

KNOWLEDGE PARTNERSHIP AGREEMENT
Between
Asian Development Bank
and
World Wide Fund for Nature Pakistan

This KNOWLEDGE PARTNERSHIP AGREEMENT (hereinafter “Agreement”) is dated XXXXX and entered into by and between the Asian Development Bank (“ADB”) and the World Wide Fund for Nature Pakistan (“WWF-Pakistan”), each a “Party”, together the “Parties”.

WHEREAS,

- (A) WWF-Pakistan is a registered non-profit organization in Pakistan and a national organization within the international WWF Network, with its head office located in Lahore, Pakistan. Established in 1970, it is the largest conservation organization in Pakistan and works with communities, government, civil society, international organizations, industries, and corporate entities towards the conservation of the environment and improving the management of the country’s natural resources.
- (B) ADB is a regional development bank that aims for an Asia and Pacific free from poverty. ADB’s mission is to help its developing member countries reduce poverty and improve the quality of life of their people through inclusive economic growth, environmentally sustainable growth, and regional integration.
- (C) ADB and WWF International entered into a Memorandum of Understanding in 2001, which encourages cooperation and joint programming between ADB and the WWF Network towards sustainable management of natural resources in Asia and the Pacific.
- (D) In December 2017, ADB approved a knowledge and support technical assistance (TA) in the Islamic Republic of Pakistan: 51324-001: Revitalizing the Ecosystem of Ravi River Basin (“the TA”). The TA will work for 18 months upon effectivity to improve environmental water management in the heavily polluted Ravi River Basin (“the river basin”) in Punjab. It will work to (i) assess the pollution problem, (ii) identify and close institutional gaps, (iii) raise awareness, and most importantly, (iv) develop a long-term plan to revitalize and build resilience in the basin, with detailed investment recommendations. WWF-Pakistan was identified as a possible partner to support the achievement of these outputs. ADB enters this Agreement in connection with the TA.
- (E) ADB and WWF-Pakistan have proposed a knowledge partnership between them under which collaboration on the TA would take place.

NOW THEREFORE the parties hereto agree as follows:

ARTICLE 1
NATURE AND SCOPE OF COOPERATION

1. Recognizing the strategic value of WWF-Pakistan’s experience on issues of water quality assessment and pollution control in the Ravi River Basin, and its networks and engagement with local industries, corporate entities, government, and civil society, ADB shall designate WWF-Pakistan as a “knowledge partner” for the purposes of improving the assessment of the pollution situation in the river basin and supporting multi-stakeholder visioning and planning toward

improved environmental water management in the river basin, including through capacity building and training, research and development, and knowledge sharing activities.

2. ADB and WWF-Pakistan shall cooperate on the development and organization of joint workshops, trainings, publications, or other outputs. The activities to be undertaken by WWF-Pakistan are set out in the Terms of Reference (“Activities”) attached in Appendix 1 to this Agreement.

3. The Agreement shall be effective from the date of its signature until the date of closure of the TA, which is tentatively scheduled for 30 September 2019 (unless terminated in accordance with paragraph 4 below or modified by mutual agreement of the Parties). The Activities will be undertaken from date of effectiveness to the date of closure of the TA, which is tentatively scheduled for 30 September 2019.

4. The Agreement may be terminated by either Party within 30 days written notice to the other Party. Any termination of this Agreement shall be without prejudice to the (a) orderly completion of any ongoing Activity, and (b) any other rights and obligations of the Parties accrued prior to the date of termination under this Agreement. The Parties shall ensure the orderly settlement of accounts prior to the expiration of the notice period.

ARTICLE II PAYMENTS AND CONTRIBUTIONS

5. Each Party shall provide financial and/or in-kind contributions to carry out the Activities as set out in Appendices 1 and 2. ADB’s contributions shall be made independently of WWF-Pakistan’s contributions.

6. ADB’s contribution shall consist of payments made to WWF-Pakistan to undertake the Activities. In this regard, ADB shall make payments to WWF-Pakistan in an amount not exceeding USD 100,000 (the “Funds”) to carry out the Activities as specified in the Terms of the Reference (see Appendix 1). The Funds shall be remitted upon ADB’s certification of completion of the milestones specified in accordance with the payment schedule in Appendix 1.

7. ADB shall transfer the Funds to WWF-Pakistan’s account with the following details:

[This information has been removed as it falls within exceptions to disclosure specified in paragraph 97 (x) of ADB’s Public Communications Policy (2011).]

8. The Funds shall be used exclusively for the costs and expenses incurred in carrying out the Activities. In the event WWF-Pakistan shall engage external consultants or procure any equipment, WWF-Pakistan shall obtain prior written consent from ADB, and shall carry out such engagement and procurement in accordance with ADB’s Procurement Policy (2017) and its associated project administration instructions and/or technical assistance staff instructions.

9. WWF-Pakistan shall submit requests for payment in United States Dollars to ADB and ADB shall disburse the payment in accordance with the schedule of payments set out in Appendix 1. Disbursements will be made in accordance with the Technical Assistance Disbursement Handbook (2010, as amended from time to time). WWF-Pakistan shall not use the Funds to: (i) finance expenditures related to capitalization; (ii) purchase equipment without first consulting with the ADB project officer; or (iii) finance any local taxes or duties.

10. WWF-Pakistan's contribution shall consist of in-kind contributions of the services of its professional staff to carry out the Activities as specified in the Terms of Reference (see Appendix 1). In this regard, WWF-Pakistan shall contribute in-kind the services of its professional staff in an amount not exceeding the equivalent of USD 15,346, which is based on the unit costs of these staff (see Appendix 2).

ARTICLE III ANNUAL FINANCIAL STATEMENTS, AUDITS

11. WWF-Pakistan shall provide ADB with an audited consolidated entity financial statement as of 30 June each year, including the auditor's opinion, within one month from the approval of such audited consolidated entity financial statement by the relevant approval authority. All financial reports shall be provided by WWF-Pakistan in the standard WWF-Pakistan formats. WWF-Pakistan shall also provide ADB, not later than six months after the completion of the Activities each year, a financial statement, certified by the WWF-Pakistan Financial Director, on the use of the funds transferred by ADB to WWF-Pakistan and on WWF-Pakistan's in-kind contributions. After completion and financial closing of this Agreement, WWF-Pakistan shall also provide ADB, not later than six months after the completion of the Activities, a final financial statement, certified by the WWF-Pakistan Financial Director, on the use of the funds transferred by ADB to WWF-Pakistan and on WWF-Pakistan's in-kind contributions.

12. WWF-Pakistan shall keep systematic accounts and records documenting evidence of payments of the Funds as required by ADB's policies, procedures, and regulations. WWF-Pakistan shall maintain accounts and records of the Funds during the term of this Agreement and for ten (10) years after the completion of the Activities. If information about the expenditure of the Funds is requested for the conduct of ADB's internal and external audits, WWF-Pakistan shall provide the information as reasonably requested by ADB. WWF-Pakistan shall permit ADB-authorized representatives, including auditors ADB selects, to inspect and audit such accounts and records.

ARTICLE IV INTELLECTUAL PROPERTY

13. The term "Intellectual Property" as used in this Article means all intellectual creations including any information relating to a Party's operations, processes, plans, know-how (being technical, marketing or commercial information), trade secrets, technical information, finances, business operations and procedures, business affairs, television broadcast rights, inventions, layouts, drawings, designs, specifications, computer programs, reports, data, maps, photographs and any other matter protected by intellectual property rights, whether registered or not, including patents, designs, copyrights, trademarks and all similar proprietary rights and applications for protection thereof.

14. The Parties recognize the importance of protecting and respecting Intellectual Property rights. This Agreement does not extend any express or implied licenses or other rights by one Party to Intellectual Property solely owned by the other Party.

15. WWF-Pakistan's reports, documents, correspondence, draft publications, maps, drawings, notes, specifications, statistics, work product in any form, and technical data sent to ADB as part of the Activities shall be jointly vested in WWF-Pakistan and ADB (including the rights to use, reproduce, adapt, publish and distribute any item or part thereof), each of whom, except

as explicitly provided, shall be free to protect, transfer and use such Intellectual Property and the rights in respect thereof as it deems fit.

16. Copyright in any publications and/or creations resulting from or relating to any of the Activities and any Intellectual Property generated in the course of Activities shall be vested in WWF-Pakistan and ADB jointly. However, WWF-Pakistan may, following the procedures laid down paras 17–21 below, publish results obtained during the course of work undertaken as part of the Activities. ADB may, following the procedures laid down in paras 17–21 below, publish results obtained during the course of work undertaken as part of the Activities. ADB may, following the procedures laid down in paras 17–21 below, make available for any commercial and/or noncommercial purposes any publications and/or creations resulting from or relating to any of the work undertaken as part of the Activities.

17. Where WWF-Pakistan wishes to submit for publication results of the Activities, WWF-Pakistan will submit such results to ADB in writing not less than 30 days in advance of the submission for publication. ADB may require WWF-Pakistan to delay submission for publication if in ADB's reasonable opinion such delay is necessary in order (a) to seek patent or similar protection for the results; (b) to ensure that ADB's contribution is acknowledged in form and substance as agreed with ADB prior to such publication; and (c) to ensure that information deemed confidential under ADB's Public Communications Policy (2011) is not included in such publication. For the avoidance of doubt, ADB shall not be entitled to request the deletion of any of the results of the Activities from such publication except where such results may be information deemed exempt from public disclosure under ADB's Public Communications Policy. A delay imposed on submission for publication should not exceed three months from the date of receipt of the results by ADB or such longer time as is necessary to seek the required patent or similar protection for the results, although WWF-Pakistan will not unreasonably refuse a request from ADB for additional delay in the event that property rights would otherwise be lost. Notification of the requirement for delay in submission for publication must be received by WWF-Pakistan within 60 days after the receipt of the results by ADB, failing which WWF-Pakistan shall be free to assume that ADB has no objection to the proposed publication.

18. Except as the Parties may otherwise agree, and subject to prepublication review and approval, ADB or WWF-Pakistan may make freely available on their websites, or on an open access basis on ADB's Open Access Repository, any publications and/or creations resulting from or relating to any of the work undertaken as part of the Activities on a CC BY 3.0 IGO license, provided that the Parties' standard copyright information and disclaimers are properly acknowledged or referenced in any such use. ADB and WWF-Pakistan will acknowledge each other's contributions to any publications and/or creations resulting from or relating to any of the work undertaken as part of the Activities. ADB and WWF-Pakistan will provide notice to each other prior to finalizing any publications resulting from work undertaken as part of the outputs.

19. WWF-Pakistan and ADB shall ensure the following in respect of any joint publications: (a) each of ADB and WWF-Pakistan has the right to prepublication review and approval of the joint publication at least 30 days prior to the submission of the publication; (b) ADB and WWF-Pakistan receives equal authorship credit on the same line or on adjacent lines directly below the other; (c) the standard copyright notice and information, and disclaimers, which will be provided by ADB and WWF-Pakistan will appear on the copyright page of the joint publication; (d) ADB's and WWF-Pakistan's contribution is acknowledged in form and substance as agreed with ADB prior to such publication; (e) all references to ADB member designations, maps and ADB logos comply with ADB guidelines as indicated in the ADB Handbook of Style and Usage (2017, as amended from time to time) and Branding Tool Kit; and (f) all references to WWF-Pakistan, the WWF Network,

and the WWF logo and other WWF branding elements comply with WWF's Communication and Branding Guidelines. Parties shall enter into a separate copublishing agreement if necessary.

20. WWF-Pakistan shall ensure that the Activities do not violate or infringe on any industrial property or intellectual property right or any third party claim. WWF-Pakistan shall indemnify ADB from and against any and all claims, liabilities, obligations, losses, damages, penalties, actions, suits, proceedings, demands, costs, expenses, and disbursements that may be imposed on, incurred by, or asserted against ADB; or actions related to the Activities. These include WWF-Pakistan's infringing or allegedly infringing copyright, trademark, patent, or other protected right.

21. The obligations contained in this Article shall continue notwithstanding the expiry or termination of this Agreement.

ARTICLE V CONFIDENTIALITY AND DISCLOSURE

22. The Parties may disclose to the general public this Agreement and information with respect to Activities carried out thereunder in accordance with their respective policies and procedures and subject to paras. 23 and 24 below. However, when information provided in the context of this Agreement (whether orally or in writing, in electronic or printed form) is described and/or designated by a Party providing it as confidential, the receiving Party shall take all reasonable measures to keep such information confidential and shall only use it for the purpose for which it was provided. Such confidential information shall not be disclosed by the receiving Party without the prior knowledge and consent of the Party providing such information.

23. Where information and/or documents are generated with contributions of ADB and WWF-Pakistan, the Parties shall consult with each other and decide on a case-by-case basis on the disclosure of such documents.

24. ADB and WWF-Pakistan shall consult with each other in advance and prior to release of documents and/or information relating to this Agreement to ensure that release of such documentation and information is coordinated and does not contravene the access to information and disclosure policy of either Party.

ARTICLE VI APPLICATION OF ADB'S SAFEGUARD POLICY STATEMENT

25. ADB's Safeguard Policy Statement (2009) ("SPS") shall apply to the activities in the delivery of the outputs:

- a) In cases where there are consequential safeguard procedures or actions required by the SPS which are not required under WWF-Pakistan's regulations and rules, ADB and WWF-Pakistan shall consult with each other and decide on how these requirements will be met and assured by WWF-Pakistan in the carrying out of the Activities; and
- b) In cases where there are no consequential safeguard procedures or actions required by the SPS, WWF-Pakistan shall carry out the Activities under this Agreement in accordance with its own applicable safeguard policies.

ARTICLE VI MISCELLANEOUS

26. The officials responsible for the implementation of this Agreement:
- c) For ADB, Director General, Central and West Asia Department or any officer or officers as duly authorized by ADB in writing; and
 - d) For WWF-Pakistan, Director General or any officer or officers as duly authorized by WWF-Pakistan in writing.
27. ADB and WWF-Pakistan shall consult with each other on any deviations from this Agreement or cost estimates stated in Appendices 1 and 2 to this Agreement.
28. Any amendment and/or modification to this Agreement shall be made by mutual consent and in writing between the Parties.
29. In the management and utilization of the Funds, WWF-Pakistan shall maintain standards of conduct that govern the performance of its staff, including the prohibition of corrupt, fraudulent, collusive, or coercive practices in connection with the award and administration of contracts and procurement.
30. The employees, personnel, representatives, agents, contractor or affiliates of a Party, including the personnel engaged by a Party for carrying out any of the Activities pursuant to this Agreement, shall not be considered in any respect for any purposes whatsoever as being employees, personnel, representatives, agents, contractors or affiliates of the other Party, nor shall employees, personnel, representatives, agents, contractors or affiliates of the other Party be considered, in any respect or for any purposes whatsoever, as being employees, personnel, representatives, agents, contractors or affiliates of a Party. Neither Party shall be entitled to act or make legally binding declarations on behalf of the other Party. Nothing in this Agreement shall be deemed to constitute a joint venture, agency, interest grouping or any other kind of formal business grouping or entity between the Parties.
31. This Agreement and the activities carried out thereunder are subject to ADB's Anticorruption Policy (1998) and Integrity Principles and Guidelines (2015), both as amended from time to time. WWF-Pakistan shall comply with ADB's Anticorruption Policy and will also ensure compliance therewith by any legal entity or individual they engage using all or any part of the Funds provided by ADB under this Agreement. ADB reserves the right to investigate directly, or through its agents, any alleged corrupt, fraudulent, collusive or coercive practice or other integrity violation relating to this Agreement, the Activities or the use of the Funds. WWF-Pakistan shall cooperate with any such investigation and extend all necessary assistance for satisfactory completion of such investigation.
32. WWF-Pakistan further acknowledges that ADB's Anticorruption Policy (1998) requires staff, beneficiaries, consultants, bidders, suppliers and contractors involved in carrying out the Activities to observe the highest standards of ethics and personal integrity. Any party found in breach of ADB's Anticorruption Policy may be subject to sanctions and other remedial actions in accordance with ADB's policies, including the Integrity Principles and Guidelines. Any entity or individual debarred or temporarily suspended in accordance with the Integrity Principles and Guidelines will be ineligible to participate in activities financed by or related to this Agreement.
33. WWF-Pakistan recognizes ADB's privileges and immunities under the Agreement Establishing the Asian Development Bank, including ADB's immunity from every form of legal process and judicial proceedings. Nothing in or related to this Agreement shall be deemed a waiver, express or implied, of any of the privileges and immunities of ADB.

34. WWF-Pakistan will indemnify ADB against, and hold ADB harmless from, all losses, claims, liabilities, damages, demands, actions, or proceedings whatsoever arising out of or in connection with the implementation of the Activities.

35. ADB undertakes no responsibility in respect to life, accident, travel, or any insurance coverage of the personnel of WWF-Pakistan, or any service providers engaged by WWF-Pakistan or for the dependents of any such persons who may travel for the purpose of carrying out the Activities or for claims by third parties resulting from carrying out the Activities.

36. Neither Party shall use the name, emblem of the other Party, or any abbreviation thereof, in connection with its business or for public dissemination without the prior written approval of the other Party in each case. In no event shall authorization to use the ADB or WWF-Pakistan name or emblem be granted for commercial purposes. WWF-Pakistan acknowledges that it is familiar with the independent, international and impartial status of the other Party, and recognizes that their names and emblems may not be associated with the status of the ADB and WWF-Pakistan respectively. The Parties agree to recognize and acknowledge this relationship, as appropriate. To this end, the Parties shall consult with each other concerning the manner and form of such recognition and acknowledgement.

37. If audit discloses that ADB's financial contribution has not been used by WWF-Pakistan in accordance with the terms of this Agreement, ADB and WWF-Pakistan shall consult each other and agree remedial actions as appropriate, taking into account the respective contribution by ADB and WWF-Pakistan pursuant to this Agreement. The remedial action may include the refund by WWF-Pakistan to ADB of ADB's financial contribution in part or in full in US dollars. Any exchange losses from the conversion in other currencies shall be borne by WWF-Pakistan.

38. The use of ADB funds transferred by ADB to WWF-Pakistan shall be subject to the internal and external auditing procedures provided for in the financial regulations, rules, and directives of WWF-Pakistan. Should the audit report contain observations concerning the Activities and/or the financial management of the Funds, WWF-Pakistan shall promptly provide such information as requested by ADB in connection with the audit.

39. This Agreement shall be governed by general principles of international law, to the exclusion of any single national system of law.

40. Any notice required or permitted to be given or made under this Agreement shall be in writing. Such notice or request shall be deemed to have been duly given or made when it shall be delivered by hand or by mail, facsimile, or electronic mail to the party to which it is required or permitted to be given or made at such party's address as specified at the end of this Agreement or at such other address as such party shall have designated by notice to the party giving such notice or making such request.

41. Nothing contained herein shall be construed as establishing or creating between ADB and WWF Pakistan a relationship of master and servant or principal and agent.

42. Nothing contained herein shall be construed as changing, superseding, nullifying, or otherwise creating any effect whatsoever on the existing Memorandum of Understanding signed between ADB and WWF International in 2001.

43. In the event of a dispute, controversy, or claim arising out of or relating to this Agreement, including a dispute as to the validity or existence of this Agreement and/or this clause, the Parties shall use their best efforts to amicably settle any differences and disputes through direct negotiation. Any dispute, controversy, or claim that remains unresolved within eighty (80) days from the date either Party has notified the other Party of the nature of the dispute and of the measures that should be taken to rectify it, shall be referred to arbitration under the Rules of Arbitration of the International Chamber of Commerce by a single arbitrator appointed in accordance with the said rules. The arbitration will take place in Manila, Philippines. The resulting award shall be final and binding on the Parties and shall be in lieu of any other remedy. The language of arbitration shall be the English language.

44. AS WITNESS WHEREOF, the Parties hereto, acting through their representatives thereunto duly authorized, have caused this Agreement to be signed in their respective names at the day and year first above written.

Signatures

For and behalf of
Asian Development Bank:

For and behalf of
World Wide Fund for Nature - Pakistan:

[This information has been removed as it falls within exceptions to disclosure specified in paragraph 97 (vii) of ADB's Public Communications Policy (2011).]

Werner Liepach
Director General
Central and West Asia Department

Hammad Naqi Khan
Director General
World Wide Fund for Nature, Pakistan

Date: _____ 14 Feb 2018 _____

Date: _____ 15 Feb 2018 _____

Contact Details

Contact Persons for
Asian Development Bank:

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[This information has been removed as it falls within exceptions to disclosure specified in paragraph 97 (vii) of ADB's Public Communications Policy (2011).]

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**Knowledge Partnership Agreement between Asian Development Bank and World Wide
Fund for Nature Pakistan
Terms of Reference**

A. Background and Purpose

1. The ADB Knowledge and Support Technical Assistance 51324-001 Pakistan: Revitalizing the Ecosystem of Ravi River Basin (“the TA”) was approved in December 2017 and will work for 18 months upon effectivity to develop a plan to revitalize and build resilience in the Ravi River Basin in Punjab. The river basin is being heavily polluted from urban, industrial, and agricultural wastes, and this is creating major human health, food, and water safety risks. Climate change impacts may alter the river’s flow and increase floods and droughts that worsen pollution risks. These risks will continue to worsen without urgent action by the government and society. The TA will support activities to (i) assess the pollution problem, (ii) identify and close institutional gaps, (iii) raise awareness, and most importantly, (iv) develop a long-term plan to revitalize and build resilience in the basin, with detailed investment recommendations. The TA is being administered by the Environment, Natural Resources, and Agriculture Division of ADB’s Central and West Asia Department.
2. The TA will deliver two outputs that prepare for long-term ADB support. Output 1 will be the first comprehensive assessments of the pollution situation in the basin, its health impacts, its risks and vulnerabilities from climate change, and its related institutional gaps and development needs, including identifying lessons learned and best practices from previous initiatives. Output 2 will develop a long-term, multi-sectoral plan to revitalize and build resilience in the basin, including recommendations for investment projects and institutional reforms. Future investments may include urban planning and wastewater treatment, industrial and agricultural effluent control, solid waste management, surface water and groundwater storage and control infrastructure, or waterborne disease control. Institutional reforms may include setting up a river basin management agency, strengthening the Punjab Environment Protection Department, or agreeing more flow transfers to Ravi using Punjab’s system of link canals, among others.
3. The results of Output 1 will raise public awareness to make the scale of the problem clear and create the support needed to achieve Output 2. These outputs will result in the following outcome: Environmental water management in the Ravi River Basin improved. The TA will be aligned with the following impact: Water quality in the Ravi River Basin in Pakistan improved.
4. The Parties will enter this Knowledge Partnership Agreement (“Agreement”) within the framework of the TA. The Parties will collaborate within TA Output 1 to improve their understanding of the nature of pollution discharges from large industries and small and medium enterprises (SMEs) in the river basin, and the risk of these discharges to ecosystems in the river basin. The Parties will collaborate within TA Output 2 to engage these industries and SMEs in the river basin planning process – to raise their awareness on the risks and impacts of their pollution discharges and on cost-efficient ways to reduce their pollution, including through nature-based treatment options.
5. The Agreement will support the existing Memorandum of Understanding between ADB and WWF International, signed in 2001, which encourages cooperation and joint programming between ADB and the WWF Network toward sustainable management of natural resources in Asia and the Pacific. ADB and WWF have held annual consultations since 2002 to review progress of MOU activities, discuss new areas of focus and conduct joint programming. Currently, sectoral and thematic collaborations focus on natural capital, ecosystem-based adaptation, nature-based tourism, green business, sustainable fisheries, air quality, and water and forest

management. Additionally, the partnership holds joint forums and stakeholder consultations, shares information, manages knowledge, builds capacity, and exchanges staff.

B. Scope of Work

6. WWF-Pakistan, with the support of ADB, will provide research, advisory support, and public engagement on industrial pollution assessment and ecosystem assessment, and facilitation on nature-based industrial investment in pollution control in the Ravi River basin. WWF-Pakistan will facilitate work within the context of the TA to improve understanding of the nature and risk of pollution discharges from large industries and SMEs to ecosystems in the river basin, and to help engage industries and SMEs in the river basin planning process.

7. The overall implementation arrangements for the TA includes this Agreement with WWF-Pakistan and an international consulting firm that will lead most of the TA outputs. WWF-Pakistan and the firm will each be responsible for separate deliverables, but are expected to coordinate and cooperate closely during their work.

8. The Parties agree to consult each other to ensure that the following outputs are delivered in a timely manner, of high quality, well-presented, reach target audiences, and help to achieve the outcomes of the TA in line with the objectives of the Agreement.

9. Output 1: Successfully document and assess ecosystem characteristics and the industrial pollution situation in the river basin, and recommend water quality and pollution control knowledge management and data sharing systems.

Activities will include:

- Conduct a stakeholder mapping relevant to industrial pollution. Stakeholders will include local administration and government, civil society, research / academia groups, and local industries, corporations, and chambers of commerce.
- Desk review of existing data / information on the environmental characteristics / ecosystems within the river basin, and to review previous river basin management efforts by the government, WWF, peer organizations, academia and others.
- Consultation meeting(s) with relevant stakeholders for identification of relevant sampling sites (hotspots for industrial pollution) and to develop data sharing and monitoring systems for water quality and pollution.
- Providing technical assistance to ADB for identifying hotspots and developing monitoring systems for water sampling according to pre-defined sampling protocols.
- Facilitate consultant in developing baseline assessment report on selected sampling sites for pollution reduction, including advising on the ToRs and outline for the assessments.
- Propose and develop integrated data / knowledge management techniques for the basin, e.g., modifying WWF-Pakistan's "Basin Assessment Scenario Intervention Tool" (BASIT).

Deliverables from these activities that together generate the Output will include:

- Report on industrial / corporate stakeholder mapping and desk review of ecosystem characteristics.
- Recommendations on identification of industrial pollution hotspots and developing baseline ecosystem assessment.
- Report and meeting summaries with recommendations and techniques for knowledge management and data sharing system on water quality and pollution control.

10. Output 2: Successfully undertake multi-stakeholder visioning exercises and training to support the planning process to revitalize the river basin.

Activities will include:

- City-Wide Partnership forum sessions on cleaner production techniques in industries targeting at least three major cities in the river basin (the same cities targeted by the TA, tbd.).
- Advocate (through the TA Steering Committee) and subsequently assist the government with development / strengthening of a Ravi Industrial Pollution Management Cell (IPMC).
- Capacity building sessions on the implementation of Alliance for Water Stewardship (AWS) standards as a tool for industry to minimize pollution in the river basin in a stakeholder inclusive manner. (AWS provides a consistent framework for industry to work with relevant stakeholders to minimize their impact on important water bodies in their catchment area.)
- Facilitate consultant in developing multi-stakeholder visioning report. Assist with stakeholder linkages and networking through WWF's platforms. Input on an analytical framework for the plan.

Deliverables from these activities that together generate the Output will include:

- Report on recommendations emanating from City Wide Partnership sessions.
- Report with recommendations on the IPMC formation and for the multi-stakeholder visioning report.
- Report on the AWS sessions.

11. Output 3: Successfully provide inputs to the revitalization and resilience plan for the basin, focused on industrial pollution planning and nature-based pollution control.

Activities will include:

- Assessment and recommendations, based on previous studies conducted by WWF-Pakistan and others, and through stakeholder engagement platforms (e.g., River Ravi Commission, Hudiara drain study), for feasible solutions for mitigating industrial pollution in the river basin.
- Supporting discussions with the private sector to leverage their investment in the river basin planning actions.
- Assessment report developed after consultation with IPMC stakeholders on cost-effective industrial effluent treatment options, including but not limited to nature-based treatment solutions, bio-remediation, combined effluent treatment units (ROs, anaerobic digesters) versus increased flow quantities through improved environmental flows, and also including business case for industries to upgrade their existing technology for improved environmental performance, to be included as recommendations in the river basin plan.
- Assist with conducting a gap analysis on legal, regulatory, and management systems / mechanism issues pertaining to industrial pollution.
- Assist with drafting of the revitalization plan through incorporation of findings and recommendations gleaned from the various assessments, reports, and multi-stakeholder sessions under this TA.
- Advise on the way forward, especially with regard to conducting pre-feasibility studies for solutions to address pollution in the river basin.

Deliverables from these activities that together generate the Output will include:

- Assessment report on industrial effluent treatment options and other recommendation for the revitalization plan and next steps

- Report on industrial pollution control gap analysis

C. Cost and Financing

The total cost of the work program described in this Agreement is estimated at \$115,346. The breakdown of this cost is as set out below. Appendix 2 gives details of these cost estimates.

ADB Financial Contribution	Financial contribution: \$100,000, which comprises: 1. Remuneration and per diem: \$48,000 2. Out-of-pocket expenses: \$20,505 3. Surveys and workshops/meetings: \$31,495
WWF-Pakistan Contribution (In-kind)	In-kind contributions: \$15,346
Total Financial Contributions	\$115,346

ADB = Asian Development Bank, WWF = World Wide Fund for Nature

Source: Asian Development Bank and World Wide Fund for Nature Pakistan estimates.

D. Outline of Work Plan

Milestone Payment	ADB Disbursement (USD)	Target Milestone Date	Activities to be Completed ¹
1 st	15,000	May 2018	- Inception report detailing work plan and staffing inputs, within one month of the effectivity of this Agreement
2 nd	30,000	December 2018	- Interim report detailing activities and outputs achieved to date and any issues arising - ADB's approval of Outputs 1a-1, 1a-2, and 1a-3
3 rd	25,000	December 2018	- ADB's approval of Outputs 2a-1, 2a-2, and 2d-1
4 th	5,000	April 2019	- Interim report detailing activities and outputs achieved to date and any issues arising
5 th	25,000	September 2019	- ADB's approval of Outputs 2b-1 and 2b-2 - Final summary report detailing activities and outputs achieved, lessons learned, and recommendations to ADB for follow-on work in the river basin

ADB = Asian Development Bank

¹ Output numbers correspond to the outputs as numbered in the "Linked WWF-Pakistan Outputs" column of the table below.

Source: Asian Development Bank.

Relevant TA Outputs	Linked WWF-Pakistan Outputs	Responsibility	Timeline	Assumptions	Cost Estimate
TA Management	Inception report detailing work plan and staffing inputs	WWF-Pakistan, collaborating closely with the international consulting firm	April to May 2018	KPA signed	(in kind)
TA Management	Interim report detailing activities and outputs achieved to date and any issues arising	WWF-Pakistan	December 2018	(none)	(in kind)

TA Management	Interim report detailing activities and outputs achieved to date and any issues arising	WWF-Pakistan	April 2019	(none)	(in kind)
TA Management	Final report detailing activities and outputs achieved, lessons learned, and recommendations to ADB for follow-on work in the river basin	WWF-Pakistan	September 2019	(none)	(in kind)
1. Comprehensive situation assessment of the river basin completed: - 1a: Pollution assessment report disseminated	Successfully document and assess ecosystem characteristics and the industrial pollution situation in the river basin, and recommend water quality and pollution control knowledge management and data sharing systems - 1a-1: Report on industrial / corporate stakeholder mapping and desk review of ecosystem characteristics - 1a-2: Recommendations on identification of industrial pollution hotspots and developing baseline ecosystem assessment - 1a-3: Report and meeting summaries with recommendations and techniques for knowledge management and data sharing system on water quality and pollution control	WWF-Pakistan, collaborating closely with the TA Steering Committee and the international consulting firm	April to December 2018	(none)	\$35,413
2. Environmental water management plan for the river basin completed: - 2a: Multi-stakeholder visioning report disseminated - 2d: Government officials improved their knowledge on environmental water	Successfully undertake multi-stakeholder visioning exercises and training to support the planning process to revitalize the river basin - 2a-1: Report on recommendations emanating from City Wide Partnership sessions - 2a-2: Report with recommendations on the IPMC formation and for	WWF-Pakistan, collaborating closely with the TA Steering Committee, the international consulting firm, and other relevant organizations, e.g., AWS representatives	April to December 2018	Stakeholders willing to engage in City Wide Partnership and AWS sessions	\$43,123

management from international exposure and training	the multi-stakeholder visioning report - 2d-1: Report on the AWS sessions				
2. Environmental water management plan for the river basin completed: - 2b: A final, long-term, multi-sectoral revitalization and resilience plan for the basin disseminated	Successfully provide inputs to the revitalization and resilience plan for the basin, focused on industrial pollution planning and nature-based pollution control - 2b-1: Assessment report on industrial effluent treatment options and other recommendation for the revitalization plan and next steps - 2b-2: Report on industrial pollution control gap analysis	WWF-Pakistan, collaborating closely with the TA Steering Committee and the international consulting firm	December 2018 to September 2019	IPMC formed or stakeholders engaged with this mandate	\$21,464

ADB = Asian Development Bank, AWS = Alliance for Water Stewardship, IPMC = industrial pollution management cell, KPA = knowledge partnership agreement, TA = technical assistance, WWF = World Wide Fund for Nature.
Source: Asian Development Bank and World Wide Fund for Nature Pakistan estimates.

E. Milestone Payment based on Achievements

Note: Joint milestones may be invoiced concurrently or individually in a different sequence to that shown above or in advance of the indicated target date subject to completion of the work items.

**Knowledge Partnership Agreement between Asian Development Bank and World Wide Fund for Nature Pakistan
Detailed Cost Estimates**

**[This information has been removed as it falls within exceptions to disclosure specified in paragraph 97 (iv)-(v) of ADB's
Public Communications Policy (2011).]**