds. the flow and quality of water has been reducing, giving rise to trans-boundary and riparian issues." Being an agri-based country, he continued, the economic loss is imminent due to reduction in the water flow.

"To reverse this situation we need to take drastic measures to

situation was so dire that government alone would not be able to tackle it, and require external assistance.

"The role of each and every The themes for the days this citizen is very important, as well year were "Water and Nature" as that of NGOs who are already and "Forests and Sustainable contributing to increasing the Cities". The event was attended forest cover in the country." In by representatives of the Minis- the welcome address, Mahmood try of Climate Change, interna- Akhtar Cheema Country Repretional organizations, government sentative IUCN Pakistan quoted agencies, academia, the private a recent study of drinking water quality conducted by IUCN Pakistan in the FATA region that 97% samples were found unsafe mainly due to the presence of microbiological contaminations.

> Only 3% sources were found safe for drinking purpose. He proposed that the concept of water treatment through chlorination must be adopted at the government level. Cheema shared that IUCN has been working with both government and civil society in Pakistan since over 30 years, with a view to develop nature based solutions to address these issues while spreading environmental awareness.

IUCN's achievements include aettina Juniper Forests in Ziarat declared as a Man and the Biosphere Reserves, pioneer to

water sheds and rangelands," he tion and rehabilitation through added. He further said that the regional initiative Mangroves for the Future (MFF) Programme.

> IUCN works in partnership with the private sector to offset the impacts of their operations on the natural resources and ecosystems and to arrest the sea intrusion. IUCN Pakistan has implemented several projects on water issues as the prime focus.

> Syed Mahmood Nasir, Inspector General Forest, Ministry of Climate Change said that "Pakistan needs to design urban forests that may result in a temperature reduction of 8-10 degree centigrade".

> Sheikh Amir Waheed, President Chamber of Commerce Islamabad, suggested the need for increased afforestation in country and further emphasized that private sector investment in natural resource management.

> Ahmed Kamal, Chairman Federal Flood Commission, Government of Pakistan reflected on flood plains management and National Water Policy. Mr. Neil Buhne, UN Resident Coordinator Pakistan said that Pakistan is focusing on UN Agenda 2030 to ment Goals 11.13 and 15.

> Pakistan is trying its best to address the water challenges.



Xiaohong Yang, Country Head, Hotel presented a vote of thanks Asian Development Bank Pakistan mentioned in her remarks that Pakistan is in the list of top effected countries by extreme weather conditions.

The Green House Gas Emisthe government should promote sions are getting doubled in two years and by year 2050 it will increase upto 14 times. FAO Country Representative Pakistan. Ms. Mina Dowlatchahi said "For ensuring food security and sustainable development in Pakistan, it is important to take note of the nexus between food security, forests and water.

achieve the Sustainable Develop- and coordinated action to help conserve natural resources and protect our eco-systems". Ms. Ayesha Wafa Khan of Serena overcome these. ◆

and reflected upon the commitment of Serena Hotels about their environmentally sustainable business.

Representatives of embassies, donors, international organizations, government agencies including UN, FAO, ADB, Embassy of Netherlands, GIK Institute, Islamabad Chamber of Commerce, Federal Flood Commission and academia joined IUCN and Ministry of Climate Change participated at the event.

While presenting the global situation, facts and figures about There is a need for concerted the importance and issues of water usage and water scarcity, the audience were also briefed about the possible solutions to