### ANNUAL PROGRAMME/PROJECT REPORT (APR)

## **Basic programme/project information**

Programme or project number and title: 00047440 Restoration of Golema Reka

Designated institution:

Project starting date:

Originally planned:

Actual: 01 December 2005

Project completion date:

Originally planned:

New: 31 December 2007

Total budget (US \$):

Original:

Latest signed revision: 1,000,000 CHF

Period covered by the report: 01 January 2006 – 31 December 2006

The SDC funded project "Restoration of Golema Reka" had its official commencement on 1st December 2005. At the beginning all the necessary preparatory work for successful initiation of the project was undertaken. This included equipping of the project office, preparation of the project staff for the planned activities, training on financial and administrative procedures etc.

The main foreseen output of the first stage of the project was the development of a main/basic design for restoration of the river ecosystem, while the second stage of the project is planned to focus on physical implementation of the proposed river restoration measures designed during the first stage.

Firstly, a short term consultant was selected through a competitive procedure, to work on development of comprehensive Terms of Reference (TOR) which served as a basis for selection of a consulting company whose main responsibility was to develop the river restoration design. The consultant conducted site visits during which a preliminary assessment of the current environmental status of Golema Reka was carried out. Also initial meetings with the relevant project stakeholders were organized. The prepared TOR was accompanied by a report on the river's environmental status which was based on the preliminary/rapid assessment of the main environmental problems in river and its basin.

A consortium of three companies headed by GEING, Skopje was awarded with contract for the assignment of development of the main/basic design for restoration and protection of the river ecosystem. The team of experts commenced with their work in May.

In the early stages of the company's work, all the required information for development of the main/basic engineering design were gathered with the support provided by the PIU. This included significant field work such as: geodetic survey, hydro-geological prospection, and geo-mechanical investigations in the sections where regulation of the riverbed was foreseen. In addition good cooperation was established with the relevant institutions/organizations which have provided strong support to the consulting team. The contributing institutions/organizations were: Local Self-Government; Public Enterprise "Proleter"; Cadastral Office; Forest Enterprise; NGOs, agricultural associations; villages along the river, etc.

Series of meetings and interviews were conducted in order to both gather the relevant information and to ensure cooperation and support of the identified relevant institutions/organization during the preparation of the design, and even more importantly, during the implementation of the proposed measures/activities.

Taking into consideration the importance of the community involvement in the attempts for achieving sustainability of the project outputs, the PIU initiated a broad community dialogue process. This process included continuous information of the local communities living within the river basin for all relevant issues, as well as establishment of mechanisms for their involvement in the process of development and implementation of the restoration activities.

Good cooperation was established with the Local Government in Resen, as one of the most important project partners and beneficiaries. This cooperation has resulted in commitment of the Local Government for continuous support to the PIU during the project implementation. It was agreed by the Municipality all the required resources to be made available for the PIU, including the support of the municipal engineers and technicians to the consulting team that will work on the development of the main river restoration design.

The initial project workshop was organized on 05 June (World's Environment Day). This workshop was used as an opportunity for presentation of the project objectives to the broader community. The early reactions of the stakeholders were very positive, having in mind the serious problems related to the river's environmental status, as well as the absence of any mitigating intervention in the river during

the last decades. It was again emphasized the importance of the community involvement, and that every effort should be made, so that local people's needs are realistically reflected into the project's implementation programme.

Taking into account the requirements of the present national legislation with respect to engineering projects, a company (Reviewer) was selected to carry out technical review of the main/basic river restoration design. Subject to review was the main design developed within the Task 1 of the assignment (Restoration of the riverbed and the riparian corridor). This assignment was assigned to the Faculty of Civil Engineering, Skopje.

During the reporting period the contracted consortium headed by GEING finalized the various reports, studies, and conceptual designs. Although with delays, the efforts made have resulted in completion of the main river restoration design. After being revised several times all the supporting studies and elaborates have been finally accepted and verified by the Reviewer and UNDP. Currently the Designer is working on translation, printing and submission of the documentation. One issue that may cause additional delays is the preparation of the expropriation documentation/elaborate. The recent changes on the Law on Cadastre have imposed modifications in the procedures for preparation of expropriation elaborates resulting in time consuming coordination between the Cadastral administration in Skopje and its branch office in Resen for issues relevant to the project.

Despite the relatively broad scope of the Designer's assignment, the work in the field has resulted in identification of additional problems which hadn't been initially included in the TOR, or were out of the scope defined in the TOR. These problems include unsolved evacuation and transport of storm waters in the zone of the river, as well as direct discharge of wastewaters into the river due to the absence of an appropriate collection system.

Currently a team of engineers is working on development of a basic design for the storm water drainage system. The purpose of this system will be protection of the planned river regulation from runoffs after heavier rainfall.

Also a procedure for selection of a Designer of a wastewater collection system in the urban and industrial zone along Golema Reka is currently underway. Originally it was requested by the Iocal authorities that the design of the wastewater collection system is developed in accordance to the Resen's Detailed Urban Plan (DUP). However, the preliminary field/geodetic surveys made by GEING have shown that this solution is full of risks because of the possibilities for wastewater clogging and odor generation due to inadequate terrain gradient. Therefore, a different conceptual solution for efficient management of wastewater was proposed by the consultants. This solution was broader in scope than originally foreseen (in the DUP), and thus a new contractor will be selected to develop the basic design.

Based on the recommendation of the engineers, the physical implementation of the designed river restoration measures should be carried out in parallel with the construction of the storm water and wastewater collection systems because of mainly economic and practical reasons. However, such solution will undoubtedly increase the costs of the overall investment, and therefore additional funds should be secured prior to the commencement of the tendering procedure. Alternatively, the project could support interventions on a very limited river section within the currently available budget. This would mean that it will be solely Municipality's responsibility to finalize the river restoration activities as soon as additional funds are available. The project team is currently supporting the municipal authorities in their efforts for mobilization of the additionally required resources. This includes exploring the opportunities for further cooperation with the present donor of the project (SDC).

Although mainly focused on finalization of all necessary technical and other designs, the project also worked on physical implementation of certain proposed measures for which consent from the stakeholders was obtained.

In the period October – December, the project supported afforestation activities in the river basin of Golema Reka. Afforestation is a very efficient measure against erosion and will result in significant reduction of sediment load in the river and consequently in the lake, thus creating environmental benefits.

Originally it was foreseen that approximately 24 ha of eroded land will be afforested with 120,000 seedlings of black locust. However, the results from the independent expert supervision of the quality of afforestation have shown that the contractor hasn't completely fulfilled the provisions of the contract. Therefore, the contract with the company was terminated upon series of evaluations of the afforestation activity. Taking into account the seasonality of the afforestation activities, the project didn't completely finalize the afforestation plan with another contractor. Based on the inspection of the survival rate of the seedlings, the project will decide whether additional afforestation activities should be foreseen. This will to a large extent depend on the available funds and the final outcome of the measures prioritization process.

The project also supported the local initiative for cleaning of the drainage channels located nearby the river. These channels served as a protection against flooding of vast area of agricultural land shared by four neighboring villages. About 3.5 km of drainage channels were cleaned and made fully operational. The reactions of the local affected communities after the successful completion of the cleaning activities were very positive.

### **Project issues**

The realization of the initial work plan faced with several problems due to various external factors. In general, there were certain delays in finalization of the main project product i.e. the design for restoration of the riverbed and the riparian corridor which consequently caused postponement of the actual interventions on the ground.

The procedure for selection of a company was relatively long because it included clearance by the Contract Assets Procurement Committee (CAPC) and final clearance of the whole process by the Advisory Committee on Procurement (ACP/HQ, New York). The whole procedure was verified to be fair and transparent, both by CAPC and ACP/HQ.

Serious problems and delays occurred during the preparation of Task 1 of the assignment (restoration of the riverbed and the riparian corridor), which is considered to be the most important segment of the project. For most of the reports and elaborates produced by the Designer (GEING), the Reviewer had very serious remarks, and therefore they were asked to conduct series of revisions in order to improve their quality. This has also involved a significant amount of additional field work.

It is assessed that most of the problems occurred because of the inappropriate organization of the Designer as well as their insufficient internal control. This has resulted in serious problems in their overall coordination of such complex project. In addition, the Designer showed insufficient understanding of the ecosystem oriented approaches in restoration of rivers, which was one of the core project's requirements, as this is an area that is quite new as a concept in the country. Therefore, the Reviewer had provided a significant support for development of good quality project documentation which would serve as a basis for the future physical interventions.

Confirmed by: Anita Kodzoman

Programme Officer

Prepared by: Dimitrija Sekovski n Project Manager

## Programme or project summary table

<b>t</b> DEX	01 January 2006 – 31 December 2006	
Management arrangement:	Period covered:	ENT
00047440 – Restoration of Golema Reka		OVERALL ASSESSMENT
Programme/project title and number:	Designated institution:	

# Brief analysis of progress achieved in the contribution of the programme or project to the expected results.

selection of appropriate measures and activities whose implementation will result in achievement of the project goal - improvement of the the project's second stage focusing on implementation of the proposed measures. However, after the series of subsequent revisions of the The main product of the project's first stage was the main river restoration design, which should present a basis for prioritization and river's overall environmental status. The significant delays in the delivery of good quality river restoration design have resulted in delays of project documentation (river restoration design), it was finally accepted and verified by the Reviewer to be a solid basis for further interventions aiming towards achievement of the project goal.

activities which have previously been agreed by the relevant stakeholders. These activities include afforestation of eroded land within the river basin and cleaning of drainage channels in the vicinity of Golema Reka. However, more significant impact of the project realization is Despite the serious delays in the preparation of the technical documentation, the project managed to implement certain proposed expected during 2007, when it is foreseen the majority of proposed and prioritized measures to be implemented.

	Delivery rate (%)		% 65				
	Estimated annual expenditure (\$ '000)		144.250,32				
FINANCIAL SUMMARY	Annual budget (\$,000)		244.241,26				
	Source of funds	TRAC (1 and 2) TRAC 3	Swiss Development Cooperation Agency	Cost-sharing: Government	Financial institution	Third party	Trust funds

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**SUMMARY OF RESULTS** 

	Programme support objectives (PSOS) or immediate objectives	Indicators	Achievements
0bj. 1	Preparation of comprehensive TOR for consulting services "Development of main/basic river restoration design"	Completed preliminary/rapid assessment of the river's environmental status; prepared and accepted comprehensive TOR	Successfully completed rapid assessment. Comprehensive TOR prepared after their amendment based on relevant comments provided by UNDP
Obj. 2	Development of main/basic river restoration design	Completed main/basic river restoration design (Task 1 to Task 7)	Task 1: generally (not fully) completed (serious delays due to the need for multiple revisions of the reports) (Task 2 to Task 7) Completed and verified designs/studies/elaborates (with minor delays)
Obj. 3	Implementation of prioritized set of river restoration measures / activities	Implemented set of measures and activities prioritized by the stakeholders	Partly achieved due to the delays in finalization of the river restoration design
	Annual output targets	Achievement of outputs	Proposed output targets for the next year
Obj. 1 Prepara consulti main/ba	Obj. 1 Preparation of comprehensive TOR for consulting services (Development of main/basic river restoration design)		
Output 01. Conducting the river's e	Output 01. Conducting preliminary/rapid assessment of the river's environmental status	Fully achieved	
Output 02 Preparatio	Output 02. Preparation of comprehensive TOR	Fully achieved	
Obj. 2 Develop design	Obj. 2 Development of main/basic river restoration design		

Output 01.  Task 1: Restoration of the riverbed and the riparian cover (main/basic design)	Partially achieved	Finalization of the main/basic design and all supporting documentation (i.e. expropriation elaborate)
		Finalization of the basic design for the storm water collection system along Golema Reka
		Finalization of the basic design for the wastewater collection system along Golema Reka
		Finalization of the design for the construction and craft works required for installation of the river monitoring equipment
Output 02 Task 7: Mitigation of the solid waste and	Fully achieved	
waste and waste and waste and waste and wastewater pollution (conceptual design)		
Output 03	Fully achieved	
lask 3: Improvement of the wetlands condition (conceptual design)		
Output 04:	Fully achieved	
Task 4: Improvement of the forest cover and		
mitigation of erosion processes (conceptual design)		
Output 05:	Fully achieved	
Task 5: Mitigation of the problems related to the current land-use (report)		
Output 06:	Fully achieved	
Task 06: Improvement of the river monitoring		
(leport)	Fullyachioned	
Output 07. Task 07: Public awareness raising (report)	מווא מרוושגיפת	
Obj. 3		
Implementation of prioritized set of river restoration measures/activities		
Output 01:	Partially achieved	Decision for additional afforestation activities to be
Afforestation activities (mitigation of erosion processes in the river basin)		roreseen upon the inspection of the survival rate of the planted seedlings and budget availability
Output 02:	Fully achieved	
Cleaning of drainage channels in the vicinity of		

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Output 03:	Not achieved	Finalization of the prioritization of measures and
Physical implementation of the main river		activities for improvement of the river's environmental
restoration measures/activities		status through involvement of the relevant stakeholders
		and in accordance to the available budget.
		Implementation of the prioritized measures (for
		example: installation of the river monitoring equipment,
		physical implementation of the main river restoration
		measures)
		Additional resource mobilization activities required.