

ត្រះរាប់ារណាចក្រូកម្ពុប់ា Kingdom of Cambodia ជាតិ សាសនា ព្រះមហាក្សត្រ Nation Religion King

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August 09, 2022

To: Mr. Madhurjya K. Dutta

Director

Trade and Investment Facilitation Department

Coordinator of Mekong-Korea Cooperation Fund (MKCF)

Mekong Institute

CC: Mr. Robby Rosandi

Project Manager

Mekong-Korea Cooperation Fund (MKCF)

Mekong Institute

Ms. HONG Angkearbos

Focal Point and Chief of Bureau

Ministry of Foreign Affaires

Subject: Submission of Full Proposal on Capacity Building for Sustainable and Climate Change Resilient Water Resouces Management, Mekong-Rpublic of Korea Cooperation Fund (MKCF)

This refers to the Announcement of the shortlisted EOIs of 6th MKCF's letter No. 04/276/2022, dated 15 July 2022 on Capacity building in 6th Call of Mekong-Republic of Korea Cooperation Fund "MKCF".

In accordance with the above reference. MOWRAM (Ministry of Water Resources and Methodology) would like to submit full proposal to Mekong Institute(MI) as indicated in attachement appendix 2.

In order to fulfill the requirement and clarification of submission, please contact to H.E. Huong Sunthan, Directorate General, email: huongsunthan@gmail.com and CC to Mr. Bak Bunna, Deputy Director, email: bakbunna@yahoo.com, chanbosak@gmail.com.

We are appreciate from your letter of consent for this program as soon as possible.

Your support and cooperation will be highly appreciated by us.

Sincerely yours,

PONH SACHAK

Secretary of State

Ministry of Water Resources and Meteorology

Appendex 2: Full proposal for Capacity Building

CC: - PMU Team for PMU/IDFMP/MOWRAM

- K-water Academy

- Mr. Kim Songil, Project Manger of the Consultant, IDFMP

- Chronicle file





Ref. No. 04/276/2022 July 15, 2022

H.E. Ponh Sachak Secretary of State Ministry of Water Resources and Meteorology Cambodia

Subject: Announcement of the shortlisted EOIs of 6th MKCF Call for Proposals

We are pleased to inform that your project Expression of Interest (EOI) on "Capacity Building for Sustainable and Climate Change Resilient Water Resource Management" submitted to 6th Call of Mekong-Republic of Korea Cooperation Fund (MKCF) has been shortlisted for the formulation stage (Full Project Proposal).

As per the requirements of MKCF, you are requested to submit the full proposal package by 5 August 2022 using the templates in the appendix 2-6 of the MKCF Management Manual. During this period, the MKCF team from Mekong Institute may contact the proponent organization to conduct interview(s) and due diligence to check the organization capacity in implementing the project technically and financially. The proposed budget should be prepared in detail using the attached template which should not exceed as indicated in the EOI.

The MKCF projects address the regional issue(s), and hence the interventions and benefits should be designed for more than one country in the Mekong region (Cambodia, Laos, Myanmar, Viet Nam and Thailand). Any documents that provide information on partnership arrangements in implementing the proposed project with organizations in the Mekong countries, International organizations, trilateral/quadrilateral cooperation, etc, in forms of pre-bidding agreement, MOU, or consent letter should be attached in the proposal. Furthermore, the confirmed team members to be engaged on full time basis for the entire project duration are required to be mentioned in the full proposal with their CVs and TORs as per the requirements of MKCF.

The shortlisted EOIs for full proposals do not necessarily guarantee the award of final selection of the project. The shortlisted proposals are subject to review and will go through a process of evaluation. The decision of the MKCF is final and irrevocable. The MKCF will not engage reasons why the proposal is not selected for funding.

For proposal submission and any clarification or queries, please contact Mr Madhurjya K. Dutta, Director Trade and Investment Facilitation department and Coordinator of MKCF at dutta@mekonginsttute.org and Mr Robby Rosandi, Project Manager at robby@mekonginstitute.org, and cc to MKCF focal point at Ministry of Foreign Affairs of the respective country.

Sincerely yours,

Suriyan Vichetlekarn Executive Director

Appendix 2: Full Project Proposal Template

(1) Summary page



Project Classification (check all that applies)

- ☐ Culture and Tourism
- ☑ Human Resources Development
- ☑ Agriculture and Rural Development
- ☑Infrastructure
- ☑ Information and Communication Technology (ICT)
- ☑ Environment
- ☐ Non-traditional Security Challenges

Project Title

Capacity Building for Sustainable and Climate Change Resilient Water Resource Management

Brief Description of the Project

Capacity Building through various training program and for various target group under cooperation/joint work with K-water (Korea Water Resources Cooperation) Academy

Country / Region

- Cambodia and Republic of Korea

Budget

Total budget (USD): 425,650 USD

Total budget requested from MKCF (USD): 425,650 USD

Total contribution if any including from third parties (USD):

Proponent

Name	H.E.Ponh Sachak
Address	#364, Monivong BVLD, Phnom Penh, Cambodia,
Date of Submission	09/August/2022

8 h

(2) Full Proposal Format



Mekong-ROK Cooperation Fund (MKCF) Project Proposal

Project Information						
1.1. Project Title	Capacity Building for Sustainable and Climate Change Resilient Water Management					
1.2. Country (s) / Region	Cambodia and Republic of Korea					
1.3. Date of Submission	09/08/2022					
1.4. Proponent Contact Deta	ils					
Contact person, position	H.E. Huong Su	ınthan				
Organization	Ministry of Wa	ater Resources	and Meteorology			
Email address	huongsunthan(@gmail.com				
Telephone number	(855)012-760-3	310				
Mailing address	#364, Monivor	ng BVLD, Phn	om Penh, Cambodia			
1.5. Project Area (check all t	that applies)					
☐ Culture and Tourism ☐ Human Resources Develor ☐ Agriculture and Rural De ☐ Infrastructure ☐ Information and Commun ☐ Environment ☐ Non-traditional Security (velopment nication Technol	ogy (ICT)				
Project Milestone						
Estimated implementation start date Estimated implementation end date Project duration Estimated implementation end date Project duration O1/03/2023 30/09/2025 Two(2)year(s) Six (6) month(s)						
Description of Financial E	lements					
Project cost (USD) 425,650 USD	Contribution (I		Total Project Cost (USD) 425,650 USD			
	L					

The Ministry of Water Resources and Meteorology (MOWRAM) is responsible for implementing the Law on Water Resources Management 2007 (Water Law) and related sub-decrees composing of the Sub-decree on River Basin Management passed on 25 July 2015 (Provisions for establishing river basin zones, multi-sectorial river basin management committees and river basin planning processes). The MOWRAM has two Directorates (Administrative Affairs and Technical Affairs), eleven departments and one technical service centre. and 24 Provincial Department of Water Resources and Meteorology (PDOWRAM).

Over recent years of the climate changes, the Government has place priority of stimulating the rural economy to alleviate poverty, and considers that water resource managment, rural infrastructur and capacity building are the most urgent constraints the need to be addressed. In additional is needed in MOWRAM to full fill its responsibility for achieving these goals. Even though Sustainable and Climate Change Resilient Water Management is a high government priority to capabilities require strengthening.



Project background and justification

For water resources development, Cambodia Government still is receiving many grant or loan projects from the developed countries and MDB. Most of infrastructures projects is focusing for the construction of structures and equipment provision plus simple operation training. More advanced technology and integrated water resources management know-how are necessary for the advanced water resources operation and management. Also for the adaptation against climate change such as abnormal floods and severe droughts, paradigm shift is necessary in the field of water resources management. MOWRAM has been connected with K-water more than 20 years in water resources sector in development and management part. In this project, both authority will cooperate in the partnership level.

(Special Proposal) Especially MOWRAM will request K-water provide the special course/lecture for the staffs in charge of management for the infrastructure that Korea funded such as Sala Ta Orn Dam Project, Mongkol Borey Dam, Irrigation development and flood mitigation project in Banteay Meanchey Province, and Krang Ponely River Water Resources Development Project. MOWRAM staffs, K-water staffs and K-water Academy Professors will have some practical field experience exchange and there will be some live lectures/communication between them in all issues for their interested area. Many feed-backs and improvements regarding the operation experience for the Korea funded structure are expected through this project.

Problems (to be addressed)

The major climate-related natural disaster risks in Cambodia are sea level rise, storms, floods, and droughts. The dry season begins in November and ends in April. The 2015 El Niño was one of the strongest on record and impacted Cambodia through lower yields because water had to be transported to over 2 million rural people who had no access to a water source. Annual flooding during the wet season (May- October) is a natural part of the water cycle in Cambodia. Due to extreme flooding and flash floods, Cambodia also faces significant threats to economic growth, urban and rural livelihoods and the natural environmental management challenges. During 1996~2019, there were 1,243 people 's deaths, 13,457,143 affected person, 2,057,518 ha damages in crops from floods. The poor persons have been suffering more during disasters. Hence, water resources management is the most important agenda to achieve poverty reduction in Cambodia. So, not only sufficient installment of infrastructures but also effective water resources management is important issues in Cambodia. Many ODA projects for infra structures was constructed and are constructing currently. But MOWRAM's capacity for the water resources management of infrastructures are still insufficient and not enough to operate and manage the infrastructures.

Project Objective

The objectives of the project are follows;

- a) To obtain information and knowledge on flood forecasting and warning system and to develop integrated water resources management in Mekong river basin in Cambodia
- b) To develop integrated insight on water resources in Mekong region and learn how to manage water related issues to cope with climate change
- c) To strengthen future cooperation in the water resources management between Mekong region including Cambodia and Republic of Korea
- d) Cambodia shares river basin with other Mekong Countries and bordered with some countries. So some lectures on cross-boundary water resources management issues shall be provided to the trainees.



Project Description

In order to achieve the objectives, K-water Academy will provide a multi years training course as bellows.

- (First year) Preliminary Study in Cambodia (5days) and Training in Korea (12days) for High-level
 officials to achieve the sub-objectives such as Diagnosing current water issues in Mekong river
 basin and Enhancing capacities for water resources management
- 2) (Second year) Training in Korea(12days) for Specialists and Working-level officials to to achieve the sub-objectives such as Enhancing capacities for water resources management and Building and revising action plans for effective implementation.
- 3) (Third year) Workshop in Cambodia(5days) for Participants of prior courses to achieve the subobjectives such as Enhancing capacities for water resources management and Strengthening implementation of Action Plans.

Regional nature of the project

- 1) In this region, heavy rainfall in rainy season, drought in dry season, and extreme flood and drought due to climate change, cause the difficulties for effective water resources management such as operation and maintenance of infra/hydro structures, disaster countermeasure, and set-up/execution of policy. Cambodia currently does not have the enough infra/hydro structures to control the full water resources potential, so many infrastructures are constructing by assistance of MDB and developed countries. Cambodia also does not have the enough skilled man powers to manage the infra structures efficiently due to the shortage of adequate, sustainable, practical, applicable, and integrated education and training.
- 2) Therefore, MOWRAM, under the cooperation with K-water Academy, proposes the Capacity Building for Sustainable and Climate Change Resilient Water Resource Management.
- 3) K-water agreed with MOWRAM to provide the multi years capacity building program on titled project. K-water has many experiences in capacity building role.
- 4) K-water Academy will provide MOWRAM staffs with three (3) years training program in the ROK and region as well for the modules as followings; National Water Policy & Strategy, Flood Forecasting & Warning System (FFWS), Water Resources Development & Management, Climate Change Adaptation on Water Resources Management, Action Plan.
- 5) K-water has successfully completed over 350 international training programs, training around 5,000 participants from 106 countries worldwide until the end of 2021 including Cambodia and another Mekong regional countries. K-water and MOWRAM are still keeping the close relationship by cooperation on AWC (Asia Water Council) and on project development.

Target beneficiaries and Project Coverage

Direct Target beneficiaries are High-level officials (10 persons) and Specialists and Working-level officials (20 persons). But through the direct beneficiaries Indirectly, this project affects the all MOWRAM'S staff and PDOWRAM even Famer Water User Community (FWUC).

Geographically, all Cambodia belong to Tonle Sap and middle/lower Mekong river basin shall be covered through this project.



Value Added for the MKCF Involvement/Potential

Sustainable and integrated capacity building program have not been provided to the Cambodian Water Related staffs during latest 10 years. Only short-term and one-time education and training courses have been provided to the MOWRAM staff currently through the infrastructure construction project.

If MKCF supports this capacity building program, more sustainable and integrated capacity building program shall be provided to the Cambodia staffs. Especially if this proposal be selected real project, MOWRAM will request some more customized curriculum to K-water Academy. K-water has been worked for many ODA projects on Cambodia's water resources development. So K-water can provide the required curriculum to the MOWRAM'S practical needs.

MKCF also can contribute Mekong river basin country's sustainable development. This projects is related more than three sectors out of seven priority sectors such as Human Resources Development, Agriculture and Rural Development, Infrastructure, Information and Communication Technology (ICT), and Environment.

Project Sustainability

Explain how the project sustainability will be ensured in the long run, after the project is implemented with support from the MKCF

The projects shall be ensured its sustainability in terms of bellows.

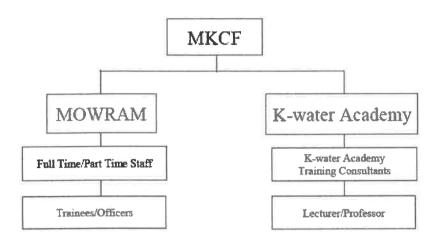
- 1) This project aims training for various level of the Cambodia officials.
- 2) This project aims training for multi-years courses.
- 3) This project aims training for multi-subjects on related sustainable/integrated water resources management.
- 4) This project shall be implemented by two authorities which were experienced in cooperation with infra structures construction.



Management Arrangements

Describe the project management structure of the project, coordination mechanism with the Mekong country

partners, relevant stakeholders, MKCF secretariat and MoFA.



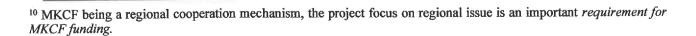
MOWRAM as a proponent is in charge of full responsibility for this project under cooperation with K-water.

K-water as a training agency partner is in charge of actual training works such as curriculum development, lecturer/professor provision, and site visit arrangement in Korea and Cambodia under cooperation with MOWRAM.

Describe briefly the human resource inputs i.e. full-time project staff, part time staff, Experts and consultant's

bio and roles and responsibilities (refer to ToR and CV format at appendix 5 and 6)

Assigned Position in project	Position in Authority	Name	Date Commenced	Date Complete
Cambodian Full-time/part-time project staff				
Project Manager	Deputy Director in MOWRAM	Mr. Bak Bunna	01/03/2023	30/09/2025
Project Coordinator	Officer in MOWRAM	Mr. Chann Bosak	01/03/2023	30/09/2025
Korean Full-time/part-time project staff				
Training Consultant	Senior Manager in K-water	Ms. Heejung Son	01/03/2023	30/09/2025
Project Coordinator	Manager in K-water	Ms. Sora Keum	01/03/2023	30/09/2025
Lecturers/Processors	Professors and Specialist in K- water/Korea	Nominated Later	01/03/2023	30/09/2025



Expected Result	Indicator	Means of	Target		Remarks	
•		Verification	Mid- term Final			
Project outcomes			l			
Climate change resilient water resources management insight and capacity building	Improved training accomplish ment	Degree of gap on self- capacity diagnosis between before and after training participation	10% increase		Average result of the survey on self- diagnosis of all the participants to training programs	
Project outputs (that contribute to o	utcomes)					
1. Setting priority on capacity building in water management		Submitted preliminary study report by Training experts	One copy	of report		
2. Plan for Integrated water resources management policy and skills enhancement in Cambodia	and	Established & revised action plan by participants Implementation result of final action plan by participants Feedback on the result by training experts	More than one established, revised and improved action plan		Can be multiple plans according to the participants' professional areas	
Activities	Description		1			
1.1. Field survey and interview on capacity building needs	working at th	najor water management ne field and high & mid nt, develop and manage	-level offic	cials workin	g for water policy	
2.1. Training in Korea for High-level officials	Participate training programs in Korea to widen insight and to establish ac plans at a managerial level for integrated water management in Cambodia					
2.2. Training in Korea for Working-level officials	management to find soluti	raining programs in Kor skills including meteor ions to be applied in wo by establishing revised	ological for rking leve	orecasting a	nd warning system and	
3.1. Workshop in Cambodia	Feedback of solutions to sustainable v	the implementation state better fit to the field in (tus of action	on plans, dis	cuss and find out burce management as a	

Monitoring and Evaluation (M&E) Framework

HIERARC HY OF RESULTS	RESULT STATEMENT(S)	OBJECTIVELY VERIFIABLE INDICATORS (OVIs)	DEFINITION How is it calculated?	BASELINE What is the current value?	TARGET What is the target value?	DATA SOURCE / MEANS OF VERIFICATION How will it be measured?	FREQUENCY How often will it be measured?	RESPONSIBLE Who will measure it?	REPORTING Where will it be reported?
Impacts									
Impact	Enhanced capacity of MOWRAMS's water policy and regulation design		Number of suggestions on climate change resilient water resources management	Not measurable	3 suggestio ns	implementation result of the action	Half-year term (after high- level official's training)	MOWRAM	Training Institute
Outcome	Climate change resilient water resources management insight and capacity building	Improved training accomplishment	Average result of the survey on self-diagnosis degree of all the participants to training programs	Not measurable	10% increase	Survey on degree of gap on self- capacity diagnosis between before and after training participation	term (before the training, after 6 months of	Training Institute	MOWRAM
	Priority on capacity building in water management	Preliminary study report submission	Report on field survey and interview result	Not measurable	One copy of report	Submitted preliminary study report by Training experts	1 time(after field survey to Cambodia)	Training Institute	MOWRAM
Outputs	2. Plan for Integrated water resources management policy and skills enhancement in Cambodia	Action Plan and implementation result submission	Number of submitted action plans(establis hed/revised/i mproved) and implementati on result	Not measurable	one	Submitted reports by MOWRAM	Annually (after training program)	MOWRAM	Training institute

Appendix 3: [proposal package] Indicative budget

The budget should be presented in this section and provided in a separate Excel file

(Unit: USD)

Task	Activity	Total Budget	Proponent Portion (Cambodia)	K-water Portion (Korea)
Activity 1	Field Survey & Interview	49,571	24,396	25,175
Activity 2	Invitational Training in Korea for High-level	158,760	3,210	155,550
Activity 3	Invitational Training in Korea for Working-level Officials	158,760	3,210	155,550
Activity 4	Workshop in Cambodia	58,559	24,396	34,163
Total		425,650	55,212	370,438



Appendix 4: [proposal package] Indicative Work Plan

Activity 1.4. Workshop in Cambodia	Activity 1.3. Invitational Training in Korea for Working-level Officials	Activity 1.2.Invitational Training in Korea for High-level	Output 2. Plan for Integrated water resources management policy and skills enhancement in Cambodia	Activity 1.1. Field Survey & Interview	Output 1. Priority on capacity building in water	TASK
- Budget: 58,559 USD	- Budget: 158,760 USD	Budget: 158,760USD	- Total Budget: 376,079 USD	Activity 1.1. Field - Budget: 49,571 USD Interview	- Total Budget: 49,571 USD	MONTH 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 2 2 2 3 9 0



TERMS OF REFERENCE OF KEY PROJECT CONTRACTED PERSONNEL $\ensuremath{(\text{N/A})}$

TERMS OF REFERENCE OF FULL TIME PROJECT STAFF

	TOR No. 01
Position	Project Manager
Duty Station	Ministry of Water Resources and Meteorology (MOWRAM)
Responsibilities	Overall responsibility for the Project
Requirements	More than 10 years' Experiences in project management for water resources management, English
Date	DD/MM/YY

	TOR No. 02
Position	Project Coordinator
Duty Station	Ministry of Water Resources and Meteorology (MOWRAM)
Responsibilities	Coordinator for the Project
Requirements	More than 5 year's experiences in project management for water resources management, English
Date	DD/MM/YY

TERMS OF REFERENCE OF CONSULTANTS/EXPERTS

	TOR No. 03
Position	Senior Manager
Duty Station	K-water
Responsibilities	Training Consultant
Requirements	More than 10 years' Experiences in project management for water resources management, English
Date	DD/MM/YY

	TOR No. 04
Position	Manager
Duty Station	K-water
Responsibilities	Training Consultant
Requirements	More than 5 years' Experiences in project management for water resources management, English
Date	DD/MM/YY



CVs of Proposed Project Team

1. Name: Bak Bunna

2. Proponent Organization: MOWRAM

Greater Mekong Sub-Region Flood & Drought Risk Management and Mitigation Project (GMS-FDRMMP), Flood Damage Emergency Reconstruction Project (FDERP) and Rural Irrigation and Agricultural Productivities Improvement Project (RIAPIP), (ADB and IMF-WB Fund).

- Sala Ta Orn Dam Development Project in Battambang province. (Korean Fund)
- Irrigation Development and Flood Mitigation Project in Banteay Meanchey province. (Korean Fund)
- 3. Proposed Position: Project Manager
- 4. Date of Birth: 15 January 1965

Citizenship: Cambodian

5. Complete personal contact details:

Address: #132, St. 132 Khan Toul Kork, Phnom

Penh Mobile: 012 886 241 Email: bakbunna@yahoo.com

1. 6. Education:

- Bachelor Degree of Irrigation Engineer.

Cambodia - Russian Friendship Engineering Institute, 1986 to 1991.

-Bachelor Degree of Civil Engineering.

National Technical Training Institute (Cambodia), 2002 to 2004.

-Master Degree of Civil Engineering. International

University (Cambodia), 2012 to 2014.

7. Membership in Professional Associations:

8. Other Trainings:

- Robot Structure Program, January to May 2004

- Global Information Systems Training, March to July 2001
- AutoCAD R14 and 2000, September to Nov. 1999
- Basic computer course (Windows Word and Excell), 1994
- Irrigation Systems Management and Maintenance courses, May and August 1993
- Lectures on Environmental Impact, and Dispersive Soils, October and November 1993
- 9. Countries of Work Experience: [in the last 10 years]
- 10. Languages: [Mother Tongue/Excellent/Good/Fair/Poor]

Language	Speaking	Reading	Writing
Khmer	Fluent	Fluent	Fluent
English	Good	Good	Good
Russia	Fair	Fair	Fair



11. Employment Record:

Date from	Location	Employer	Position	Work Undertaken that
	Location	organizations and	FOSITION	Best
-to				illustrates Capability to
January /2012-	Phnom Penh /Cambodia	Greater Mekong Subregion Flood & Drought Risk Management and Mitigation Project (GMS-FDRMMP), Flood Damage Emergency Reconstruction Project (FDERP) and Rural Irrigation and Agricultural Productivities Improvement Project (RIAPIP), (ADB and IMF-WB Fund).	Project Manager Manager	 Sala Ta Orn Dam Development Project in Battambang province. (Korean Fund) Irrigation Development and Flood Mitigation Project in Banteay Meanchey province. (Korean Fund) Co-ordination of rural infrastructure (water supply, irrigation and rural roads) activities in the target provinces; Supervision of the implementation process (identification, selection, planning, quality control and monitoring and follow-up); Supervision of user groups training; Manage, co-ordinate and provide engineering technical advice to contracted institutions undertaking project activities; Supervision of technical monitoring and evaluation of project infrastructure activities and sub- contracted activities; Liaise with other stakeholders in the project areas, including government, non-government and donor activities; Oversee PIU implementation of the program as required by the Team Leader and be part of the program introduced to monitor the quality assurance of all contracted activities;

August/ 2008- January /2012	Phnom Penh / Cambodia	Eastern Rural Irrigation Development Project (IMF Fund- WB)	Irrigation Manager	 Calculation flow discharge on the canal and structures, pitch flow from catchment area. Feasibility and detail design of the subproject (check and review the hydrology report, crop water requirement , water balance, stability structures, hydraulic structures and canal section in the projects relevance. Site construction supervision of the subproject in eastern rural irrigation development projects in seven provinces. Field visit to interview, screening list and evaluation of priorities list of irrigation subproject. Worked with GIS for layout map and location map. Make estimation cost of each sub-projects. To work with GPS to check the location survey. Draftsman of the project. Public relation with authorities of each sub-projects.
January/ 2008- July/ 2008	Phnom Penh/ Cambodia	K-Water Co,LTD. (Consultant to K-Water on Kraing Puley Project.)	Cost Estimate Engineer	 Discussion with expert engineer, get recommendation from expert and evaluation overall cost of the project. To make detail unit cost of each items for Kraing Punley project in Kampong Chhang Province. Material selection of existing sources in local and on market are require in Kampong Chhang Province. Field visit to interview, screening list and make priorities list of data requirement.



	nl	CDC Combodia	Tuniontion	To collect data of incontact
O DITTO	Penh/ Cambodia (-	Irrigation Engineer	 To collect data of inventory irrigation system in Kampong Thom and Siem Reap province. To collect rainfall data in Kampong Thom and Siem Reap province. Site visit on sub-basin along Stung Sen in Kampong Thom province and Stung Siem reap in Siem Reap province. Field visit to interview, screening list and make priorities list of inventory irrigation system. Worked with GIS for the project. Make estimation cost of each sub-projects.
1 00/2002	Phnom Penh/ Cambodia	SMEC, Cambodia Consulting LTD. (Consultant to SMEC on	Design and Construction Engineer	 To work with GPS to check the location survey. Draftsman of the project. Public relation with authorities of each sub-project. Inspection of all structures (concrete spillway, head regulator, cross drainage and
		Stung Chinit Irrigation and Rural Infrastructure Project.		drop struct.). Inspection of rip-rap and stone pitching of spillway chute and all structures. Inspection of secondary structure (box culvert, open flume, emergency spillway, tail escape). Inspection of box culvert pass to National road and village road Inspection of all tests (concrete and earth tests) Checked for calculation sheets.
Sep/2003- Jan-2005	Phnom Penh/ Cambodia	Ministry of Water Resources and Meteorology	Chief Officer of Rural Water Supply Department	 Collection of data for computer data base from various Ministries Preparation of proposals for provision of rural water supply schemes Investigation of ground water levels Design and construction of rural water supply schemes

December/	Phnom	Soma Construction Co.	Project	- Design and construction of
December/ 2000- September/ 2003	Penh/		Manager	 Design and construction of two story Villa (280m2) in Phnom Penh. Landfilling for National Cambodia – Korea Vocational Training School Project in Phnom Penh. Construction of building for Commercial Institute in Phnom Penh for Ministry of Education. Flood Emergency Rehabilitation, Road and Bridges Project, Ministry of Rural Development. Construction of public toilet at Anchor Wat in Siem Reap for APSARA Tourism Authority
March/1999				 Design and construction of buildings Construction of landfill foundation for buildings Quality control (soil tests, compaction and soil moisture tests) Preparation of bids (prices, financial data, and construction schedules) Procurement of construction materials from local markets Design, and supervision of contractors on construction of roads and bridges Measurement of Work and preparation of progress payments Coordination with government departments.
-Nov/2000	Cambodia	China Guangxi Corp. for International Techno-Economic Cooperation, Cambodia Representative Office		 (on secondment from Soma Construction Co. Ltd) Review of construction drawings Selection and procurement of building materials Preparation of invoices for contract payments Issuing technical instructions for plumbing, civil and structural work Planning and coordination of construction activities Quality control (concrete tests, etc).

July/1996- Febuary /1999	Phnom Penh/ Cambodia	Soma Construction Co. Ltd	Civil Engineer	 Siem Reap Airport Improvement Project, Civil and Building Jetty construction project at Soma Company's Sovannak Mundul Factory, south of Phnom Penh, April to Oct. 1998 Landfilling for factory in Sre Ambel District, Koh Kong Province, July 1996 to March 1998 Preparation of bid prices, financial data, and construction schedules Supervision of pile driving operation and concrete construction on jetties Supervision of landfill foundation construction for buildings Quality control (concrete and soil compaction tests, etc.) Measurement of work for payment Coordinating with government departments
October/ 1993- July/1996	Cambodia	BCEOM, France. (Consultant to ADB on Irrigation Rehabilitation Sector of Loan No. 1199- CAM)	Design and Construction Engineer	 Design of headworks, canals and canal structures Construction of concrete / rockfill spillways at Thnot Te and Tuk Chhar Construction of outlet structures, canals and canal structures Rehabilitation of existing structures. Construction of reservoir embankments, access roads and bridges

12. Other relevant information (e.g., Publications)

Certification:

I, the undersigned, certify to the best of my knowledge and belief:

		res	INO
i)	This CV correctly describes my qualifications and my experience	\checkmark	
ii)	I am employed by the proponent organization	\square	
iii)	I was part of the team who wrote the Expression of Interest (EOI)		
	for this proposed project		

I certify that I have been informed by the proponent organization that it is including my CV in the EOI/proposal. I confirm that that I will be available to carry out the assignment for which my CV has been submitted, in accordance with the implementation arrangements and schedule set out in the proposal.

I understand that any willful misstatement may lead to disqualification or dismissal, and any other MKCF disciplinary action.

Name: Bak Bunna Date: 05 August, 2022

Signature: 77



CVs of Proposed Project Team

1. Name: SEANG Chanbosak

Proponent Organization: MOWRAM
 Proposed Position: Hydraulic Engineer

4. Date of Birth: 17 May 1982 Citizenship: Cambodian

5. Complete personal contact details:

Address:

Mobile: (855) 92 661 345 Email: chanbosak@gmail.com

6. Education:

• 2014 – 2016: Master Degree in Institute de Technologie du Cambodge "ITC",

• 2006 – 2008: Master Degree in the University of Civil Engineering, Hanoi, Viet Nam (Construction of the Bridges and Tunnels

• 2001 – 2006: Bachelor Degree in the University of Transport and Communications, Hanoi, Viet Nam (Bridge-Road Construction Engineer)

7. Membership in Professional Associations: Professional Enginger (PE)

8. Other Trainings:

- 2007 2008: Successfully completed the program of Investment and construction Project Management, Construction Supervision and Construction Bidding.
- 2014: Standard Operating Procedures (SOP) For Externally Financed Projects/ Programs In Phnom Penh, Cambodia.
- 2015: Water Resource Management School for Cambodia Government Officials, 1st to 3rd December 2014, Phnom Penh, Cambodia.
- 2015: Procurement Organized by Asian Development Bank (ADB) and Ministry of Economy and Finance (MEF), 16th to 20th March 2015, Sokha Beach Resort, Sihanoukville Province, Cambodia
- 2015: Sustainable Water Resource Management, 18th to 22nd May 2015, Mahidol University, Bangkok, Thailand.
- 2015: Water Supply Management to Improve Quality of Life (2015), 31st August to 4th September 2015, Bangkok, Thailand.
- 2016: ASEAN Special Training Program-Sustainable Water Management, 17th July to 6th August 2016 (20 days), Republic of Korea.
- 2016~2018: Water Accounting Plus System (WA+) in Cambodia, 21st to 24th June 2016, 22nd to 24th August 2016 and 22nd to 25th November 2016, 25th to 28th April 2017, 22nd to 25th August 2017, 27th to 30th April 2018 (focus on water balance and water requirement).

9. Countries of Work Experience: [in the last 10 years]

10. Languages: [Mother Tongue/Excellent/Good/Fair/Poor]

Language	Speaking	Reading	Writing
English	Good	Good	Good
Viet Nam	Excellent	Excellent	Excellent



11. Employment Record:

Date from	Location	Employer organizations and	Position	Work Undertaken that Best
-to				illustrates Capability to
2018-	Phnom Penh/ Cambodia	Ministry of water resource and Meteorology	Assistance Project Manager (Civil Engineer)	Project Implementation: ADB L2970/8262/G0330-CAM: Greater Mekong Subregion Flood and Drought Risk Management and Mitigation Project (CAM), in Pursat Province. Korea, EDCF Loan No. KHM-13: Sala Ta Orn Dam Development Project, in Battambang Province. Korea, EDCF Loan No. KHM-19: Irrigation Development and Flood Mitigation Project, in Bateay Meanchey Province. key responsibilities: the projects covered on Irrigation System with cover with the 3 mains: Procurement Work Regional Cooperation "MEF & MOWRAM" Preparation for document referred to PAM "FS, Bidding, PRC, CEC & BEC" Approval "Development part-ADB, Korea" Implementation "PRC and BEC" Completion/Evaluation "Development part- ADB, Korea, MEF & MOWRAM" Technical Work Monitor all structural design and analysis "Used software as Sap 2000-V22, Auto Cad Civil 3D and Excel". Monitor all draft of drawing "Used software as Auto CAD 2019" Monitor all Bill of quantities (BOQ) Monitor all project schedule, "Used software as Auto CAD 2019" Monitor all project schedule, "Used software as Microsoft Project Management 2016" Coordinate all activities referred to technical work. Financial work especially on Pity Cash, Disbursement procedure referred to Financial Management Manual" FMM-MEF"



2014-2018	Dlancon	Ministry of wester	Technical	Project Implementations
2014-2010	Phnom Penh/	Ministry of water resource and	Assistance	- Project Implementation: 1. Construction of Yustasas
			and	
	Cambodia	Meteorology	Monitoring	Irrigation Subproject "Contract
			Design	No. REIIP-MOWRAM-CW5" in
			(Irrigation	April 2015, Kampong Chhnang
		1	Engineer)	Province.
		1	Engineer)	2. Rehabilitation Srol Reservoir
				Subproject "Contract No. RDIP-
				CW203" in June 2016, Kandal
		1		Province.
				3. Rehabilitation Kouy Reservoir
				and Koah Kouy Dam Subproject
				"Contract No. RDIP-CW209-DC"
				in Feb 2017, Kandal Province.
				Irrigation Expanion of Krapeu
				Troum Sub-project "Contract No.
	1			RIAPIP-CW-AD3" in Apr 2017,
				Kampong Speu Province.
				Rampong Speu Frovince. Rehabilitation Extent Preak
				Mukampul (Sambour Meas Down
				Stream) "Contract No. RDIP-
	1			CW214-AD" in Aug 2017, Kandal
				Province.
				. Rehabilitation of Tradok Pong
				Reservoir Sub-Project
				"Contract No. RDIP-CW401-
				AD" in June 2018, Kandal
				Province.
				key responsibilities: the projects
				covered on Irrigation System.
				 Control and the distribution of
		V		all the companies quality
				documentation
				Monitor all quality related
				activities on the project.
				Review quality inspection
				personnel qualifications and
	1			training requirements
				 Coordinate all QA/QC
	1			activities with the site QC
				manager
				Coordinate all QA/QC
				activities with the site QA/QC
				procurement manager
				Monitor statistical method
				reporting
				Managing the quality and
				schedule of construction
				Supervising the finishing
				works, handing over procedures
				and post construction phase.
				The role of TA will require
				travel around province
				The reports have been
				preparing and submission to the
	1		The second secon	project manager.

2014-2015	Phnom Penh /Cambodia	Ministry of water resource and Meteorology	Technical Assistance and Monitoring Design (Irrigation Engineer)	 Project Implementation: Construction of North Along Chrey Subproject "Contract No. REIIP-MOWRAM-CW4" in April 2014, Kampong Chhnang Province. key responsibilities: the projects covered on Irrigation System. Control and the distribution of all the companies quality documentation Monitor all quality related activities on the project. Review quality inspection personnel qualifications and training requirements. Coordinate all QA/QC activities with the site QC manager Coordinate all QA/QC activities with the site QA/QC procurement manager. Monitor statistical method reporting. Managing the quality and schedule of construction Supervising the finishing works, handing over procedures and post construction phase. The role of TA will require travel around province. The reports have been preparing and submitting to the project manager.
2011-2013	Cambodia	Heng Heng S.R 68 Construction Co., Ltd	Technical Manager and Site Manager (Civil Engineer)	Project Implantation: Construction Building of Chamkarmon Int'l Hospital, Phnom Penh. key responsibilities: the projects covered on civil work. Control and the distribution of all the quality documentation Monitor all documents, avoids of material and salary of masonry. Monitor all quality related activities on the project Review quality inspection personnel qualifications and training requirements. Coordinate all QA/QC activities at construction. Monitor of BOQ (Bill of Quantity) Monitor of Construction Cost for tender Monitor all structural analysis

				 Monitor statistical method reporting Manage the quality and schedule of construction Supervising the finishing works, handing over procedures and post construction phase. The reports have been preparing and submitting to the director
2010-2011	Cambodia	Genting Teamwork & Construction Co., LTD	Structural Analysis (Civil Engineer).	 -Project Implantation: APSARA Authority Building in Siem Reap Province and Other project. key responsibilities: the projects covered on civil work. • Monitor all structural design and analysis "Sap2000 V14.2" • Monitor all draft of drawing "Auto CAD 2011" • Monitor all Bill of quantities (BOQ) • Monitor all project schedule, "Microsoft Project Management 2007"
2009-2010	Cambodia	David Hanman Engineering Service (DHES) Co., Ltd under the "SOTEL CO VIP Beeline Projects in Cambodia	Inspector Supervisor (Civil Engineer)	Project Implantation: Construction of both rooftop and Greenfield Telecommunications. key responsibilities: the projects covered the construction of both rooftop and Greenfield Telecommunications site. • Checked and inspected the construction of both rooftop and greenfield telecommunications site. The work was involve attending TSSR surveyed works, site kick-off, and various stages of inspecting the works, mostly concerning the piling, pre- concreting during concreting, tower installation, site finishing, and equipment room. • The final punch-list of the site will be created and the site engineer will follow up until all the items are corrected. A final site completion report will be generatedThe reports have been prepared and submitted to the Regional Manager and Project Manager based on the above basics of the role role but the job will not be limited to these.



				Some other tasks may arise from time to time time that need the Regional Manager's assistance. The role will require travel around all province within Cambodia, so a high level of flexibility is required from the Regional Manager. • Preparing and Check list base on the basics at head office for final completing
2007-2010	Vietnam	Head Chief of Civil Department, Civil University, Ha Noi, Viet Nam	Draft drawing and design analysis (Civil Engineer)	Project Implantation: Bridge and railway bridge in Hanoi, VN. key responsibilities: the project covered the construction of bridge and railway bridge. • Monitor all structural design and analysis "Sap2000 V9.0" • Monitor all draft of drawing "Auto CAD 2007" • Site visitor and drawing check according to drawing before start construction.



12. Other relevant information (e.g., Publications)

Certification:

I, the undersigned, certify to the best of my knowledge and belief:

		Yes	No
i)	This CV correctly describes my qualifications and my experience		
ii)	I am employed by the proponent organization	\checkmark	
iii)	I was part of the team who wrote the Expression of Interest (EOI)	\checkmark	
	for this proposed project		

I certify that I have been informed by the proponent organization that it is including my CV in the EOI/proposal. I confirm that that I will be available to carry out the assignment for which my CV has been submitted, in accordance with the implementation arrangements and schedule set out in the proposal.

I understand that any willful misstatement may lead to disqualification or dismissal, and any other MKCF disciplinary action.

Name: SEANG Chanbosak Date: 05 August, 2022

Signature:



CVs of Proposed Project Team

1. Name: Heejung Son

2. Proponent Organization: K-water (Korea Water Resources Corporation)

3. Proposed Position: Training Consultant

4. Date of Birth: August 10, 1981 Citizenship: Republic of Korea

5. Complete personal contact details:

Address: 125, Yuseong-daero 1689beon-gil, Yuseong-gu, Daejeon, 34045 Republic

of Korea Mobile: +8210-3515-1386

Email: rain@kwater.or.kr

6. Education:

• M.S., KAIST, 2015 (Technology and Innovation Management)

• D.S., Korea University, 2005 (Political Science and Diplomacy)

7. Membership in Professional Associations: None

8. Other Trainings: None

9. Countries of Work Experience: [in the last 10 years]

Indonesia (Asia International Water Week special session operating), Philippines (Philippines ANGAT Dam Project, San hose Delmonte Water District training)

10. Languages: [Mother Tongue/Excellent/Good/Fair/Poor]

Language	Speaking.	Reading	Writing
English	Excellent	Excellent	Excellent

11. Employment Record:

Date from -to	Location	Employer organizations and reference persons	Position	Work Undertaken that Best illustrates Capability to Handle the project
2022-	Korea	K-water	Senior Manager, Human Resources Developmen t Institute	■ Feasibility study on establishing Dhaka WASA's international training and research institute - training consultation service on developing curriculums and suggesting training programs, etc ■ Design and implementation on Training programs on ICT based Hydrologic Measurement for Indonesia, Smart water city, etc



2016-2021	Korea	K-water	Senior Manager, Future Strategy Dept.& Regional Head Office	■ Economic analysis and business plan establishment for local water supply system - Bonghwa, Yecheon, Goryeong city's water supply systems, etc ■ Strategy establishment and business risk analysis on overseas water businesses
2013-2015	Korea	K-water	Manager, Management & Innovation Services Dept	■ Knowledge management,
2009-2012	Korea	K-water	Manager, Human Resources Development Institute	■ Program design and coordination of internation training courses on water resources management, water supply management supported by KOICA, ADB, and USAID -more than 10 courses annually
2005-2008	Korea	K-water	Manager, Andong Office	■ Business management of dam operation and customer relations management

12. Other relevant information (e.g., Publications)

Certification:

I, the undersigned, certify to the best of my knowledge and belief:

		Yes	No
i)	This CV correctly describes my qualifications and my experience		
ii)	I am employed by the proponent organization	$\overline{\checkmark}$	
iii)	I was part of the team who wrote the Expression of Interest (EOI)		
	for this proposed project		

I certify that I have been informed by the proponent organization that it is including my CV in the EOI/proposal. I confirm that that I will be available to carry out the assignment for which my CV has been submitted, in accordance with the implementation arrangements and schedule set out in the proposal.

I understand that any willful misstatement may lead to disqualification or dismissal, and any other MKCF disciplinary action.

Name:

Heejung Son

Date: May 11, 2022

Signature: ////

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CVs of Proposed Project Team

1. Name: Sora Keum

2. Proponent Organization: K-water (Korea Water Resources Corporation)

3. Proposed Position: Training Consultant

4. Date of Birth: February 4, 1994 Citizenship: Republic of Korea

5. Complete personal contact details:

Address: 125, Yuseong-daero 1689beon-gil, Yuseong-gu, Daejeon, 34045 Republic of Korea

Mobile: +82-10-4786-3303

Email: sorakeum@kwater.or.kr

6. Education:

D.S., Hanyang University, 2017 (Public Administration)

- 7. Membership in Professional Associations: None
- 8. Other Trainings: None
- 9. Countries of Work Experience: [in the last 10 years]
 Indonesia (Asia International Water Week special session operating)
- 10. Languages: [Mother Tongue/Excellent/Good/Fair/Poor]

Language	Speaking	Reading	Writing
English	Good	Good	Good

11. Employment Record:

Date from	Location	Employer	Position	Work Undertaken that Best
-to		organizations and		illustrates Capability to Handle
		reference persons		the project



2021-	Korea	K-water	Manager, Human Resources Developmen t Institute	■ Design and implementation on Training Programs on Integrated Water Resources Management in Jordan ■ Design and implementation on Training programs on ICT based Hydrologic Measurement for Indonesia ■ Design and implementation on Training programs on Strengthening the Capacity of Planning and Implementing Smart Cities in Indonesia ■ Design and implementation on K-water Academy — University Partnership Training Program; KDI, University of Seoul, KAIST, etc. ■ Design and implementation on several in-house staff training programs
2017- 2020	Korea	K-water	Manager, Paldang Office	 Business management; contract, human resources management, etc. for operating multi-regional water supply system Customer relations

12. Other relevant information (e.g., Publications)

Certification:	
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I, the unde	ersigned, certify to the best of my knowledge and belief:		
.,		Yes	No
i)	This CV correctly describes my qualifications and my experience	$\overline{\mathbf{A}}$	
ii)	I am employed by the proponent organization		
iii)	I was part of the team who wrote the Expression of Interest (EOI)		
	for this proposed project		

I certify that I have been informed by the proponent organization that it is including my CV in the EOI/proposal. I confirm that that I will be available to carry out the assignment for which my CV has been submitted, in accordance with the implementation arrangements and schedule set out in the proposal.

I understand that any willful misstatement may lead to disqualification or dismissal, and any other MKCF disciplinary action.

Name: Sora Keum Date: May 11, 2022

Signature: 공소각

