



**USAID**  
FROM THE AMERICAN PEOPLE

**U.S.-Pakistan  
Centers for Advanced Studies in Water**



**USPCAS-W**



Quarterly

**Newsletter**

Vol. III | Issue: I | Jan. - Mar. 2017



**WORLD  
WATER  
DAY**



## Contents:

- 02 Visit of US Consul General Karachi
- 03 World Water Day Celebrated at Badin
- 04 Board of Governors Meeting
- 05 Gender, Communication & Outreach Activities
- 08 Research Projects      09 Graduate Seminars
- 11 Exchange Program      12 Exchange Experiences
- 13 USPCAS-W Success Story      14 Field Visits
- 15 Visit of Thar Coal Project      16 SDG-6: Targets

### Partnering Universities:



**MEHRAN UNIVERSITY**  
of Engineering & Technology  
Jamshoro, Pakistan





## Visit of US Consul General Karachi

Ms. Grace W. Shelton, US Consul General Karachi visited USPCAS-W, MUET on 20th January 2017 and met with students and the faculty of the Center, who recently returned after spending one semester at University of Utah (UU) in the USA under exchange training program. While interacting with students and teachers, she said that the Center is producing next-generation leaders, who are to look after the sustainability issues and challenges faced by Pakistan in the water sector. She said that Centers for Advanced Studies (CAS) was one of its kind and prominent the United States Higher Education programs in Pakistan, which would pave the way for applied research corridor in the country. On this occasion, the faculty and students shared their exchange experiences. Vice Chancellor MUET Dr. M. Aslam Uqaili while welcoming the guests acknowledged that this state-of-the-art and modern applied research, water center has been established with

generous support from the United States Agency for International Development (USAID) in Pakistan. Dr. Uqaili said that the Center is encouraging and empowering women scientists and researchers for their active participation in the applied research to solve Pakistan's contemporary problems. He further added that the Center was the driving force for MUET to adopt Gender Equity Policy and establishing Women Resource Center on Campus. On this occasion, Dr. M. Aslam Chaudhry, Chief of Party USPCAS-W, University of Utah briefed about the faculty and students' selection criteria for the Exchange Program. Dr. Randy Hatfield, USAID Senior Policy Advisor, Mr. Hafeezullah Samo, Agreement Officer's Representative USPCAS-W and other officials of US Consulate and USAID participated in the event. The delegation also visited the under construction building of the Center at MUET.





## World Water Day Celebrated at Badin

This time, USPCAS-W in collaboration with National Rural Support Program (NRSP) and Pakistan Council of Research in Water Resources (PCRWR) celebrated World Water Day along with communities. The 1st session of the day was organized in Badin city which was attended by government officials, civil society representatives, and activists of the district.

Prof. Dr. Rasool Bux Mahar, Deputy Director (Academics and Research) at USPCAS-W gave a comprehensive presentation on wastewater treatment and its reuse, which was the theme of the day for the year 2017. Dr. Mahar said that untreated wastewater causes various water borne endemic fatal diseases, which affect the health of huge population especially the children up to the age of five years. Further, he talked on the various water saving, disinfection and treatment techniques which can be adopted by the community at household levels to prevent the diseases.

Mr. Allah Dino Chandio, Vice Chairman District Council Badin said that water is a precious commodity and it was wasted at large, because it had been taken as granted.

Mr. Zaheer Khoso, program manager NRSP Badin briefed about the interventions of NRSP in

Water, Sanitation, and Hygiene (WaSH) practices.

Mr. Muhammad Ishtiaq Rao, Director Drainage & Reclamation Institute of Pakistan (DRIP) Tandojam, Mr. Abdul Ghaffar Khoso, Deputy Director Social Welfare Department Badin and others also spoke in the ceremony.

Later, the USPCAS-W faculty and students participated in an interactive session organized by NRSP at village Shaheed Mubarak Soomro, with the local community on WaSH practices. Ms. Uzma Imran, Assistant Professor USPCAS-W, moderated the community interaction to appraise the villagers for the importance of cleanliness in their lives and adopting safe WASH practices.

On this occasion, USPCAS-W students led by USPCAS-W Faculty member Ms. Rakhshinda conducted a brief survey, with community members to obtain feedback on their sensitivity towards WaSH practices.

Before the survey, NRSP volunteers presented water related tableaus and songs to sensitize the community on water importance and healthy WaSH practices



## Board of Governors Meeting

4<sup>th</sup> meeting of the Board of Governors (BoG), USPCAS-W MUET held at Committee Room of the Vice Chancellor Secretariat. Prof. Dr. Mohammad Aslam Uqaili, Vice Chancellor MUET chaired the meeting. In the meeting, the progress of the Center was reviewed and future plans were discussed.

Dr. Bakhshal Khan Lashari, Project Director USPCAS-W briefed about the progress of the Center made during the period Jan – Dec 2016. Mr. Nisar A. Memon, Chairman Water Environment Forum (WEF) Pakistan suggested that Center may help Pakistan for the formulation of National Water Policy which is yet to be finalized. Dr. Mohammad Ashraf, Chairman Pakistan Council of Research in Water Resources (PCRWR) suggested that the Center may try to explore the opportunities and submit the proposals in Knowledge Corridor research

grants announced by Higher Education Commission (HEC) Pakistan.

The board suggested that in order to sensitize the stakeholders, the Center may include the targets of the SDG-06 repeatedly in the printing material. The Board resolved that a time-bound action plan needs to be developed for the National Water research Network (NWRN) on the annual basis so that the network is utilized optimally.

The board was explained that the research agenda has been developed through an extensive consultative process which involved stakeholder participation from various public and private sector organizations.

Board appreciated the exchange training program and suggested that MUET should think of a joint degree program with University of Utah, USA.





# Gender, Communication & Outreach Activities:

## Outreach at NED University:

Gender, communication, and outreach activities are central to achieve the desired goals of the Center. In this connection, the USPCAS-W team organized an outreach activity at NED University of Engineering & Technology Karachi. Prof. Dr. Abdul Latif Qureshi explained the purpose and objectives of the visit to the participants. Mr. Shahid Panhwar, Monitoring & Evaluation Specialist gave a comprehensive presentation about the Center's overall goals, the partnership with the University of Utah, and the targets. He also briefed the participants about the procedure of seeking admission in the Center, the exchange & scholarship program, the on-going activities under its research component and engagement with various stakeholders.

Ms. Uzma Imran, Assistant Professor & Gender Committee Focal person gave a presentation on Gender Equity Policy of MUET. She shared the policy objectives, achievements and the future action plans for gender empowerment. Ms. Hadiqa Maqsood, Assistant Professor USPCAS-W moderated the event. Dr. Shafqat Ejaz, Professor of Civil Engineering Department NED UET, highly appreciated the outreach activity and thanked MUET team for visiting their university. The session was attended by a large number of faculty and students from different departments of the University. On this occasion, souvenirs of USPCAS-W were presented to NED UET faculty members, whereas; the printing and promotional material of the Center were also distributed among the participants.



## Jashn-e-Baharaan Celebrated

To welcome the colors of spring, a social gathering namely “Jashn-e-Baharaan” was organized by the Gender Equity Committee, USPCASW at Girls' Hostel MUET Jamshoro. Highlights of the event including: tree plantation by all the participants; *henna* designing and distribution of colorful bangles among all female students and faculty.

The event was attended by Dr. Bakhshal Khan Lashari, Project Director USPCAS-W, Prof. Dr. Rasool Bux Mahar, Deputy Director, and Prof. Dr. Kamaran Ansari, as well as female faculty and students of the Center. Welcoming the participants, Ms. Uzma Imran, Gender focal person said that organizing such events are aimed at to provide an opportunity to students, faculty and other staff of the center to interact with each other and to create working synergies.



## Sindh TV News Program

Mr. Dhanji Mal, Ms. Iram Sifat and Ms. Rubab Sahar, exchange students participated in a program “Nae Tahee” – the New Generation, one of the most famous youth programs of Sindh TV News Channel, at TV Studio Hyderabad. Around 40- minute program aired from the channel on the next day of the recording. The students shared their experiences and observations, which they had on their one-semester exchange visit at University of Utah, USA.

Engr. Latif Gaad – the host of the program moderated the program, whereas, Mr. Sahib Khan Bhand, Communication, Media & Outreach (CMO) Expert of the Center facilitated the program participants and coordinated with the host and management of TV Channel.





## Participation in FM-101 Radio Show at Karachi

Ms. Rakhshinda Bano, Mr. Asim Ali, Mr. Abdul Basit, Ms. Rubab Sahar and Mr. Muhammad Touseef, exchange faculty and students participated in a radio program at FM-101 Karachi which was sponsored by USAID Pakistan. The participants shared their exchange experiences, research opportunities in water sector of Pakistan and contribution of USPCAS-W in solving the water-related problems of the country.



Mr. Adnan Hassan Syed, Radio Jockey (RJ) moderated the program. Mr. Haris Zuberi, Development Outreach & Communication (DOC) Specialist USAID-Pakistan, Mr. Sahib Khan Bhand, CMO Expert USPCASW and Ms. Rabia Akram, Program Manager of FM 101 also participated in the program. The program participants, RJ, and facilitators also called on Mr. Khalil Ahmed Channa, Controller Pakistan Broadcasting Corporation (PBC) FM-101 Radio Pakistan Karachi in his office.



## Participation in World Water Day Radio Programs

On the occasion of World Water Day (WWD), the special radio programs were broadcasted from Pakistan Broadcasting Corporation (PBC) Radio Pakistan Hyderabad and recently launched Liaquat University of Medical and Health Sciences (LUMHS) Community Health FM Radio 96.6 at Jamshoro. The interviews of Prof. Dr. Bakhshal Khan Lashari and Dr. Rasool Bux Mahar, the key officials of the Center were aired from PBC Radio Pakistan Hyderabad. They shared their

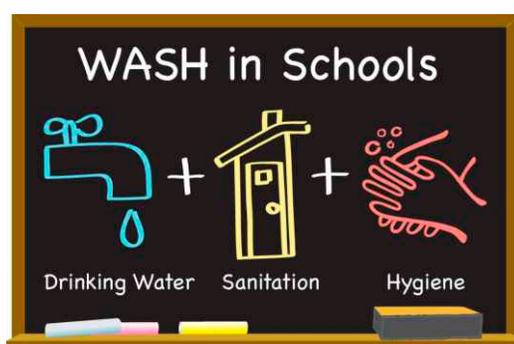
experiences on the issues and remedies of water sector in Pakistan, scope, and objective of the Center, also the WWD celebration activity brief of the Center. Likewise, Dr. Jameel Ahmed, Assistant Professor USPCAS-W participated in the live program at LUMHS FM Radio, which was focused on wastewater- the theme of the day and water-borne diseases and the precautionary measures.



# Research Projects

Project grant awarding is one of the major components of the research program, to achieve the vision of the Center. During 2<sup>nd</sup> call for proposals, the Center received 250 concept notes. After completing the review process, the following six proposals were finalized for the grant award.

Principal Investigator (PI)	Organization	Research Proposal Topic
Dr. Ashfaq Ahmed Sheikh	Pakistan Council of Research in Water Resources (PCRWR), Islamabad	Monitoring Seawater Intrusion in the Indus Delta for Climate Change ,Adaptation
Dr. Jamil Ahmed	USPCAS-W, MUET	Assessment of Water, Sanitation and Hygiene Services in Primary Schools of Sindh, Addressing Sustainable Development Goal -6
Mr. Ghulam Hussain Dars	USPCAS-W, MUET	Changing Climate in Pakistan: Food Security and Water Management Implications
Dr. M. Munir Babar	USPCAS-W, MUET	Assessing Effectiveness of Linear Anionic Polyacrylamide (LA-PAM) to Reduce Seepage Losses in Unlined Canals
Dr. Asmat Ullah	USPCAS-W, MUET	Crop Water Productivity Assessment of Major Cropping Systems in Sindh and Punjab
Ms. Uzma Imran	USPCAS-W, MUET	Keenjhar Lake Water Quality Assessment and Valuing Ecosystems Services (KL-WAVES)



# Graduate Seminars

## Indus Integrated Modelling Framework

Dr. Mobin-Ud-Din Ahmad and Mr. Joel Stewart, from Commonwealth Scientific and Industrial Research Organization (CSIRO) Australia, conducted the graduate seminar on their research initiatives on “Indus Integrated Modeling Framework”, undertaken by Australian Government on South Asia Sustainable Development Investment Portfolio (SDIP) on the platform of Friends of Democratic Pakistan. Pakistan-Australia Indus SDIP project is an initiative aimed at to carry out Indus basin

modeling to generate confidence and cooperative decision-making across jurisdictional borders for the effective and equitable management of shared water resources. SDIP is an Australian government initiative with the goal of increasing water, food and energy security in South Asia, targeting the poorest and most vulnerable, particularly women and girls. CSIRO is among one of the several partners delivering this initiative. SDIP focuses on three major river basins; the Indus, Ganges, and Brahmaputra in South Asia.



## Sustainable WASH Practices

Dr. Heinz-Werner Kreutzer, a German research scholar conducted a graduate seminar on “WASH Project to the 2010/11 Flood affected Districts in Sindh”. He shared the process and progress of the project, funded by HEKS – a Zurich-based donor agency, implemented in Naushahro Feroze and Dadu districts of the

province. Dr. Heinz briefed about the Latrine-Bath-Hand-Wash Units, water supply schemes and other related WASH facilities being provided to the community through the project and the lesson learned. The seminar was followed by the question-answer session.



## SDG-12: Responsible Consumption and Production

Dr. Mushtaq Ahmed Memon, an expert in United Nations Environment Program (UNEP), conducted the graduate seminar on Sustainable Development Goal-12: "Responsible Consumption and Production". He called for proper planning, implementation and integrated efforts to ensure sustainable

consumption and production in Pakistan. He said that owing to rapid growth in population, particularly in Asia Pacific, consumption of various products had increased dramatically. He briefed the audience about the importance of SDG-12 which covers responsible consumption and production.



## Laboratory Safety and Security

Mr. Khalid Latif, Founder and Technical Director of KL – TECHNICAL & HSE SERVICES, conducted the graduate seminar on "Laboratory Safety and Security". Highlighting the importance of security in general and behavioral security in

particular, Mr. Khalid said scientists and researchers must develop the environment-friendly and safe laboratory habits while using laboratory apparatus.





## Writing an Effective Research Proposal

Dr. Awias Khatri, Associate Professor at Textile Engineering Department of MUET conducted a graduate seminar on "Writing an Effective Research Proposal". While elaborating the research as a process, Dr. Khatri said that in order to establish the facts and to reach the new conclusion, one has to take a systematic

investigation into and study of materials and sources, called research. Dr. Khatri further shared his views on the types, objectives, and outcomes of the research. He also assigned an exercise for writing a brief research proposal to the seminar participants.

## Exchange Program

The Center has an excellent exchange program for faculty and students at the partner universities at USA. During this quarter there were 13 students including 03 females of different disciplines of the Center on the Exchange visit. Two of them have returned to MUET after successfully completing the exchange program.



## Exchange Experiences

### Asim Ali

PhD Scholar (Environmental Engineering)

Visiting the United States of America is a dream for many and I had the same but USPCAS-W provided me an opportunity to get my distant dream into reality. I had a wonderful experience of learning and research during my stay at the University of Utah. Additionally, I also had an opportunity to explore the USA by visiting different cities i.e. New York, New Jersey, Florida, California, and the Washington DC.



### Shoaib Ahmed

(MS- Environment Engineering)

The exchange visit significantly helped me to improve my communication, interpersonal, social and technical skills by interacting with scholarly teachers and students. Participating in the Globallocal seminar and field trips also helped me to know about the global issues of water and their research remedies, which will be helpful for me to resolve water-related issues in Pakistan.

### Saira Halepoto

(MS - Environment Engineering)

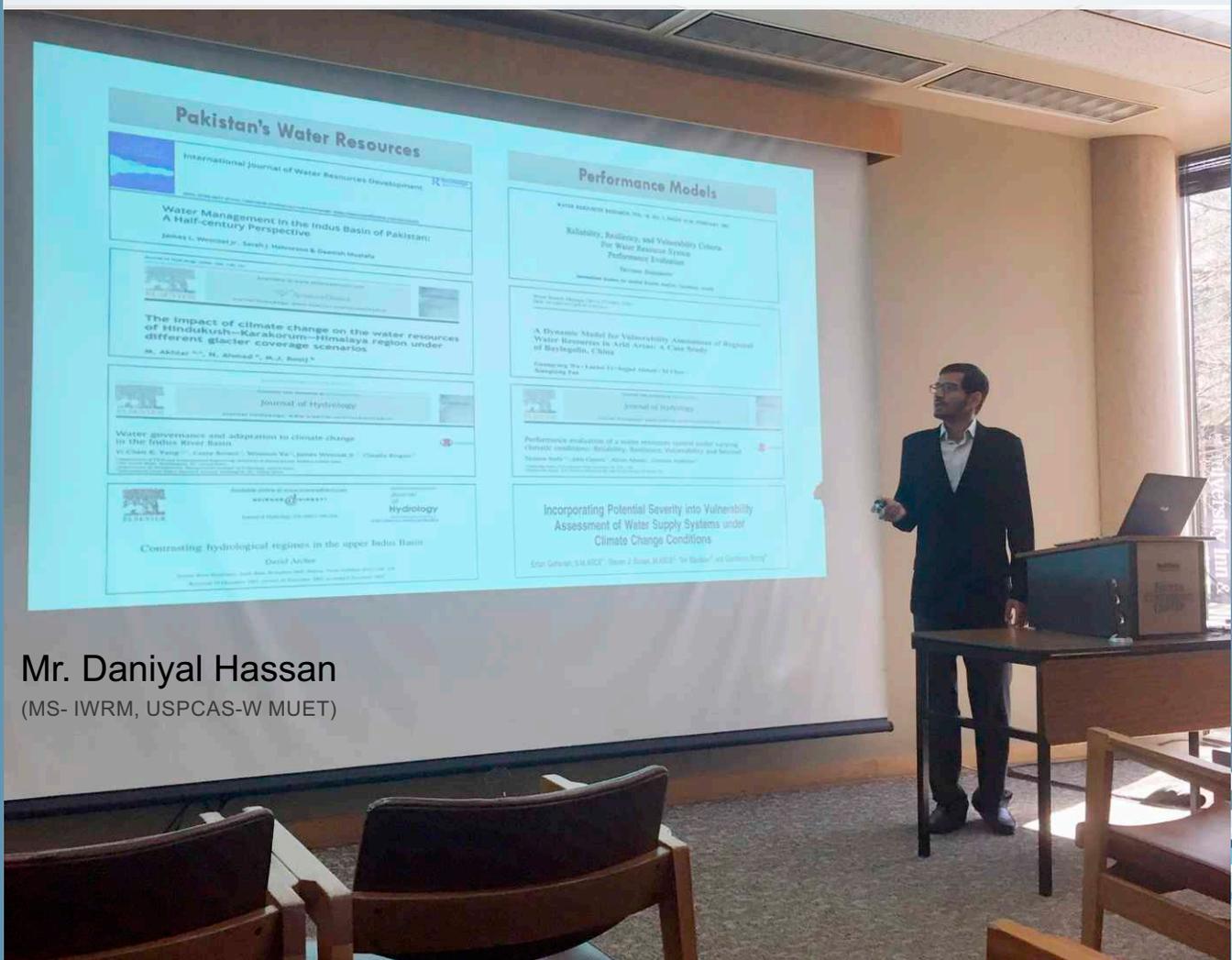
My exchange experience at the USA was amazing. Academically, an interactive and learning environment at UU had polished my research skills. Interaction with experts from water-related organizations and field trips to various facilities have broadened my understanding of water infrastructure and quality in Salt Lake City.





## USPCAS-W Success Story:

Mr. Daniyal Hassan, exchange student presented his research paper on, "Performance Evaluation of Pakistan's Water Apportionment Accord-1991 against Supply", in the 12th Annual J. Paul Riley AWRA-Utah Section, Student Conference and Paper Competition, held on March 29, 2017 at Eccles Conference Center, Utah State University, USA . Mr. Hassan is an MS Student of Integrated Water Resources Management (IWRM) at USPCAS-W MUET, presently he is on the exchange visit to the University of Utah, USA. His presented paper was accepted in the American Water Resources Association (AWRA) Spring Runoff Conference-2017. There were only two papers accepted from the MS students; one from the student of Utah State University and second from Mr. Daniyal Hassan, who is an exchange student of USPCAS-W MUET at UU. He was the first president of Society of Water Managers (SWM) at USPCAS-W, MUET Jamshoro.



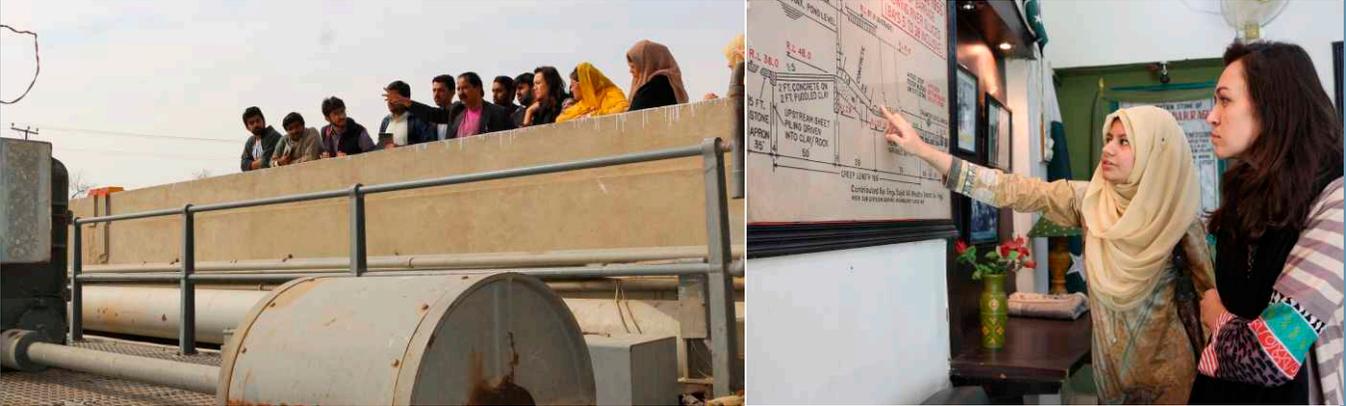
**Mr. Daniyal Hassan**  
(MS- IWRM, USPCAS-W MUET)

While sharing his exchange experiences, Mr. Daniyal Hassan said, "The exchange visit at The University of Utah (UU) enabled me to discover my research potential, enhanced my research, communication, networking and cross-cultural interaction skills. I learned about writing papers for scientific journals and international conferences that advanced my substantive knowledge. I personally took interest in organizing events in UU as recently arranged a symposium on Water Sustainable Development Goals and the UU on the eve of World Water Day, which helped me to boost up my management and leadership skills."

## Field Visits

Center has organized the following field visits for the students in this quarter.

- ❑ Isra University Hyderabad
- ❑ Sindh Agriculture University Tandojam
- ❑ Drainage and Reclamation Institute of Pakistan (DRIP), Tandojam
- ❑ Darawat Dam, Thana Bola Khan, District Jamshoro
- ❑ Ghulam Muhammad (Kotri) Barrage, Jamshoro
- ❑ Sindh Industrial Trading Estates Limited Nooriabad
- ❑ Keenjhar Lake, Thatta





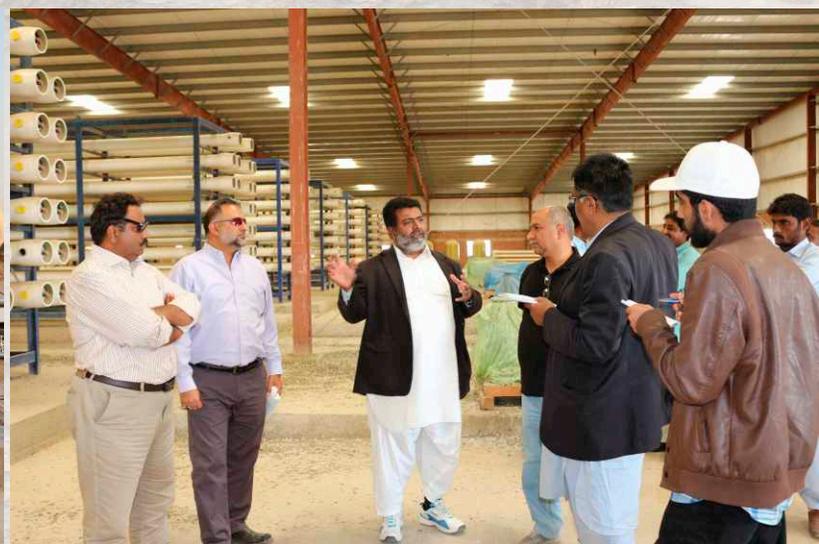
## Visit of Thar Coal Project

USPCAS-W faculty team comprised of Prof. Dr. Rasool Bux Mahar, Prof. Dr. Kamran Ansari, and Prof. Dr. Altaf Ali Siyal visited the site of Thar Coal Project located in District Tharparkar, Sindh province of Pakistan.

The purpose of the visit was to get first-hand information on the existing mechanism of safe drinking water, disposal of wastewater, drainage, environmental issues, hygiene conditions, ground water conditions, and social environment.

The group also assessed the social impact of the project and came up with a number of suggestion and remedies in order to improve the living condition of the local community.

The group also identified various research areas for the faculty and students of the Center to consider in future.





## SUSTAINABLE DEVELOPMENT GOAL 6: Ensure Availability and Sustainable Management of Water and Sanitation for All

### SDG-6: Targets to be achieved by 2030

- 6.1:  Achieve universal and equitable access to safe and affordable drinking water for all
- 6.2:  Achieve access to adequate and equitable sanitation and hygiene for all
- 6.3:  Improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials
- 6.4:  Substantially increase water-use efficiency across all sectors
- 6.5:  Implement integrated water resources management at all levels
- 6.6:  Protect and restore water-related ecosystems
- 6.a:  Expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programs
- 6.b:  Support and strengthen the participation of local communities in improving water and sanitation management

#### Chief Patron:

Dr. Mohammad Aslam Uqaili  
Vice Chancellor  
MUET, Jamshoro

#### Patron:

Prof. Dr. Bakhshal Khan Lashari  
Project Director  
USPCAS-W, MUET, Jamshoro

#### Co-Patron:

Prof. Dr. Mohammad Aslam Chaudhry  
Chief of Party  
USPCAS-W, University of Utah, USA

#### Editorial Board:

Mr. M. Shahid Panhwar  
Monitoring & Evaluation Specialist

Mr. Sahib Khan Bhand  
Communication, Media & Outreach Expert

Mr. Muzafar Joyo  
Layout, Design & Photography

#### Contact:

#### U.S.-Pakistan Centers for Advanced Studies in Water

Mehran University of Engineering and Technology, Jamshoro-76062, Sindh - Pakistan

for feedback, questions and media queries: [cmoexpert.uspcasw@admin.mueta.edu.pk](mailto:cmoexpert.uspcasw@admin.mueta.edu.pk)

[water.mueta.edu.pk](http://water.mueta.edu.pk) | [@uspcasw@admin.mueta.edu.pk](mailto:uspcasw@admin.mueta.edu.pk) | [f /USPCASW](https://www.facebook.com/USPCASW) | [t USPCASW\\_MUET](https://twitter.com/USPCASW_MUET) | [92-22-277 1226](tel:92-22-2771226)

#### Disclaimer:

*This Newsletter is made possible by the support of the American people through the United States Agency for International Development (USAID). The contents are the sole responsibility of USPCAS-W, MUET Jamshoro and do not necessarily reflect the views of USAID or the United States Government.*

