

MEHRAN UNIVERSITY OF ENGINEERING & TECHNOLOGY JAMSHORO 76062, SINDH, PAKISTAN



No. PM/USPCAS-W/ MUET/JAM/-26

Dated: 29-Mar-17

CONSULTANCY SERVICES REQUIRED

U.S.-Pakistan Center for Advanced Studies in Water at Mehran University of Engineering and Technology (MUET), Jamshoro, is seeking services of reputed consulting firms/individuals with requisite qualifications and experience to conduct Study on "Assessing Relevance of CAS-W Program Outputs to Sector/Industry Needs. Interested firms/individual consultants having relevant qualification & experience can access the detailed Terms of Reference (ToRs) at www.muet.edu.pk and water.muet.org.pk. It is anticipated that the consultancy will be carried out over a period of three (3) months.

Interested firms/consultants are required to submit the proposals to undersigned for conducting the required study as spelled out in detailed 03.00pm.

ToRs by April-14-2017 upto

The procuring agency reserves the right to reject any or all proposals subject to relevant provisions of SPP Rule 2010 (amended 2013) and may cancel the selection process at any time prior to the acceptance of a proposal under Rule-25 of said Rules.

Procurement Manager USPCAS-W

Mehran University of Engineering & Technology, Jamshoro Ph: 022-2109148

Email: po.uspcasw@admin.muet.edu.pk

CORRIGENDUM

This is with reference to the advertisement No. PID (H) 98909 namely "Consultancy Services Required", published in Daily Jang and Daily Kawish, on March 31, 2017 and the same in Daily Dawn, on April 01, 2017, regarding the Assessing Relevance of CAS-W Program Outputs to Sector/Industry Needs at MUET, Jamshoro.

It is hereby informed to all interested firms/ reputed consultants, the following amendments are made as under:

- 1. (a). Last date of Submission of EOI is 02-May-2017 up-to 01.00pm.
 - (b). Opening of EOI is 02-May-2017 at 01.30pm.
- 2. Correct website address for access to ToRs is: water.muet.edu.pk
- Having registration with Federal Board of Revenue (FBR) for Income Tax, registration
 with the Sindh Revenue Board (SRB) as the case may be and are not black listed in any
 procuring agency or authority.
- 4. In case of any unforeseen situation resulting in closure of office on the date of opening or if Government declares Holiday the EOI shall be submitted / opened on the next working day at the same time & venue.

All other terms and conditions will remain same.

Procurement Manager USPCAS-W

MUET, Jamshoro



Mehran University of Engineering & Technology, Jamshoro



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Interested firms/consultants are required to submit the proposals to undersigned for conducting the required study as spelled out in detailed ToRs by April 14, 2017 till 03.00 pm.

The procuring agency reserves the right to reject any or all proposals subject to relevant provisions of SPP Rule 2010 (amended 2013) and may cancel the selection process at any time prior to the acceptance of a proposal under Rule-25 of said Rules.

Procurement Manager

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PID (H) 98909



MEHRAN UNIVERSITY OF ENGINEERING AND TECHNOLOGY (ISO-9001) CERTIFIED JAMSHORO - 76062, SINDH, PAKISTAN

PUBLIC RELATIONS OFFICER MEHRAN UNIVERSITY OF **ENGINEERING & TECHNOLOGY JAMSHORO**

NEWS CLIPPING

Dated: 31 03 2017







يو ايس- پاڪستان سينٽر فور ايدوانسڊ اسٽديز اِن وائر، مهراڻ يونيورسشي آف انجنيشرنگ ايند تيكنالاجي. جامشورو " Assessing Relevance of CAS-W Program Outputs to Sector/Industry Needs جي مطالعي جي اهتمام لاء معروف فرمن/شخصن جي خدمنن حاصل ڪِرڻ جو خواهشمند آهي. لاڳاپيل تجربو ۽ هليت ركندڙ فرمون/انفرادي كنسلينيس تفصيلي قرمز آف ريفرنس (ToRs) لاء www.muet.edu.pk و water.muet.org.pk قسى سكين ثا. واصح رهى ت كسلتنسي 03 مهينن ۾ مكمل كئي ويندي.

دلجسين ركندر فرمن/كسلتنس TORs ير صراحت سان بيان كيل تفصيل مطابق گهربل مطالعي جي اهتمام لاه پنهنجو پرويوزل هيٺ صحيح ڪندڙ کي 14 اپريل 2017 نيهري جو 3.00 وڳي تائين جمع ڪرائين.

ايس بي بي رولز 2010 (ترميم ثيل 2013) جي لاڳاپيل تشريحات مطابق بروكيورنگ ايجنسي كنهن هك يا سعورن پرويوزلز كي رد كري سگهي ثي ۽ مذكوره رواز جي رول-25 تحت كنهن يرويوزل جي قبوليت كان پهرين كنهن بـ وقت چوند جو عمل منسوخ ڪري سگهي ٿي،

يو ايس - پاڪستان سينٽر فور ايڊوانسڊ استديز لن وائر مهران يونيورستي أف انجنيثرنگ ايند تيكنالاجي، جامشورو الي: 022-2109148 اي ميل: po.uspcasw@admin.muet.edu.pk



مراز بونیورسٹی آف تمينلرنگ ايند تيکنالومي . مامشورو

ىسروسزدركارهين

والمراس باكتان بينوفورا في والسدّ استدير إن والرموران ع يُعرَق آف أنجيترُ مك إينا ليكنالو ملى ، جامشورو _ Assessing Relevance of CAS-W Program Outputs to Sector/Industry Needs' مطالع كابتام كيا معروف فروا افراد كي فدمات كالصول كاخوابال ب-متعلقه فرياور البت كى عال و كابي ركع والى فرمز أ الرادي كنسلاي التصلي زمز آف ريز أس (Tors) كيك water.muet.org.pk الاحدار على إلى water.muet.org.pk العدار على إلى الما المعادية سلنسي 13ماه يرسمل كي جايئ كي-

ری رکے وال فرمز السلتك ToRs عن صراحت سے بيان كاكي تفييدات كے مطابق مطلوب

الى لى زار 2010 و (تريم شده 2013 م) كى حقاقة وفعات كيدها بنى بروكور على الجنى كى ايك 上、ことがいりないところと25-Joic Aindane でうっていれている الى بى وقت القاب كالمل منسوع كرعتى --

يره كيودمنث فيجر يوالين- بإكستان سيفرفورانيه وانسذ اسنذيز إن وافر ميران يو نيورشي آف الجيئر گڪ ايند نيکنالو تي ، جامشور و 022-2109148:و) po.uspcasw@admin.muet.edu.pk:



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



NOTIFICATION

No. MUET/USPCAS-W/- 6 2-7 of Dated 22 -11-2016 It is notified for the general information of all concerned that the Vice Chancellor, Mehran University of Engineering & Technology, Jamshoro/Chairman BoG has been pleased to re-constitute a separate Bid Opening Committee/ Procurement Committee consisting of following members for Procurement Cell in the Project Director USPCAS-W, Mehran University of Engineering & Technology, Jamshoro with immediate effect:

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

Convener

 Engr. Muhammad Mashooque Siddiqui Director Procurements University of Sindh, Jamshoro Member

 Mr. Abdul Ghafoor Kandhir Procurement Manager USPCAS-W, MUET, Jamshoro

Member/Secretary

The following terms of reference/ functions of above procurement cimmittee are as under:

- 1. Shortlisting of contractor/firms/suppliers responding to the Notice Inviting Tenders (NIT).
- Evaluation of Bids.
- 3. Finalization and recommendation of successful bidders.
- 4. To cancel the bidding process at any time prior to the acceptance of a bid.
- Upon request by any of the bidders, communicate to such bidder, grounds for the cancelation of bidding process, but is not required to justify such grounds.
- To recommend the competant authority for inviting fresh tenders in case an infirmity has surfaced in the bidding documents.
- To recommend to the competant authority for awarding the contract to the bidder with the lowest evaluated cost, but not necessarily the lowest submitted price.

Project Director USPCAS-W MUET, Jamshoro

Copy f.w.cs to:

- 1. All committee members
- 2. The Secretary to Vice Chancellor, MUET, Jamshoro

Partnering Universities:







U.S. Pakistan Centers for Advanced Studies in



NOTIFICATION

No. MUET/USPCAS-W/- 228 of Dated O6-A 25-2017. It is notified for the general information of all concerned that the Vice Chancellor, Mehran University of Engineering & Technology, Jamshoro / Chairman BoG has been pleased to constitute Consultants Selection Committee for technical evaluation of Technical Proposals received from the Consultants for:

Consultancy Services for Assessing Relevance of CAS-W Program Outputs to Sector / Industry Needs.

The committee shall be consisting on the following members:

 Prof. Dr. Bakshal Khan Lashari Project Director, USPCAS-W Convener

 Dr. Rasool Bux Mahar Deputy Director/ Professor, USPCAS-W Member

 Dr. Arabella Bhutto Co-Director MUISTD MUET, Jamshoro

Member

Dr. Ghulam Ali Jariko
 Director, Sindh Development Study Center
 University of Sindh, Jamshoro

Member

 Mr. Shahid Panhwar M & E Specialist, USPCAS-W

Member/ Secretary

Deputy Director

USPCAS-W, MUET, Jamshoro

Copy f.w.cs for information to:

- 1. All Committee Members
- 2. The Secretary to Vice Chancellor, MUET, Jamshoro.

Partnering Universities:





U.S.-Pakistan
Centers for Advanced Studies in



NOTIFICATION

No. MUET/USPCAS-W/- 70 of 2017 It is notified for the that the Vice Chancellor, Mehran University of Engineering & Technology, Jamshoro/Chairman BoG has been pleased to re-constitute Complaint Redressal Committee (CRC) consisting of the following members with immediate effect:

Prof. B. S. Chowdhry,
 Dean Faculty of Electric, Electronic, Computer Engineering,
 MUET, Jamshoro

Convener

 The Divisional Accounts Officer, Provincial Coastal Highway Division, Govt. of Sindh, Hyderabad. Member

 The Executive Engineer, Education Works Department, Govt. of Sindh, Matiari. Member

The terms of references of the above committee is to address the complaints of bidders / contractors that may occur during the procurement proceedings in USPCAS-W, as per Sindh Public Procurement Regulatory Authority, (SPPRA) Rules 2010 (Amended 2013), Government of Sindh.

Project Director USPCAS-W MUET, Jamshoro

Copy f.w.cs to:

1. All committee members

2. The Secretary to Vice Chancellor, MUET, Jamshoro

Partnering Universities:





U.S. PAKISTAN CENTRE FOR ADVANCED STUDIES IN WATER (USPCAS-W) MEHRAN UNIVERSITY OF ENGINEERING & TECHNOLOGY (MUET), JAMSHORO Annual Procurement Plan 2016-2017

Sr. No	Description of Procurement	Quantity (where applicable)	Cost (where applicable)	Estimated Total Cost	Funds Allocated	Source of funds (ADP/ Non ADP)	Proposed Procurement Method	Timing of Procurements				
								1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Remarks
1	Procurement of Laptops	As per requirement	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	USAID Funded	As Per SPPRA Rule 46/ II	-	Nov-16			-
2	Supply of T-Shirts	As per requirement	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	USAID Funded	As Per SPPRA Rule 46/ I	-	Nov-16	-	-	-
3	Procurement of Multimedia	As per requirement	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	USAID Funded	As Per SPPRA Rule 46/ I	-	Nov-16			-
4	Procurement of Lab Equipment for Advanced Water and wastewater Quality Control Lab (Phase II)	As per requirement	\$ 239,487.06	\$ 239,487.06	\$ 239,487.06	USAID Funded	As Per SPPRA Rule 46/ II	1.0		Jan-17		
5	Procurement of Lab Equipment for Soil and Water Analysis Lab (Phase II)	As per requirement	\$ 106,568.01	\$ 106,568.01	\$ 106,568.01	USAID Funded	As Per SPPRA Rule 46/ II		-	Jan-17	190	,
б	Procurement of I.T. Equipment	As per requirement	\$ 154,223.56	\$ 154,223.56	\$ 154,223.56	USAID Funded	As Per SPPRA Rule 46/ II	1.	-	Jan-17	-	
7	Procurement of Lab Equipment for GIS and Remote Sensing Lab (Phase II)	As per requirement	5 193,348 33	\$ 193,348.33	\$ 193,348.33	USAID Funded	As Per SPPRA Rule 46/ II	1.77	-	Feb-17	-41	
8	Procurement of Software for Computer and Software Lab (Phase II)	As per requirement	5 147,134.68	5 147,134.68	\$ 147,134.68	USAID Funded	As Per SPPRA Rule 46/ II	-	-	Feb-17		-
9	Procurement of Hydraulics Lab	As per requirement	\$ 671,390.00	\$ 671,390.00	\$ 671,390.00	USAID Funded	As Per SPPRA Rule 46/ II			Feb-17	-	
10	Consultancy Services for feasibility study of Water Treatment Plant and Distribution Network & its design of Water Supply System of MUET, Jamshoro	As per requirement	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	USAID Funded	As Per SPPRA Rule 72	l a		9	Apr-17	
11	Consultancy Services for Assessing Relevance of CAS-W Program Outputs to Sector / Industry Needs.	As per requirement	5 10,000.00	\$ 10,000.00	S 10,000.00	USAID Funded	As Per SPPRA Rule 72		-	-	Apr-17	
12	Procurement of Equipment for Pilot Scale Water and Wastewater Treatment Field	As per requirement	\$ 572,108.60	\$ 572,108.60	\$ 572,108.60	USAID Funded	As Per SPPRA Rule 46/ II	-		· ·	May-17	

MUET, Jamshoro

US-Pakistan Center for Advanced Studies in Water (CAS-W) Mehran University of Engineering and Technology (MUET), Jamshoro

Terms of Reference for the Study on "Assessing Relevance of CAS-W Program Outputs to Sector/Industry Needs"

1. Background

The Centers for Advanced Studies in Water (CAS-W) project has been established at the Mehran University of Engineering and Technology (MUET), Jamshoro, with funding from USAID, and technical assistance and collaboration from the University of Utah (UU).

The objective of the Center is to undertake educational programs, training and capacity building activities, applied research, and network development, with a view to resolving water-related challenges faced by Pakistan. The high quality water education being offered by the Center entails improved curriculum, better teaching, access to global education networks, and continuous faculty and staff development. The applied research component, on the other hand, responds to meeting national commitments to global sustainable development agenda, namely sustainable goal on water as well as other water-related issues and challenges confronting Pakistan¹.

At the end of five years (2019), the CAS-W is anticipated to have achieved the following key results: (i) developed a cadre of highly qualified graduates for public and private sector employment in their specialty areas; (ii) formed partnerships and interest-specific networks by bringing together the best minds in academia, government and the business community to identify solutions to localized and systemic challenges facing the public and private sectors in the area of water; (iii) improved quality and relevance of higher education in water curricula in response to public and private sector needs.

The Center is presently in its third year of operation and soon its first cohort of graduates will be in the job market to seek employment with public and private sector institutions. This study is being conducted to assess the relevance and suitability of Center's products (graduates, research, short-term training programs) to market needs.

2. Rationale and Purpose

The Center offers MS and PhD degree programs in four disciplines: (i) Environmental Engineering, (ii) Hydraulics, Irrigation and Drainage, (iii) Integrated Water Resources Management and (iv) Water, Sanitation and Health Sciences. Prior to Center's establishment, MUET was already offering degree programs in the first two disciplines. Under the aegis of Center, however, a series of new courses have been introduced in these two disciplines including improving the syllabi of existing courses. The remaining two programs which offer multidisciplinary perspective were started to provide education and training in addressing key issues within the context of water-development nexus.

Each degree program emphasizes the understanding of fundamental scientific and engineering principles to manage and solve water problems both from engineering and policy perspectives. In addition, the curricula caters for enhancing graduates' competitiveness in the market with training in improved management and communication skills, critical thinking and creativity, and

¹ Major challenges include: increasing water scarcity, deteriorating water quality, declining water productivity, aging water infrastructure, groundwater depletion, poor land and water management, lack of access to safe drinking water, water sharing/allocation conflicts and poor water governance, among others.

entrepreneurship etc. The students are prepared for careers in policy practice, consulting and design, management of water systems, or teaching and research. An overview of each degree program together with a list of courses being taught at the Center is available at: http://water.muet.edu.pk/degree-programs/

Main objective of Center's research component is to stimulate competitive and innovative applied research that is multi-disciplinary in nature and developed within the broader context of water-development nexus to support the achievement of sustainable development goal on water. To this end, the Center has developed an agenda through a series of stakeholder consultations. A list of these issues/topics is available at: http://water.muet.edu.pk/applied-research/. The Center is advancing the implementation of this agenda through its research grants program, students' research, and contract research.

3. Study Objectives

Major purpose of this study is to assess the relevance and suitability of higher education (curriculum), training programs and research work being delivered by the CAS-W to market (water sector) needs. To this end, specific study objectives include:

- a) To identify what type of jobs are available in the market that can be filled by CAS-W graduates, with a special focus on highly demanded skills.
- b) To find out the relevance of current curriculum and research portfolio as well as short term training courses offered by the Center to market needs.
- c) To identify potential growth areas and program-specific markets.
- d) To assess the capacity of CAS-W in delivering the education and training needs in response to market demand.
- e) To assess competiveness of CAS-W program with other similar programs being offered at other universities.

4. Framework for Needs Assessment

The following questions provide a broader framework for the assessment of market needs and to define strategic priorities for making CAS-W program (and its deliverables) more attractive and competitive. The following list by no means is exhaustive, and the selected consultant is expected to further expand and enrich it as warranted by the study objectives.

- Which are the leading public and private sector employers in the field of water? What is the nature of their work/business (policy, engineering, management, research or teaching etc.)?
- What are the major factors that currently influence the job market in the water sector?
 Among other things, this will include analysis of the mandates of organizations engaged in the water sector.
- What are the recruitment trends among employers in terms of skills set requirements for young water and environmental professionals entering in the job market? Has the skills set requirements been changing overtime or remained steady?
- Is the current curriculum well aligned with the technical and soft skills needed by the
 potential employers? This will require evaluation of each course in terms of how it is

- contributing to the expertise/specialization needed in the market. If not, what are the major gaps and how these could be bridged?
- Which other schools/institutions in Pakistan are offering similar degree programs, and how
 these programs are qualitatively different than those offered by the Center in terms of course
 work and research requirements? What steps Center should take to enrich the quality of its
 programs and to increase its competiveness in the market?
- Is research being done by the faculty and students well aligned with the national research agenda? Will it contribute to achieving the water SDG and lead to finding solutions to challenges confronting the water sector? If yes, how could it be further improved/enriched?
 If not, what steps Center should take to align it with current and projected water sector priorities?
- How well curriculum and research components are aligned with each other? Are these mutually supporting?
- What are short-term training needs (for practitioners at different levels) in the area of water?
 Who are the potential clients? To what extent Center can meet this demand with its existing capacities?
- Why the private sector so far has not been very forthcoming in building research partnerships in water sector?
- What are the challenges that will hinder CAS-W response to meeting market needs in the form of producing good quality graduates and research?

5. Resources

The study requires collection of data from appropriate target groups by means of established procedures and methods that are thoughtfully selected to fit the purposes and context of the assessment. While providing good overview of CAS-W program, the following sources will be useful in designing the questions/questionnaire and interviews.

- RFP by the USAID (March 2014)
- Cooperative Agreement between MUET and USAID (December 2014)
- Memorandum of Understanding between MUET and UU (August 2015)
- Centers' websites: http://water.MUET.edu.pk and http://water.utah.edu
- List of courses and their contents http://water.muet.edu.pk/degree-programs/
- Research projects awarded under small research grants program
- List of students' research topics (including summary of their research findings)
- CAS-W baseline study conducted by MSI/USAID
- · Work plans and progress reports

6. Key Deliverables

Inception Report (due within first two weeks from the starting date of the contract): detailing
the methodology including the main research methods, the sampling framework, proposed
sources of data, procedures for data collection and analysis, and a draft but detailed table of
contents. The proposed research tools will be discussed and approved by CAS-W Team
before data collection commences.

- Draft Final Report (due two weeks prior to the conclusion of the contract): detailing findings
 in response to issues/questions raised in section 4 above.
 - Final Report (due at concluding date of the contract): incorporating comments and suggestions provided by CAS-W team on the draft report.

7. Management Arrangements

The Consultant will report to Project Director/Deputy Project Director of CAS-W, and work in close collaboration with Center's management team and faculty, including visiting and resident teams of the University of Utah, USA.

8. Duration

It is anticipated that the consultancy will be carried out between 1st April 2017 and 30th June 2017 over a period of three (3) months.

9. Qualifications and Experience

CAS-W is seeking to engage the services of an independent contractor/consulting firm to conduct a comprehensive assessment of its education and research programs vis-à-vis market needs. Required qualifications include: (i) advanced university degree in social science, business, economics, and/or other related field; (ii) proven experience in undertaking market needs assessment studies; (iii) good understanding of water sector issues, capacity gaps, and training needs in the water industry; (iv) ability to articulate strategies for professional development and growth of institutions such as CAS-W; (v) working experience with senior officials within government and nongovernment organizations; and (vi) proven capacity to supervise and coordinate all administrative and technical aspects of the consultancy.

10. The Selection of Consultants shall be made on Consultants Qualification Selection Method as per Rule-72(3); read with rule 59 of SPP Rule, 2010 (amended 2013)