. THE WORLD BANK/IFC/M.I.G.A.

OFFICE MEMORANDUM

DATE:

1 October 1998

TO:

John Hayward, Sector Leader

FROM:

Ms.N. Durutan (Team Leader, ECCTR), Messrs. D. Gray (ENV) and S. Krugman

(Consultant)

SUBJECT:

In-Situ Conservation of Genetic Diversity-GEF Grant No: 28632 Full Supervision Report

- 1. We carried out the last supervision mission during September 2-16, 1998 under the terms of reference dated August 27, 1998. The mission's discussions were focused mainly on: I) participation and public awareness activities and baseline survey, ii) preparation of Final Progress Report, iii) preparation of GMZ management plans, iv) training, v) adoption of National Plan for in-situ Conservation by the Government.
- 2. The mission is pleased with the excellent progress made during the period of one year extension. Almost all of the project components have been finalized and the project objectives have been achieved. Due to some scientific and administrative reasons some work will be completed shortly after the Closing Date, September 30, 1998.
- 3. This project was the first of its kind in the in-situ world to protect both woody and non-woody wild crop relatives from an integrated multi-species approach. Existing biodiversity conservation programs worldwide have generally failed to recognize the significance and need to protect important wild crop relatives in their natural habitat. There are few national programs designed to protect wild crop relatives in-situ, but these have focused on single species only. Thus, this project is a model project for Turkey and also for the other countries. It initiated and developed a mechanism to foster an on-going national program for identifying, designating and managing areas specifically for in-situ conservation of nationally and globally significant wild crop relatives. The Final Progress Report which is of a technical/scientific nature is the summary of all that was accomplished during the term of this GEF project. Among other benefits, this report can be the basis for grant proposals to fund follow-up projects in Turkey.
- 4. The Implementation Completion Report is due March 31, 1998.

Attachments

PSR (Form 590) Letter to Government Aide-Memoire Status of Legal Covenants

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Accessio	n No.	Box No.
F)PN	DATE 06-02-99	Log #
Action	cc	
FILE (Co/	aipha/Pname or #) Ln/Cr G	R/TF ESW Co/Rg Adm Proc
TR-	GE-8869	General

Distribution

Region:

Messrs/Mmes. Blanc (ECAVP); Cleaver, de Nevers, Tuck, Goldberg, Ablasser, Stewart (ECSSD), Chhibber (ECC06)

ECA Information Center; Project Files

Bankwide:

Messrs/Mmes. Barlas, Santos (LEGEC); Albert, Rahill, Gray (ENVGC); Mehta (LOAEL)

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Board Approval Date: 03/11/1993

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Project Name: IN SITU GENE CONSERV

Recipient: GOVT. OF TURKEY TM Division: ECCTR

Since: 07/01/1995

Team Leader: DURUTAN

BLOCK 1. IDENTIFIERS

Region: ECA Country: To	JRKEY		Sec	tor: WY	Lending	Instrument:	
Prog. Obj. Cat.: PA	EA Category: T	PTI	N	NGO? N	Resettlen	nent? N	
GLOBAL Recipient: GOVT. C	OF TURKEY				- 	Focal Area:	В
	•	Currency Indicator	Currency Code XDR	Prod Line GE	Signing <u>Date</u> 03/25/1993	Effective <u>Date</u> 03/25/1993	Supp Proj ID
Cofinancing Agency			Board Am	ount (\$M)	Current Amo	ount (\$M)	•
		Total	0.	.00	0.00	0	,
Guarantee Type:		Guar	antee Amou	unt (\$M):			<u>-</u>
This () Initial summary form (X) Supervision mission is part () Portfolio status upd of () Mid-term review	together	(X) Aide-me (X) Follow-		09/25/1998	Months sinc	Date: 09/16/1 e last mission: n planned: 11/	6
() ICR mission	This PSR	Date: 09/30/	1998		Last PSR Da	ate: 04/22/199	8
Supervision Effort Current FY - Planned	Total Staff-weeks 8.00	Total \$000 34.80	Fie Staff-v		Field \$000	As of 09/30/1998	}
Current FY - Actual Board through preceding FY Total Actual	2.60 48.85 51.45	20.16 126.48 146.64	0.0 9.5 9.5	57	0.00 26.19 26.19		
UPI Number Mission Member 22316 DURUTAN	Divisio ECCT		Number of Field Day	s Role or	Specialization		Previous aission?
65474 KRUGMAN 93164 GRAY	ECSS ENV	D BANK	12.0 12.0	CONSU			Y Y

BLOCK 2. PROJECT OBJECTIVES

GLOBAL ENVIRONMENT OBJECTIVES

1. The project will identify, survey, inventory, and manage selected areas (Gene managements zones-GMZs) for the In-Situ protection of the wild relatives of herbaceous and woody species with focus on globally significant species. It will put in place a management plan for GMZs. Based on the results of field work under the project, it will prepare a national strategy for In-Situ gene conservation of wild relatives of these species. The project will strengthen both the individual agencies of MOF, MARA and MOE as well as support their complementary strengths and capabilities through: i) collaboration through coordination committiees, ii) extension and public awareness, iii) national and international training, iv) sponsoring of an international symposium.

Key indicators of global outcome/impact

No indicators were identified at appraisal.

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Team Leader: DURUTAN TM Division: ECCTR Since: 07/01/1995

BLOCK 2. PROJECT OBJECTIVES (CONTINUED)

GLOBAL ENVIRONMENT OBJECTIVES (CONTINUED) Have global objectives changed since Board approval? N Has there been a mid-term review? N Date: MTR scheduled for Has the project been restructured? N

BLOCK 3. MANAGEMENT INFORMATION SYSTEMS

Original from SAR/MOP As formally revised Expected - this PSR Expected - last PSR	Closing Date 09/30/1998 09/30/1998 09/30/1998	Proj Cost (\$M 5.1 5.1 5.1 5.1	Project As % of Number	age in years: 5.5 f elapsed time from Board to expected closing: 100.0 r of formal closing date extensions: 0 last extension:
Cost overrun (percent): 0.		J.1	1	Delay (months):
Disbursement amounts in As of 08/31/1998	millions of SDR a	t \$1.46 per SDR		Original Disbursement lag (% forecast): 8.9 Original Disbursement lag (months): 15
	,	Amount	<u>%</u>	Revised Disbursement lag (% forecast): 6.2
Original SAR/MOP Forec		3.7	100.8	Revised Disbursement lag (months): 4
Formally Revised Forecast	t	3.6	97.8	Date of last disbursement: 08/31/1998
Actual Disbursements		3.4	91.7	
Revised Disb. Forecast for	Current FY	0.4	12.9	Are disbursements now under suspension? N
Actual Disbursements For	Current FY	0.1	4.3	Please indicate the latest date suspension was:
	Grant Balance	0.3	8.2	Imposed: Lifted:

Quick Disbursing Components			ected	Actual	Expected v.
(For SALs, SECALs, RILs, DRLs				_Date_	Actual (months)
	Act	tual Amount (\$	M):		
Audited Financial Statements	Over	due	Rec	ceived	
antity/angonization	1-3 Months	>3 Months	Qualified	Account. Issues	

	1-3 Months	>3 Months	Qualified	Account. Issues
 entity/organization 	N	N	N	N
- project (incl. SOE)	N	N	N	N
- special accounts	N	N	N	N
Progress Reports	N	N		

Actions Taken on Audit/Accountability Issues

BLOCK 4. IMPLEMENTATION PROGRESS RATINGS

Last PSR	This PSR	Component	Category	Cost (\$M)
S	S	INVENTORY AND SURVEY	Other	2.6
S	S	GERMPLASM MANAGEMENT	Institution-building	0.5
S	S	DESIGNATION OF GMZ	Institution-building	1.9
S	S	NATIONAL PLAN	Policy	0.5
S	S	INSTITUTIONAL STRENGTHENING	Institution-building	1.0
S	S	DATA MANAGEMENT	Institution-building	0.7

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BLOCK 4. IMPLEMENTATION PROGRESS RATINGS (CONTINUED)

Last PSR	This PSR	Specific aspects				
HS	HS	Counterpart Funds			HS	Highly Satisfactory
HS	HS	Project Manageme			S	Satisfactory
HS	HS	Procurement			U	Unsatisfactory
		Resettlement			HU	Highly Unsatisfactory
HS	HS	Environment			NR	Not Rated
		Environmental Plan	n			Not Applicable
		Financial Covenant	ts			**
HS	HS	Other Legal Coven	ants			> o _e
		WID Impact				 ,*,
		Monitoring and Ev	aluation			4
		Public Involvement	t			· .
		Government Comn	nitment			•
Last PSR	This PSR	Summary Implem	entation	Progress Rating (IP)		
S	HS			e based primarily on pr	coaress by c	omnonant
~				p	-6. 200 OF C	
() Legisla () Admin	principal probl tive approvals istrative proble	ems:	(IP rating, or if IP rating) Management of Specific () Shortage and/or delight () Procurement	ecial Accou	nts
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BLOCK 5. KEY ASSUMPTIONS AND RISKS RATINGS

Risk Ratings			
Last PSR This PSR	Generic Assumptions		
	World Market Conditions/Prices	H	High
	Local/National Market Conditions/Prices	S	Substantial
М	Climatic/Environmental Conditions	M	Modest
	Political/Security Conditions	N	Low or Negligible
	Macroeconomic Policies/Conditions	NR	Not Rated
M	Sector Policies/Conditions		Not Applicable
	Private Sector Response		••
M	Community/NGO Support		

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Team Leader: DURUTAN TM Division: ECCTR Since: 07/01/1995

BLOCK 5. KEY ASSUMPTIONS AND RISKS RATINGS (CONTINUED)

Risk F <u>Last PSR</u> N	Ratings This PSR N	Summary Risks Rating	
Last PSR	This PSR	Risk Name	Type of Risk
Risk F	Ratings	Possible Controversial Aspects (Project Alert System)	
	M	QUALIFIED MANAGERS	N
	M	STAFF TURNOVER	N ,
	S	CAPACITY AND COMPETENCY OF MOE	Y
		AMONG IMPLEMENTING AGENCIES	· ·
	M	COLLABORATION AND COORDINATION	Y
Last PSR	This PSR	Project-specific Assumptions	Identified in SAR?
Risk I	Ratings		`\ <u>.</u> .
		Achymnt of Cofinciers Objectives	
		Others	
		Counterpart Funding	
	N	Government Administrative Capacity	
(CONTINUE)	D)		
Last PSR	This PSR	Project-specific Assumptions	Identified in SAR?
Risk I	Ratings		

BLOCK 6. PROJECT OBJECTIVES: PERFORMANCE FACTORS AND RATING

GLOBAL ENVIRONMENT OBJECTIVES

Factors on which GO rating is based (where possible, refer to the key global outcome/impact indicators in Block 2)

Key project risk identified at appraisal was institutional and limited experience by project principals in working together. Based on the experience to date, this is not threat to the achievement of the project objectives. Communication and coordination among the agencies has improved significantly. PIC, ISC and Resident Mission Coordination meetings are being held regularly.

The planned inventory/survey and genetic analysis are completed. GMZs are selected for the wild relatives of herbaceous and woody species. The GMZ plans were prepared. A national strategy was prepared for in-situ conservation. The project agencies are strengthened significantly, through provision of specialized training, technical assistance and equipment.

ast PSR This PSR	Sum	mary Global Objectives (C	GO) Rating	
S HS	HS	Highly Satisfactory	S	Satisfactory
	U	Unsatisfactory	HU	Highly Unsatisfactory

CURRENT PROJECT STATUS

i) Survey and Inventory: The surveys and inventories have been successfully completed in all of the three pilot areas. ii) Gene Management Zones: A total of 21 GMZs were selected for the target species, iii) Data Management: Data collected through survey and inventory studies have been organized. Some distribution maps have been prepared. The Information Technology Management Plan and associated training were completed and the GIS center has become operational. The project agencies, using the facilities of GIS center, have completed digitizing and map production for the majority of the GMZs. The remaining work will be completed by the Closing Date, iv) National Plan for In-situ

Project Status Report

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CURRENT PROJECT STATUS (CONTINUED)

Conservation: It has been published and distributed. MOE is working on a statute regarding the adoption of the Plan by the Government. After being reviewed by relevant agencies and departments, this will be submitted to the Ministerial Cabinet for endorsement, v) Institutional Strengthening: Coordination committees are meeting regularly, some extension material has been published including the translation/publication of the booklet "Conserving the Wild Relatives of Crops," major training needs have been fulfilled.

Stakeholder Participation Workshops in each of the pilot areas have been held. Village representatives, teachers, local administrators (mayors and governors), NGOs, managers of rural development cooperatives, local/regional representatives of line ministries were participated in these workshops. The local communities and administrators were informed about the project objectives and principles and in small groups consisting of various stakeholders, the problems of the project sites were discussed and ideas concerning the sustainability of the conservation activities were developed. MOE hired a private consulting company in June, 1998 to carry out a baseline survey and training program for the local communities in Kaz and Bolkar Mountains. The work will be completed shortly after the Closing Date and the data will be integrated into the GMZ Management Plans.

SUMMARY OF KEY ISSUES AND ACTIONS

Summary of Key Issues and Actions	Status
Issue: Local training.	P
Action: MOE will complete local community training by September 1, 1998.	
By Whom: MOE	
By When: 09/01/1998	
Issue: Baseline survey.	N
Action: The baseline survey and community training completed	
By Whom: MOE	
By When: 10/20/98	
Issue: Management plans.	N
Action: GMZ Management Plans finalized	
By Whom: MOE, MARA, MOF	
By When: 09/30/98	
Issue: Maps.	N
Action: Maps for Bolkar finalized	
By Whom: MOF and GIS Center	
By When: 09/30/98	
Issue: Progress reporting.	N

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SUMMARY OF KEY ISSUES AND ACTIONS (CONTINUED)

Summary of K	ey Issues and Actions			Status
Action: The fir	nal Progress Report finalized	l		
By Whom: MC	OF, MARA, MOE			
By When: 09/3	0/98			
Issue: National	Plan.		,	N N
Action: The dra	aft statute for the National P	lan submitted to line agen	cies for comment	
By Whom: MC	DE .			*
By When: 09/3	0/98			<u>.</u>
IANAGER'S CO	MMENTS			
Manager 1 Comm	ents:			
Manager 2 Comm	ents:			
	n - 1 T	Oct 1,1998		
GNATURES	Team Leader	Date	Managing Division Chief/Portfolio Mg	r Date

el : 90-312-468 45 27

Fax : 90-312-468 45 26 Telex : 46722 wban tr.

September 25, 1998

Ms. Jale Aktas Head, World Bank Project Department Undersecretary of Treasury Ankara, Turkey Fax No: 212 87 37

Dear Ms. Aktas;

In-Situ Conservation of Genetic Diversity Project (GEF Grant No. 28632)

I wish to thank you for the support and cooperation provided to the mission composed of Ms. N. Durutan, Messrs. S. Krugman and D. Gray which supervised the above project during September 12-16, 1998. The conclusions and recommendations of their mission are presented in the attached Aide-Memoire.

As you know, the project had been extended one year mainly to: i) finalize Gene Management Zones (GMZs) selection, ii) develop management plans for the selected GMZs, and iii) make the GIS Center operational for data management and monitoring. The mission reported very positively on the excellent progress that is being made to finalize the above mentioned tasks. I would like to compliment all the project staff for their efforts to achieve the project objectives before the Closing Date.

At this point, please let me highlight few tasks that need special attention during the next couple of weeks: i) completing the social assessment and extension activities which are being carried out by MOE, ii) submitting the draft statute to Cabinet which is being prepared by MOE concerning the adoption of the National Plan for In-Situ Conservation by the Government, iii) finalizing the GMZ management plans and, completing the envisaged procurement of some goods and services. I shall be grateful if you use your good offices to monitor these tasks are followed up by the project agencies.

Please note that as you have requested in your letter dated September 22, 1998, the Bank will allow for a grace period of up to 4 months. Further disbursements from the Grant will be made for withdrawal applications received at the Bank's headquarters by close of business on **January 31, 1999** in respect of eligible expenditures incurred before the closing date (i.e. payments made or payments due for goods, works, and services that have been provided prior to the closing date).

The Final Progress Report which is scientific/technical in nature will be ready before the Closing Date. This is the summary of all the that was achieved during this project. It will serve as a model for similar activities in Turkey and other countries, and will serve as a document describing how the Turkish GEF Project can form the basis of a regional and global approach to in-situ conservation of wild relatives. It can also be a basis for grant proposals to fund additional projects in Turkey.

There is another important task which needs to be followed up closely in the coming months: the project Implementation Completion Report (ICR). This will be prepared by the Bank and the implementing agencies by March 31, 1999. As agreed, GDAR as the project coordinator in collaboration with APK/MOF and GDEP/MOE will make available to the Bank not later than February 1, 1999 its final evaluation of the project. The mission has provided GDAR with guidelines for the ICR and examples of the previous ones.

Again, many thanks for helping make this project a successful model for Turkey and other countries.

Sincerely,

Ajay Chhibber

Director

Country Department VI
Europe and Central Asia Region

Cc:

Mr. Hasan Turan Head, APK Ministry of Forestry

Mr. Dr. Muzaffer Kiziltan
Deputy GD, General Directorate of Agricultural Research
Ministry of Agriculture and Rural Affairs

Mr. Fahri Akben General Director, General Directorate of Environmental Protection Ministry of Environment

AIDE-MEMOIRE TURKEY IN_SITU CONSERVATION OF GENETIC DIVERSITY (GEF Grant No: 28632)

Supervision Mission of September 2-16, 1998

A mission consisting of Ms. N. Durutan (Team Leader, ECCTR) and Messrs. S. Krugman (Consultant, forester) and D. Gray (ENV, GIS Specialist) supervised the above project during September 2-16, 1998. The mission visited the research institutes in Ankara, Izmir and Tarsus/Mersin and selected GMZs in Bolkar Mountains. The mission held discussions with the officials of Undersecretariat of Treasury, MOF MARA and MOE. During July 20-24, 1998, the GIS component of the project was supervised by Mr. D. Gray. The mission wishes to express its appreciation for the assistance, support and courtesies extended during the supervision. The views of the mission and the agreements reached with the project authorities contained in the Aide-memoire were discussed in the wrap-up meeting on September 16, 1998 and subject to confirmation by the World Bank management.

EXECUTIVE SUMMARY

The overall progress is excellent. The project components almost fully completed and the objectives were achieved. The mission would like congratulate all the project agencies and their staff. Only the social assessment activities which have not been envisaged during the project preparation but arised as a need for the sustainability of the project activities and the preparation of the GMZ management plans is still continuing. Efforts are being made to complete the majority of the work before the Closing Date.

With the completion of the Information Technology Management Plan (ITMP) and associated training, the GIS Center can now be considered operational. The mission wishes to congratulate the project agencies for the significant progress made with regard to the GIS component. The forthcoming Atlas and the various awards received by the participants reflect the hard work of all concerned, notably the staff and management of the GIS Center and the valuable input of the Consultants. It also demonstrates the benefits which arise from cooperation between agencies. It is hoped that this cooperation will continue to flourish beyond the project and that Turkey will avoid the mistakes made by some other nations - where agencies fail to share data and knowledge.

A web page is being prepared for the project - to disseminate knowledge arising from the project to the international community. The web page, which will be launched on September 21st, will be hosted on the World Bank's server until such time that a suitable server exists in one or more of the project agencies. Once available, the HTML code will be sent to the relevant agency. The project agencies have already made a considerable amount of material available (e.g. the National Plan for In-Situ

Conservation) and have agreed to compile other documents, photos, papers, maps, etc for inclusion on the web page.

A Final Progress Report will be ready before the Closing Date. This will be the summary of all that was achieved during this project. It will serve as an evaluation of the GEF Project for the Ministries involved and the World Bank, it can also serve as a model for similar activities in Turkey and other countries, and it will serve as a document describing how the Turkish GEF Project can form the basis of a regional or global approach to in-situ conservation of wild crop relatives, it can be a basis for grant proposals to fund additional projects in Turkey.

The Project Implementation Completion Report will be prepared by the Bank and the implementing agencies by March 31, 1999. GDAR, as the Project Coordinator in collaboration with GDAR/MARA, APK/MOF and GDEP/MOE, will make available to the Bank not later than February 1, 1999 its final evaluation report on the project. The GDAR, MOF and MOE will also assist the Bank in gathering the necessary information to complete the Bank's Implementation Completion Report (ICR), and will comment on the Bank's draft ICR within one month of receiving it.

Project Administration

- 1. The Interministerial Steering Committee (ISC) meeting which was organised by MOE was held on April 24, 1998. The major decisions were: i) preparation of a statute based on the National Plan for In-Situ Conservation of Genetic Diversity in order to make the Plan effective, ii) signing of the protocol by the project agencies to enable the joint use of the GIS center.
- 2. The Project Implementation Committee (PIC) meeting was organised by MARA on July 3, 1998 and decided to accelarate the on-going work related to: i) final progress report, ii) GMZ management plans, and iii) public awareness and extension.

Participation and Public Awareness

3. MOE hired a private consulting company in June, 1998 to carry out the baseline survey and training program for the local communities in the Kaz and Bolkar Mountains. However, due to a recently changed accounting rule that the public agencies and the Central Bank of Turkey have to abide by, payment to the company was subject to a new procedure which created some bottlenecks in starting the field work. The mission was informed that the field work will be completed shortly after the Closing Date and the data will be integrated into the GMZ management plans.

Survey/Inventory and Isoenzyme Studies

4. The survey/inventory and isoenzyme analysis have been completed for the majority of the target species except for *Cedrus*, *Castanea and Prunus* due to scientific reasons (Appendix 1). For *Cedrus*, the seeds will be collected this year and the genetic analysis will be started after the Closing Date. For *Castanea sativa* and

Prunus divericata, the attempts to determine the genetic diversity failed due to the problems in methodology. Therefore, for the Aegean Agricultural Research Institute, an expert has been provided from the Israel Institute of Technology/Telaviv and with her valuable assistance, the initial difficulties regarding the methodology has been overcome and the isoenzyme laboratory has become fully operational. The analysis are continuing and will not be finalized before the Closing Date.

Selection of GMZs

5. The mission would like to compliment the MARA and MOF project staff for their excellent arrangements for finalizing the GMZ selection in Kaz and Bolkar Mountains in May, 1998. For each pilot area workshops and field trips were organized and the candidate GMZ were screened based on the established criteria by a joint group (research scientists from MARA and MOF, representatives of MOE, local Forestry Directorates, universities and the Bank). 5 GMZs were selected in Bolkars, 10 in Kaz Mountain and 6 in Ceylanpinar (Appendix 2).

Preparation of GMZ Management Plans

6. A workshop has been organized by MOF for the preparation of the GMZ Management Plans in Izmir during September 14-15, 1998. All the project staff, the representatives of the Regional Directorates of Forestry, General Directorate of Forestry, and the General Directorate of National Parks. Game and Wildlife attended the meeting and the management for each GMZ was discussed in detail. The mission who had an facilitation role in the workshop would like to compliment the participants for their excellent contribution for the preparation of the management plans. It has been agreed that these draft plans will be finalized by September 30, 1998 and will be revised/updated/improved in future, as the new data is collected and new experience is gained.

Data Management and GIS

- 7. While the project agencies, using the facilities of the GIS Center, have completed digitizing and map production for most of the twenty GMZ areas, those in the Bolkar Mountains have yet to be completed. The MOF have agreed to have their staff digitize the base (forest) maps and GMZ-specific data. This work, which will commence by the end of September, 1998 will be coordinated by *Photogrammetry and Mapping Center/MOF* and carried out using their facilities and those of the GIS Center. The resulting digital data will be made available to project agencies which request it.
- 8. With the completion of the *Information Technology Management Plan* (ITMP) and associated training, the GIS Center can now be considered operational. The mission wishes to congratulate the project agencies for the significant progress made with regard to the GIS component. The forthcoming Atlas and the various awards received by the participants reflect the hard work of all concerned, notably the staff and management of the GIS Center and the valuable input of the Consultants. It also demonstrates the benefits which arise from cooperation between agencies. It is

hoped that this cooperation will continue to flourish beyond the project and that Turkey will avoid the mistakes made by some other nations - where agencies fail to share data and knowledge.

- 9. The Protocol (Appendix 4), which has now been signed by all project agencies, provides an excellent basis for such long-term cooperation. In the first instance, it is hoped that the agencies can combine their efforts to contribute to the development of management plans for the GMZ's. These will benefit greatly from the inclusion of GIS products.
- 10. A web page is being prepared for the project to disseminate knowledge arising from the project to the international community. The web page, which will be launched on September 21st, will be hosted on the World Bank's server until such time that a suitable server exists in one or more of the project agencies. Once available, the HTML code will be sent to the relevant agency. The project agencies have already made a considerable amount of material available (e.g the National Plan for In-Situ Conservation) and have agreed to compile other documents, photos, papers, maps, etc for inclusion on the web page. These should be sent to the Bank's Country Office and will be returned, where necessary.

National Plan for In-situ Conservation

12. MOE has initiated the work regarding the adoption of the Plan by the government; a draft statute has been prepared and submitted to the Legal Department of MOE. After being reviewed by MOF and MARA the statute will be finalized and submitted to the Ministerial Cabinet. Once it is endorsed by the Cabinet and published in the Official Gazette it will become effective. MOE is making effort to complete the procedures before the end of the project.

Final Progress Report

13. The draft final report which is the summary of all that was accomplished during the life of the project has been prepared. The mission is very impressed with the comprehensive nature of the information collected by the project agencies which will undoubtedly attract significant interest by the international community via the web page. It has been agreed that the final version will be ready by the Loan Closing Date, September 30, 1998.

Procurement and Disbursement

- 14. By September 9, 1998 the undisbursed amount is US\$418,273.22. It is estimated that about US\$330,000 more could be used by the three agencies for the on-going procurement of additional goods and services and, for the existing commitments (Appendix 5).
- 15. The mission reviewed the requests submitted by MOE and MARA concerning some GIS equipment and issued no objection. The mission would like to remind to the agencies that payments can only be made by the Bank for the coming 4 months for

the goods, and services that have been provided on or before the Closing Date. In other words, disbursements after September 30, 1998 will be limited to services performed, goods shipped or delivered, would not cover services or goods which are only contracted.

Guidelines for the Implementation Completion Report to be prepared

- 16. GDAR, as the Project Coordinator in collaboration with GDAR/MARA, APK/MOF and GDEP/MOE, will make available to the Bank not later than February 1, 1999 its final evaluation report on the project. The GDAR, MOF and MOE will also assist the Bank in gathering the necessary information to complete the Bank's Implementation Completion Report (ICR), and will comment on the Bank's draft ICR within one month of receiving it.
- 17. The GDAR's report is expected to be ten pages or less and to be incorporated in full and unedited to ICR. If the report is longer than ten pages, GDAR will prepare a summary of it less than ten pages to be incorporated into the ICR. The mission provided GDAR with guidelines for the evaluation report, and with examples of ICR's.
- 18. It has been agreed that GDAR Deputy General Director (also the project coordinator) and the Deputy Project Coordinator will be in charge of preparing the evaluation (in collaboration with the project management units in MOF and MOE) of providing to the Bank the information required to complete its own report, and of preparing the comments to the draft ICR to be submitted by the Bank.
- 19. The following topics should be addressed in the ICR section to be prepared by GDAR:
 - the assessment of project objectives, design and implementation;
 - the evaluation of MARA's, MOE's and MOF's performance during the preparation, appraisal and implementation stages of the project with specials emphasis on lessons learned that may be relevant in the future;
 - the evaluation of the performance of the Bank during the preparation, appraisal and implementation of the project with special emphasis on lessons learned:
 - the plan and timetable for the completion of the project defining the indicators to be used to monitor project implementation.

IN-SITU CONSERVATION OF GENETIC DIVERSITY PROJECT

Activity Status by March 18, 1998

	Survey	Inventory	Seed collection	Seed Collection	Isoenzyme	Candidate	Final GMZ	Seedling
]	1]	for ex-situ	for iscenzyme	analysis	GMZ	selection	Charact.
	1	ł		analysis		selection		
Bolkar Mountains						'		<u></u>
Pinus nigra	F	F	F	F	ŀ	F	F.	C
Pinus brutia	F	F	F	F	F	F	l:	С
Abies cilicica	F	F	F	F	Į;	F	F	C
Cedrus libani	F	F	С	С	C	F	F	С
Aegilops								
speltiodes	F		c		F	-	-	
Lens spp.	F		С	•	F	•		
Vicia spp.	F		С	-	F	•		-
Pisum spp.	F	•	С	-	. F	-	-	
Kaz Mountains								
A.nordmanniana]				
subsp.equitrojani	F	F	F	F	F	F	F	C
Pinus nigra subsp.								
pallasiana	F	F	F	F	F	F	1"	С
Pinus brutia	F	F	F	F	F	F	F	С
Castanea sativa	F	F	F 2/	С	('	F	F	-
Prunus divericata	F	F	F 2/	С	C	F	F	-
Ceylanpinar State Fa	מתי							
Triticum dicoccoides	F	F	F	F	F	F	F	-
Triticum								
nonococcum	F	F	F	F	F	F	F	-
Aegilops speltoides								
/ar.speltoides	F	F	F	F	F	F	F	
Aegilops speltoides				T				
ar.ligustica	F	F	F	F	F	F	F	
Aegilops squarrosa	F	F	F	F	F	F	l'	

F: Activity is fully completed

C: Activity is continuing (expected to be completed by May 1998)

N: Activity has not started yet

^{1/} Will not store in ex-situ, only resh material can be used

IN-SITU CONSERVATION of GENETIC DIVERSITY PROJECT

The GMZ for the Target Species

	Gene Management Zone	Size ha	
KAZ MOUNTAIN			
A. nordmanniana	Ayigedigi	721	
subsp. equitrojana	Gurgendag	621	
Pinus nigra	Alinoluk	385	
subsp.pallasiana	Ayigedigi	721	
	Gurgendag	621	
	Karakoy	528	
Pinus brutia	Engece Camlik	491	
	Karakoy		
Castanea sativa	Ayigedigi	*	
	Mihlidere	385	
	Sivrikatran	*	
Prunus divericata	Kilisealan	*	
2	Sarisu	*	
	Yukaricavus	*	
BOLKAR			
Pinus nigra subsp pallasiana	Asmacik	1,028	
1 mas mg. a suosp pamasiana	Bahce	6108	
	Payam-Cocakdere	10,879	
Pinus brutia	Bahce	10,077	
1 mus or una	Karakoyak	1,196	
	Payam-Cocakdere	1,170	
Abies cilicicai	Asmacik		
Ables cilicical	Camliyayla	3227	
Cedrus libani	Asmacik	3221	
Cearus Hoani	Bahce		
	Camliyayla		
	Payam-Cocakdere		
CEYLANPINAR STATE FARM	Fayaiii-Cocakucie		
Triticum dicoccoides	Gurgurbaba	35	
Triticum monococcum	Saraccestic	30	
	_		
Aegilops speltoides var. speltoides	Beyazkule,	30	
	Cavani	10	
	Gurgurbaba		
	Saraccesme		
Aegilops speltoides var. ligustica	Beyazgule, Cavani, Gurgurbaba,		
	Saraccesme		
Aegilops tauschii	Cavani		
	Gokcayi	9	
	Gurgurbaba		
	Horozmiran	30	

^{*} Size to be determined later

GMZ MANAGEMENT PLAN WORKSHOP

- Preparation of the Gene Management Zones (GMZs) Management Plans (MPs) is the last buckle of a long chain of efforts of survey and inventory activities, determining the diversity through isoenzyme analysis and morphological studies, and selection of GMZs. Since the project will be closed on September 30, 1998 we should achieve this last goal and complete the chain.
- Until the National Plan for In-situ Conservation becomes effective and the procedures for the preparation and implementation of GMT MPs become operational, the current project staff should prepare the GMT MPs to provide a sample for project files and future studies.
- As you know, through the In-situ Conservation of Genetic Diversity Project we are trying to ensure the sustainable management of the natural biological and genetic diversity for our target species and their ecosystem by employing "insitu" conservation strategies.
- To ensure that this objective is met, we have to prepare a workable MP for the GMZs which have been selected based on your comprehensive field and laboratory studies during the last 4 years.
- A GMZ MP is an organized map for the establishment, protection and current and future management of the GMZs. It is not a static but a living document.
- The MP which we will prepare based on the information already available will be an initial one. This will be improved/revised/updated in future, as the new data is collected and the new experience is gained.
- The MP will contain the permanent file records for all current and future research and administrative staff and as well as, future managers and scientists working in these protected areas.
- The GMZ MP Outline which was provided by the Bank Supervision Mission of March 1998 is attached. You are expected to feed the available information to Items 1, 2, 3 and 7 of the outline. We will be working on Items 4, 5 and 6 during the workshop.

Elements of the GMZ Management Plan

- 1. It is both essential and very important that a complete legal description be prepared immediately for each selected GMZ and promptly shred with the staff that will have administrative responsibilities for a given GMZ. This is the initial step in establishing some protection for your GMZ selections. This will also make the administrative staff aware of the special purpose of the GMZ.
- 2. On the separate sheet "GMZ Management Plan Outline" are a number of informational items that we have previously agreed to that should be included in the management plan. However, your initial plan should not be delayed because all of the information is not now available. Information and new data can be added later and if required changes can be made in the GMZ management plans as you gather additional information and experience in the use and protections of these areas.
- 3. As we have discussed before, the level and type of interventions will depend on the reproductive biology and possible outside threats to maintaining the target species. A brief but informative discussion should be included in the plan. For the forest species including the woody fruit trees, in most cases, no interventions will be required for some annuals consideration should be given to the necessity of some level of management in order to maintain them from local competition.
- 4. Some monitoring will be required to ensure that reasonable level of genetic diversity is maintained. The level of monitoring will depend on the species, site conditions and competition. Based on your experience with the target species you should include in the plan your thinking on his issue,
- 5. We both know the importance of good communication between the scientific and administrative staffs in the management of the GMZ. If at all possible, a joint communication plan should be prepared and individual organizational responsibilities identified.

GMZ MANAGEMENT PLAN OUTLINE

1. Goals/Objectives: Sustainable natural biological and genetic diversity for selected plant species and ecosystems in Turkey by employing In-situ conservation strategies.

2. Biological/genetic structure of targeted species

- A. Known genetic composition i.e. isozymes
- B. Morphological Characteristics
- C. Degree of homo/heterogeneity employing all characteristics
- D. Mode of reproductive biology
- E. Size of target population and its distribution

3. Site/growing environment

- A. Geographical i.e. soil, climate, moisture etc.
- B. Inventory of associated species and their distribution
- C. Land ownership (Legal/institutional consideration)
- D. Local demographics
- E. Past/current history including potential threats i.e. fire, logging, grazing and fire wood collection and local land use.

4. Management action required

- A. Non-intervention: permit natural undisturbed reproduction and successional activities.
- B. Intervention: need to maintain target species from competition
 - 1. To maintain target species populations remove or control competition by means of control fire, grazing and harvesting
 - 2. To maintain or increase target populations apply additional on-site seed sources.
- 5. Monitoring: monitoring plan and management schedule
- 6. Action plan: An action plan and appropriate assignments of responsible scientific and technical groups within the Ministries
- 7. **Appendices:** supporting documents, maps, data based, sources of support information.

PROTOCOL

ON THE APPLICATION OF THE PROJECTS OF GEF-1 AND NATURAL RESOURCES (By the use of CBS and UA Laboratories)

BY THE

MINISTRY OF AGRICULTURE AND RURAL AFFAIRS MINISTRY OF FORESTRY MINISTRY OF ENVIRONMENT

PURPOSE:

The purpose is to organize the principles for the use of Geographical Information Systems - CBS and Distance Control- of the UA Laboratories Research Centre by the Ministry of Forestry and Ministry of Environment and Ministry of Agriculture and Rural Affairs.

The Center was established under the General Directorate of Agricultural Research and financed partially by Agricultural Research (Loan No. 3472-TU) and In-Situ Conservation of Genetic Diversity (Grant No. 28632-TU) Projects and by the funds provided from the General Budget of Ministry of Agriculture and Rural Affairs.

This "Protocol" has three main titles; the Use, Coordination and General Subjects.

A- USING PRINCIPLES

AI. Activities of the In-Situ Conservation of Genetic Diversity (GEF 1; Grant No.28632-TU):

- 1. The Centre will separate one cell containing 1 Unix work station and 1 personal computer to each of the Ministries of Forestry and of Environment in accordance to the targets of the GEF-1 project and within the framework of national project plan.
- 2. The Ministries of Forestry and Environment shall send their "Annual Working Programs" to the centre in one month after the signing of this protocol for the first year and in January of every year for the following years through the agency of their coordinators.
- 3. The Ministries of Forestry and Environment, in case they notify their need in addition to the principles prescribed in article 1, shall be able to use also the

computers in the other cells in a manner as not to hinder the present working system of the centre.

- 4. The Ministries of Forestry and Environment shall be able to connect to the Centre via X-25 line and use the present equipment and entries for data processing and data connections.
- 5. The Ministries of Forestry and Environment shall meet themselves the consumption materials to be used in this part.

A II. The Activities to be Carried Out As Regards Natural Resources:

- 1. The Ministries of Forestry and Environment shall be able to enjoy the facilities of the Centre also for their other planned or unplanned activities regarding natural resources. These kinds of activities shall be carried out within the framework of a cooperative working program with the Centre and in a manner as not to hinder the Centre's activities.
- 2. The Ministries of Forestry and Environment shall meet themselves the consumption materials regarding the issues referred to in this part.

B - COORDINATION

- 1. A "Project Administrative Coordination Committee" constituted of 3 people, one person from each ministry, shall be set up in order to organise the activities which are stated in part A. The Committee shall gather once in every two months for its activities. However, the Committee may gather also on the request of one of the Ministries when necessary.
- 2. A "Working Group on Geographical Information Systems" constituting of representatives from Ministries of Agriculture and Rural Affairs, Forestry and Environment, Universities, Voluntary Organisations and other relevant organisations shall be set up. The secretariat of the working group shall be executed by the Ministry of Agriculture and Rural Affairs. The working group shall meet once in every year at minimum. The place and time of the meeting shall be decided in association of three Ministries. Participation of new members to the working group shall also be possible if necessary.

C - GENERAL RULES

- 1. The Ministerial staff at the Centre shall be sensitive to comply with the "General Administrative" and "Technical Administrative" rules of the Centre.
- 2. The Ministerial staff at the Centre shall be obliged to comply with the general "Security" rules.

- 3. In case of any damage caused by users on the "Equipment and Entries", which are used by the Ministries at the Centre, the cost of damage shall be met by the Ministry to which the staff belong.
- 4. The staff who are given work at the Centre by the Ministries shall be able to enjoy the facilities of local telephone calls, fax and e-mails regarding their work during their post. But no device shall be provided.
- 5. This Protocol shall come into force after having been signed by the three Ministries.

Yavuz YÜKSEL Ministry of Forestry Deputy Undersecretary (Signature)

Melih Akalin Ministry of Environment Deputy Undersecretary (Signature)

Dr. H. SAHIN CENGIZ Ministry of Agriculture and Rural Affairs Deputy Undersecretary (Signature)

Appendix 5

Agency	Item	App. Cost (US\$)	Status of the process
MOE	GIS software, hardware	30,000	has just started
	TA for social assessment	25.000	contract has signed
	Office equipment	14.000	committed
	Printing booklets	4,200	has just started
MOF	Office equipment	30.000	on-going
	Lab supply for genetic analysis	10.000	on-going
	Office supply	10.000	has just started
	PCs	10.000	has just started
MARA	Computers for GIS Center	31.500	procedures has started
	Audio-visual equipment	30.000	at the customs
	ARC/INFO SDE	93.000	on-going '
	GIS software	31.000	has just started
	GIS center support equipment	12.000	has just started
	TOTAL	328,700	

Data Management Component

Supervision Mission of July 20-24, 1998

1. Mr. David Gray supervised the Data Management component during the period July 21-24, 1998. Discussions were held with officials of the Undersceretariat of the Treasury, Ministry of Agriculture and Rural Affairs (MARA). Ministry of Forestry (MoF), Ministry of the Environment (MOE) and the Office of the Prime Minister. Meetings were also held with the consultants involved in the project (ISLEM Company) and those involved in the preparation of the proposed second GEF project (SECA-BRL). A wrap-up meeting was held at Treasury on July 24th. The mission wishes to express its appreciation for the assistance, support and courtesies extended during the supervision. The views and recommendations of the mission are subject to confirmation by the World Bank.

The GIS & Remote Sensing Center

- 2. The six-month technical assistance program known as the "Information Technology Management Plan (ITMP) will be completed on August 19th. The program has exposed staff from the three project ministries to a range of GIS and Remote Sensing (RS) applications. Clearly this program has been quite successful, with staff reportedly working well as a team and aggressively completing data input and analysis for a range of project-related tasks. As well as national level mapping of target species, species diversity and a number of environmental indicators, the group have also assembled a series of datasets for the Ceylanpinar State Farm and other project sites.
- 3. The exercise has produced some extremely useful results which will be published in an atlas in August. One of the most interesting of these is the diversity index (density of target species). This highlights how useful it would have been if the Center had been operational prior to the selection of the Gene Management Zones (GMZs).
- 4. The consultancy company has submitted a brief report detailing their accomplishments to date, specifically the results of the user needs assessment and the database design. The latter should provide the Center, and other project agencies with a highly structured framework which can be used for future development of the GIS database.
- 5. The consultancy company reports that while the staff assembled at the Center have approached the tasks associated with the ITMP enthusiastically, there have been some problems with them being pulled out of training at various points to undertake daily functions. Clearly this has had a negative impact on the level of expertise which has been developed. This has particularly affected the development of management

capacity and system administration at the Center. The consultants identify the lack of technical management at the center as the major constraint to its sustainability and recommend that the latter, the management of the computer equipment be outsourced to a private sector company on a per-call basis at the earliest opportunity. The Center should make every effort to assign and maintain staff in a technical management role in the GIS lab.

- 6. The 1:25,000 scale topographic data from the General Command of Mapping has not yet been acquired. This data will provide the essential base data for most GIS applications developed by the Center and every effort needs to be made by the GIS Center to acquire it as soon as possible.
- 7. The consultancy company reports that the staff trained now have basic GIS skills and that the equipment is largely operating successfully (although this will be improved dramatically by a number of upgrades already approved by the Bank). The consultants correctly note that the period immediately following the termination of the project will be critical. Ensuring the continued practical, operational use of the skills acquired during the ITMP period by the staff involved, is vital to the development and entrenchment of these skills. The agencies involved in the project need to identify a work program to ensure continued development of skills developed during the ITMP. These should ideally:
- focus on relatively small areas (e.g. Gene Management Zones) which will require staff to exercise their full range of skills
- produce output of real value to the current project or other proposed projects. In particular, the project agencies should be proactive in working together to develop datasets and products of use in the proposed second GEF project, once this is finalized.
- 8. Ensuring the development of the skills developed during the ITMP will require that the project agencies commit their staff to continued participation in the activities of the Center, especially in the six months following the end of the project.

Development of GIS capacity in the project agencies

9. Given the significant investment involved in the GIS Center (\$3 million, to date), the recently acquired operational capacity and the obvious benefits from multisectoral cooperation, there are clear benefits in focusing GIS/RS activity at the GIS Center. This will ensure that the equipment is used to its full capacity and encouraging data exchange. However, it is acknowledged that the project agencies have certain unique analytical needs which cannot realistically be carried out at the Center and that these may require that some increased capacity be developed in the individual agencies. This is also in line with the government's initiative "Turkish Restructuring Public Administration Project" being implemented by the Prime Ministry which will require agencies to maintain datasets relating to their legal mandate and make these available to other agencies (and the public, in most cases).

- 10. Accepting these realities, the Bank will support development of data processing capacity within the project agencies to allow them to undertake their specific duties. However, given the risks associated with lack of (and potential turnover of) specialized technical staff, the Bank will encourage the project agencies to avoid implementing high-level systems (e.g. Remote Sensing capability) which duplicate capacity available at the GIS Center and which require high levels of technical management or skills. To this end, requests for equipment under this, or future projects, will be scrutinized to ensure that the most appropriate allocation of GIS/RS capacity. Higher level investments in the project agencies will be made based on clearly demonstrated need and capacity for their effective use.
- 11. Achieving the most effective use and development of the GIS Center will require a change in the perception that the GIS Center is "MARA's Center" and begin to see it as a joint resource. While this may be difficult to achieve until the Center is constituted as an Institute (as proposed), the management of the Center should make every effort to accommodate the needs of the project agencies with a minimum of bureaucratic constraints. The provisions laid out in the Protocol provide a useful basis for this working relationship.

Training

12. Given the opportunities which exist for the staff trained under the project to follow opportunities in the private sector - and the likelihood of high staff turnover, further, continuous GIS/RS training is essential - both for existing staff and others likely to become involved. The GIS Center should take the lead in identifying opportunities for such programs and provide facilities to accommodate them. In the longer-term, the Center should coordinate the development of training programs and associated facilities with the Office of the Prime Minister, who propose a similar program.

Cooperation between project agencies

13. The Protocol provides an excellent basis for continued cooperation between the project agencies. This will greatly assist in the implementation of future projects affecting natural resource management, protected areas management and planning. The agencies involved should move aggressively to implement the provisions of the protocol, particularly those related to coordination (the Coordinating Council) and the GIS working Group. The latter will be essential to ensure coordinated development of data standards within the project agencies and free and easy data exchange.

OD 13.05 - ANNEX D5 Page: 1

Run Date: 09/30/98 at 05.01.29

Form 590 Date: 09/29/1998

- IN SITU GENE CONSERV Project ID: TR-GE-8869

	Covenant Class(s)	Status	Original Fulfill Date	Revised Fulfill Date	Description of Covenant	Comments
Agreement: TRUST TRU	UST Number	: TRUST	<u>-28632</u>			
Text Reference: Article 4.0	<i>l(a)</i> 01	С			Maintenance of financial records and accounts.	NA
Text Reference: Article 4.0	<i>1(b)</i> 01	С			Audit submitted within 6 months of end of FY.	none
Text Reference: Schedule 2	? 05	С			Execution of project in accordance with project description.	none
Text Reference: Scheule 4.	<i>I</i> 05	С			Procurement of goods and services in accordance with arrangements described in Section I and II.	none
Text Reference: Schedule 4	4.1 05	С			Establish and maintain a National Steering Committee.	none
Text Reference: Schedule 4	4.1 05	С			Assign responsibility for implementing various parts of the project of MOF, MARA and maintain a project implementation committee.	none
Text Reference: Schedule 4	4.1 05	С			Employment of consultants, maintenance of Scientific Advisory Committee. Ensure adequate training under the project.	none

Status:

C - Complied with
CD - Compliance after Delay
NC - Not Complied with
SOON - Compliance Expected in Reasonably Short Time
CP - Complied with Partially
NYD - Not Yet Due

Covenant Class

- 1 Accounts/audit
- 2 Financial performance/generate revenue from beneficiaries 3 Flow and utilization of Project funds
- 4 Counterpart funding
- 5 Management aspects of the Project or of its executing agency
- 6 Environmental covenants
- 7 Involuntary resettlement
- 8 Indigenous people
- 9 Monitoring, review and reporting
- 10 Implementation
- Sectoral or cross-sectoral budgetary or other resource allocation Sectoral or cross-sectoral regulatory/institutional action
- 13 Other

Report: PCLCR1 - Latest Status of Covenant Compliance (Annex D5)
User ID: TM22316, User Division: ECCTR

Run Date: 9/30/98 11:03:05 AM

Selection Criteria for Report:

Product Line Project ID
Form 590 Sequence No.
Form 590 Date

: 'PE','SF'

: 8869 :7

: 09/29/1998