



Reducing Transboundary Degradation in the Kura-Aras River Basin

FINAL TERMINAL EVALUATION REPORT

KAP/1375 (GEF)/2272 (UNDP)



David G. Aubrey, Ph.D.

July 2014

**Reducing Transboundary Degradation in the
Kura-Aras River Basin**

FINAL TERMINAL EVALUATION REPORT

KAP/1375 (GEF)/2272 (UNDP)

**Terminal Evaluation: November 2013-July 2014
International Waters
UNDP**

**Terminal evaluation by
Dr. David G. Aubrey**

ACKNOWLEDGMENTS

The Terminal Evaluator would like to thank all those who facilitated this Terminal Evaluation, including those connected with the Kura-Aras GEF Project in various capacities: participants, stakeholders, national focal points, government individuals, NGOs, international institutions, and others committed to effective governance of ecosystems of the Kura-Aras River Basin. Names of those who personally contributed during interviews or via questionnaires (or both) are included in an annex. Although the list of people who facilitated this review in some sense is long, I would like to highlight certain key individuals: the Kura-Aras Project Chief Technical Advisor/Project Manager, Dr. Mary Matthews, and her staff, all of whom worked with the Evaluator during the TE process; Kura-Aras Steering Committee Members; *inter alia*. Ms. Matthews and Mr. Harald Leummens provided numerous hours of relevant discussions on various topics related to the TE, and voluminous emails. The Kura-Aras Project Coordinating Unit (PCU) staff assured that I had full access to reports and other products of the project, to allow the evaluation to proceed. Ms. Maka Ogichava provided logistical, financial, and other support during this effort.

Dr. Vladimir Mamaev of the Regional Center in Bratislava and Dr. Andrew Hudson of UNDP/New York provided guidance at various phases of this project. UNOPS helped to facilitate this TE.

The ultimate stakeholders of this process contributed to the completion of the TE: although it is always welcome to include even more stakeholders than possible in the interview process, those that did contribute did so selflessly and openly.

TABLE OF CONTENTS

ACKNOWLEDGMENTS	II
TABLE OF CONTENTS	III
EXECUTIVE SUMMARY	V
TABLE OF ACRONYMS	X
1. INTRODUCTION	12
2. PROJECT DESCRIPTION AND DEVELOPMENT CONTEXT	14
2.1 Problems to be addressed	14
2.2 Major threats to the Kura-Aras region	14
2.3 Main Stakeholders	15
2.3 Baseline Indicators	15
2.4 Inception Phase	16
2.5 Expected results	16
3. FINDINGS	33
3.1 Project Design / Formulation	33
Assumptions and Risks:	33
Planned stakeholder participation:	34
Replication approach:	38
UNDP comparative advantage:	38
Linkages between project and other interventions within the sector	39
Management arrangements	39
3.2 Project Implementation	39
Adaptive management (changes to the project design and project outputs during implementation)	39
Feedback from M&E activities used for adaptive management	41
Project Finance:	41
Monitoring and evaluation: design at entry and implementation	44
UNDP and Implementing Partner implementation / execution (*) coordination, and operational issues	44
3.3 Project Results	46
Overall results (attainment of objectives) (*)	46
Relevance	47
Effectiveness and Efficiency:	47
Country Ownership	48
Mainstreaming	49
Sustainability	49
Impact	50
4. CONCLUSIONS, RECOMMENDATIONS AND LESSONS LEARNED	54
4.1 Corrective actions for Design, Implementation, Execution and M&E of project	55
4.2 Follow-up Actions	56
4.3 Future Directions	56
4.4 Recommendations:	57

4.5 Lessons learned:	57
5. ANNEXES	58

EXECUTIVE SUMMARY

Project Details:

PROJECT TITLE:	Reducing Transboundary Degradation in the Kura-Aras River Basin
COUNTRY:	Armenia, Azerbaijan, and Georgia
GEF AGENCY:	UNDP-RBEC
PROJECT EXECUTING AGENCY:	UNOPS
DURATION:	3 years: Spring 2011 through June 2014 (extended)
GEF FOCAL AREA:	International Waters
GEF OPERATIONAL PROGRAM:	OP #9: Integrated land and water multiple focus operational program
GEF STRATEGIC PRIORITY:	IW SP2: Protection of transboundary surface and groundwater resources in a changing climate
AGENCY'S PROJECT ID:	PIMS 2272
GEFSEC PROJECT ID:	1375

Project Description:

The Project for Reducing Transboundary Degradation in the Kura-Aras River Basin addressed transboundary water resource and environmental issues towards the sustainable management of the basin, as identified in priority sequence through the completion of the Transboundary Diagnostic Analysis (TDA) process, and addressed in an agreed Strategic Action Program (SAP) of policy, legal and institutional reforms, and priority investments. GEF funding was used for finalization of the comprehensive TDA and SAP, and the implementation of targeted water quality demonstrations identified as priorities in the preliminary TDA/SAP. The SAP development was closely linked to national IWRM plans. A phased approach is planned that progressively builds the knowledge base and strengthens technical, managerial and decision-making capabilities at the national and regional scales so as to address environmental concerns and transboundary developments (in all relevant sectors); builds political will to undertake threat abatement activities; and leverages finances proportionate to management and governance needs.

The global environmental benefits were to be achieved through the use of Integrated Water Resources Management (IWRM) policies to balance competing and conflicting uses of water resources to inform and consider tradeoffs being made in socio-economic development objectives and ecosystem protection. The project was to establish an enabling framework for the preservation of transboundary water resources in an extremely political sensitive area facing challenges from reduction of hydrological flow, deterioration of water quality; ecosystem degradation in the river basin; and increased flooding and bank erosion (river bank erosion was later de-emphasized as it was an issue primarily between Iran and Azerbaijan, and Iran did not participate in the Project). Additional global benefits were to be achieved through the maintenance of the hydrological flows and patterns, and riverine environment that are important in the conservation of natural spawning grounds of the sturgeon and other anadromous fishes of the Caspian sea.

Evaluation Rating Table:

The ratings for this project are as follows. Details for the ratings are included in the Evaluation body itself.

Rating Table for Project Performance: Note that this table is based on concept that a HIGHER score indicates BETTER performance

Rating Project Performance		
Criteria	Comments	
monitoring and Evaluation: Highly Satisfactory (6), Satisfactory (5) Moderately Satisfactory (4), Moderately Unsatisfactory (3), Unsatisfactory (2), Highly Unsatisfactory (1)		
Overall quality of M&E	(rate 6 pt. scale)	4 (out of 6)
M&E design at project start up	(rate 6 pt. scale)	5 (out of 6)
M&E Plan Implementation	(rate 6 pt. scale)	5 (out of 6)
IA & EA Execution: Highly Satisfactory (HS-6), Satisfactory (S-5) Moderately Satisfactory (MS-4), Moderately Unsatisfactory (MU-3), Unsatisfactory (U-2), Highly Unsatisfactory (HU-1)		
Overall Quality of Project Implementation/Execution	(rate 6 pt. scale)	5 (out of 6)
Implementing Agency Execution	(rate 6 pt. scale)	4 (out of 6)
Executing Agency Execution	(rate 6 pt. scale)	3 (out of 6)
Outcomes 1: Highly Satisfactory (HS-6), Satisfactory (S-5) Moderately Satisfactory (MS-4), Moderately Unsatisfactory (MU-3), Unsatisfactory (U-2), Highly Unsatisfactory (HU-1)		
Overall Quality of Project Outcomes	(rate 6 pt. scale)	4 (out of 6)
Relevance: relevant (R or 2) or not relevant (NR or 1)	(rate 2pt. scale)	2 (out of 2)
Effectiveness	(rate 6 pt. scale)	4 (out of 6)
Efficiency	(rate 6 pt. scale)	5 (out of 6)
Sustainability: Likely (4); Moderately Likely (3); Moderately Unlikely 2); Unlikely (1).		
Likelihood of Sustainable Future	(rate 4pt. scale)	3(out of 4)
Financial resources	(rate 4pt. scale)	3 (out of 4)
Socio-economic	(rate 4pt. scale)	3 (out of 4)
Institutional framework and governance	(rate 4pt. scale)	3 (out of 4)
Environmental	(rate 4pt. scale)	2-3 (out of 4)
Impact: Significant (3), Minimal (2), Negligible (1)		
Environmental Status Improvement	(rate 3 pt. scale)	1 (out of 3)
Environmental Stress Reduction	(rate 3 pt. scale)	2 (out of 3)
Progress towards stress/status change	(rate 3 pt. scale)	2 (out of 3)
Overall Project results	(rate 6 pt. scale)	4 (out of 6)

Scale for Ratings: A larger value indicates a better rating

ratings Scales		
ratings for Outcomes, Effectiveness, Efficiency, M&E, I&E Execution	Sustainability ratings:	relevance ratings
6: Highly Satisfactory (HS): The project had no shortcomings in the achievement of its objectives in terms of relevance, effectiveness, or efficiency 5: Satisfactory (S): There were only minor shortcomings 4: Moderately Satisfactory (MS):there were moderate shortcomings 3: Moderately Unsatisfactory (MU): the project had significant shortcomings 2: Unsatisfactory (U): there were major shortcomings in the achievement of project objectives in terms of relevance, effectiveness, or efficiency 1: Highly Unsatisfactory (HU): The project had severe shortcomings	4. Likely (L): negligible risks to sustainability 3. Moderately Likely (ML):moderate risks 2. Moderately Unlikely (MU): significant risks 1. Unlikely (U): severe risks	2. Relevant (R) 1. Not relevant (NR) Impact Ratings: 3. Significant (S) 2. Minimal (M) 1. Negligible (N)
Additional ratings where relevant: Not Applicable (N/A) Unable to Assess (U/A)		

Project Financing is shown in the table below:

Co-financing Table: Kura-Ara(k)s River Basin Project

Co financing (Type/ Sources)	IA own Financing (mill US\$)		Government (mill US\$)		Other Sources* (mill US\$)		Total Financing (mill US\$)		Total Disbursement (mill US\$)	
	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual
Grant	\$2.9 m	\$2.9 m					\$2.9 m	\$2.9 m	\$2.9 m	\$2.9 m
Credits										
Equity										
In-kind			\$30.1 m	\$1.8 m	\$8.8 m	\$13.3m	\$38.9 m	\$40.7 m	\$38.9 m	\$40.7
Non-grant Instruments*										
Other Types										
Total			\$30.1 m	\$1.8 m	\$8.8 m	\$13.3 m	\$41.8m	\$43.6 m	\$41.8m	\$43.6 m

Summary of conclusions, recommendations and lessons

The conclusions from the Evaluation are provided above in the Ratings for the project. Overall, the rating for the project was Moderately Satisfactory (there were moderate shortcomings). This rating as described below is partly based on failure to achieve a 3-country SAP (though a 2-country, endorsed SAP was achieved). Significant achievements of the project include delivery of a large volume of studies and reports, and approved IWRM plans and SAP endorsed by two countries. Significant country ownership of most products, including the IWRM and SAP, was achieved.

The top rating of Satisfactory was for Efficiency of the outcomes, reflecting the tremendous work achieved on a rather minimal GEF full project budget. This Satisfactory rating was provided because of the strong dedication and work ethic of the PCU staff and stakeholders. The Kura-Aras River Project Document, as written, was a nearly impossible project to carry out as it was complex and all-

encompassing for the budget assigned to it. Despite this, the countries assisted by the PCU were able to accomplish nearly all of the tasks (exceptions being one item in Public Participation which made it to the final Project Document, though apparently not intended to be completed; some meeting minutes; no new IWRM plan for Armenia), and to exceed the expectations in some instances (inclusion of public participation in an existing regional forum; content of two IWRM plans; country ownership). Although some areas of project implementation were less than satisfactory (interaction of local UNDP offices with the Project office, Execution Agency delivery, quality of some of the products (such as some of the technical documents, the SAP being somewhat weak compared to other regional river-basin projects, etc.), SAP reflecting two countries rather than all three), in general all project outcomes were achieved in spite of restrictive budget.

Corrective actions are identified in the final section of the Terminal Evaluation, to guide GEF, IAs, and EAs in designing, implementing, executing, and monitoring/evaluating complex IW waters projects that include several countries. Though not the largest IW foundational project for surface waters, the stresses imposed by requisite interactions amongst the mutually reserved governments and the myriad of stakeholders puts a high premium on effective project management, including negotiation skills.

Follow-up actions are provided for this project, including:

- Azerbaijan and Georgia have endorsed the SAP. This endorsement will pave the way towards future GEF intervention.
- A follow-on GEF project focused on SAP implementation should be developed by UNDP and approved by the GEF IW. There is currently national ownership of the IWRM concept for the Kura-Aras region in all countries, but in this human resource challenged region, the leadership of GEF towards developing sustainable policy and governance for the Kura-Aras River in the two SAP agreed countries (Azerbaijan and Georgia) is crucial and momentum should not be lost.

Future Directions are recommended:

The next GEF-able activity should focus on SAP implementation. The objectives of this SAP implementation could include: To deliver and execute the agreed management reforms and policy realignments for effective long-term river basin and ecosystem management in the Kura-Aras River Basin in line with an endorsed Strategic Action Programme; Integrated water resources management in the Kura Aras river basin to strengthen sustainable development, through the implementation of agreed actions in the SAP.

For UNDP, the SAP implementation should focus on core strengths of UNDP, including components addressing:

- Executing Management and Policy Reforms through a Knowledge-Based Governance Mechanism
- Secure improved Stress Reduction within the IW projects through Community empowerment in the SAP Management Process
- Deliver Private Sector/Industry Commitment to and execution of Stress Reduction activities and transformations in management practices
- Realignments in Institutional Arrangements for stronger coordination and partnerships
- The project should move into the SAP implementation under GEF support. These steps should take place quickly so momentum is not lost.

Finally, lessons learned are outlined:

- GEF and the IAs should take measures to restrict projects to reasonably achievable numbers of outputs and activities. Although GEF, STAP and Agency comments always want to see more out of a project, care must be taken to limit the outputs and activities to a level that is achievable with the resources allocated. In this case, for a budget of less than \$3 million, it is not reasonable to expect a full TDA and SAP process, particularly when gaps in knowledge are so profound, as identified during the project identification stage.
- Tensions between the Implementing Agency and the GEF Projects that fall under their purview should be ironed out early by the IA, to avoid conflicts that may affect successful project outcomes. UNDP projects within IW waters are a case in point, as the UNDP is represented not only by a lead UNDP country office (or alternatively, all three country offices), but as well by the UNDP/GEF IW office, and finally (in this case) a Regional Office (UNDP-RBEC). If adequate coordination and alignment between the UNDP players involved are missing, management attention may be drawn away from the project itself, to address what are essentially intra-agency issues. Such tension in IA coordination places a burden on the project staff, even though they are not responsible for this structure. The net result is that project staff has to work harder at coordination, diverting their focus from outcomes/outputs. With a small project staff (as in this project), such diversion is counter-productive.
- Executing Agency backstopping should pay particular attention to the full training of the Financial Administrative staff, as much of the financial tracking has devolved to the project level given the EA's inability to track output-based costs as opposed to input-based costs. Lacking effective financial administration, planning and implementation by the Project Manager may be seriously hampered.
- Private sector needs to be a key player even in foundational capacity building activities of the GEF, in order to secure a higher probability for long-term sustainability of interventions. Private sector is a key to project sustainability.
- Project management for highly complex, multi-national (3) projects characteristic of IW interventions must be backed by sufficient financial resources to allow interaction and close negotiations with all participating countries at high governmental levels, particularly for projects such as this where political differences are rife.
- The artificial limitation by GEF of 10% of budget spent on Project Management is unrealistic, and does not reflect the actual requirements, particularly in a complex political situation as exists in the Kura-Aras River basin. Percentage targets sound fine, but there is a minimum level of project management required that MUST be addressed, regardless of what percentage of the total project it represents.

TABLE OF ACRONYMS

Acronym	Definition
APR/PIR	Annual Performance Report (APR)/Project Implementation Review (PIR)
ATLAS	UNOPS accounting/management system
CB&T	Capacity Building and Training
CBA	Cost Benefit Analysis
CO	Country Office
COG	Coordination Group
CPAP	UNDP Country Programme Action Plan
D&I	Data and Information
DoA	Delegation Of Authority
EA	Executing Agency
EBM	Ecosystem Based Management
EC	European Commission
EE	Environmental Education
ENVSEC	Environment and Security Initiative
EQO	Ecosystem Quality Objective
EU	European Union
EU-JRC	European Union Joint Research Center
FA	Financial Administrator
FP	Focal Point
GEF	Global Environment Facility
GEFSEC	GEF Secretariat
GHG	Green House Gas
GIS	Geographic Information System
HQ	Headquarters
HS	Highly Satisfactory
HU	Highly Unsatisfactory
IA	Implementing Agency
ICA	International Consultancy Agreement
ICZM	Integrated Coastal Zone Management
IGAD	Intergovernmental Authority of Development
IGO	Intergovernmental Organisation
IMC	Inter-Ministerial (Sectoral) Coordination
IUCN	International Union for Conservation of Nature
IW	International Waters
IW:LEARN	International Waters: Learning Exchange And Resources Network
IWC	International Waters Cluster (also, International Waters Conference)
IWRM	Integrated Water Resources Management
LBA	Land-Based Activities
LF	Logical Framework Matrix
M&E	Monitoring and Evaluation
MS	Marginally Satisfactory
MTE	Mid-Term Evaluation
MU	Marginally Unsatisfactory
NAP	National Action Plan
NFP(s)	National Focal Point(s)
NGO(s)	Non-Governmental Organisation(s)
NWPD	National Water Policy Dialogue
P&G	Policy and Governance
PA	Procurement Authority
PAC	Policy Advisory Committee
PCU	Project Coordinating Unit
PDF	Project Development Facility

PDF-B	Project Development Facility, Stage B
PI	Process Indicators
PIF	Project Identification Form
PIR	Project Implementation Report (annual)
PSC	Project Steering Committee
QA	Quality Assurance
RR	Resident Representative
SAP	Strategic Action Programme
SHAG	StakeHolder Advisory Group
STAP	Scientific Technical Advisory Panel
SWOT	Strength-Weakness-Opportunities-Threats
TDA	Transboundary Diagnostic Analysis
TE	Terminal Evaluation
TOR	Terms Of Reference
TPR	Tripartite Review
TWAP	Transboundary Waters Assessment Programme
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNOPS	United National Office For Project Services
USA	United States of America
USGS	United States Geological Survey
USSR	Union of Soviet Socialist Republics
WG	Working Group
WSSD	World Summit on Sustainable Development
WWF	World Wildlife Fund

1. INTRODUCTION

The UNDP GEF project, “Reducing Transboundary Degradation in the Kura-Ara(k)s River Basin,” is a full-sized project with the participation of Armenia, Azerbaijan, and Georgia. The project has assisted the three Kura Ara(k)s riparian states to 1) identify the principal threats and root causes related to the transboundary water resources of the Kura Ara(k)s river basin and 2) develop and implement a sustainable program of policy, legal and institutional reforms and investments to address these threats. Balance overuse and conflicting use of water resources in transboundary surface and groundwater basins is seen as the critical issue in the Kura Ara(k)s basin, and is the principal focus of attention from the outset of the activities. The long-term development/environment goal of the project is the sustainable development of the Kura Ara(k)s river basin enhanced through ecosystem-based integrated Water Resource Management (IWRM) approaches.

The basin of the rivers Kura and Aras covers the territory of Armenia, Azerbaijan, Georgia, Iran, and Turkey. The total area of the Kura-Aras basin is approximately 188,400 km², occupying the greater part of the South Caucasus. As a percentage of the river basin area, Armenia has about 15.8%, Azerbaijan about 29.2%, and Georgia about 19.3%, for a total coverage of 64.3% of the total basin area. The remaining basin areas are in Iran (20.3%) and Turkey (15.3%). The Kura is the main water artery of the Caucasus. Its total length is 1,515 km. It originates at a height of 2,740 m in the Anatolian highland of Northeast Turkey in the Gizilgadik mountain range, winding its way through mountainous regions in Turkey, Georgia and Azerbaijan into the Caspian Sea. The main tributary of the Kura is the Aras.

The long-term development/environmental goal of the project is sustainable development of the Kura-Aras River Basin enhanced through ecosystem-based Integrated Water Resource Management approaches. The project objective is to improve the management of the Kura-Aras River Transboundary Basin through the implementation of a sustainable programme of policy, legal and institutional reforms and investment options using the Trans-boundary Diagnostic Analysis (TDA) and Strategic Action Programme (SAP) process.

This TE was conducted according to the guidance, rules and procedures established by UNDP and GEF as reflected in the UNDP Evaluation Guidance for GEF Financed Projects.

The objectives of the evaluation are to assess the achievement of project results, and to draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming.

An overall approach and method for conducting project terminal evaluations of UNDP supported GEF financed projects developed over time has informed the present evaluation. The evaluator framed the evaluation effort using the criteria of relevance, effectiveness, efficiency, sustainability, and impact, as defined and explained in the UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects.

A set of questions covering each of these criteria has been drafted and is included with this TOR. The evaluator has amended, completed and submitted this matrix as part of his evaluation inception report, and this matrix is included as an annex to the final report. A questionnaire was developed, covering the areas of relevance, effectiveness, efficiency, sustainability and impact.

The evaluator has reviewed many relevant sources of information, such as the project document, project reports – including Annual APR/PIR, project budget revisions, midterm review, progress reports, GEF focal area tracking tools, project files, national strategic and legal documents, and other materials that the evaluator considered useful for this evidence-based assessment. The comprehensive list of documents that the evaluator has reviewed is included as an Annex.

In addition to the review of the documents, the evaluation took advantage of a visit in the region, in November 2013. Taking advantage of regional meetings to enable more face-to-face contact, the visit to

Tblisi permitted not only interviews with staff in the Project Unit, but also participants from other countries.

These meetings permitted an extensive face-to-face interview process with more than one dozen individuals actively involved in the Kura-Ara(k)s project. It included project developers, implementers, executors, government officials, participants, and beneficiaries. Annex III provides a summary of who was interviewed, and Annex VI provides a summary of major findings from these interviews.

This report is structured as follows: first is a description of the project and its development context. Following is a discussion of major findings, broken into various categories as follows:

- Project Design/Formulation

- Project Implementation

- Project Results

The report is finalized by a set of conclusions, recommendations, and lessons learned. This section includes a ratings matrix as required by UNDP/GEF. Following this concluding section, a series of annexes is included, as required by the UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects.

2. PROJECT DESCRIPTION AND DEVELOPMENT CONTEXT

The rather extended period of project preparation began with the PDF-A in 2003 and extended through the Full Sized Project approval by the countries in January, 2011. In the interim, PDF-B phase that spanned between 2005-2008, the countries prepared a Preliminary Transboundary Diagnostic Analysis (TDA); conducted an institutional assessment and gender studies in a companion UNDP/SIDA component; and with UNDP Water implemented a Transboundary Water Governance Project that established a region-wide NGO Forum, and Stakeholder Advisory Group in conjunction with OSCE, USAID and ENVSEC. ENVSEC supported a bridging project to develop institutional mechanisms for a region-wide programme (Kura Aras Environment Programme). This regional mechanism was rejected by the countries, setting the stage for the approach used in the current project.

The Kura-Ara(k)s project began with an inception phase from January through July 2011. The project duration was three years, but that has been extended to June 2014 through re-programming of funds (three years plus the inception phase).

2.1 Problems to be addressed

According to the Project Document, the project sought to address the following problems:

“The long-term development/environmental goal of the project is sustainable development of the Kura-Aras River Basin enhanced through ecosystem-based Integrated Water Resource Management approaches.”

The **Project Objective** is “to improve the management of the Kura-Aras River Transboundary Basin through the implementation of a sustainable programme of policy, legal and institutional reforms and investment options using the Trans-boundary Diagnostic Analysis (TDA) and Strategic Action Programme (SAP) process”.

In line with achieving this **Project Objective**, The **Overall Project Deliverables** are:

- Acquisition of data needed to support an ecosystem-based approach to management of the Kura-Ara(k)s River basin, using concepts of Integrated Water Resources Management; and
- Updated TDA and full SAPs for the Kura-Ara(s) River Basin.”

The project objectives were to be accomplished with the following outcomes:

Outcome	
1	<i>Completion of Transboundary Diagnostic Analysis</i>
2	<i>Preparation of the National IWRM Plans and Strategic Action Programme (SAP)</i>
3	<i>Basin wide stakeholder involvement activities</i>
4	<i>Demonstration Projects on conflicting water use</i>

2.2 Major threats to the Kura-Aras region

The Preliminary TDA and the Project Document (both documents having been re-affirmed by the PSC) identified the human-induced threats to the Kura-Aras area as:

- variation and reduction in hydrological flow,
- deterioration of water quality,

- ecosystem degradation and
- flooding and bank erosion.

River bank erosion was dropped from the final TDA as it was largely an issue between Iran and AZ related to shifting river morphology and territorial definitions.

2.3 Main Stakeholders

The Project Document referenced an existing qualitative and quantitative Stakeholder Analysis for the region. The full project itself therefore did not need to perform a formal Stakeholder Analysis. The major stakeholders (used in a broad sense and not in the Agenda 21 sense) in the Kura-Ara(k)s River Basin include:

- those from government agencies and institutions in the following ministries and departments: Ministry of Water, Hydro-meteorology, Natural Resources, Ecology and Environment, Ministry of Industry, Ministry of Emergencies, Ministry of Energy, Ministry of Economy, Ministry of Foreign Affairs, Ministry of Defence, Ministry of Agriculture, Ministry of Forestry, Ministry of Fishery, Ministry of Social Welfare / Public Health, Ministry of Labour, Ministry of Transport and Parliamentary committees for environmental protection.
- regional and municipal administrators including: Regional government officials, District water management officials, Municipal Government and Municipal waste managers
- Industrial sectors included Mining industry, Heavy industry, Light industry, Tourism/Recreation industry, and Agro-industry representatives.
- National NGOs, Scientists, Nature preserve staff
- farmers, fishermen, pastoralists
- community based organizations
- educators/teachers, students
- public health care providers
- members of coastal communities
- press and media,
- international funding Institutions and bilateral development agencies.

2.3 Baseline Indicators

The Project Document identified various indicators addressing successful ecosystem-based IWRM in a transboundary sense. Major indicators identified by the Project Document include:

- The first indicator is a finalized TDA with the number of studies conducted to fill gaps and number of interventions identified. The sub indicators include: completed TDA with gaps filled for water quantity, hydrological flow data, land-based source of pollution, etc.; the environmental and Water Resources Status baseline; the long-term SAP M&E, to be carried out in close coordination with EU Kura-Aras project; agreement on final priority TB issues; identified immediate and root causes; the final TDA revised and updated; the number of copies of Final TDA disseminated; and, the number of visitors to webpage with Final TDA.
- The second indicator is budget commitments at regional and national level to National IWRM plans, and the SAP, agreement on the M&E framework, the number of coordinated policies. The sub indicators include: the percent of National IWRM plans budget committed by governments; the number of Ministries supporting SAP in each country; support for SAP from Steering Committee; the number of P, SR, and ES indicators agreed to within the M&E Framework; the number of donors attending conference held to mobilize resources for SAP and IWRM implementation; and, the amount pledged by donors at conference.
- The third indicator is the number of Stakeholder groups involved in water resource planning process, the number of Public awareness events or publications; and the range of Stakeholders

involved in project activities. The sub indicators include: the number of attendees at the Kura-Aras NGO Forum and number of meetings held; the number of Stakeholder Advisory Group meetings and number of inputs/recommendations at each meeting; number of stakeholder groups represented in the Stakeholder Advisory Group; the number of Communities participating in activities for improved water conditions; and the number of awareness raising and education activities for Stakeholders

- The fourth indicator is the number of assessment criteria developed to establish empirical measures for ecological flows and ecosystem assessment at key location for water resources management developed and implemented in the countries. The sub indicators include: Pilot demonstrations for the Kura-Aras basin to establish impacts for water resource development and the number of ecological assessment criteria at key locations in established areas.

Baseline conditions for major indicators are included in the revised Logical Framework Matrix which is shown as Table 1.

2.4 Inception Phase

During the Inception Phase, it was recognized that the Project had been a long time in gestation (2003 to 2011), although the Project Document was only recently (January 2011) approved by countries. As a result, a new workplan was established, and the Logical Framework Matrix (Strategic Results Framework) was updated. The updates included in the Inception Report were relatively minor. Following the Mid-Term Evaluation, yet another Logical Framework Matrix update was developed. This one had more substantive changes, reflecting the nature of the project at that time.

This Evaluation focuses on the final updated Logical Framework Matrix. Appendix VIII includes copies of all three Strategic Results Frameworks for information.

2.5 Expected results

The Project Document projected the following expected results:

Through linkages with the well-established Caspian Environment Programme, the Kura-Aras project could serve as a pilot towards broadening of the CEP to a truly basin-wide management framework similar, to what has emerged with GEF assistance in the Danube-Black Sea.

Global benefits: The global environmental benefits will be achieved through the use of Integrated Water Resources Management (IWRM) planning that have been identified as the answer to balancing competing and conflicting uses of water resources to inform and consider tradeoffs being made in socio-economic development objectives and ecosystem protection, and include:

- The project will establish an enabling framework for the preservation of transboundary water resources in an extremely political sensitive area facing challenges from reduction of hydrological flow, deterioration of water quality; ecosystem degradation in the river basin; and increased flooding.
- Additional global benefits will be achieved through the maintenance of the hydrological flows and patterns, and riverine environment that are important in the conservation of natural spawning grounds of the sturgeon and other anadromous fishes of the Caspian Sea, migratory bird species, and other flora and fauna.
- Preservation of the unique ecosystem of the Caucasus eco-region, increasing political stability through environmental cooperation in a geopolitically sensitive area, and testing activities that can be replicated elsewhere for integrated transboundary water management. The challenge in this project is the development of harmonized policies among nations who are at varying stages of development, with wide ranging priorities pertaining to water use.
- by trialing a number of innovative strategies, as well as employing coordination mechanisms this project will take an array of options into account and will devise a set of realistic activities and objectives that can be met by the participating countries. The lessons learned from this can be

translated to many of shared water systems and it is expected that refinement of the strategies will enable this and other projects to develop more fully in the future.

National – the national benefits will include:

- an improvement in water quality and water quantity management strategies, monitoring programmes and coordination with neighboring countries.
- Through prioritized objectives and increased policy harmonization, resources can be combined and will not need to be replicated at the national level alone.
- Countries can benefit from improved IWRM approaches and through long term sustainable development of water in the region. Benefits will include increase monitoring reliability, decrease impacts of significant flooding damages to infrastructure and economic development, increased activities of public, civil society and stakeholders in addressing water resource management challenges.

Local – the local benefits will be:

1. Improved conditions in water system health, including improved quality and quantity, as well as defined activities that can be undertaken by communities themselves to improve conditions.
2. By collaborating with civil society, and project staff, the local beneficiaries will gain a sense of control over their local circumstances, increase the ability to address these and learn from other stakeholders in neighboring countries.
3. Provide other communities and stakeholders with examples of low cost activities that can be undertaken to improve conditions pertaining to their impacts on and impacts from regional water management issues.

Table 1: Strategic Results Framework from post-Mid-term Evaluation

Overall Project Objective/ outcomes	Base line (at inception)	Verifiable Indicative Targets <i>Unless otherwise states these are targets for Project completion</i>	Means of Verification	Update description of implementation status at TE
<p>Goal: The overall goal of the Project is to contribute to improved management of the Kura-Aras River Basin's trans-boundary water resources through integrated Water Resources Management (IWRM) approaches that remediate threats and root causes.</p>				
<p>Purpose (Objective):</p> <p>To create an enabling framework for the long-term, sustainable integrated management of the Kura-Aras River Basin following IWRM principles</p>	<p>The preliminary TDA conducted during the preparatory stage, is based on desk studies produced by the GEF team. This work has identified a number of knowledge gaps to be filled, some of which will be addressed by GEF in the full size project, including water quantity, hydrological flow data, land-based source of pollution, etc.</p>	<p>Completed TDA with at least 3 main gaps filled on water quantity, hydrological flow data, National hotspots and regional water quality, and river biodiversity by June 2013</p> <p>Identification of at least 10 short, medium and long term interventions and pre-feasibility studies of priority interventions identified from TDA by September 2013</p>	<ul style="list-style-type: none"> • 3 Gap filling assessments on water quantity, hydrological flow data, and biodiversity • Updated and revised TDA endorsed by the countries. • Revised CCA in line with IWRM Best practices • Pre-feasibility studies • TDA disseminated widely 	<ul style="list-style-type: none"> • 6 gap-filling assessments include: <ul style="list-style-type: none"> ○ Floodplain study literature review completed in draft to be completed in June 2014; ○ Climate change Desk Study ○ Trend Analysis desk study completed ○ Hydrology desk study and water quality desk study to be completed in June 2014 ○ Gender Mainstreaming Study Pending PSC Approval • 2013 Updated TDA completed in full, approved for the countries by the NFPS; distributed to 200 different entities. • Causal chain analysis updated and revised, included into national IWRM plans and SAP. • 35 Short, medium and long term interventions and pre-feasibility studies for priority interventions identified in the SAP • 2013 Updated TDA distributed through web page – 313 downloads in first week of release
	<p>At present there is no regional basin wide management through which a regional IWRM approach can be applied. The donor supported</p>	<p>Amount from national budgets (total inter-sectoral) and donors allocated to support IWRM plans and SAP activities as appropriate by March 2014</p>	<ul style="list-style-type: none"> • Strengthened National IWRM plans agreed by each country • Provisions for National IWRM Plans budgets committed to by 	<ul style="list-style-type: none"> • Updated draft IWRM plans for Georgia and Azerbaijan prepared and under consideration by country authorities – not yet approved at national levels. Should be completed by June 2014. • Armenia NAP based on TDA – draft dated May 2014, to be finalized by June 2014. • SAP prepared and under review by countries, including 10 common

Overall Project Objective/ outcomes	Base line (at inception)	Verifiable Indicative Targets <i>Unless otherwise states these are targets for Project completion</i>	Means of Verification	Update description of implementation status at TE
	potential collaborative mechanisms have so far been of limited success. Support for national level IWRM policies will provide the foundation for an eventual regional strategy. Each country is moving towards development of IWRM plans, but at different rates. There are no common IWRM policies at the regional level to date.	Commitment to National Monitoring and Evaluation Framework in place by March 2014 At least 4 common national IWRM policies from between all countries by March 2014	<ul style="list-style-type: none"> • Financial support sources for IWRM and common policies identified • Regional SAP supported by countries strengthening common IWRM Strategies • SAP M & E framework agreed 	<p>momentarily. Armenia apparently will not support the SAP.</p> <ul style="list-style-type: none"> • Donors meetings being held one-to-one to determine level of interest in co-financing SAP activities. In Azerbaijan, for instance, quasi-private sector entities are interested in participating. • NEXUS study initiated for Alazani River Basin with UNECE – preliminary introduction to methodology and approach for AZ and GE
	There is a little or no high level, multi stakeholder involvement in the water resource planning process, at the heart of the IWRM approach. There is a lack of general knowledge regarding the water resource issues and a clear need for public awareness raising and targeted education programmes.	At least 12 stakeholder groups involved in IWRM planning by December 2012 Recommend: Development of a regional IWRM Master's Curriculum with major regional universities At least 2 NGO Forum Meetings held by July 2013	<ul style="list-style-type: none"> • Stakeholder Advisory Group meeting regularly • NGO Forum Meetings regularly and regionally strengthened • Education and public awareness raising activities 	<ul style="list-style-type: none"> • Project representation at 3 National Water Policy Dialogue meetings between January 2013 and November 2013, with attendance of 20 stakeholder groups. • Presentation of National IWRM Plans/ NAP and SAP to members of the NRPD Steering Committee in each country with 10-15 stakeholder groups represented in each meeting and comments included in both IWRM Plans/NAP and SAP. • The 2nd NGO Forum "Gender mainstreaming, public health and Education ", was convened in July 2013, 25 participants, 10 recommendations for the PSC • Regional Curriculum for MSc course in IWRM prepared and agreed by 3 national universities • Training for Lecturers for IWRM Curriculum at BSU, TSU and YSUAC with UNESCO-IHE and Delft University. • Grant proposal for funding of teacher training in IWRM for Armenia and Georgia prepared and secured (NUFFIC), serving the start-up of the MSc course.

Overall Project Objective/ outcomes	Base line (at inception)	Verifiable Indicative Targets <i>Unless otherwise states these are targets for Project completion</i>	Means of Verification	Update description of implementation status at TE
				<ul style="list-style-type: none"> Continued relations with NGOs through project activities, and through National Water Policy Dialog Meetings <i>TDA Summary to be completed in June 2014 for wide distribution</i>
	<p>There is not sufficient information for establishing integrated water resource management within the basin at the national or regional level. Information on ecological flows and river ecosystems is incomplete for sustainable IWRM planning. All three countries are becoming familiar with the methodology of the EU WFD and the IWRM approach. Gaps in information pertaining to ecological conditions information limit full implementation of IWRM. The countries need approaches they can use to establish objectives and goals for water resource development</p>	<p>Assessments on ecological flows and river system ecology information status conducted in each country by March 2014</p> <p>Recommend:</p> <p>3 scenarios for river flow variations and their implications on the biophysical and ecosystem function agreed by March 2014.</p> <p>Guidelines for designing a long-term Monitoring Program approved by the PSC by March 2014</p>	<ul style="list-style-type: none"> Reports from assessment projects Common basin-wide methodology employed for measuring ecological flows Demonstrated use of assessments in decision making process Lesson learned reports Results replicated in other parts of the basin and in the wider region. 	<ul style="list-style-type: none"> Three Baseline Data Collection Programs for Environmental Flows and Ecosystem Function Review completed - 5 of 5 planned field survey campaigns completed in each of 3 countries, awaiting final report and translation Training reports on the biophysical and ecosystem function in draft form <i>Methodology for common approach to environmental flows to be finalized in June 2014</i> <i>Lessons learned report to be drafted by June 2014 as part of TDA Summary</i> <i>Recommendations for result replication to be distributed in June 2014 with TDA Summary</i> Demonstration project summary submitted to PSC May 2014

Overall Project Objective/ outcomes	Base line (at inception)	Verifiable Indicative Targets <i>Unless otherwise states these are targets for Project completion</i>	Means of Verification	Update description of implementation status at TE
	and which can be utilized over the medium to long terms.			
Outcome 1: Completion of Transboundary Diagnostic Analysis	There was agreement on the priority transboundary issues relating to water resource management in the river basin but there remain a number of empirical information gaps to be filled before a complete picture can be formed. The project parties will need to reaffirm these, as they pertain to national IWRM priorities. The donor component projects will address these knowledge gaps, with GEF investigating issues of water flow data, land-based source of pollution, and impacts of climate change..	TDA based on: Gap analysis and desk studies to complete draft TDA from PDF-B by September 2012 Study of anticipated climate change scenario impacts at the national and regional levels pertaining to water resources by June 2013 in line with National IWRM Plans Assessment of water quantity variation by season and flow regimes with baseline and 2-5 year increments by January 2014	<ul style="list-style-type: none"> • Assessment report of the gaps and relevant information regarding their impact on the IWRM planning system • Study and assessment reports 	<ul style="list-style-type: none"> • 2013 Updated TDA completed in full, approved for the countries by the NFPs • Climate Change Desk Study completed • Hydrology Desk Study completed • Water Quality Hot Spots Desk Study completed • Trends Analysis Desk Study completed • Gender Desk Study (approved by PSC) • Azerbaijan Floodplain Forests Study completed, awaiting country approval: literature study completed, field inventory completed. • 2013 Updated TDA completed and approved by the PSC • 2013 Updated TDA distributed through web page – 120 downloads in first 2 days

Overall Project Objective/ outcomes	Base line (at inception)	Verifiable Indicative Targets <i>Unless otherwise states these are targets for Project completion</i>	Means of Verification	Update description of implementation status at TE
		<p>Recommended:</p> <p>Additional desk studies to address: gender mainstreaming, developmental trends analysis, and national and regional water quality hotspots reports by June 2013)</p> <p>National Level study of flood plain forests in Azerbaijan by January 2014</p>		
	<p>The preliminary TDA was not able to establish a firm baseline for environmental conditions and water resource statuses, required to implement IWRM at the national levels and with regards to common regional issues. These will be critical to monitor and evaluate the progress of the SAP. Common baselines will provide the benchmark</p>	<p>3 sets of commonly accepted baselines for environmental and water resource status by June 2013</p> <p>5, 10 and 20 year for SAP activities including M&E by March 2014</p>	<ul style="list-style-type: none"> • Assessment reports for water resources and environmental status • M&E guidelines based on assessments 	<ul style="list-style-type: none"> • 6 Desk Studies completed: Hydrology; Climate Change; Socio-economic Trends Analysis; Water Quality Hot Spots; Azerbaijan Floodplain Forests; Gender study. • SAP approved by Azerbaijan; to be approved shortly by Georgia. Armenia will not approve the SAP. • SAP Activities for short, medium and long term agreed by Georgia and Azerbaijan, reflecting priorities in national IWRM Plans. TDA and SAP are in harmony with Georgia and Azerbaijan IWRM plans, and are linked through draft bilateral agreement between two countries.

Overall Project Objective/ outcomes	Base line (at inception)	Verifiable Indicative Targets <i>Unless otherwise states these are targets for Project completion</i>	Means of Verification	Update description of implementation status at TE
	for progress to be gauged and to enable all countries to reach consensus on what priority actions are needed in the basin, for the SAP and other partner projects including the EU Kura-project, bilateral and national efforts.			
	The preliminary TDA undertaken during the preparatory stage did not identify the longer-term interventions to be incorporated into the SAP. These will be part of the IWRM Planning Process at the national level and linked into regional priorities where they are common to National Priorities. This requires revised Causal Chain Analyses. This work will be a precursor to SAP as part of the National IWRM Plan development.	<p>3 countries and all Steering Committee Members in agreement on final priority transboundary issues by May 2013</p> <p>3 Immediate and 3 root causes of each priority issue identified in line with IWRM best practices by December 2013</p> <p>Set of alternatives interventions for each priority issue by: October 2013</p>	<ul style="list-style-type: none"> • Revised TDA document containing the results from gap filling studies and revised Causal Chain Analyses • List of potential interventions in the short, medium and long term to address each of the transboundary issues • Economic assessment report for alternative interventions • Pre feasibility studies for key interventions 	<ul style="list-style-type: none"> • 2013 Updated TDA approved by the PSC, including major transboundary issues. • Primary, intermediate and root causes identified in the 2013 Updated TDA for each of the identified transboundary issues • Trend analysis completed for economic assessment • Pre-feasibility studies incorporated between Trend Analysis and SAP/PIF development: 35 pre-feasibility studies included in SAP recommendations.

Overall Project Objective/ outcomes	Base line (at inception)	Verifiable Indicative Targets <i>Unless otherwise states these are targets for Project completion</i>	Means of Verification	Update description of implementation status at TE
	The preliminary TDA has information gaps and requires revision and updating prior to dissemination. This activity will result in a document that accurately reflects the current conditions in the basin, and serve as the baseline for actions of the SAP.	Steering Committee approval of Final TDA by June 2013 <i>Recommend removing government, SC implies this and as it is not a political document the TDA does not require government approval beyond the PSC</i>	<ul style="list-style-type: none"> • TDA Document Finalized • Final TDA on-line and accessible to public for comments • Final TDA presented to the Steering Committee 	<ul style="list-style-type: none"> • Draft 2013 Updated TDA approved by the PSC in May 2013 • Final 2013 Updated TDA published in October 2013.
	As evidenced in the SHA, there is currently a generalized low awareness among stakeholders regarding the priority transboundary issues in the basin and how the issues inter-relate, as well as how these common issues can be viewed collaboratively by all basin states.	Recommend: At least 50 copies of the SUMMARY TDA , with recommendations for the SAP in local languages shared with at least 20 different stakeholder groups, in electronic format by January 2014 At least 20 hits on website with Final TDA by March 2014	<ul style="list-style-type: none"> • TDA finalized and endorsed by Steering Committee • TDA in easy access format prepared and disseminated • Newspaper articles, radio and TV programmes featuring the TDA findings in local languages 	<ul style="list-style-type: none"> • 2013 Updated TDA distributed through web page –200 downloads in first 5 days of publication on the internet.
Outcome 2: Preparation of the National IWRM Plans and Strategic Action	There is currently no clear measure of the national level capacity for implement IWRM, therefore an initial	Completed IWRM Capacity needs assessment by October 2011	•	<ul style="list-style-type: none"> • Activities completed by MTE

Overall Project Objective/ outcomes	Base line (at inception)	Verifiable Indicative Targets <i>Unless otherwise states these are targets for Project completion</i>	Means of Verification	Update description of implementation status at TE
Programme (SAP)	assessment that will serve as an empirical metric for capacity building in order to implement sustainable IWRM Plans	<p>Training modules developed that are regionally specific by December 2011</p> <p>At least 3 trainings held by October 2012</p>		
	Currently, each country is developing their own individual and independent water resource use plans without collaboration with others in the basin. At the national level there is a need to develop plans for IWRM that spans sectors and includes priorities of government and other stakeholders, including environmental sustainability. The common issues addressed in these IWRM plans that have transboundary implications should be highlighted. The common issues in these plans should be supported and	Suggested revision: IWRM Plans for AZ and GE accepted by key agencies with plans to link into budget sector development within 5 year budget cycles, and additional funding for IWRM activities being sought nationally and internationally	<ul style="list-style-type: none"> • National IWRM plans establish • Letters of support from lead government agency • Work plans for implementation of national plans 	<ul style="list-style-type: none"> • Draft IWRM plans for Azerbaijan and Georgia prepared, based on country teams involvement and revisions proposed by national authorities. • Draft NAP for Armenia includes some elements of an IWRM plan. • Draft IWRM plans presented to National Water Policy Dialog Steering Committees in Azerbaijan, and Georgia • Revision and finalization of National IWRM Plans for Azerbaijan and Georgia and National Action Plan for Armenia underway and due to be completed by June 2014.

Overall Project Objective/ outcomes	Base line (at inception)	Verifiable Indicative Targets <i>Unless otherwise states these are targets for Project completion</i>	Means of Verification	Update description of implementation status at TE
	can be harmonized in through the regional SAP.			
	<p>Across the Caucasus there are competing water uses drawing on the Kura-Aras River basin resources which may increase tensions if not collectively addressed. An initial Basin Vision and preliminary SAP was developed under the PDF-B phase of the project, but the final agreement was not decided and targets and activities not agreed. National IWRM Plans are needed to solidify the planning process. The movement to address common concerns has started, however a final full SAP formulation and support can strengthen the and provide partner organizations with a clear set of regional priorities for investments.</p>	<p>Recommend: At least 3 ministries in each country with plans aligning to SAP implementation by March 2014)</p> <p>Recommend: Project Steering Committee approves SAP by May 2014</p>	<ul style="list-style-type: none"> • SAP supported by the national governments • Final IWRM plans approved by appropriate national planning authorities • GEF M&E Framework included in the final SAP 	<ul style="list-style-type: none"> • Draft SAP prepared and reviewed by AZ and GE, including 10 common national IWRM issues agreed by the NFPs. SAP approved by Azerbaijan in May 2014; approval by Georgia pending. • M&E framework for SAP included into National Plans for formal oversight. • Alignment of SAP/IWRM plans and Ministerial plans underway in Azerbaijan and Georgia. • National Water Policy Dialog Steering Committee Representatives supporting the IWRM Plans and SAP: at least 4 ministries in AZ and GE in support of plans.

Overall Project Objective/ outcomes	Base line (at inception)	Verifiable Indicative Targets <i>Unless otherwise states these are targets for Project completion</i>	Means of Verification	Update description of implementation status at TE
	<p>N/A</p> <p>There have been multiple donor projects assisting the Kura-Aras Basin states with development of transboundary water resources workplan and efforts have been undertaken to ensure the minimum of duplication of effort and maximum synergy. These efforts will continue throughout the project.</p>	<p>At least 12 agreed indicators for the M&E Framework by March 2014</p> <p>At least 5 International and bilateral organizations attending donors conference by March 2014</p> <p>Support for 20% of SAP activities supported by donors within 6 months of donor conference.</p>	<ul style="list-style-type: none"> • Detailed M&E framework incorporated into the SAP. • Agreed set of P, SR and ES indicators • Donor conference minutes, project monitoring reports and files • Financial support leveraged for SAP and IWRM implementation 	<ul style="list-style-type: none"> • M&E framework for the SAP linked to National IWRM plans for AZ and GE, and includes P, SR, and ES indicators. • Donor meetings: ongoing individual consultations with donors pending final SAP endorsement.
Outcome 3: Basin wide stakeholder involvement activities	<p>There are currently limited facilities at the basin wide level for consultation and involvement of stakeholders. Earlier efforts towards the development of a basin-wide NGO Forum showed promise, and included participation from NGOs throughout the basin and</p>	<p>At least 2 NGO Forum Meetings with at least 21 participants at each meeting the first held in March 2012, and again in July 2013</p> <p>At least 1 Steering Committee meeting with NGO Forum by May 2013</p>	<ul style="list-style-type: none"> • National Policy Dialog /Stakeholder Advisory Group roster • National Policy Dialog Stakeholder Advisory Group meeting minutes and recommendations • Recommend: At least 2 approved NGO Forum reports including statements on recommendations to the national IWRM 	<ul style="list-style-type: none"> • NGO Forum in July 2013 on gender mainstreaming in water management with 26 attended from all countries. Inputs were used in TDA Gender Mainstreaming Desk Study and informed recommendations in IWRM Plans and SAP. • The 3rd Steering Committee meeting was held 21-22 May 2013 in Tbilisi, recommendations from NGO Forum included in SAP • Project representation at National Water Policy Dialogue meeting between January 2013 and November 2013, attendance of 20 stakeholder groups; on-going consultation between project and NWPD.

Overall Project Objective/ outcomes	Base line (at inception)	Verifiable Indicative Targets <i>Unless otherwise states these are targets for Project completion</i>	Means of Verification	Update description of implementation status at TE
	inter-donor coordination. Ongoing support for this collaborative forum is needed in order to strengthen civil society collaboration across the basin. This strategy includes reconvening the Stakeholder Advisory Group and creation of national stakeholders forums to provide input and advice to the TDA finalization, SAP development and creation of national IWRM plans in line with the EU Kura Project and Aarhus Convention. Additionally these groups will provide input into the M&E strategy for the SAP implementation.	<p>Recommended:</p> <p>At least 1 Steering Committee meeting with NGO Forum recommendations included for PSC by July 2013)</p> <p>At least 3 Stakeholder Advisory Group Meetings / National Water Policy Dialog Meetings held and at least 10 comments/ recommendations in from each meeting with the first by August 2012, the next in August 2013 and a final meeting by March 2014</p> <p>At least 10 stakeholder groups represented in the Stakeholder Advisory Group/ NWPD held in each country with schedule above</p>	plans and SAP	
	The current level of awareness of water conservation is	At least 15 public awareness raising events each year	<ul style="list-style-type: none"> • Basin-wide campaign strategy to engage stakeholders in all 	<ul style="list-style-type: none"> • Public Awareness Raising designed targeting internet updated with relevant news items, project progress information. • One regional and 3 national meetings with universities held, agreement

Overall Project Objective/ outcomes	Base line (at inception)	Verifiable Indicative Targets <i>Unless otherwise states these are targets for Project completion</i>	Means of Verification	Update description of implementation status at TE
	stakeholder group specific and sectorally focused. Stakeholders are eager for more information about conservation measures across the basin including how to improve water quality	Recommended: In line with PSC decision, hold at least 2 meetings with university officials from all three universities to discuss common interests for IWRM MSc	sectors • Stakeholder education and training exercises conducted and results measured • Meeting Minutes of the University Meetings	reached on joint development of an MSc curriculum for IWRM • TDA Summary for non technical readers in national language to be distributed electronically to school libraries throughout the basin, on key drives or cds with school biomonitoring guides
	There is a need to increase the capacity of future water management experts through development of IWRM based curriculum specific to the regional needs at the undergraduate and graduate level. This does not currently exist	IWRM Curriculum based on capacity needs assessment findings for use at National Universities by October 2013 Recommend: Regionally accepted IWRM MSc Curriculum agreed by National Universities	• Curriculum accepted by faculty at key national universities	<ul style="list-style-type: none"> • Capacity Needs Assessment for IWRM Professionals conducted and published on web page • Regional Curriculum for MSc course in IWRM prepared and agreed by 3 national universities • Grant proposal for funding of teacher training in IWRM for Armenia and Georgia prepared and secured (NUFFIC), serving the start-up of the MSc course. • Training for Lecturers for IWRM Curriculum at BSU, TSU and YSUAC with UNESCO-IHE and Delft University. • Second round funded to be held in Netherlands Sept 2014
Outcome 4: Demonstration Projects on conflicting water use	The assessment of ecological flows and classification of the river are sensitive since it has a direct bearing on the water resources available. The existing procedures for establishing ecological	Recommended: 3 Baseline Data Collection Program for Environmental Flow and Ecosystem Function Reviews designed and implemented, with at least 4 field surveys at pilot sites in each country	<ul style="list-style-type: none"> ▪ Common assessment methodology for setting Ecological Flows in the Kura-Aras river basin. Recommended <ul style="list-style-type: none"> ▪ Field Survey Reports • Biomonitoring and rapid ecological assessment 	<ul style="list-style-type: none"> • Three Baseline Data Collection Programs for Environmental Flows and Ecosystem Function Review completed - 5 of 5 planned field survey campaigns completed in each of 3 countries • Three country reports on bio-monitoring and environmental flows in draft, including scenarios for flow variation • Country assessment reports completed • <i>Guidelines for approval of long term Monitoring Program and environmental flows development strategy for all currently being finalized – will be completed by the end of June 2014</i>

Overall Project Objective/ outcomes	Base line (at inception)	Verifiable Indicative Targets <i>Unless otherwise states these are targets for Project completion</i>	Means of Verification	Update description of implementation status at TE
	<p>flows were developed during the Soviet period and do not reflect modern environmental protection standards. In addition, ecological flows need to take account of the seasonal variations and flooding events, necessary for wetland inundation, fish migration and river bed cleansing. A basin-wide rapid assessment and criteria for ecological flows the countries are a key element in defining the long-term IWRM and a vision for the basin.</p>	<p>completed.</p> <p>Training in Bio-monitoring and Rapid Ecological Assessment completed for at least 21 participants from 3 countries</p> <p>3 country assessment reports on biological monitoring & environmental flows approved by the PSC, including scenarios for river flow variations and their implications on the biophysical and ecosystem function.</p> <p>Guidelines for designing a long-term Monitoring Program prepared and approved by the PSC by March 2014</p> <p>Trained teachers of at least 5</p>	<p>training materials</p> <ul style="list-style-type: none"> • Country assessment reports approved by PSC in minutes • PSC approval of guidelines • Report on teaching training and materials) 	<ul style="list-style-type: none"> • Agreement reached with GIZ on joint implementation of a training course for school teachers on aquatic environment monitoring – training materials prepared in Georgian and Azeri languages (using GIZ Armenia available training materials); field monitoring equipment purchased (GIZ Armenia). Training and subsequent voluntary school monitoring planned for May/June 2014 • Hydrology study on gap filling in historical records for environmental flows for Armenia drafted as initial effort to be completed by PSC

Overall Project Objective/ outcomes	Base line (at inception)	Verifiable Indicative Targets <i>Unless otherwise states these are targets for Project completion</i>	Means of Verification	Update description of implementation status at TE
		schools in each country have implemented the school aquatic monitoring program.		
Outcome 5: Effective project management	N/A	3 full time staff hired within three months of project commencement.	<ul style="list-style-type: none"> • Local administration staff appointed • Filing and accounting systems set up and bank account opened. • Web-site updated regularly • Number of web-sites hits 	<ul style="list-style-type: none"> • PCU office continued to function fully operational • Web page operational in 2011 • MTE provides full evaluation
	Current institutional mechanisms for multiple stakeholder group input into project activities are not active, though initial inputs from a stakeholder advisory group into the PFD-B were deemed very useful to project development	3 meetings of Stakeholder Advisory Group within 3 years	<ul style="list-style-type: none"> • Stakeholder Advisory Group Input Reports 	<ul style="list-style-type: none"> • Project representation at 1 National Water Policy Dialogue meeting between January 2013 and November 2013, attendance of 20 stakeholder groups • Since MTE, 5 NWPD meetings held with 3 specifically focused on Kura-Ara(k)s project output.
	Complex donor activities and priorities in the region should be addressed through a roundtable donors meeting to increase projects	4 Donor initiatives harmonized at the national and regional level	<ul style="list-style-type: none"> • FoP meeting minutes • Support of SAP components by FoP members 	<ul style="list-style-type: none"> • Harmonization with donor initiatives included at least 5 initiatives between as of June 2014 • EU- EU Water Initiative, UNECE Nexus, OECD Ecosystems valuation, WB SEA for Hydropower in GE, ADB hydrology study in AZ, GIZ biomonitoring, FAO irrigation project in Armenia, Norwegian study on hydrological information digitization, WWF Sustainable hydropower project in the South Caucasus with Norwegian government, NUFFIC IWRM MSc with UNESCO-IHE, GEF Climate change in Mountain

Overall Project Objective/ outcomes	Base line (at inception)	Verifiable Indicative Targets <i>Unless otherwise states these are targets for Project completion</i>	Means of Verification	Update description of implementation status at TE
	synchronization			<p>Communities in AZ project, Israeli full hydrological and ground water studies in AZ, Dutch project on irrigation in AZ. Etc.</p> <ul style="list-style-type: none"> • Invitations to share endorsed SAP with multilateral donors, including EU for future program design in Brussels and UNECE in Geneva.
	N/A	<p>Inception meeting held within 3 months of project start</p> <p>At least 1 Steering Committee Meeting held every year</p>	<ul style="list-style-type: none"> • Steering Committee reports • UNDP Progress reports measured against inception report 	<ul style="list-style-type: none"> • The 3rd Steering Committee meeting was held 21-22 May 2013 in Tbilisi • Final Steering Committee Meeting scheduled for 20 May 2014

3. FINDINGS

3.1 Project Design / Formulation

As stated earlier, the original logical framework matrix was revised during the Inception Phase of the project from January through July 2011. Following the mid-term evaluation, the strategic framework matrix was once again updated. This third strategic framework matrix is presented as Table 1 earlier. The original logical framework matrices from the Project Document and from the inception phase are shown in Annex VIII. From a project design/formulation standpoint, all of the logical framework matrices are addressed.

Analysis of LFA/Results Framework (Project logic /strategy; Indicators): The final revised logframe matrix was reviewed to see how successful the project was in producing the outcomes and outputs. Reviewing copious volumes of written materials, media information, annual reports, etc., as well as intensive interviews with those involved, the Log Frame Analysis was reviewed. Table 1 provides the results of the analysis of the strategic/logical framework analysis.

Assumptions and Risks:

The assumptions and risks as contained in the Project Document are evaluated in the risk analysis table below (Table 2).

Table 2: RISK ANALYSIS REVIEW

Project Document		Evaluation
Risk		Risk Mitigation Measure
		Comments
Government commitment is not sustained	M	Increasing political commitment from the countries towards regional cooperation to manage the natural resources exists manifested in multilateral and bilateral agreements, including bilateral negotiations between Georgia and Azerbaijan on water sharing. The project should ensure good information flow to the political decision makers regarding the economic value and importance of the basin's water resources and the need to manage them in an integrated manner
Low acceptance of the TDA/National IWRM Plans/SAP/process by the participating governments	M	The basin countries have indicated a willingness to work within the TDA/National IWRM Plan/SAP process and have already prepared a TDA and preliminary SAP; however, it is not clear what level of inter-sectoral coordination is currently ongoing. The project will assist the countries to improve coordination at the national level and regional level through the IWRM plans and SAP to ensure political buy-in from all the relevant sectors throughout the TDA/SAP process
		All countries appear committed to address water resource issues in the common basin. However, political relations between Azerbaijan and Armenia have hindered full cooperation amongst the three countries towards shared agreements (e.g., SAP), although the TDA was agreed by the countries.
		Intersectoral coordination continues to be an issue in two of the countries. National owners of environmental ministries is not the strongest national acceptance. Reasonable coordination between water ministries and environment ministries appears to have taken place during the project. Azerbaijan has viewed itself to be more advanced than other two countries in IWRM, and pursued a separate course in the TDA/SAP process following the completion of

Project Document			Evaluation
Risk		Risk Mitigation Measure	Comments
			TDA.
Bi-lateral relations between basin states may impact on project implementation	M	Relations between Armenia and Azerbaijan remain tense and the project management will have to be constantly sensitive to this issue and consult regularly with the Ministries of Foreign Affairs in both countries	This situation continues to present, and appears to have resulted in Armenia not agreeing the common SAP, instead preparing a National Action Plan.
The transboundary priorities vary between countries in the Kura and Aras basins and may hinder SAP agreement	M	During the TDA development the countries of the Aras basin expressed their wish, as a first step to the introduction of IWRM, to focus on water quality issues which are seen as a priority and more problematic than water quantity issues, which are currently dealt on a bilaterally basis through historical agreements. This situation contrast with the situation in the Kura where both sets of issues are critical	Transboundary priorities amongst the three countries do seem to be at odds in some instances: upstream countries tend to have different priorities than downstream recipient countries. A bilateral agreement between Azerbaijan and Georgia will address these issues in the future. Armenia's water agreements will likely remain bilateral rather than regional as well.
Currently planned interventions will not bring effective results due to adverse effects of Climate Change	M	Project through the TDA/SAP process will assist the riparian countries to the build management flexibility needed to adapt to the most severe climate change scenarios	Awareness of climate change effects has been adequately addressed by project.
Overall Rating	M	Risk Rating: L - Low; M – Medium; S – Substantial	

Planned stakeholder participation:

Stakeholder Participation is the subject of Outcome 3: Basin wide stakeholder involvement activities, and was reviewed in Table 1 above. The planned stakeholder participation was outlined in the Project Document as Appendix IV; however, as the Project cycle progressed, budget for this stakeholder participation was cut, and therefore the Strategy indicated in the Project Document was not followed during the project. It is summarized here as Table 3 with comments on its implementation.

Table 3: Stakeholder Participation Evaluation

Output	Activity	Product	Comments
Stakeholder Involvement Plan (SIP) (appendix IV)	Provide input into the project development, including Strategic Action Programme development and demonstration project implementation through the SHAG with linkages to national stakeholders charged with supporting the UNDP Kura Aras Project	SHAG meetings	The SHAG meetings were replaced early on by the National Water Policy Dialogue meetings. The NWPD meetings subsequently evaluated

			various outputs of the Kura-Ara(k)s project.
	Continue to support the region wide Kura Aras NGO Forum focusing on addressing sustainable transboundary water and environmental management advocacy to support the project, provide civil society input into project activities and support project outreach activities.	NGO Fora	Two NGO Fora meetings were held: on in March 2012 and one in July 2013. Reports are available on each of these meetings.
	Based on the input of the SHAG, develop an iterative communication and outreach strategy for the project that emphasizes broad public awareness building and specific stakeholder group targeted education activities to be implemented through a small grants programme in coordination with the NGO Forum	<ul style="list-style-type: none"> • Different messages to be sent to stakeholders and based on both awareness raising about the nature of the challenges to the Kura Aras Basin environment, and improving the behaviours and actions of specific stakeholders in order to reduce negative impacts on the environment • to increase educational outreach to specific stakeholder groups 	These “products” are a bit vague, and were hard to track down. Presumably, the “messages” were passed by the national focal point agencies in each country. No examples were shown. Regarding educational outreach, the PSC quickly reached the conclusion regarding need for enhanced training of professional water managers, leading to the Regional Needs Assessment, ultimately leading to the IWRM Master’s Degree Program for all three countries.
	Implement the hands-on stakeholder and public involvement activities at the local level in close coordination with the project SAP Demonstration Projects to be implemented by NGOs and civil society within the	<ul style="list-style-type: none"> • Implementation of a farmer training project that demonstrates the impacts of current farming 	These Public Involvement Demonstration Projects (PIDS) ultimately were not carried out. The budget was removed from

	region.	<p>practices, improved farming practices and organic farming practices. This will involve training of farmers in communities, carefully gauging the impacts of the farming practices on the environment, and providing hands on community educational opportunities that target reducing negative impacts while improving harvests quantity and quality.</p> <ul style="list-style-type: none"> • Design and implementation of artificial wetlands to treat waste water in public buildings within small communities. This will use artificial wetland technologies to purify the water prior to introducing it to the river environment, and will emphasize small scale, cost effective mechanisms for improving the water 	<p>these projects before it was in final form; however, the verbiage was not removed from the ProDoc.</p> <p>Instead, this work was substituted by training of stakeholders in various water practices.</p>
--	---------	--	---

		environment.	
	Create and maintain an empirical mechanism to monitor and evaluate the effectiveness of the activities to determine what works, what needs improvement and how sustainable efforts are without long term project funding.	<ul style="list-style-type: none"> the development of an empirical mechanism to monitor and evaluate the effectiveness of activities. A second end of project stakeholder analysis should be conducted to identify where changes have or have not been effective SHAG and project staff will be charged with reviewing the impacts of the public involvement in the demonstration project activities The final output from the monitoring and evaluation of the public participation and stakeholder involvement activities will be critically reviewed and a lessons learned report will be produced to provide information for related projects and inputs 	No products were observed of this nature. No end of project stakeholder analysis is available. These absences reflect the lack of budget for these activities. No review of the impacts of the public involvement demonstration projects is available. Lessons learned will be included in the TDA summary to be released in June 2014.
Outcome 3: Basin-wide stakeholder involvement activities	REFER TO TABLE FOR ASSESSMENT OF THIS OUTCOME.		

Replication approach:

The project document several major areas where it expected replication:

Table 4: Replication Evaluation

Replication Expected by ProDoc	Evaluation of likelihood of replication by TE
At the national level, the development of National IWRM plans, with the strengthening of interministerial and stakeholder dialogue, will increase economic and political support for the SAP development and implementation.	This apparently has been successful in Azerbaijan and Georgia; in Armenia, the success is less apparent.
At the international level, focusing on common concerns and focusing on transboundary water issues to strengthen national and regional water governance will serve as a model for other transboundary water projects in similar politically sensitive regions. The components within this project stress the importance of common national priorities as the foundation building regional policy harmonization.	It is too early to assess the success of this project vis-à-vis other transboundary water regions. However, the IWRM Academy has been featured as a model for fresh waters in IW:LEARN. The UNECE Nexus Pilot was specifically designed to replicate the methodology in other basins.
At the local level, the public participation and stakeholder involvement activities will be supported initially by the project, but with ultimately communities themselves taking responsibility to maintain and replicate the project outputs and outcomes.	There appears to be movement towards community ownership of environmental/ IWRM issues, and increased participation in their resolution
The overall objective was to refine methodologies for establishing rapid ecological assessment and environmental flow requirements throughout the Kura-Aras river basin and as such would be applied in selected sites in each of basin states and therefore replicability is inherent in the project. The methodology would address environmental requirements in rivers as well as the main river branches. The methodology will have application outside the Kura-Aras River Basin, into the CIS and beyond.	The methodology has been demonstrated. The replicability now rests with ability of countries to secure, maintain, and utilize the equipment to replicate what has been demonstrated to them.

The CTA/Project Manager is responsible for the replication strategy, which will be produced in June 2014 along with the TDA Summary.

UNDP comparative advantage:

The Project Document did not assess UNDP's comparative advantage in implementing this project. In hindsight, the comparative advantage of UNDP is quite clear: presence in all three countries of UNDP offices; a regional environmental center (RBEC) which participated strongly in the project. Ability to bring in examples from other IW transboundary water projects to the table was a strong asset.

Linkages between project and other interventions within the sector

The Project Document outlined linkages between the various projects in the region. In general, the projects interacted well, and it was through synergies developed by the Project staff that the present project was able to be carried out. Significant budget was provided by these companion projects to increase the success of the Kura-Ara(k)s project. For instance, the completed NEXUS project from UNECE carried out some activities of direct concern to the Kura-Ara(k)s basin. Other projects having shared resources included EU Kura II, EU Kura III, USAID GE Integrated Natural Resource Management in River Basins, EU Water Initiative, WWF Sustainable Hydropower in the South Caucasus, USAID AR Clean Water and Energy, GIZ Biomonitoring training, Finnish Water Quality monitoring interventions, *inter alia*.

Management arrangements

The management arrangements within the project appear to have been well thought out. National Focal Points in each country had direct access to staff supported by the Project to facilitate high level national participation in the project. Each country has a National Project Coordinator, reporting to the National Focal Point, and answerable to the PCU. Each country also has an administrator, reporting to the National Focal Point and the PCU Project Management Associate. The PCU is located in Tblisi, and is rather small: consisting at project end of two full time international staff (the CTA/Project Manager and the Demonstration Project Coordinator), a Project Management Associate, along with one part-time intern sharing time with the IW:Learn project; and the National Project Coordinator from Georgia. In addition, a part-time Senior Demo Project Expert/Advisor has been on the staff from October 2011 up to project end. At various times in the past, the PCU did include two additional international personnel (International Coordinator for IWRM, part-time International IWRM Senior Expert), but by the end of the project, the team lacked these two positions. In the Evaluator's view, this lack of personnel put undue stress on the remaining PCU staff, leading to excessive work hours and undue pressure on delivering remaining products.

To alleviate the pressure on existing personnel, the PCU hired a part-time consultant, who has direct experience with bio-monitoring planning. Mr. Ahmed Abou El-Seoud, with the title of Senior Bio-monitoring and Environmental Flows Expert, has worked on the project from October 2011 to project end.

The Project Steering Committee (PSC) had no specific terms of reference spelled out in the Project Document. All GEF Project Documents should have clearly defined terms of reference for the PSC. In place, the PSC had the following members: UNDP Bratislava, National Focal Points from each country (from Ministry of Environment in Georgia, Ministry of Ecology and Natural Resources in Azerbaijan, and Ministry of Nature Protection in Armenia), UNDP Country Offices, and the Executing Agency (UNOPS). Various observers attended the three PSC meetings of 2011, 2012, and 2013.

3.2 Project Implementation

Adaptive management (changes to the project design and project outputs during implementation)

The project successfully utilized adaptive management to its greatest effectiveness and efficiency. Given the delay of several years between the conception of the Kura-Ara(k)s project, and its implementation in the Spring, 2011, some of the conditions within the region had changed. The project was able to re-program its funds and attention to address these changes.

The project undertook an inception phase during which the Project Manager first came on board the project, the inception roughly being from January through July, 2011. The project manager was interviewed in April 2011, and contracted in June 2011. The inception phase resulted in an Inception

report which slightly updated Components, Outcomes and Outputs for the project, and updated the project delivery schedule with sufficient detail to permit proper management of this project for the period July 2011 to July 2014. The new, updated Strategic Results Framework Matrix also included, inter alia, an updated list of assumptions and some new targets.

The Inception Report was discussed and approved by the PSC in July 2011. It was also shared with GEF/UNDP HQ as well as the UNDP GEF/Technical Country Offices, and Bratislava.

Another area where adaptive management was required was in the area of public participation. As indicated in Table 3 above, the ProDoc envisioned quite a different public participation scenario than that which resulted on the ground. In particular, the ProDoc, reflecting country inputs, had originally established a Stakeholder Advisory Group (SHAG), that was to provide input to the project at various points in the project. However, after the Inception Meeting in 2011 at the second Steering Committee Meeting in July 2012, two countries adamantly argued for a Master's Level program in IWRM, as a long-term capacity building exercise in IWRM. This proposal was supported by all countries. The 2012 Steering Committee Meeting approved the following change to the project:

“Stakeholder Activities

- a. –Use National Policy Dialog Meetings for Stakeholder Advisory Group Meetings
- b. –Continue social media/internet public awareness raising
- c. –Dedicate resources for Stakeholder Advisory Group Meetings to IWRM Master's Curriculum development”

A third notable area of adaptive management involved interaction of the PCU with all countries. Though the project started with the intention of close coordination with the National Coordinators, this somehow became a bit side-tracked mid-way through the project, as Dr. Mamaev noted in the May 2012 Steering Committee Meeting, “Mr. Mamaev, having listened to the questions and comments by the Steering Committee members, concluded that there seems to be suboptimal communication between the PCU and the countries' NFPs as well as the UNDP offices. He proposed to have the Project Coordinator submit quarterly content reports on project implementation activities, to which the NFPs can respond with questions, if needed.” As a result, the PSC concluded:

- “Project team to inform and consult with National Focal Points on all activities to take place within each country”

Another issue requiring adaptive management involved balancing the viewpoints of all countries. Whereas AZ and GE were on board with the idea of developing national IWRM plans followed by a Regional Strategic Action Programme, Armenia's viewpoint was expressed at the May 2012 PSC as: “Mr. Narimanyan commented that for Armenia the focus on the IWRM plan for the Arpa river basin is envisioned to serve as an elaborated example towards developing the National Action Plan, helping to clarify the main issues for it. The main focus for Armenia is not on the RBM organizations, as they exist already, but the action plan or strategy describing on what to focus, how to implement.” Thus, Armenia did not propose a national IWRM plan, but rather a single river basin plan (the Arpa), and a National Action Plan using lessons learned from the Arpa River Basin plan. This difference in opinion appears to be one of several flashpoints that appear to have deteriorated relationships between the PCU and the NFP from Armenia. Cooperation and Communication between the two entities appears to have been less effective in the second half of the project. The ultimate adaptive management decision taken, given the tensions involved, was that the SAP would address the two countries AZ and GE, and Armenia would be covered by a NAP. A proposal for a SAP implementation project was submitted in 2014 to UNDP/GEF, which covered these two countries only.

The strain in relationships between Armenia and the PCU appears to have been only at the governance level. Apparently, as represented by various interviews, the interactions between National Experts, with each other and with the PCU, continued on a high professional level.

The inception report and each of the annual Steering Committee Reports described in detail the project activities, changes in activities required by good adaptive management, the budget, and the expected budget expenditures for the coming year. Thus, the adaptive management followed by the project can be traced in a transparent fashion for the three years of the project.

Thus, this project was able to implement adaptive management successfully, and demonstrates the wisdom of GEF in permitting projects to use adaptive management approaches, overseen by the Project Governance mechanisms (PSC, UNDP, UNDP/GEF, etc.).

Feedback from M&E activities used for adaptive management

The M&E documents clearly show the existence and utility of adaptive management. The relevant documents reviewed by the Evaluator include:

- Inception Report, which includes slightly revised Strategic Framework Matrix, as well as specific activities, deliverables, anticipated costs, human resources, work-plans and schedules.
- Annual Project Implementation Reports (PIR)
- Annual Steering Committee Reports
- The mid-term Review
- Quarterly Reports
- This terminal review

The Inception Report, the PIR, and the Mid-Term Review, in particular, show how adaptive management has been used throughout the project. Each review has pointed out areas where improved performance can take place, or improved input to the TDA/SAP process; the steps and budget allocated to make these improvements are then indicated clearly.

Project Finance:

As of May 2014, and as reported by the PCU Team from Tblisi, the project finances stood as follows:

Table 5: Project Finances as given by PCU

Activities	2009	2010	2011	2012	2013	Expected 2014
Actual Totals	\$4,569	\$28,697	\$971,741	\$1,444,129	\$863,443	\$356,806
GRAND TOTAL OF ACTUAL EXPENDITURE as of June 2014 (expected)						
						\$2,900,000

Note:

Budget remaining from May 2014 to end of project	~\$50,000
--	-----------

According to UNOPS, as of May 2014, the following is the budget status:

Table 6: UNOPS Budget Status

Country Name :	Denmark		
Project Atlas id:	00070228	All Amounts in US\$	
Project Title :	Reducing Transboundary Degradation in the Kars-Aras Basin	Date:	0
PRELIMINARY REPORT AS OF 31 May 2014			
1) AWARD			2,900,000
TOTAL FUNDS			2,900,000.00
2) EXPENDITURE			
ACTUAL EXPENDITURE INCURRED			
PERIOD - PRIOR YEARS:			
2009*	Project Expenditure	4,589.34	
2010*	Project Expenditure	28,967.01	
2011*	Project Expenditure	438,851.71	
2012*	Project Expenditure	983,044.62	
2013*	Project Expenditure	1,033,021.34	
*As per PDFs submitted by UNOPS HQ to UNDP HQ			2,488,464.02
Period - Current Year			
2014*	Project Expenditure	305,418.20	
*As per Expenditure Report 30040214			
TOTAL EXPENDITURE INCURRED			2,793,882.22
3) CURRENT BALANCE			\$ 106,127.72
Current Balance			106,128
Upcoming commitments			86,875
Subtotal unprogrammable			17,253
TOTAL UNPROGRAMMABLE (per UNOPS financial report)			17,253

Project expenditures began in 2009, two years BEFORE the project was approved. The TE has requested information on how those expenses were approved against the project prior to Project start.

The discrepancies in these numbers appear to be related to the types of budgeting done in the two different locations. The PCU budgeting is primarily to keep track of cash against project ACTIVITIES, when UNOPS reporting is not as clear, whereas the UNOPS budgeting is according to their formal ATLAS procedures which is budgeting against budget lines, not necessarily against project ACTIVITIES. Project managers normally want to know how well they have done budget-wise against project ACTIVITIES, since this is how they gauge their flexibility in managing project components to closure. This budgeting dilemma plagues many organizations, not just UNOPS, and often forces companies to develop more Project accounting software, as opposed to pure accounting software. UNOPS should consider doing the same.

However, project finance has been a major source of stress between the project and the UNOPS. Problems between UNOPS and the project are discussed more in a later section.

Co-financing was achieved at a significant level. The Evaluator was unable to verify the co-financing by countries, however, the co-financing from other sources is as follows, according to discussions with the PCU (note that UNOPS does NOT track co-financing, unless it comes to UNOPS as cash to expend against the budget, in which case it is subject to the UNOPS fee structure):

Table 7: Co-financing

Co-financing type	Source	Proposed		Actual		Classification of source
In-kind	National Governments	\$2,265,000		\$1,814,670		Countries
In-kind	OSCE	\$90,000		0		
In-kind	UNDP/OSCE (ENVSEC)	\$120,000		\$120,000		
In-kind	EU Kura II	\$7,200,000		\$6,406,123		
In-kind	EU Kura III			\$1,350,000		
In-kind	EU Water Governance in Western EECCA			\$2,025,000		
In-kind	EPIRB Environmental Protection in International River Basins			\$3,190,472		
In-kind	NATO	\$135,000		\$135,000		
In-kind	FINLAND	\$1,050,000		0		
In-kind	Government of Sweden	0		0		
In-kind	UNDP Regular Resources	0		0		
In-kind	OSCE	\$90,000		0		
In-kind	UNDP/OSCE (ENVSEC)	\$120,000		\$120,000		
	Various leveraged resources*			\$488,300		

* These leveraged resources are not counted officially in the co-financing. However, they are noted because they did contribute to the project. Some of the project activities above that in the table were not counted as co-financing by the MTE. However, this Evaluator believes that the present project was so under-funded that the PCU was put in a position to cooperate closely with other projects, and in so doing was able to complete the project on the limited funding available.

Table 8: Summary of Co-financing by kind

Co financing (Type/Sources)	IA own Financing (mill US\$)		Government (mill US\$)		Other Sources* (mill US\$)		Total Financing (mill US\$)		Total Disbursement (mill US\$)	
	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual
Grant	\$2.9 m	\$2.9 m					\$2.9 m	\$2.9 m	\$2.9 m	\$2.9 m
Credits										
Equity										
In-kind			\$2.265 m	\$1.8 m	\$8.8 m	\$13.3m	\$11.0 m	\$15.1 m	\$11.0 m	\$15.1

Non-grant Instruments*			\$0	\$0			\$0	\$0	\$0	\$0
Other Types										
Total	\$2.9 m	\$2.9 m	\$2.265 m	\$1.8 m	\$8.8 m	\$13.3 m	\$13.9 m	\$18.0 m	\$13.9 m	\$18.0 m

The co-financing, as usual, was a bit difficult to gather full information. The proposed co-financing was included in the ProDoc, but was not broken down by country.

Regardless, the project co-financing was still 5 times the GEF contribution to the Project, quite reasonable by GEF IW project standards for foundational projects.

Monitoring and evaluation: design at entry and implementation

The Project Document designed the M&E programme for the Project. This M&E program was followed as laid out according to the table below, as the M&E process was not changed during the Inception Phase. The Activities in Red below as those directly reviewed by the Terminal Evaluator.

Table 9: M&E Plan

Activity	Responsibilities
Drafting Project Planning Documents: ProDoc, LogFrame (including indicators), M&E Plan	UNDP staff and consultants and other pertinent stakeholders. Steering Committee Review
Inception Workshop & associated arrangements	UNDP, PSC, project development specialists
Inception Report	Project Manager, with UNDP
Quarterly Operational Reports (QORs)	UNDP and PPR
Annual Programme/ Project Reports (APRs)	The Steering Committee, working closely with UNDP and the Project Manager in consultation with Project stakeholders
Project Implementation Review (PIR)	UNDP, project team, S.C., GEF M&E team
Tripartite Review (TPR)	Governments, UNDP, project team, Steering Committee, beneficiaries and other stakeholders
Technical reports	Project team and consultants as needed
Mid-term evaluation	UNDP, project team, S.C., independent evaluators
Lessons learned	Project team; to be delivered in June 2014.
Terminal Evaluation	UNDP, Project Manager, S.C.
Audits	UNDP GE
Post-Project Sustainability Evaluations	UNDP, Project Team and GEF, S.C.
Terminal Report	Project Team, at least one month prior to completion of project.

Notes: The terminal report is this report. The Post-Project sustainability evaluation has not been done. The Tripartite Reviews were not done, but minutes from the Steering Committees replace them. For GEF projects, the Annual Programme Project Reports are the same as the Project Implementation Review. The Quarterly Operational Reports QORs are replaced by a quarterly reporting of the Enhanced Results Based Monitoring (EBRM), which are based on quarterly inputs by the PCU; these have been reviewed.

UNDP and Implementing Partner implementation / execution (*) coordination, and operational issues

UNDP was the implementing agency for this project, whereas UNOPS was the executing agency. UNDP/GEF, both through the New York office and their three National Country Offices, provided considerable backstopping to the project. Although Georgia UNDP Country Office officially was the lead UNDP Country Office for the Kura-Ara(k)s project, in fact all three UNDP Country Offices

provided support. Frequent phone and SKYPE communication kept the PCU in close contact with the UNDP/GEF throughout the project. UNDP/Bratislava Regional Center provided valuable backstopping to the project, attending all Steering Committee Meetings and intervening with countries on behalf of the project where needed. With a UNDP project team so close on board, the project maximized its chances of success.

UNOPS provided the execution for the project. UNOPS personnel attended one Steering Committee Meeting, as well as the Inception Meeting. Numerous questionnaires returned by the program participants made reference to delayed payments, some late by six months. Steering Committee Meeting minutes similarly document the lack of responsiveness of UNOPS. My experience in such IW projects indicates that the fault here likely rests on several parties, including UNOPS and the PCU. The PCU attributes much of the problem to delays in payment by UNOPS, which delays are not communicated to the PCU. The PCU hears of the delays only from the recipients, as they complain. The repetitive turnover in UNOPS personnel appears to have been a factor as well, as interns apparently were given responsibility for administering the project for UNOPS, without sufficient experience or training. Mistakes such as mis-allocating costs from other projects to this project meant that the PCU staff had to monitor their activities, but also for the support provided by UNOPS. The relationship between the project and UNOPS was much more strained than it need be, requiring significant management time from the PCU to resolve, as well as that of other UNDP personnel.

The UNOPS has made it clear in other Terminal Evaluations that the income derived by management of the IW projects “defines the scope of capacity which UNOPS makes available to the IW portfolio.” If the income derived by UNOPS is not adequate to manage the project as expected, either that income needs to be reviewed, or the Implementing Agency needs to assure that money is in the Project Budget for the PCU to provide that management in its place. Unfortunately, GEF has placed a cap on Project Management Costs for IW projects at something near 10%. As any private sector company will tell you, this is inadequate for project administration. Something has to give here: either the Executing Agency is paid more (or somehow made more responsive through alternative resources), or the project must be able to manage with a higher percentage for project administration. The scenario as it works now places undue stress on the Executive Agency and on the PCU, and their relationship.

As an example an issue the project had with UNOPS is the difficulty of the Project Manager to get an operational budget accounting from UNOPS. UNOPS uses an accounting system that is not output-oriented, so much as input-oriented. Whereas a private company’s financial accounting would be able to track human resources and expenditures/obligations by output, the UNOPS accounting system does not appear to do this easily. This leaves the Project to create a parallel accounting to see how much money has been spent from various budget tasks, to plan for future expenditures. This Evaluator considers this to be an unreasonable burden on a project that is trying to keep its overall Administrative costs to a low level, when it is paying a higher percentage of the overall budget to UNOPS (7.5% to UNOPS versus 5% internal project management) to provide such tracking.

There was a concern expressed that the complexity of this project far outweighed the resources available for management of the project. This is a common concern, in the Evaluator’s opinion, for several of the IW projects (such as the Yellow Sea LME and the ASCLME projects). When the GEF restricts the amount of funding for administrative resources for the project, it has the potential to backfire in that the project becomes poorly managed and thus weakens its delivery. Fortunately, for the Kura-Ara(k)s project, the management team was up to the challenge and pulled off the management without major problems, using adaptive management to assure expenditures were within budget.

3.3 Project Results

Overall results (attainment of objectives)

The Project Objective is “to improve the management of the Kura-Aras River Transboundary Basin through the implementation of a sustainable programme of policy, legal and institutional reforms and investment options using the Trans-boundary Diagnostic Analysis (TDA) and Strategic Action Programme (SAP) process”. The project objectives were attained in full, as follows:

- A TDA was updated covering the Kura-Ara(k)s River Basin, including the three project countries (AZ, AR, GE).
- Two countries produced national IWRM plans as the basis for the SAP (Azerbaijan and Georgia); Armenia chose to produce a study of the Arpa River Basin as an IWRM demonstration, leading to replication efforts in their National Action Plan.
- A SAP was finalized by two of the three countries: Azerbaijan and Georgia. Armenia chose not to finalize the SAP, but rather to concentrate on its National Action Plan. The SAP was developed late in the project timeline, as is normal for a three-year IW project. As a result, the SAP though lacking some robustness is sufficient as a guideline for SAP implementation, as it addresses governance issues, policy and regulatory reform, community engagement, private sector engagement, and related priority issues.

Thus, in terms of quality and completeness, the Kura-Ara(k)s project attained all the objectives set out in the Project Document, though not with 100% participation of the three countries. This two-country focus has led the Evaluator to down-grade the evaluation somewhat; not necessarily due to short-comings of the PCU or the Implementing Agency, but rather to prevailing conditions internal to Armenia and perhaps some over-ambitiousness of the Project design. The number of deliverables was remarkable given the final limited monetary resources awarded to this full-sized project. Quality of deliverables was high but not outstanding, in part because of the aggressive nature of the project on a rather limited budget. Of significant note, the country ownership of the IWRM plans and the SAP was remarkably strong. The IWRM, NAP, and SAP are examples of products that should be viewed as living documents, to be added to or improved routinely as conditions evolve. Some of the desk studies, as well, were not as in-depth and insightful as perhaps desired, but likely reflected the short time available for development and the limited resources available.

From an activity perspective, some activities planned according to the project Document were not as successful as others, for a variety of reasons. Some examples are included here:

- **Public Participation:** Although it is difficult to judge from existing documents and from interviews how successful the National Offices were in developing broad public participation, the public participation was not as broad as envisioned in the ProDoc (see Table 3 above). This may be partly due to the Steering Committee Decision to forgo some activities of the SHAG (Stakeholder Advisory Group) in favor of two activities: participation in the National Water Policy Dialogue meetings rather than the broader-based SHAG, and creation of the IWRM MSc-level program. This trade-off contributed to compromised public participation in the project. Both substitutional activities are high value to the project; however, they did not permit the full public participation to be attained.
- The ProDoc envisioned two PDIPs (Public Involvement Demonstration Projects) to be conducted. Apparently, prior to final acceptance of the ProDoc, these were taken from the budget, but are still reflected in the narrative of the ProDoc. While not apparently a deficiency in project implementation, the ProDoc as a guiding document is a key element of this Terminal Evaluation.

- Donors meetings: because of the timing of the SAP and the completion of the project, no group donors meetings will be taking place in preparation for SAP implementation. In its place, there have been and will continue to be individual donor consultations, which hopefully are being carried through to the SAP implementation project if successful.
- An overall indicator was budget commitments at the National Level to IWRM Plans and a regional SAP. While somewhat unclear, I interpret this to mean that the governments would pledge money for implementation of the IWRM plans and the SAP. Azerbaijan has indicated that within six months, the entire IWRM Plan will be funded as part of the National Water Strategy. In Georgia, the IWRM Plan will be incorporated into the EU Association Agreement implementation plans of the government. Neither of these plans has been funded at the time of this evaluation.
- Pre-feasibility studies: The use of this term is also a bit unclear. In normal project parlance, a pre-feasibility study is a STUDY, not a possible project. The present project identified up to “35 short, medium, and long-term interventions and pre-feasibility studies for priority interventions identified in the SAP.” However, I have found no pre-feasibility studies, per se. An example definition of a pre-feasibility study is: “A pre-feasibility study (PFS) is broadly defined as preparatory studies enabling funders to undertake a successful feasibility study for a particular investment opportunity. Generally, the study will comprise sector investment options and priorities, initial scoping and costing of the identified investment project, and designing the governance and financing structures for implementation. Typical outputs provide the technical, financial, environmental, and social assessments of projects at a level of detail sufficient to write the terms of reference for a feasibility study.” These studies would have to be done as part of the SAP, and will require a budget line item.

Relevance

Relevance is a measure of the extent to which the activity is suited to local and national development priorities and the extent to which the project is in line with the GEF Operational Programs or strategic priorities.

The project participants all saw the project as relevant, though to varying degrees. Certainly, the project complies with relevance from a GEF perspective, as the project follows the GEF operational programs and strategic priorities closely. If not, the project would not have been funded; and the positive results of the project bear out the Project Design as proposed and approved.

As for relevance to local and national priorities, the answers are a bit more mixed. From the perspective of Azerbaijan and Georgia, the project was highly relevant, filling an important gap as these countries come on line with their modern IWRM protocols. As for Armenia, the relevance was less significant, as Armenia indicated they felt they were already at a different level than other countries in the Kura-Ara(k) basin regarding River Basin Management, organizationally.

All countries see the intent of the IWRM to fit in well with their national water policies. All three countries noted numerous times, in PSC meetings and in NAPs, IWRM, etc., that the current project was in line, and therefore relevant, with national priorities and policies.

Effectiveness and Efficiency:

The overriding view was that the Kura-Ara(k)s River Basin project was carried out both moderately effectively and efficiently. Remembering that the Kura-Ara(k)s River Basin project's development objective focused on baseline analysis, TDA and SAP processes, the strong performance of the project in providing new cooperation is impressive. This cooperation is even more notable given the decadal long tensions between the countries.

Regarding project effectiveness, the objectives of the Kura-Ara(k)s River Basin project were all achieved, although some of the project activities may have fallen short. The TDA and SAP were produced, although the SAP was a two-country SAP rather than the three-country SAP originally envisioned. In addition, two countries produced national IWRM plans, and Armenia produced a sort of IWRM plan for a single basin (Arpa River Basin) as an example to be replicated during the NAP implementation. The Armenian NAP was developed during this project as part of the project activities; and the Evaluator has received the next-to-final version.

Another area showing project efficiency was the use of national experts for the vast majority of the activities in the project. Peer review, a process normally performed by international experts, was in this case performed almost entirely by local experts. Peer review of all major outputs of the project was accomplished via the PSC and various national bodies. The PCU international staff was quite limited, from a maximum of four full-time international hires in the early project, to just two in the final year or so of the project. This use of national experts likely also contributed to project effectiveness, as the country ownership was thus enhanced.

Efficiency is also demonstrated by the level of co-financing achieved by the project. Actual co-financing was \$15 million, which is a 5 times multiplier compared to the GEF foundational project financing.

Country Ownership

Country ownership can be demonstrated in numerous ways. The metrics used in this evaluation include the various participatory mechanisms availed by the countries.

- Project Steering Committee Meetings (PSC): PSCs were always well attended, with the national focal point or his/her representative in attendance, as well as national experts as required.
- National Water Policy Dialogue (NWPD): In place of the Stakeholder Analysis Group (SHAG), the PSC decided that attendance at the National Water Policy Dialogue was the proper way to influence policy. Thus, the SHAG concept was abandoned early in the project in favor of the NWPD attendance and participation. Countries attended the NWPD meetings.
- TDA process: A mechanism was put in place in each country to develop strong country contribution to the TDA process, to assure country ownership. National workshops provided strong interim reports on not only technical ecosystem details, but also on causal chain analysis, root cause analysis, and related analytical metrics. This comprehensive process led to a strong TDA, with in-depth country inputs.
- SAP process: Although the SAP preparation was compressed in time because of the short project duration (compared to many other IW projects), the use of national committees to develop and prepare input for the SAP occurred in each country. SAP workshops were held in each country, and produced priority inputs for the regional SAP. The SAP was then reviewed not only by the experts, but also by the PSC and the National Water Policy Dialogue, to improve and strengthen it. Although in the end only two of three countries are endorsing the SAP, the third (Armenia) has prepared a DRAFT NAP that contains measures for the Kura-Ara(k)s River Basin, though from a unilateral standpoint.

- SAP Implementation Project: The two riparian countries of AZ and GE have prepared a request to GEF for a SAP Implementation Project to follow on from the original foundational project. This project is now under review by GEF for future funding.

Budget expenditure: as mentioned earlier in this Evaluation, the project expenditures were designed to focus the majority of project funding on countries. In summary, this meant that well over 50% of GEF funding was to be disbursed throughout the region into actual on-the-ground activities and support that assisted the countries in the development of the TDA and SAP.

Mainstreaming

UNDP supported GEF financed projects, as key elements in UNDP country programming, are intended to align with country programme strategies as well as with international environmental conventions. Thus, this evaluation addresses the mainstreaming of the Kura-Ara(k)s project vis-à-vis the country priorities and UNDP priorities. To this end, the Evaluator reviewed, where they exist, the UN Development Assistance Framework and the UNDP Country Programme Action Plan (CPAP).

All Kura-Ara(k)s countries have a CPAP (though AZ is really called a Country Action Plan and is abbreviated) with a strong emphasis on sustainability and environment. This includes in various countries a focus on biodiversity management, protected areas, climate change, and sustainable natural resource use. Adaptive management is a common theme, as is sustainable development. The Kura-Ara(k)s project is congruent with these UN directions, as sustainable use of water resources is an outcome of ecosystem based management. In fact, in most CPAPs the Kura-Ara(k)s River Basin is mentioned specifically.

The CPAPs also focus on gender issues, and the rural poor as well as vulnerable groups. The Kura-Ara(k)s project ultimately addressed these community issues, with gender being addressed by a special report now approved by the PSC. Future projects related to the Kura-Ara(k)s should take into account the rural poor, gender issues, and vulnerable groups more specifically. Thus, the Kura-Ara(k)s project is mainstreamed well with UNDP country programming.

Sustainability

This is a crucial issue for any GEF IW project. Many IW regional projects end with an agreed regional document that states the commitments of the states to River Basin governance. For instance, the BCLME project culminated with a signed Benguela Current Convention in March 2013, some six years after the Benguela Current Commission was formed. The presence of a negotiated, agreed Convention or similar document provides some assurance that a mechanism and commitment are in place for long-term sustainability of the GEF intervention.

The current project is strengthened by a bilateral agreement between AZ and GE on joint River Basin Management issues, being negotiated with help from UNECE: “Agreement between the Government of the Republic of Azerbaijan and the Government of Georgia on Cooperation in the Field of Protection and Sustainable Use¹ of the Water Resources of the Kura River Basin”. This Agreement is now ready pending approval from the Ministry of Agriculture in Georgia. As part of this Agreement, a Joint Commission will be established: “The Commission referred to in Article 6 of this Agreement is the organ of intergovernmental cooperation between the Parties in the area of protection and rational utilization of the water resources of the Kura River basin.”

A SAP implementation project has been proposed to GEF by AZ and GE, as a logical follow-on to the foundational GEF IW project for the Kura-Ara(k)s River Basin. This project, provisionally titled “Implementing the Kura River Strategic Action Plan to address water-food-energy-ecosystem

security nexus through Integrated Water Resources Management,” would take the next steps in SAP implementation and strengthening foundations for regional cooperation in common River Basin issues.

The one area that was less sustainable, and pointed out in the ProDoc as a risk, was the participation of all three countries in the SAP and follow-on project. At some point, hopefully, all five countries (AR, AZ, GE, IR, and TK) would participate in meaningful basin-wide joint management to the global benefit; the successful experiences of the GEF IW interventions in the meantime, leading up to times when such cooperation will be politically acceptable, is key to future basin-wide success.

Environmental risks for sustainability of the project are increasing, and need to be addressed in the SAP implementation project. Major risks include increased use of hydropower, climate change (mentioned in all three CPAPs regarding environmental damage), increased extraction of groundwater, and inadequate control on allocation and use of surface waters. These issues must be addressed for the sustainability of the resources.

Impact

Since this project was a foundational project (IW project developing a TDA and SAP), stress reductions and status change impacts have not been measured. Rather, this Evaluator has used potential for sustainability of the intervention for ecosystem-based management (EBM) of the three neighboring countries, and outcomes from the present project as indicators of likelihood of future impact.

As discussed in the previous section, the likelihood of a sustainable financing and governance mechanism for the future ecosystem based management of the Kura-Ara(k)s is reasonably high, given the Agreement between AZ and GE, and its associated Commission. Thus, one can expect that given governmental and stakeholder continued support for the application of IWRM, the financing and governance mechanisms will be in place to oversee IWRM for the Kura-Ara(k)s northern region.

Outcomes from the Kura-Ara(k)s project support this viewpoint. With the strong TDA process and with the SAP now in hand and approved by AZ and GE, the region has tools to move towards impacts in the areas of stress reduction and ecological improvement. The TDA documents provide the foundational information basis for IWRM, with strong indications of baseline conditions in many areas relevant to IWRM. In addition, the TDA process itself leads to conditions for sustainability of IWRM efforts, in that cadres of individuals in each country participated in the Kura-Ara(k)s efforts to date, benefitting from training, active participation, scientific investigation, policy and governance efforts, etc., that now leaves each country in a stronger position of educated stakeholders. Similarly, the SAP process brought nationals from the region into a regional context to understand regionality of ecosystem problems and to develop regional solutions to these problems.

The Gender study was a major advancement in a region where gender inequalities persist. Though the impact of the study cannot be measured quantitatively, it is anticipated that the in-depth nature of the study and recommendations will lead to positive impacts in this region.

The demonstration project activities similarly will likely have positive impacts. Demonstration projects included biomonitoring, Rapid Ecological Assessment, Environmental Flows Methodology and Training. The impact from these activities likely cannot be documented until the countries adopt and implement the concepts of biomonitoring, rapid ecological assessment, and environmental flows methodology. However, with the commitment in the SAP, in the IWRPs, and in the Armenian NAP to move forward in these areas, the impacts of these interventions will likely be seen in the future.

More than one interviewee mentioned that the governments of the countries of the Kura-Ara(k)s region now have been sensitized to the importance of IWRM of shared basin regions such as the Kura-Ara(k)s.

In their opinion, this is a significant impact that would not have happened otherwise. This sensitization to IWRM is perhaps the largest impact of the project to the region.

Other positive impacts of the project include:

- Strengthening of the debate within the National Water Policy Dialogue meetings, through introduction of TDA/SAP processes as well as other GEF-related interventions.
- Formation of an IWRM Master’s Level programme with participation from all three countries, to provide for strong, long-term impact on capacity for the countries to manage their shared water resources and associated ecosystems.
- There was a perceived need to train current and future generations of water managers in the fields of IWRM in order to improve prospects for sustainable integrated management of water resources at the local, national and regional level. Training has been conducted through the IWRM Academy on the following major topics:

Block 1 - April 2012

Introduction to IWRM - Benefits of Integration

Water Quality - Reaching Decision Makers

Data Management - Making it Matter and Helping it Flow

Block 2 - June 2012

River Basin Ecology - River Basin Health

Floods and Droughts - IWRM for Disaster Management

Climate Change - Planning Adaptation into IWRM

Block 3 - October 2012

Public Health, Gender and Awareness - Issues for IWRM

The Economic Aspects of IWRM - The Costs and Benefits

Implementation and Enforcement of IWRM - Bringing it all together and making it work

In order to evaluate impact, we re-visit the indicators of the Project Document:

Global benefits: The global environmental benefits would be achieved through the use of Integrated Water Resources Management (IWRM) planning that have been identified as the answer to balancing competing and conflicting uses of water resources to inform and consider tradeoffs being made in socio-economic development objectives and ecosystem protection. Those global benefits proposed in the Project Document are evaluated below.

Global Benefit proposed by ProDoc	Evaluation
The project will establish an enabling framework for the preservation of transboundary water resources in an extremely political sensitive area facing challenges from reduction of hydrological flow, deterioration of water quality; ecosystem degradation in the river basin; and increased flooding and bank erosion.	Successful in two countries out of three: IWRM plans are identified for two countries, and both these countries agreed to a joint SAP which is approved (already done so in AZ, and GE). Armenia developed an IWRM plan of sorts for one basin (the Arpa River Basin), which is to be replicated according to their National Action Plan produced during this project.

<p>Additional global benefits will be achieved through the maintenance of the hydrological flows and patterns, and riverine environment that are important in the conservation of natural spawning grounds of the sturgeon and other anadromous fishes of the Caspian Sea, migratory bird species, and other flora and fauna.</p>	<p>As this project is a foundational project, it is not appropriate to expect changes to hydrological regimes and environmental flows within the context of this project; however, the SAP addresses issues that are intended to lead to such improvements, and the training has introduced methodologies that are almost certainly to be used in the future to the benefit of the shared river basin entities.</p>
<p>Preservation of the unique ecosystem of the Caucasus eco-region, increasing political stability through environmental cooperation in a geopolitically sensitive area, and testing activities that can be replicated elsewhere for integrated transboundary water management. The challenge in this project is the development of harmonized policies among nations who are at varying stages of development, with wide ranging priorities pertaining to water use.</p>	<p>Again, as this project is a foundational one, no such preservation follows from this project implementation. However, the SAP addresses actions required to achieve such benefits. Some harmonized policies have been produced in the two National IWRM plans, so this part has been successful.</p>
<p>by trialing a number of innovative strategies, as well as employing coordination mechanisms this project will take an array of options into account and will devise a set of realistic activities and objectives that can be met by the participating countries. The lessons learned from this can be translated to many of shared water systems and it is expected that refinement of the strategies will enable this and other projects to develop more fully in the future</p>	<p>The IWRM Academy and IWRM MSc Curriculum were two areas of innovation introduced by the project. Though not anticipated by the Project Document, the project's adaptive response to a demonstrated need in the region produced a quite positive innovative output that is ripe for replication in other regions. In addition, lessons learned will be passed on to other projects (lessons learned to be produced by the CTA by August 2014). Training of school-children in biomonitoring is viewed by the project to be innovative, and certainly addresses education at a level required to secure sustainable IWRM in the long-term in these countries.</p>

National – the national benefits proposed by the Project Document can be evaluated:

National Benefit identified by ProDoc	Evaluation
<p>an improvement in water quality and water quantity management strategies, monitoring programmes and coordination with neighboring countries.</p>	<p>The IWRMs and the SAP/NAP have recommended improvements in management strategies and monitoring programmes. According to the countries, these strategies and monitoring programmes will be carried out under national and regional programs already identified by the countries. Certainly, the project training in REA, biomonitoring, and environmental flow calculations cannot help but lead to national benefits in the decadal time frame. In addition, improved coordination in water resources was</p>

	developed between AZ and GE, and to a certain extent, with Armenia.
Through prioritized objectives and increased policy harmonization, resources can be combined and will not need to be replicated at the national level alone	There is no regional implementing body proposed for the Kura-Ara(k)s river basin as a result of this project; however, a sister project is assisting negotiations between a joint commission between Azerbaijan and Georgia that would result in increased policy harmonization. Within the two-country SAP, national level activities will be shared to improve basin scale results and to share lessons learned.
Countries can benefit from improved IWRM approaches and through long term sustainable development of water in the region. Benefits will include increase monitoring reliability, decrease impacts of significant flooding damages to infrastructure and economic development, increased activities of public, civil society and stakeholders in addressing water resource management challenges	Benefits are too early to measure from this single foundational project.

Local – the local benefits proposed by the Project Document can be evaluated:

Local Benefit proposed by ProDoc	Evaluation
improved conditions in water system health, including improved quality and quantity, as well as defined activities that can be undertaken by communities themselves to improve conditions.	These benefits cannot be realized following a single foundational project.
By collaborating with civil society, and project staff, the local beneficiaries will gain a sense of control over their local circumstances, increase the ability to address these and learn from other stakeholders in neighboring countries	Certainly, the three countries have stakeholders who have experienced enhanced control on river-based resources. This ownership may not have devolved to the local level, as institutional barriers still exist in these countries that still centralize many of these activities.
provide other communities and stakeholders with examples of low cost activities that can be undertaken to improve conditions pertaining to their impacts on and impacts from regional water management issues.	No demonstration projects of this nature were carried out by this project.

4. CONCLUSIONS, RECOMMENDATIONS AND LESSONS LEARNED

The conclusions from the Evaluation are provided below in the Ratings for the project. Overall, the rating for the project was Moderately Satisfactory, the third highest rating possible (four out of six possible). The top rating of satisfactory was for Efficiency of project delivery. This rating was provided because of the strong dedication and work ethic of the PCU staff as well as the full commitment of the countries and their designated experts. It was also provided because the Kura-Ara(k)s Project, as written, was quite difficult to carry out as it was too complex and all-encompassing for the budget assigned to it. Despite this, the countries assisted by the PCU were able to accomplish nearly all of the tasks, and to exceed the expectations in some cases (more TDA-support desk studies were carried out than envisioned by the Product Document). Specific examples include the Trend Analysis and Gender Study for the TDA, IWRM Capacity Needs Assessment, IWRM Academy, IWRM MSc Curriculum development with 3 major universities, the Nexus pilot methodology, the Ararat Hydrology Study, the RBMP for Arpa, the Demonstration project linking environmental flow calculations to REA, and Biomonitoring as Biomonitoring was added at the request of the countries at the inception workshop. Although some areas of project implementation were less than satisfactory (the breadth of Public Participation, pre-feasibility studies, public involvement demonstration projects, etc.), in general all project outcomes were achieved in spite of restrictive budget.

Table 10: Rating Table for Project Performance: Note that this table is based on concept that a HIGHER score indicates BETTER performance

Rating Project Performance		
Criteria	Comments	
monitoring and Evaluation: Highly Satisfactory (6), Satisfactory (5) Moderately Satisfactory (4), Moderately Unsatisfactory (3), Unsatisfactory (2), Highly Unsatisfactory (1)		
Overall quality of M&E	(rate 6 pt. scale)	4 (out of 6)
M&E design at project start up	(rate 6 pt. scale)	5 (out of 6)
M&E Plan Implementation	(rate 6 pt. scale)	5 (out of 6)
IA & EA Execution: Highly Satisfactory (HS-6), Satisfactory (S-5) Moderately Satisfactory (MS-4), Moderately Unsatisfactory (MU-3), Unsatisfactory (U-2), Highly Unsatisfactory (HU-1)		
Overall Quality of Project Implementation/Execution	(rate 6 pt. scale)	5 (out of 6)
Implementing Agency Execution	(rate 6 pt. scale)	4 (out of 6)
Executing Agency Execution	(rate 6 pt. scale)	3 (out of 6)
Outcomes 1: Highly Satisfactory (HS-6), Satisfactory (S-5) Moderately Satisfactory (MS-4), Moderately Unsatisfactory (MU-3), Unsatisfactory (U-2), Highly Unsatisfactory (HU-1)		
Overall Quality of Project Outcomes	(rate 6 pt. scale)	4 (out of 6)
Relevance: relevant (R or 2) or not relevant (NR or 1)	(rate 2pt. scale)	2 (out of 2)
Effectiveness	(rate 6 pt. scale)	4 (out of 6)
Efficiency	(rate 6 pt. scale)	5 (out of 6)
Sustainability: Likely (4); Moderately Likely (3); Moderately Unlikely 2); Unlikely (1).		
Likelihood of Sustainable Future	(rate 4pt. scale)	3(out of 4)
Financial resources	(rate 4pt. scale)	3 (out of 4)
Socio-economic	(rate 4pt. scale)	3 (out of 4)
Institutional framework and governance	(rate 4pt. scale)	3 (out of 4)
Environmental	(rate 4pt. scale)	2-3 (out of 4)

Rating Project Performance		
Criteria	Comments	
Impact: Significant (3), Minimal (2), Negligible (1)		
Environmental Status Improvement	(rate 3 pt. scale)	1 (out of 3)
Environmental Stress Reduction	(rate 3 pt. scale)	2 (out of 3)
Progress towards stress/status change	(rate 3 pt. scale)	2 (out of 3)
Overall Project results	(rate 6 pt. scale)	4 (out of 6)

ratings Scales		
ratings for Outcomes, Effectiveness, Efficiency, M&E, I&E Execution	Sustainability ratings:	relevance ratings
6: Highly Satisfactory (HS): The project had no shortcomings in the achievement of its objectives in terms of relevance, effectiveness, or efficiency 5: Satisfactory (S): There were only minor shortcomings 4: Moderately Satisfactory (MS):there were moderate shortcomings 3. Moderately Unsatisfactory (MU): the project had significant shortcomings 2. Unsatisfactory (U): there were major shortcomings in the achievement of project objectives in terms of relevance, effectiveness, or efficiency 1. Highly Unsatisfactory (HU): The project had severe shortcomings	4. Likely (L): negligible risks to sustainability 3. Moderately Likely (ML):moderate risks 2. Moderately Unlikely (MU): significant risks 1. Unlikely (U): severe risks	2. Relevant (R) 1. Not relevant (NR) Impact Ratings: 3. Significant (S) 2. Minimal (M) 1. Negligible (N)
Additional ratings where relevant: Not Applicable (N/A) Unable to Assess (U/A)		

4.1 Corrective actions for Design, Implementation, Execution and M&E of project

Some corrective actions appear clear at this point of a Terminal Evaluation. These actions are in a variety of areas as described below.

- Project Design: There were some weaknesses in the project design, that led to problems in implementation. First, the project was overly ambitious for the budget. Rather than focusing on addressing a smaller subset of outputs, the project proposed a larger number of activities and outputs, relative to the funding level and time table. Although the project objectives were quite appropriate, the actual components were somewhat ambitious. These deliverables (products) were generally produced by the project, but some were of low quality reflecting the inadequate resources for producing the outputs. The tendency for overambitious projects probably comes from implementing agencies trying to foresee or address all GEF, STAP, and country comments; however, the Implementing Agency needs to protect the project and its staff by proposing appropriate levels of activities suitable to the funding. Second, a concept of Public Involved Demonstrations Projects (PIDP) was included in the project design, but was not carried out due to lack of budget. Apparently, the budget for this PIDP was removed in the project development phase of the project, but the description of the activities was not. As the countries accepted the Inception Report from July 2011, which did NOT have this activity, the Evaluator interprets this as national approval for the PIDP absence.
- Project Implementation: Project implementation in general was quite good, as shown by the rating, as somehow the limited staff was able to work closely with national experts to achieve success in most of the activities. Areas that were not as successful included

public participation (reference made to NWRPD meetings, but no concrete minutes or products shown), donor meetings (currently ongoing), and pre-feasibility studies. Since public participation is a key element to all IW projects, the Evaluator considers documentation of such participation to be an essential output.

- Project Execution: The EA did not develop good relations with the project, in part due to its restrictions given the limited GEF support (7.5% of project budget). Errors in allocation of budget plagued the project early on, and led to heightened responsibility of the Project Administration to watch the EA budget carefully. Although these errors appear to have been corrected to the benefit of the Project, such errors add to tension between the EA and project, and increase the burden on the Project Administration. With GEF 4 only allocating a maximum of 10% of budget to Project Management (of which approximately 9% was programmed for this purpose), this management time is precious. To expect only 7.5% to the EA and 5-10% to the Project to result in effective administration and management is unreasonable. No private sector enterprise to my knowledge can operate on such a restrictive budget: for example, for many private sector projects such as consulting and construction, administrative costs are at least 15% and often higher. Though GEF can do nothing about this on its own, the argument could be made to GEF Council, which is the arbiter of such decisions.
- IA performance: IA backstopping came from several locations: from UNDP/GEF in New York, from the Bratislava Regional Center, and from UNDP COs in each of the project countries (with GE UNDP office as the lead). This abundance of riches is a mixed blessing: it results in the Project having, in effect, three reporting lines. With multiple reporting lines, conflicts do arise, to the detriment of the project. Specifically, conflicts arose between the local UNDP offices and the project, because of the fiduciary responsibility of the country offices to the Project. The level of reporting required by UNDP country offices places a burden on the already heavily burdened management of the Project at the PCU. Interviews with both the PCU and the COs confirmed the conflict between the project and the COs. At any rate, with input from the RTA, this issue was addressed to result in a workable, but less than optimal relationship between the local Country Offices and the PCU. The UNDP/GEF should address this issue in future projects, by rationalizing the roles and responsibilities of the THREE UNDP bodies overseeing this IW project (UNDP GEF in New York, UNDP country offices, and UNDP GEF regional center until recently located in Bratislava).

4.2 Follow-up Actions

Actions to follow up or reinforce the initial benefits from the project are clear.

First, the countries need to approve the SAP. AZ and Georgia have endorsed the SAP. Armenia has already stated it will not endorse the SAP.

A follow-on GEF project focused on SAP implementation should be developed by UNDP and approved by the GEF IW. There is currently national ownership of the Kura-Ara(k)s River Basin joint management concept for the region based on IWRM, but in this human resource challenged region, the leadership of GEF towards developing sustainable policy and governance for the River Basin is crucial and momentum should not be lost. This Kura-Ara(k)s project has been effective in creating a regional consensus on priority IWRM problems in the region, and has cemented close cooperation amongst the two northern basin countries.

4.3 Future Directions

The next GEF-able activity should focus on SAP implementation. A provisional title for a SAP implementation project has been identified: Implementing the Kura River Strategic Action Plan to

address water-food-energy-ecosystem security nexus through Integrated Water Resources Management

4.4 Recommendations:

The project should move into the SAP implementation under GEF support, once the two countries formally approve the SAP, and once UNDP has a PIF approved and the Project Document approved. These steps should take place quickly so momentum is not lost. The GEF intervention is appropriate as there is a continuing need for river-basin wide management and collaboration, rather than just national actions. The optimal next step might involve five countries instead of two: Armenia, Azerbaijan, Georgia, Iran and Turkey. However, on-the-ground realities may not make this possible for the near future. In the near-term, assistance by GEF/IW in SAP implementation will produce measureable improvements in this important river-basin, which debouches directly to another area of GEF/IW concern: the Caspian Sea. The present project has been successful in fostering collaboration between the two countries. However, further collaboration will help cement not only the collaboration, but also adherence to the GEF/IW approach to shared water bodies. Although Azerbaijan may be in the position to implement a strong national IWRM program, Georgia is not in the same position. Intervention by GEF will help maximize the success of regional actions through the bi-national SAP.

4.5 Lessons learned:

GEF and the IAs should take to restrict projects to reasonably achievable numbers of outcomes, outputs and activities. Although GEF, STAP and Agency comments always want to see more out of a project, care must be taken to limit the outputs and activities to a reasonable level that is achievable with the resources allocated.

The Project Steering Committee responsibility needs to be laid out clearly, especially in future projects where a Commission may play a role in the Basin. The appropriate roles and responsibility of a Commission versus a Project under that Commission needs to be elucidated and agreed by parties.

Executing Agency backstopping should focus on the needs of the project. Perhaps the IA and the EA should discuss the best use of the 7.5% execution fee, and properly lay out responsibilities of the EA versus the project for Administration and Management. Clearly a 7.5% fee in an international context will allow only limited effective administration and management from a distant location.

Private sector needs to be a key player even in foundational capacity building activities of the GEF, in order to secure a higher probability for long-term sustainability of interventions.

Project management for highly complex, transboundary (hence multi-national) projects such as this must be backed by sufficient resources to allow adequate administration and management. Project management for such complex projects characteristic of the International Waters focal area is notoriously demanding and sufficient financial support must be permitted for success. For instance, the present project had a combined role of a CTA/Project Manager, when such roles are not uncommonly separated by other IW projects in recognition of the different requirements for Management versus domain expertise.

5. Annexes

- I. ToR**
- II. Itinerary and Summary of Field Visits**
- III. List of persons interviewed**
- IV. List of documents reviewed**
- V. List of partner projects**
- VI. Evaluation Question Matrix**
- VII. Questionnaire used and summary of results**
- VIII. Strategic Results/Logical framework matrices**
- IX. Evaluation Consultant Agreement Form**

Annex G: Evaluation Report Clearance Form

(to be completed by CO and UNDP GEF Technical Adviser based in the region and included in the final document)

Evaluation Report Reviewed and Cleared by	
UNDP Country Office	
Name:	
Signature:	Date:
UNDP GEF RTA	
Name:	
Signature:	Date: