Ground Water Conservation

Water Conservation
Conserve Every Drop, Preserve Our Future.

Conserve every drop,
Preserve our Future

ABOUT PROJECT

We are the students of BS Public administration and governance at NUML university Islamabad from Department of Governance and Public Policy (GPP). This report titled “Ground water conservation in Islamabad” is part of our project that assigned us and we were expected to complete under the course of social action project. The aim of this project is to educate and conserve the ground water that has been depleting due to many reasons. This project is aimed to educate individuals about the critical importance of water conservation in securing a sustainable future of Pakistan. This project aims to educate people, raise awareness local communities about sustainable conservation of ground water and educate people about effects and every aspect of water scarcity.

MEET OUR TEAM

Aamir Kaleem

Group Leader
Project Manager

Nouman

Photography
videography

Iman Ali

Data Researcher
Social media
organizer

Aqdas Masroor

Event Organizer,
Content writer

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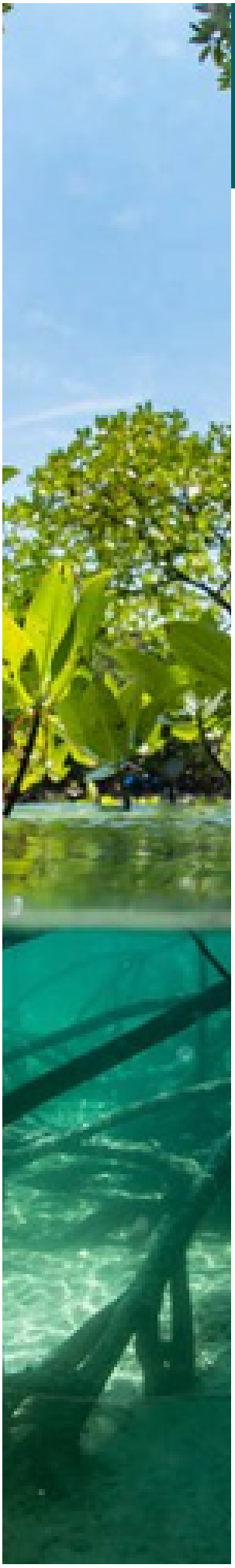


INTRODUCTION

Water scarcity is a frightening situation that is already happening in Pakistan. The country ranks 14 among the 17 'extremely high water risk' countries of the world, a list that includes hot and dry countries like Saudi Arabia. Over 80 percent of the total population in the country faces 'severe water scarcity' for at least one month of the year. In addition to surface water, Pakistan's groundwater resources the last resort of water supply are severely overdrawn, mainly to supply water for irrigation. If the situation remains unchanged, the whole country may face 'water scarcity' by 2025. The situation is strategically more complicated, as Pakistan is the lower riparian country to India and 78 percent of its water inflows from therein. Moreover, only two-thirds of available water is being utilised while one-third of the water is either lost or discharged into the sea. Over the last few decades, Pakistan has drastically changed from being a water abundant country to a water-stressed country

Fig. 1. Trend in Water Availability in Pakistan, 1962–2017

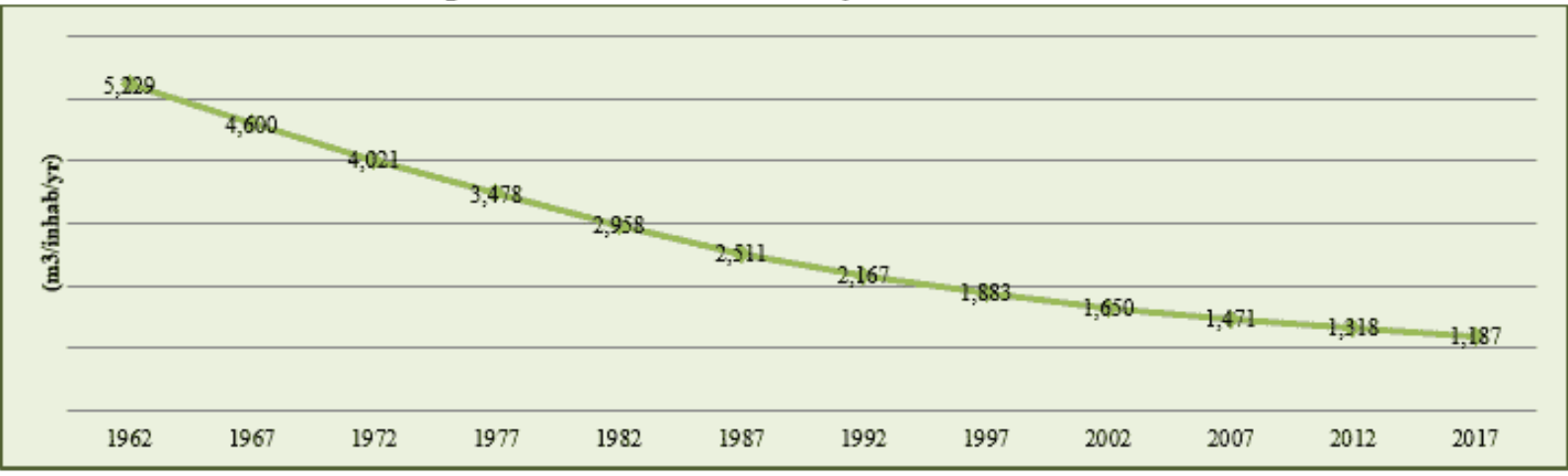
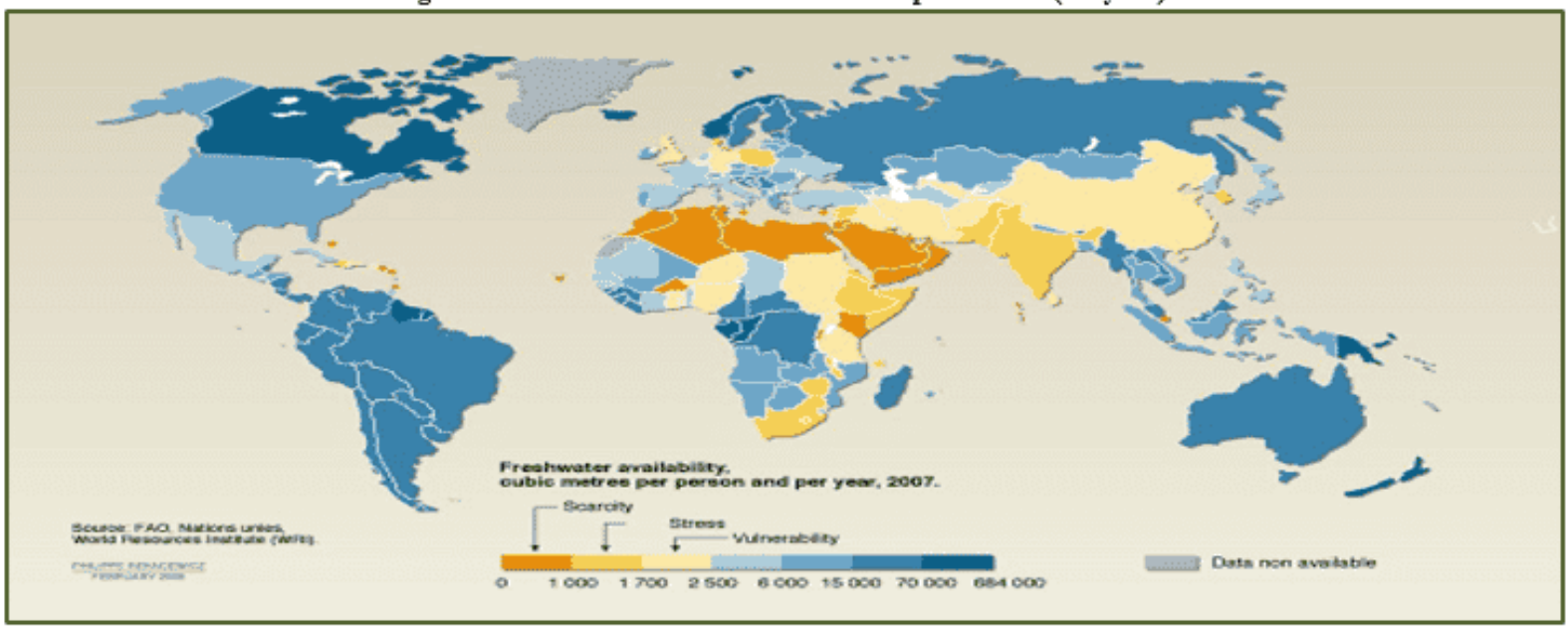


Fig. 2. Total Renewable Water Resources per Person (m^3/year)



Factors such as rapid population growth, pollution, and mismanagement have contributed to the current predicament. Islamabad may be the capital of a nation, its residents are still challenged with the most basic of human needs. The failure of authorities to ensure access to clean water has led to a situation where the poor are left without recourse, caught in a cycle of poverty and health crises. Addressing Islamabad's water crisis is not just about water; it's also about preserving the essence of a beautiful city, protecting its ecosystems, and ensuring the health and well-being of its own people.

Objective Of Project

The objective of the project "Ground water scarcity in Islamabad" are listed below:

objective	Details
Sustainable water Conservation	To spread awareness regarding sustainable water conservation by adressing challenges of management, infrasytructure etc.
Educate People	Activities could be focused on water scarcity and educate about the importance of water conservation.
Awareness and Sustainable Practices	To aware people about effects, impacts, and benefits of water conservation in Islamabad and everywhere. Encouraging people through social media and give awareness, educate people.
Engagement with Public authorities	With the engagement of public authorities we should tell the public about the benefits of the water conservation. And new reforms nd policies should be made for the conservation of water.

Literature Review

Water scarcity is one of the main environmental hazards currently faced by the world population (Jackson 2009).In the year 2018, Environmental Performance Index (EPI)1 had ranked Pakistan as the 12th worst country in environmental degradation. According to a report of World Bank in 2006 Pakistan was once listed in water stressed countries but due to high population growth Pakistan is now moving towards water scarce countries. Undoubtedly, in Pakistan Ground water is being over-exploited in many areas, and day by day its quality is also deteriorating. The major cities like Islamabad and Karachi have been facing major water crisis (Rosegrant et al., 2002). A recent study by (Sadaf et al., 2019) highlighted that Pakistan had been reaching the dangerous scarcity level of water i.e. 1000 cubic meters each year however the issue was ignored since there was not any water policy to manage water resources of the country. Water shortage and poor water quality adversely impact other necessities also, this includes ensuring food security, choices for livelihoods, and educational opportunities mainly for economically less stable families in the world. Beyond fulfilling the very basic human requirements, water supply and water as a resource, are crucial to the agenda of sustainable development. It is also, a main source for energy in some portions around the globe, whereas in other parts its probable as an energy source remains largely unused. No one can deny the agricultural and industrial processes that are dependent on water (Fraiture et al., 2010). The threats related to water management are significantly increasing with each passing day and it is predicted that in years to come the scenario will be worse. Ongoing population growth and increasing incomes in future will lead to greater demand for water, and more waste. The population residing in urban domains of developing world will also increase dramatically, creating a consumption pattern that will be beyond the capacity for water supply infrastructure and service delivery (Hanjra and Qureshi 2010)

Ground water is one of the most significant natural resource of Pakistan. More than 90% of the rural population fulfills their water requirement from groundwater due to unavailability of private water Supplier or the city water department (Hamilton and Helsel 1995). Similarly, due to water shortage, many urban centers of Pakistan also rely on groundwater to meet their requirements. Moreover, ground water also fulfils the irrigation needs and accounts for provision of 42% of the water. Therefore, it is expected that the withdrawals of groundwater will increase with the increase in population and due to limited surface reservoirs (Qureshi et al., 2010). Today, serious water shortages are faced by Pakistan due to prolong drought, a reason which is natural and beyond our control. The second reason accounts for sheer negligence and mismanagement of the water resources (Afzal et al., 1996). Islamabad, which is situated on the foothills of Margalla, has been facing issues of water management. With 5.7% growth rate of population in the city, water scarcity has become the new challenge in response to urbanization in Islamabad (Ahmad, 2018). Water scarcity, like any other issue in the world, has more devastating effects on the poor class than on any other class. Therefore, the policymakers are responsible to form effective policies for managing the scarce water resources which would eventually result in addressing the water challenges. However practically the ground reality is totally different and due to ineffective water policies, water crisis or water scarcity has emerged as a huge challenge and calls for sudden policy action in the country (Watkins 2007). The most vulnerable class that is affected by water scarcity is the poor class because this class usually bears the economic burden in the country that is caused by water crisis. Regardless of wealth and social status, water is needed for basic survival such as, sanitation, food, and drinking. However, availability of water for basic needs is often neglected in developing 10 countries. A rising population often stresses planned water resources in rural and semi-urban areas. Where it is available, the quality and quantity are far from the internationally accepted standard (Cullet, 2009).

THE PROBLEMS

Climate change and water scarcity

Climate change has influenced water cycle. Pakistan is world's one of the most susceptible countries to climate change and it falls at 5th position in the world and suffering from climate associated issues issues of water resources. The Indus River system which is country's major water source, being reliant on glaciers is sensitive to climate change. The two big effect of climate change are decline in water flows and upsurge in water demand. Climate change thus worsen the water crisis especially in the areas under water stressed like Islamabad. Resultantly, the issue of food and and drinking water shortage, and high food prices can further aggravate in future.

Population Growth and Water scarcity

Pakistan's population augmented by over 3.84 millions in 50 years lifting the country in raking from 9th to 5th. Total water resources in Pakistan increased by about 0.7 percent per year. Pakistan population is projected to increase over one half , reaching 388 million by 2050. As a consequences of population expansion, pressure on the country's both surface and ground water resources has increased. In sum fact growth of population have led increase in fresh water demand and pollution of both surface and ground water. This means, with growing population demand for water also rises resulting in pressure on water resources. Water demand for household, agriculture and industrial consumption also increased due to growth in population.

Poor management and wastage of water

Beside water shortage crisis, poor management and wastage of water is also a great concern of Pakistan. Mismanagement of water resources and profligate way of their usage, weather it to be in household, agriculture or industrial causes wastage of huge amount of water resources leading to serious stress on the amount of accessible water resources. Poor water distribution infrastructure causes massive water wastage. Pakistan was ranked 8th among the world nation in water productivity.

Pumping of ground water

Ground water is the second major source of fresh water in Pakistan. It's intake has increased several times over last years. Currently Pakistan is the biggest 4th consumer of ground water. The unrestricted exploitation and excessive use of aquifers causing ground water depletion. In Islamabad it is decreasing at an alarming rate of 5 to 8 feet per year due to excessive pumping by departments and residents to meet water requirements. We continuously pump groundwater from aquifers, and it does not have enough time to replenish itself. Pumping water out of the ground faster than it is replenished over the long term causes' similar problems. The three dams, Rawal, Khanpur, and Simli, supplying water to the cities, and increasing private housing societies, there is no immediate solution to the twin cities' water crisis. Despite successive governments' attention to the issue, there is no proposal under consideration to construct small dams in Islamabad, particularly near Margallah hills, due to the non-availability of feasible dam sites.

THE SOLUTIONS

Education and awareness

In order to deal with Water Scarcity in future, it is essential to thoroughly improve all forms of water use, from individual consumption to the supply chains of big establishments. Collaborative water conservation measures can prove fruitful. People should be educated to change their behaviors about water usage. An understanding of the worth of water protection among people needs to be promoted. Awareness oriented education of masses can play critical roe in this regard. Another effective measure can be the establishment of institutes for farmers to earn how to cope with climate change and sustainable techniques.

Improvemnt of water conservation infrastructure

To save water and to control foods, construction of new water storages is an urgent need of the time. Construction of Chashma, Kalabagh, Mirani, and Gomalzam dams, and enhancement in the storage capacity of Mangla and other existing dams must be a top priority. Large dams indeed are a source of lifeline for Pakistan's water security. In addition to producing cheapest electricity, they can supply water for irrigation, control floods, regulatewater flow from high to low flow seasons and from a wet to dry year, and can act as buffer against the impacts of climate change. If we mention the case of Kalabagh dam only, ithas been pending since act over 40 years. Although building of small dams and management of water resources in every sector is necessary.

Use of reclaimed, recycled rain water

Use of rain harvested and recycled wastewater for agricultural and other purposes can reduce the pressure on ground and surface water resources In Pakistan, about 70% of the rainwater is wasted due to poor or no storage arrangements. Policy makers also need to promote wastewater recycling based on the idea of optimal pricing by involving private sector as is practiced in several countries.

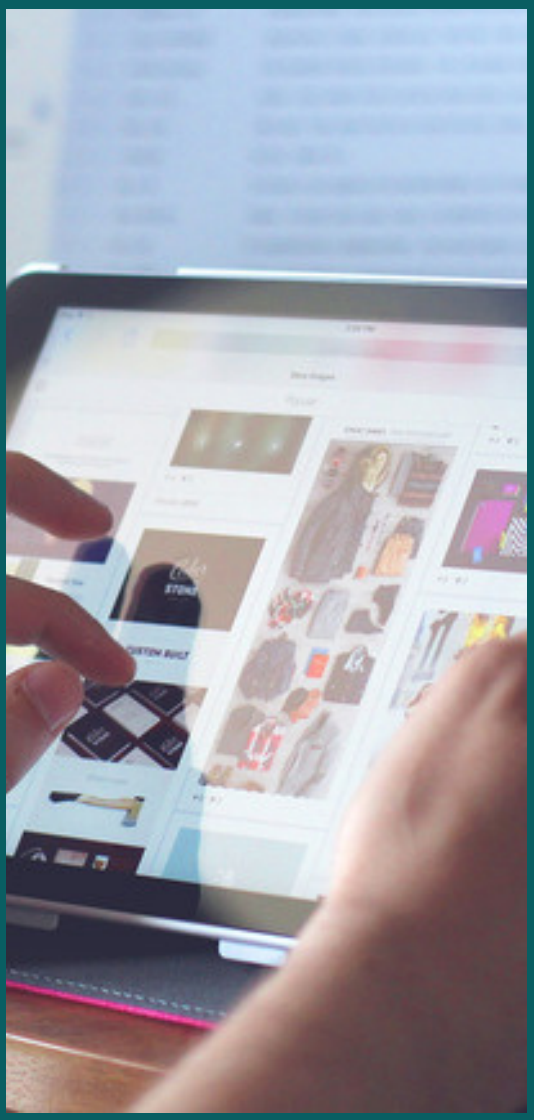
Measurement of Water usage and price rationalization

Some researchers suggest that measurement of water quantity consumed should be made obligatory for all users from households to agriculture and industry. When the quantity of usage is determined, it can helping effectively planning and managing available water resources. Our present pricing system offers little or no motivation to users for water conservation. Pricing can be related to income levels along with a number of other influential dimensions. Increase in the price of water usage will not only inspire users to consume water more carefully but also produce ample incomes for the upkeeping of infrastructures and water saving technologies.

Improvement in government efficiency

It is essential for the government to introduce a big paradigm change that supports more sensible water usage. This includes improvement of water infrastructure, provision of technoogies for water conservation, and increasing awareness. government should make and strictly implement laws on water conservation ike numerous western countries.

Project Design and Methodology



The method used in the project to promote water conservation are disccussed below:

✓ Online webinar /Seminars
✓ Social media campaign
✓ Interviews/surveys/visits

✓ Documentaries
✓Public Awareness

✓ Brochure for Awareness
✓Focal Group Discussions
Engagement of civil society

Ground water scarcity in Islamabad

VISIT TO MINISTRY OF PLANNING DIVISION

During our visit to the Ministry of Planning Division and Special Initiatives in Islamabad, we had the opportunity to learn about the Water Section and its vital role in addressing water-related issues. The Research Officer who hosted us, visit began by introducing the functions of the Water Section. This department is primarily responsible for evaluating and providing policies, new technologies, irrigation systems (including drip irrigation), and safety measures for fresh water.

The significance of the Water Section is underscored by its interconnection with various sectors, including agriculture, irrigation, domestic use, and industry. Water is a fundamental resource that affects all these sectors, making the work of the Water Section crucial for the overall well-being of the country.

One key point emphasise during the briefing was the importance of raising awareness about water's essential role in life. The officer stressed that water is a natural resource that should be available to all, and equitable distribution is crucial. However, the potential threats to future freshwater availability were highlighted, underlining the need for effective water management and conservation.


In the context of agriculture, it was revealed that the sector plays a significant role in the country's economy, contributing to 60 percent of the GDP. Given the strong dependence of agriculture on water, the Water Section has developed policies and infrastructure, such as drip irrigation systems and smart tube wells monitoring, to enhance agricultural productivity. However, there was concern about the performance of provincial agriculture ministries, with the exception of Punjab, which was deemed unsatisfactory.

When a member of our group inquired about the best possible way to conserve freshwater, the officer suggested the construction of dams near rivers, albeit not excessively large ones. These dams would serve the purpose of storing water and minimizing the risk of floods. Additionally, he emphasized the importance of planting trees along riverbanks to mitigate environmental issues related to water. The officer also mentioned the National Water Policy of 2018, which was a collaborative effort involving various political parties and stakeholders. However, he pointed out that there was a lack of a mechanism for effectively implementing this policy.

The briefing also touched upon various water-related departments and organizations, including the Federal Ministry of Water Resources, provincial irrigation ministries, IRSA (Indus River System Authority), PCRWR, World Bank, Asian Development Bank, and the Ministry of Food Security and Agriculture. These entities play a significant role in assisting the Water Section with policies and international cooperation.

The discussion concluded with an exploration of the impact of climate change and environmental issues on water resources. The officer highlighted how geographical factors and disaster vulnerabilities contribute to the challenges faced in managing and protecting water resources.

Overall, our visit was full of valuable insights into the critical work of the Water Section in Pakistan and the multifaceted issues related to water management, conservation, and policy development.

Visit to PCRWR

On 27 November We had a discussion with Arslan Mumtaz (Asistant director) from the Pakistan Council of Research in Water Resources (PCRWR) recently had a productive meeting. An awareness shared concern filled the environment as the conversation turned to Islamabad's water problems and the critical role PCRWR plays in reducing them.
The PCRWR is well aware of the difficulties facing Islamabad's water security since it has been provided with the great responsibility of conducting, organizing, and promoting research in water resource management.
The three main offenses were the topic of discussion:
1. Excessive pumping of groundwater: The valuable resource that keeps cities alive, groundwater, is quickly being depleted by urbanization's insatiable demand.
2. Declined green belts: Unfortunately, the growth of construction has covered important green areas, increasing the problem of urban flooding. Once adept at taking up extra rain, nature's sponges have been replaced by impermeable surfaces, making every rainfall a possible flood.
3. Lack of awareness and implementation: The best of intentions, effective policies are difficult to implement, and as a result, the public is mostly unaware of the approaching water disaster
Instead of backing up on the situation, the PCRWR is actively working to address it.

Their actions are evidence of their dedication and the promise of hope for the future:
1. 100 recharge wells: As a representation of the PCRWR's proactive strategy, these essential structures stand guard like brave protectors, restoring the dry ground with rainwater.

2. Careful of water quality: Equipped with modern technology, the PCRWR laboratories play the role of watchful opponents, ensuring the security of the city's water supply.
3. Creating collaborative bridges: The PCRWR is constructing a network of collaborations, ranging from national to international collaborations, to spread the word about water conservation and make sure that no one is left to tackle this challenge alone.

The meeting concluded with a renewed sense of purpose. Islamabad's water problems can be resolved with the help of the PCRWR's dedication and the public's active participation. By working together, managing water resources responsibly, and raising awareness among all parties, we can make sure that Islamabad's promise of a future secure in water becomes a reality.

Visit to Al khidmat Foundation

On 18th November We made great progress in our corporate meeting with Mr. Hamid Ather Malik, the President of the Al Khidmat Foundation Islamabad and Mr. Shoaib, the Incharge of the Clean Water division. Assuring the secure supply of clean water was our main priority, and we placed a strong emphasis on individual counseling to raise public awareness.

Mr. Malik provided insightful information about the Al Khidmat Foundation's advancement, including their difficult four-month data collection process that included four million individuals in various geographical areas. Personalized water solutions that take into consideration local needs, storage capacity, and filtering techniques are made possible by this data-driven approach.

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Mr. Malik's trust in the youth, emphasizing their critical role in addressing water scarcity concerns, was a significant takeaway from the discussion. He was all for teamwork and highlighted the good work that the younger generation could achieve. We also got an update on three current water-related initiatives in Islamabad, and arrangements are being made to work with the head of the Clean Water division on upcoming visits.When discussing possible cooperation, the topic of a four- to six-month water-related project came up. This is in perfect harmony with our mission to reduce water scarcity and promote constructive change in collaboration with the Al Khidmat Foundation.


ALKHIDMAT
SERVICE TO
HUMANITY
WITH INTEGRITY

Visit to Ministry of Climate change

On 22 December we have visited Minitry of climare change and held a meeting with Saima Nazir Deputy Director . Water scarcity is being actively addressed by the Ministry of Climate Change through a variety of measures. Ensuring policy recommendations are reflected in policymaking is ensured by active coordination with law enforcement and environmental agencies.

The Ministry places a high priority on comprehensive WASH policies that are in line with the changing environmental situation and are supported by thorough research. Understanding the significance of local differences, cooperation and communication with environmental departments at the provincial level promotes solutions suitable for particular requirements.
In addition, the Ministry carefully analyzes the current legislative and administrative structures in an effort to close gaps and improve the effectiveness of government. This diverse strategy, which includes cooperation, policy that is informed by research, involvement in the region, and revisions to the law, shows a strong commitment to tackling water-related issues and advancing environmentally sound practices across the country.

n an innovative move, the Ministry of Climate Change has proposed a variety of approaches to address environmental difficulties and worries about water quality. With modern lab technology, contemporary lab improvements, and innovative mobile water labs for quick on-site testing, this approach takes on infrastructure head-on. Beyond infrastructure, the ministry actively engages in international climate conferences such as COP, promotes green building, and runs a variety of programs to raise public awareness of climate change.

With youth projects, Techno Wash service stations for clean water access, and inter-district competitions encouraging environmental action, public engagement is put front and center. This all-encompassing strategy guarantees everyone of a robust future as well as one that is more hopeful and environmentally friendly.

Awareness Compaign

Water Filtiration Plant

On 5 December we have visited Burma and Gouri town where people were facing fresh water issues where Alhimdat Foundation had setup filtration plant. There the public tells us that they were facing the depletion of water and reduced access to clean water and safe drinking water causing many health bone diseases. Due to scarce resources the cost of water also rises. There all household activities were disturbed. So for this solution Al hidmat foundation is supplying clean water to the people with 1 rupee per litre. This is one of the initiative measure that this foundation has taken to solve the problem of the people.

But due to pumping of water continuously through boring the ground water is depleting day by day. For this problem they have no any solution to the problem. Another main problem we have seen is the lack of awareness among the individuals about the importance of water. They are wasting water and unaware that what will be the consequences after the scarcity.

For this there we have started the awareness campaign about the importance in conservation of water.

We address the public how they should take initiative measures to mitigate with this problem. Usage of less water at home like turning off tabs while brushing or washing dishes. Conserve the rain water and lesser the pumping of the ground water from their areas.
These some measures public has to take to preserve the water resources.
Conserve Every Drop, Preserve Our Future.

Visit to Arid University Rawalpindi

On 13 December embarked on a mission of water conservation at Arid Agriculture University 🌊 Our visit was a triumph, engaging with students from diverse departments to highlight the significance of water conservation in Pakistan, particularly addressing the challenges faced in Islamabad.

Initiating our project presentation, we underscored the importance of water conservation, shedding light on issues like groundwater scarcity and depletion. The response from every department was remarkable – students not only cooperated but actively collaborated, absorbing insights and raising thought-provoking questions.

Thrillingly, the Forestry and Agriculture students shared a groundbreaking recycling mechanism within Arid University. Rainwater is ingeniously saved through a canal, stored in a pond, and then repurposed for Uni flowers and greenery across the campus. 🌧️🌿 Their ideas and suggestions poured in, emphasizing the need for media involvement — electronic, print, and, notably, social media.

Our interaction emphasized the colossal role media plays in creating awareness about water conservation. From recycling mechanisms to media strategies, our visit was a wealth of impactful ideas!

Awareness Drive at NUML Islamabad

On 14 december we have compaign drive in our own university. "At our university, we organized an awareness campaign and distributed project pamphlets to start a water-conscious journey. These pamphlets highlighted the importance of water by providing information on water-saving techniques including collecting rainwater, reusing it, and following easy steps like shutting off the faucets while going about daily tasks. We pointed out that Pakistan could shortly run out of water, especially in Islamabad where groundwater pumping is increasing. This highlights the need for sustainable behaviors.

Some students were unaware of the expected water disaster. Groundwater depletion is a serious problem that is becoming worse every day. As a group, we must adopt sustainable practices to prevent water scarcity.

The main takeaway is that each person can have a beneficial influence on water conservation. Even small changes to our everyday routines, like taking shorter showers or sealing leaks, have a big impact. Every drop conserved now protects future generations' access to a sustainable future.

Join us in our mission by fixing leaks, shutting off taps, embracing rain harvesting, and implementing water-smart behaviors for conserve water. Together, let's protect the source of life on our planet and create a long-lasting difference in the global water crisis.


A Project of BS-4th students of Governance & Public Policy of NUML Islamabad
Supervised by: Mr. Ali Shafqat Khan (lecturer G&PP NUML)
SUSTAINABLE DEVELOPMENT GOALS
WATER CONSERVATION
Conserve Every Drop, Preserve Our Future
• "Every drop counts, save water for a sustainable future!"
• "Join us in the mission to conserve water. Together, we can make a significant impact on our planet's future. Conserve today, preserve tomorrow."
Follow Us :
0344-5804580
roup Members: Aamir Kaleem, Noman Ali, Ali Hassan, Syeda Aqdas Masroor, Ima

Awareness to General Public.

On 17 December our Water Conservation SDGS project presented a waves of awareness that went beyond the ordinary from the recognized 19 Cricket Stadium. On a Sunday, a diverse group of students came together to turn the empty stadium into an important hub of young variety. This created the ideal platform for sharing important knowledge about water conservation.

we started lively conversations in the lively setting by posing questions about water that generated an evening of intelligent responses. Thoughts and recommendations impacting throughout the stadium, fostering a climate of group education focused on the critical significance of water conservation.

We provided a wealth of useful advice for students to conserve water in their daily lives, both at home and in their colleges, as the sun shone down. Our all-encompassing awareness training was designed to create long-lasting improvements in everything from culinary procedures to bathroom routines.

As pamphlets were carefully distributed, the Impact was heard well beyond the debates, transforming the stadium into a hub for the exchange of knowledge. Every visit, discussion, and exchange of pamphlets aided in the successful effort to increase awareness.

Our ground-based participation in water conservation had a lasting impression on young players and students that extended beyond the walls of a cricket stadium. Combined, we turned a quiet Sunday into an exciting event for change and raised a generation dedicated to protecting the most valuable resource on Earth.


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Visit to Iqra Residential School and College Islmabad

On 20 December we have visited Iqra Residential School and college Islamabad. The sun shined not just on Iqra Residential School and College with its light, but also on bright young brains ready to learn and take action for a cause that should be precious: water conservation. The energetic student body was motivated by our awareness campaign, which was driven by a common concern for our precious resource and passion. This campaign created an idea that promised to guide the way towards a sustainable future.

Not only were the educational presentations and hands-on workshops engaging, but so were the expectant hands raised in preparation, those with eyes full of real care, and the passionate involvement. Every questions, every suggestion, and every situation of focused involvement highlighted the commitment these students were to the cause.

The peaceful commitment that settled in the minds of these young changemakers, however, was the real beauty of the day—not the cheers or the pictures.

We leave Iqra with a path of hopeful smiles and sounds of awareness, and we bring with us our deep gratitude for these exceptional students. They haven't just taken part in a campaign; they've joined a movement, a small move that will undoubtedly become a wave and change not only their own lives but also the environment in which they live.

We are grateful to the Iqra students for turning this campaign into a movement rather than just an event and for serving as a constant reminder that water has a bright future because of people like you.

Visit to Iqra School of Pharmacy

On 20 December our campaign at Iqra Institute in Islamabad sparked a crucial conversation about water, a vital resource essential for human survival. We engaged students with the 17 Sustainable Development Goals (SDGs), highlighting the importance of achieving SDG 6: Clean Water and Sanitation. By 2030, Pakistan aims to provide safe and equitable access to affordable drinking water for all.

The students learned about the growing water scarcity challenge in Islamabad, fueled by rapid urbanization. By 2030, an estimated 60% of the global population will reside in cities, putting immense pressure on water resources. Pakistan, the world's 5th most populous nation, ranks among the most water-stressed countries. The per capita water availability has alarmingly dropped, with 1 out of 3 schools lacking access to clean drinking water, and 16 million people forced to rely on unsafe sources.

Groundwater pumping further make worse the problem. In Islamabad, unchecked domestic pumping continuously depletes valuable water resources.

Lack of awareness about water conservation worsens the situation, with households unconsciously wasting water, particularly in bathrooms. This negligence has devastating consequences: unsafe water claims the lives of about 200 children every hour, and half of our city's water is lost through leaks. Unsurprisingly, 80% of illnesses in developing countries are water-related.

Empowering students to become water warriors was the campaign's core message. We encouraged them to adopt simple yet impactful actions: avoid wasting water during daily activities like brushing teeth and bathing, fix leaky faucets, and educate their families about water conservation. Rainwater harvesting and other water-smart practices were also discussed, emphasizing the responsibility we all share in building a sustainable future.


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EVERY DAY IS A CHANGE TO BE BETTER


YOU ARE STRONGER THEN YOU THINK

Online Webinar

we have an online webinar on 11 December with our guest speaker Syed Tahzeeb ul Hassan who is working as field officer at World Wide Fund Pakistan. He discuss the importance of water as water is the cornerstone of life which is essential for the survival and well-being of all living organism. Water is the foundation for agriculture, pillar of industry and vital role in ecosystem. He highlighted that water conservation is the sustainable and efficient use of water resources to ensure their availability for current and future generation. It involves Responsible management, reducing waste, balancing demand and supply and community involvement.

Four billion people experience severe water scarcity for at least one month each year. Over two billion people live in countries where water supply is inadequate. Half of the world population could be living in stress facing water scarcity by as early as 2025. Same 700 million people could be displaced by intense water scarcity by 2030. By 2024 roughly1 in 4 children worldwide will be living in extremely high water stress.

He explained the the issues that are contributed to water scarcity in Pakistan which are:
Agriculture department: Majority of the water used for farming with insufficient practices.
Rapid Urbanisation: Growing urban population increasing water demand.
Climate Change impact: Unpredictability weather in the country impacting the water resources.
Ground water Depletion: Over-extraction of the ground water resources through boring leading to quarter depletion. Water Pollution: Industries and agriculture assets resulting in the water pollution. Per Capita water availability reduced from 1500 cubic metres in 2009 to 1017 cubic meters in 2021(IMF).

He give the solution to the problems that efficient irrigation practices should be adopted and other water-efficient techniques. Installing systems to collect and store rainwater.

Utilising harvested rainwater for non profitable purpose. Implementing precision agriculture to optimise water use. Public awareness and education on the conservation of water. Government has to practise the better management and made policies and implement them is conserving water for sustainable future.

Webinar

WATER CONSERVATION

Preserve Every Drop, sescure Our Future

MONDAY
11 Dec, 2023

GOOGLE MEET

START AT
7:30 PM

PARTICIPATION:

The students of the 4th Semester of Governance and Public Policy NUML Islamabad.

ORGANAZING:

The Team of Social Action Project of Water Conservation

Host:
Syeda Aqdas Masroor

Guest Speaker:
MR.Tahzeeb ul Hassan

- Founder and President of Clean GEM
- Field Officer at WWF-Pakistan
- Ex-President Environment Protection society

UN Secretary-General António Guterres:

"I am alarmed by what is happening in Antarctica, where the evidence overwhelmingly shows that there is an acceleration of melting of ice, which could be catastrophic to coastal communities everywhere,"

Supervisor:
Mr. Ali Shafqat Khan
Lecturer G&PP NUML
Islamabad

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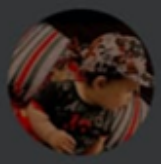
Tehzeeb is presenting



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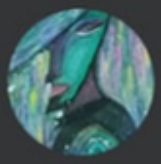

Minds

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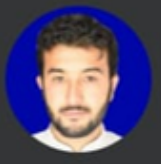

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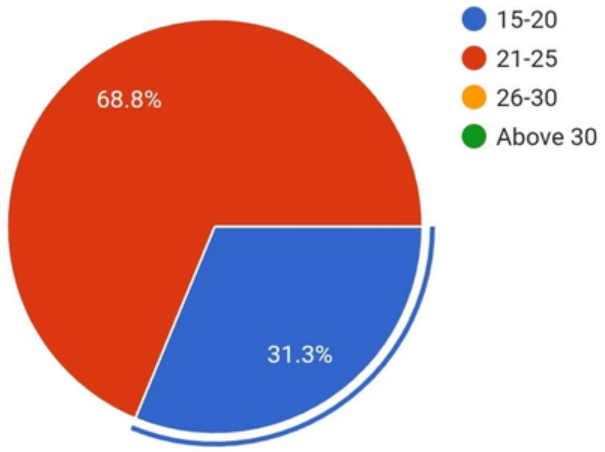
Google Survey

we have conducted a google survey by generating a google form to know the problems caused by water scarcity in which we asked people opinions.

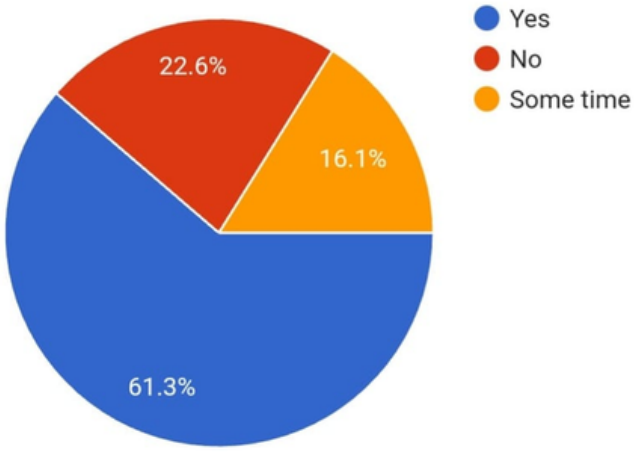
Age:

32 responses



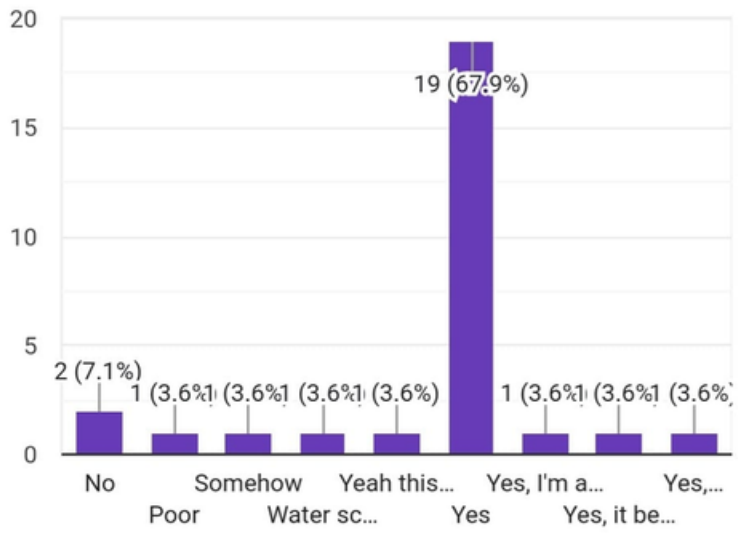
Do you have easy access to fresh water in your community where you currently live?

31 responses



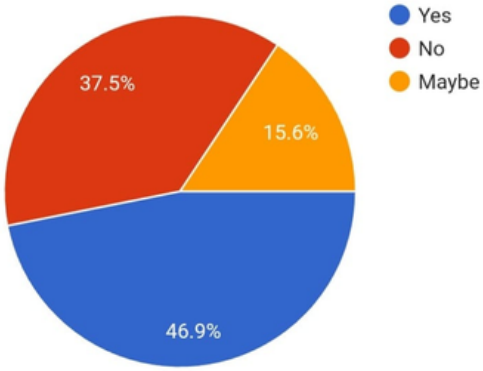
Do you know about water scarcity in Pakistan?

28 responses



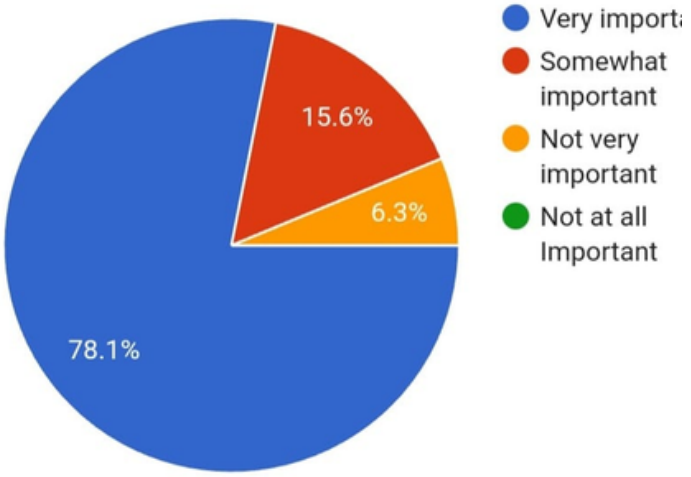
Do you have water problem in your area?

32 responses



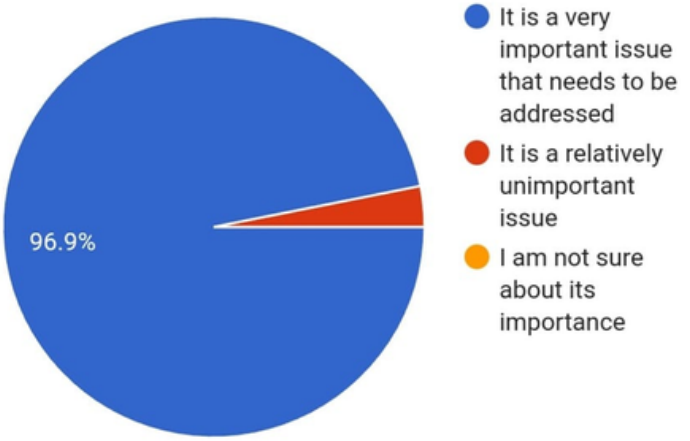
How important is water conservation to you?

32 responses



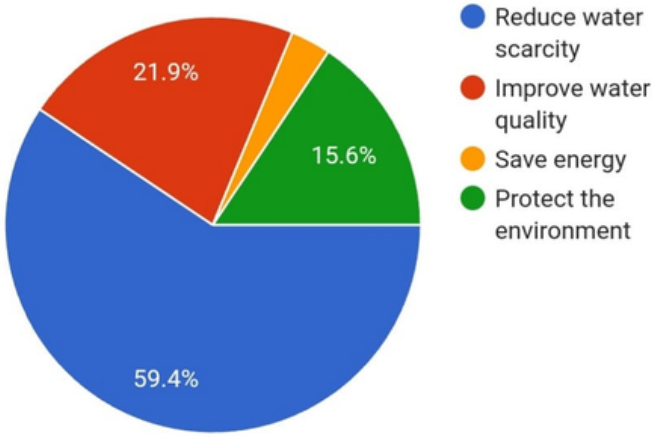
What is your overall opinion of water conservation in Pakistan?

32 responses



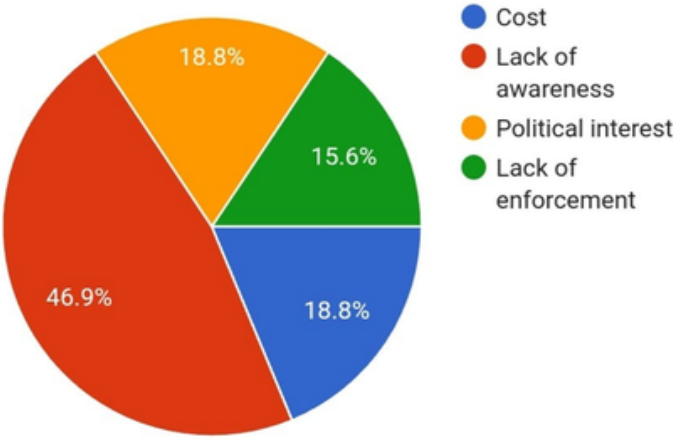
What are the main benefits of water conservation?

32 responses



What are some of the challenges to implementing water conservation policies in Pakistan?

32 responses



Objective Achieved:

The main aim was to create awareness, and we have done it through public awareness campaign drive, distribution of brochures, wall poster pasting, and social media campaign. We have ensured that people became aware of the concept of water conservation
through all of these activities. Fortunately, we got a very positive response from people. We have also motivated them to become digitally literate as it is the most important
characteristic of today's society to aware of the issues that are generated.
Throughout the project we conducted awareness campaigns to educate people overall about increasing Urbanization issues and it was successful. We will take
this project further to the national level to stop the pollution and climatic changes as well as achieving sustainability in urbanization. Our faculty and other people
praised the project and supported us.we are much appreciated on our social work by Society, Peers and teachers and also got appreciation letter from many leading organizations in the field.

- People advised to arrange much more for them on such topics.
- On social media accounts people approached us to make them as
member of our team. Our friends from other universities are quite eager to join us after this semester.

Skill Enhanced During Project

The most important and final goal of the Social Action Project is to improve educational and professional career chances. There are numerous skills that add value to us, as described below:

Negotiation and Communication Abilities:During the project, we improved our communication skills by speaking honestly with people and communicating with high officials. We are more confident in our confident in our communication with others now than
we were previously.

Time Management:This project has tremendously enhanced our time management. We are now more aware of the need taccomplish more in less time and to better manage our time in order to boost productivity.

Patience:The most valuable ability we have acquired as a result of this endeavor
is patience. Throughout the entire Social Action Project's striving path, it had
always been a part of us.

Critical Thinking and Problem Solving:The most significant ability given to our personality through this initiative is critical thinking and problem solving. Our acts and thinking have become more circumspect. Our practice of making snap decisions has shifted, and deep ideas now predominate in our minds before we
make a decision.

FINANCE SHEET

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NOTES & IDEAS

	Transport Cost	7000	
	Material and Supplies	6000	
	Marketing Cost (Posters and Flyers)	2400	
	Total Cost	154000	