Terminal Evaluation

Project Number UNDP/GEF Project: # 00037324
PIMS Number: 1636

Recovery, Conservation and Sustainable Use of Georgia's Agrobiodiversity

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March 2010

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ACKNOWLEDGEMENTS

Appreciation and thanks are due to the many people who willingly and enthusiastically spared their time to meet with the evaluator, often at short notice, and share their experiences and observations, all of which helped to inform this evaluation.

The mission was hosted by the Biological Farming Association, Elkana. Particular thanks and gratitude is owed to Mariam Jorjadze and Tamaz Dundua for their time, arrangements and company throughout the visit; to Elene Shatberashvili for her translation skills and company at various meetings; and to Murad Gogoladze and Tea Chitadze who ably hosted the field visit to the Samtskhe-Javakheti Region.

Mariam Shotadze, UNDP Georgia, kindly and ably provided her support and guidance to the evaluation.

The opinions and recommendations in this report are those of the consultant and do not necessarily reflect the position of the Ministry of Environment and Natural Resources, GEF, UNDP or ELKANA. The consultant is responsible for any errors or omissions.

LIST OF ABBREVIATIONS AND ACRONYMS

BMZ	Bundesministerium Für Wirtschaftliche Zusammenarbeit (German Federal Ministry for Economic Development Cooperation)
CWR	Crop Wild Relative
GEF	Global Environment Facility
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
KfW	Kreditanstalt für Wiederaufbau (German Bank for Reconstruction)
NGO	Non Governmental Organisation
PDF-A	Project Development Fund – A
UNDP	United Nations Development Programme

EXECUTIVE SUMMARY

Description of the Project

The *Recovery, Conservation, and Sustainable Use of Georgia's Agrobiodiversity Project* has been implemented by UNDP Georgia and executed by the Biological Farming Association, ELKANA, under the mechanism available to national non-government organisations. The designated National Coordinating Agency is the Ministry of Environment.

The total budget indicated in the Project Document is US$ 2,704,208, of which US$ 987,408 (36%) is grant-aided by UNDP/Global Environment Facility (US$ 962,408) and GEF Project Development Fund (US$ 25,000), and US$ 1,716,800 (64%) is co-financed by ELKANA. A substantive revision of US$ 20,000 from UNDP core resources (TRAC1/2) was made to this budget in February 2009 to cover the costs of a documentary film and final presentation about the Project. Very significant is the US$ 3.86 million of additional co-financing funds raised by ELKANA during Project implementation. This represents more than a doubling of the Project's total budget to US$ 6.54 million.

The Project was based in Samtskhe-Javakheti, a small province in the South of Georgia that is rich in agrobiodiversity. Implementation commenced on 14th June 2004, with a planned completion date of December 2008. It was subsequently extended on a budget neutral basis to March 2010, in line with the recommendations of the Mid-Term Evaluation in July 2007, to provide more time to achieve the conservation of crop wild relatives' component of the Project's objective.

The **objective** of the Project, revised following the Mid-Term Evaluation, was:

> the conservation and sustainable utilization of threatened local plant genetic resources important to food and agriculture in Georgia within a production landscape.

and its **outcomes**, adapted mid-term from the Project's original objectives, were:

- *Outcome 1*: Intra and inter specific diversity of crops and wild relatives conserved in Samtskhe-Javakheti region or at local level.
- *Outcome 2*: Land races and wild relatives products contribute to local food security, and market value chain strengthened and sustained.
- *Outcome 3*: Learning, evaluation and adaptive management increased.

The root cause of agricultural biodiversity loss was considered to originate from the legacy of a farming system during the former Soviet Union era that favoured extensive production of introduced varieties. Its overall strategy of the Project can be summarised thus:

- recover seed and planting material from various *ex situ* and remaining *in situ* sources;
- develop a system of seed distribution and the return of planting material from participating farmers to establish a source for new farmers entering the Project;
- create and strengthen farmers' associations and raise awareness; and
- remove barriers to local and regional markets;
- develop and implement a replication strategy; and, in the wake of the Mid-Term Review,
- develop a plan and measures for the conservation of crop wild relatives that is informed by the results of surveys of their status and distribution.

Context and purpose of the evaluation

The Terminal Evaluation is an integral part of the UNDP GEF project cycle. Its purpose is to provide a comprehensive, systematic and evidence-based account of the performance of the completed Project by assessing its design, process of implementation, achievements (outputs, outcomes, impacts and their sustainability) against project objectives endorsed by the GEF

(including any agreed changes in the objectives during project implementation) and any other results. It is intended to enhance organizational and development learning; enable informed decision-making; and create the basis of replication of successful project outcomes.

The Terminal Evaluation, carried out by an external international consultant in February – March 2010, comprised 9 days in-country (2-10 February) meeting and interviewing stakeholders in the Project area and at Tbilisi, and 9 days of preparation, collection, collation and analysis of information and report writing. Key stakeholders included farmers, state and regional government officials and non-government representatives working in the agricultural sector. Preliminary findings were shared with Project partners at meeting on 9th February.

The Project's achievements (outputs and outcomes), sustainability of outcomes and its monitoring and evaluation system (design and application) were evaluated and scored with respect to either the level of satisfaction achieved or the likelihood of outcomes being sustainable at the Project's termination. Evaluations were based on testing progress and achievements against five major criteria (relevance, effectiveness, efficiency, results and sustainability, as appropriate), in accordance with GEF requirements.

Conclusions, recommendations and lessons learned

The Project is the first of its kind in Georgia to address agrobiodiversity in holistic manner whereby conservation is achieved by improving livelihoods in an ecologically sustainable manner, It is considered to have achieved its objective with considerable success, particularly within the national context of little awareness of the importance of agrobiodiversity and the lack of an enabling policy environment. Its success can be attributed to:

- a well-designed Project concept, albeit lacking with respect to provisions to create an enabling environment;
- choice of the national NGO modality for Project execution;
- competence and commitment of ELKANA, with its professional interest in promoting sustainable farming and self-reliance among local communities that is respected by government, notably the Ministry of Environment;
- collaborative working relationship enjoyed by ELKANA with UNDP Georgia and the Ministries of Environment and Agriculture;
- sound Project management that was able to capitalise on ELKANA's existing farmers association and quickly establish a local infrastructure within the Project site;
- strong partnership working, notably with ORCHIS (Georgian Society of Nature Explorers) who delivered the crop wild relatives component of the Project, supported by some excellent technical assistance backstopping; and
- timely interventions recommended in the Mid-Term Evaluation that ensured the Project delivered its objective to maximum effect within the constraints of resources and a 15-month extension.

Overall, the Project is evaluated as **Satisfactory** with respect to achieving its *objective*.

The design and implementation of the *monitoring and evaluation system* is evaluated, respectively, as **Moderately Satisfactory** and **Satisfactory**.

The prospects of Project *outcomes* being sustainable are evaluated as follows:

- Financial resources **Moderately Likely**
- Socio-political **Moderately Likely**
- Institutional/governance **Moderately Unlikely**
- Environment **Moderately Unlikely**

The scores of **M**oderately **U**nlikely for two of the four dimensions of Project *outcomes* do not reflect the Project's implementation but are based on external drivers, such as trading relations

and standards with respect to neighbouring countries and the way in which agriculture may be intensified in Georgia. Such issues largely concern the enabling environment, which was not part of the original Project design and for which there was only limited time and resources to make some impact after the Mid-Term Evaluation. Most encouraging is the potential financial sustainability of Project outcomes, given the climatic, pest-resistance and nutritional competitiveness of land races, but this can be easily undermined by perverse incentives, such as subsidies, which might be introduced in support of efforts by government to intensify farming practices.

Opportunities to reinforce the benefits from the Project include the following (lead agencies / organisations are indicated in brackets):

- **Mainstreaming.** The conservation and economic importance of agrobiodiversity, in terms of land races and wild crop relatives, to agriculture has been demonstrated by the Project. Agrobiodiversity now needs to be mainstreamed within other sectors, initially through relevant policies and plans such as those listed below.
  - National Biodiversity Action Plan (Ministry of Environment)
  - National cultural strategy (Ministry of Culture)
  - National tourism strategy (Tourism Department)
  - Regional Development Plans (Regional Governments)
  - Regional Strategies (e.g. Ministries of Agriculture and Tourism)
  - Protected area strategy (Protected Areas Agency)
  - Protected area management plans (Protected Areas Agency)
- **Replication.** The model works well and is sustainable, both financially in market terms and economically, in terms of non-market values such as the organic approach to farming land races that does not result in potential costly damage to the environment from agrochemical inputs.
  - Document in a single publication the Project's approach, best practices and lessons learned as a handbook to inform others wishing to adopt the model elsewhere.
  - Replicate the model in other regions. (ELKANA / Ministry of Agriculture)
- **Conservation of crop wild relatives.** Adoption and implementation of the conservation strategy formulated for crop wild relatives within Samtskhe-Javakheti.
- **Agri-tourism** .Agrobiodiversity lies at the interface of natural and cultural heritage, providing huge potential for Agri-tourism, which complements ecotourism and cultural tourism. (Tourism Department, Protected Areas Agency, Ministry of Agriculture, Ministry of Culture, Patriarch Church, ELKANA working with farmers)
- **Organic farmers' markets.** Arguably, one of the most effective ways to raise the profile of the values of agrobiodiversity among the public is through farmers' markets. In Istanbul, for example, the weekly organic market is renowned and most of the produce is sold well before the end of the day. Apparently, there used to be a farmers' market in Tbilisi but this was closed down because of the ensuing chaos with traffic and problems of litter. Properly planned and managed, such an initiative could be reinstated but confined to organic products and, thereby, create a level playing field in terms of inequitable competition from cheap, imported products of unknown or dubious quality. Members of the public in Tbilisi, who represent 35% of the country's population, would value the quality assurance provided by such a market and this would contribute significantly to public recognition and support for agrobiodiversity on political agendas. (Ministry of Agriculture, Ministry of Environment, Tbilisi City Council, ELKANA)

While much can be done to capitalise on the Project's achievements as identified for the above opportunities, new ground needs to be broken on a number of fronts to underpin the models and good practices that have emerged from implementing the Project. This will require additional, new

investments of time and resources. Future directions for agrobiodiversity that need to follow on from this Project include:

- **Enabling environment.** As identified during the Mid-Term Evaluation and reinforced by this Terminal Evaluation, a priority need is to create appropriate policies, legislation and internationally credible standards to address such aspects as Intellectual Property Rights, Access & Benefits Sharing, and Biosafety (especially in relation to imported seeds and foods).
- **Biosafety.** Currently, Georgia does not have the capacity to test the biological safety of seeds and produce. This will require significant investment and capacity building.
- **Processing.** Stakeholders, especially farmers, stressed the need to develop processing facilities in the vicinity of their farms. This is justified with respect to adding value to products at source, maximising financial benefits to local communities. However, this needs to be well planned and regulated with respect to potential environmental impacts of such processing facilities.
- **Research.** Considerable research needs to be undertaken with respect to the following:
  - Rigorous scientific testing of land races for drought / frost resistance, pest tolerance etc.
  - Authentication of land races with respect to their genetic identities.
- **Economic valuation** of agrobiodiversity and its potential significance within Georgia's agricultural sector.

UNDP is in a strong position to encourage government to move forward in these directions, providing policy advice, technical assistance and coordination as appropriate. ELKANA has a long-term interest in promoting sustainable agriculture and, given resources and political support, is well placed to follow up on many aspects of the Project, working in close collaboration with the many agencies identified above, and especially with the Ministries of Agriculture and Environment and regional government agencies.

The main lessons learned from this Project concern its design, with respect to the **enabling environment**, and **partnership** approach to implementation. They are summarised as follows:

- The enabling environment must be taken into account in the design of all projects, particularly with respect to the long-term sustainability of project outcomes.
- Executing agencies with strong partnerships comprising relevant government agencies, non-governmental organisations, scientific organisations and, as appropriate, private sector enterprises and working at grassroots levels with local communities are likely to be most effective in their delivery of project objectives and outcomes.

1. INTRODUCTION

1.1 PROJECT BACKGROUND

The UNDP/GEF medium-sized project entitled *Recovery, Conservation, and Sustainable Use of Georgia's Agricultural Diversity* was implemented by UNDP Georgia and executed by ELKANA (Biological Farming Association), a Georgian-based non-governmental organisation, with the agreement and support of the National Coordinating Agency, the Ministry of Environment.

The **goal** of the Project, as originally defined in the Project Document, was:

> the conservation and sustainable utilization of threatened local plant genetic resources important to food and agriculture in Georgia.

The two immediate **objectives** towards achieving this goal were:

i. *in-situ* and *ex-situ* conservation of selected local agricultural biodiversity in Samtskhe-Javakheti on a pilot demonstration basis; and
ii. a strategy for replication to other Georgian regions of best lessons learned in conservation and utilization of local agricultural biodiversity agreed and under implementation.

The Project's *outputs* were listed as:

Output 1: Seed and planting material of local varieties available to farmers
Output 2: Local Farmers Association established as the leading organization vehicle for production and distribution of seed and planting material
Output 3: Markets for local varieties accessed by farmers
Output 4: Information on local agricultural biodiversity available to farmers, authorities, donors and the public
Output 5: A plan for replication of best practice and lessons learned agreed with local stakeholders and under implementation

The Project was based in Samtskhe-Javakheti, a small province in the South of Georgia that is rich in agrobiodiversity. In order to contribute to the recovery, conservation and sustainable use of agricultural biodiversity (i.e. crop wild relatives[1] and land races[2]), the Project directed its technical and financial resources towards five main areas of activity[3]:

i. establish sources of primary seed and planting material for the threatened crops and fruit varieties;
ii. strengthen the capacity of farmer groups to produce and make available seed and planting material to farmers, and to share experience;
iii. facilitate farmers' access to markets, including organic markets;
iv. assess local resources of wild medicinal and edible plants in the region and associated knowledge; and
v. enhance access of farmers, local and state authorities, research stations, donors and other stakeholders to information on local agricultural biodiversity and improve information sharing among them.

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[1] "*A crop wild relative is a wild plant taxon that has an indirect use derived from its relatively close genetic relationship to a crop; this relationship is defined in terms of the CWR belonging to gene pools 1 or 2, or taxon groups 1 to 4 of the crop*." (Maxted *et al*., 2006. *Biodiversity and Conservation* 15(8): 2673-2685.

[2] "*A landrace is a dynamic population(s) of a cultivated plant that has historical origin, distinct identity and lacks formal crop improvement, as well as often being genetically diverse, locally adapted and associated with traditional farming systems*." (Camacho Villa *et al*., 2005. *Plant Genetic Resource: Characterization and Utilization* 3(3): 373-384.

[3] The Project Document refers to a sixth activity area "*ensuring that best lessons from project activities in Samtskhe-Javakheti are replicated to other regions of Georgia*". This activity area was subsequently withdrawn by UNDP Georgia because it lacked any budget provision, although Elkana indicated that if the model proved successful it would be replicated using their own resources (M. Jorjadze, pers. comm., 12 April 2010).

Following the Mid-Term Evaluation, the Project design was modified to address the need for a strategy to conserve crop wild relatives, as well as creating an enabling environment that takes into account Intellectual Property Rights and Access & Benefits Sharing (see Section 3.1.3).

1.2 PURPOSE OF THE EVALUATION AND USE OF ITS OUTPUTS

The Terminal Evaluation is an integral part of the UNDP GEF project cycle. Its purpose is to provide a comprehensive and systematic account of the performance of the completed Project by assessing its design, process of implementation, achievements (outputs, outcomes, impacts and their sustainability) against project objectives endorsed by the GEF (including any agreed changes in the objectives during project implementation) and any other results.

Terminal evaluations have four complementary purposes:

i. To promote accountability and transparency, and to assess and disclose levels of project accomplishments.
ii. To capture and synthesize lessons that may help improve the selection, design and implementation of future GEF activities, as well as to suggest recommendations of replication of project successes.
iii. To provide feedback on issues that are recurrent across the portfolio and need attention, and on improvements regarding previously identified issues.
iv. To contribute to the GEF Evaluation Office databases for aggregation, analysis and reporting on effectiveness of GEF operations in achieving global environmental benefits and on the quality of monitoring and evaluation across the GEF system.

To this end, the Terminal Evaluation is intended to:

i. enhance organizational and development learning;
ii. enable informed decision-making; and
iii. create the basis of replication of successful project outcomes.

1.3 METHODOLOGY AND STRUCTURE OF THE EVALUATION

This Terminal Evaluation is guided by the *UNDP-GEF Project Monitoring and Evaluation Policies and Procedures*[4] and a specific Terms of Reference (**Annex 1**), while also taking into particular account the findings of the Mid-Term Evaluation. The evaluation process is independent of UNDP, GEF and ELKANA; and the opinions and recommendations in this report are those of the evaluator and do not necessarily reflect the position of UNDP, GEF, Ministry of Environment or ELKANA. Once accepted, the Terminal Evaluation becomes a recognised and publicly accessible component of the Project's documentation.

The Terminal Evaluation is an evidence-based assessment of the Project concept and design, its implementation and its outputs, outcomes and impacts as documented in the logframe. It has been performed in line with GEF principles concerning independence, impartiality, transparency, disclosure, ethics, partnership, competencies and capacities, credibility and utility.

The Terminal Evaluation, carried out by an external international consultant in February – March 2010, comprised 9 days in-country (2-10 February) meeting and interviewing stakeholders in the field and at Tbilisi, and 9 days of preparation, collection, collation and analysis of information and report writing. Details of the in-country schedule and individuals or organisations met are provided in **Annex 2**.

The approach was based on the Terms of Reference in **Annex 1**. It included:

- desk review of project documents and relevant related literature (**Annex 3**);

[4] http://thegef.org/MonitoringandEvaluation/MEPoliciesProcedures/mepoliciesprocedures.html

- interviews with major stakeholders, including Project donors, implementing partners and Steering Group members, government and non-government representatives, and farmers from several different farming associations; and
- field visits to several of the Project sites (e.g. Tsnisi, Akhaltsikhe,) to interview key stakeholders (farmers, local government officials and non-government representatives working in the agricultural sector), there being little to see on farm sites due to winter snow conditions.

The evaluation was undertaken in as participatory an approach as possible in order to build consensus on achievements, short-comings and lessons learnt. Farmers were interviewed in groups of manageable size (up to 12 persons) and each individual was encouraged to contribute in turn to questions posed by the evaluator, with the help of an interpreter. Interviews focused on the strengths and weaknesses of the Project and how things might be done differently in future (lessons learned). Evidence was cross-checked (triangulation) between as many sources as possible to confirm its veracity.

Opportunities were taken to acknowledge, challenge and encourage ELKANA and its partners in an open, objective manner on the basis of preliminary findings from Project reports and interviews, before committing these to paper.

Preliminary findings were shared with Project partners at meeting on 9th February. A list of participants is provided in **Annex 4**. Findings focused on the extent to which outcomes and outputs in the logical framework matrix had been achieved, as well as including a brief assessment of strengths, constraints and weaknesses, opportunities and lessons learnt from the Project. There followed some fruitful discussion and valuable feedback, which have been incorporated into this report.

The Project's achievements (outputs and outcomes), sustainability of outcomes and its monitoring and evaluation system (design and application) were evaluated and scored with respect to either the level of satisfaction achieved or the likelihood of outcomes being sustainable at the Project's termination, as summarised in **Table 1.1**. Evaluations were based on testing progress and achievements against five major criteria (relevance, effectiveness, efficiency, results and sustainability, as appropriate), in accordance with GEF requirements. Further details can be found in the Terms of Reference (**Annex 1**). Finally, in the light of the UNDP Country Office strategy to mainstream gender considerations in all of its practice areas, gender perspectives have been examined briefly.

Table 1.1 Application of GEF minimum evaluation requirements

• **Minimum evaluation requirement**[5]	• **Component of evaluation**	• **Basis of evaluation**
• Achievement of Project objective	▪ Outcomes	• Level of satisfaction
	▪ Outputs	
• Sustainability of Project outcomes	▪ Financial risks	• Likelihood of risk
	▪ Socio-political risks	
	▪ Institutional/governance risks	
	▪ Environmental risks	
• Monitoring & evaluation system	▪ Design of system	• Level of satisfaction
	▪ Application of system	

Satisfaction scale: **H**ighly **S**atisfactory, **S**atisfactory, **M**oderately **S**atisfactory, **M**oderately **U**nsatisfactory, **U**nsatisfactory, **H**ighly **U**nsatisfactory

Sustainability scale: **L**ikely, **M**oderately **L**ikely, **M**oderately **U**nlikely, **U**nlikely

[5] *The GEF Monitoring and Evaluation Policy*, 2006

2. PROJECT AND ITS DEVELOPMENT CONTEXT

2.1 PROJECT START AND DURATION

The Project Document was signed by the Implementing Agency (UNDP Georgia) and the Executing Agency (ELKANA) on 9th June 2004, once the Ministry of Environment had delegated to ELKANA its authority to execute the Project. Implementation of the Project commenced on 14th June 2004, with a planned completion date of December 2008. The Project was subsequently extended from January 2009 to March 2010, based on the recommendations of the Mid-Term Evaluation in July 2007. Thus, its total duration was approximately 5¾ years.

2.2 IMPLEMENTATION STATUS

The Project was implemented through the UNDP Country Office and executed by Elkana, under the mechanism available to national non-governmental organisations. The designated National Coordinating Agency was the Ministry of Environment.

The total available budget at the onset of the Project was US$ 2,704,208, of which US$ 987,408 (36%) was grant-aided by UNDP/Global Environment Facility (US$ 962,408) and GEF Project Development Fund (US$ 25,000), and US$ 1,716,800 (64%) co-financed by ELKANA.

A Mid-Term Evaluation of the Project was undertaken in July 2007 that lead to changes in the design of Project and a two-ear extension (see Section 3.1.3). Most of the Project's activities were completed by the end of 2009, providing the opportunity to assess the final status of outputs within the terms of the Terminal Evaluation.

2.3 PROBLEMS THAT THE PROJECT SEEKS TO ADDRESS

The Project Document presents a convincing argument for the need to intervene to prevent the further loss and reverse the historical losses of agricultural biodiversity and wild relatives. This is based on Georgia's biogeographical importance for biodiversity, long history of agriculture and contemporary losses of a siginificant portion of this heritage. The location of the Project site, *Samtskhe-Javakheti* Region, within Georgia is shown in **Figure 2.1**.

2.3.1 Biodiversity

Georgia lies on the south-eastern boundary of Europe between the Greater and Lesser Caucasus and the Black Sea, an area defined by Conservation International as one of 34 global biodiversity hotspots[6]. Georgia, having 23 soil-climatic zones within its 69,700 km^2, possesses many endemic species of flora and unique plant communities. This diversity is enriched by the long history of Georgian agriculture, dating back to the 5/6th millennium BC, when Kartvelian (Georgian) tribes began to domesticate basic crops, such as wheat, barley, oat, rye, legumes (pea, chickpea, lentil, faba bean) and fruits (plum, cherry, quince, common grape).

Georgia's rich flora includes more than 4,200 wild species, some 100 families and 350 local species of grain-crops, more than 100 species of seed and stone fruit trees, nuts and wild berries, and about 500 local varieties of grapes of which only 300 still exist in live collections in scientific research institutes and on villagers' farms (small-holdings). Many species are also used for medicinal purposes, of which some 30 are threatened with extinction.

The main threats to agricultural biodiversity identified in the Project Document were:

- The legacy of a system that favoured extensive production of introduced varieties during the 70 years of the former Soviet Union, during which production of traditional varieties declined and with it knowledge about their adaptation and cultivation.

[6] Mittermeier, R.A., Gil, P.R., Hoffman, M., Pilgrim, J., Brooks, T., Mittermeier, C.G., Lamoreux, J. and da Fonseca, G.A.B (2005). *Hotspots revisited: Earth's biologically richest and most threatened terrestrial ecoregions.* Conservation International, Washington D.C. 392 pp.

- Seeds and planting materials of modern varieties dominating the seed market.
- Barriers to markets resulting from difficulties in the transition to a market economy.

Table 2.1 Map of *Samtskhe-Javakheti* Region and network of farmers involved in the Project

2.3.2 Agriculture

The *Samtskhe-Javakheti* Region of southern Georgia has a unique socio-political history. During the former Soviet Union period the region was isolated for security reasons because of its proximity to Turkey. A large proportion of the population[7] was evicted from the region during the 1940s and, concomitantly, people from other parts of Georgia were settled in the area as part of a programme of collectivisation. The speed with which this happened and its effects upon the traditional farming system, with its land races and associated agricultural knowledge, were profound. The former Soviet Union imposed a command economy approach to agriculture, replacing traditional systems with new high-yielding monocultures of crops and the regional land races (living plants, seeds, etc.) were lost overnight[8], as well as much of the collective memory of these crops and how best to grow them.

After the collapse of the former Soviet Union, the region was once again fully integrated at political, social and administrative levels but the distinct identity of its agriculture was apparently lost. The collapse also resulted in the gradual disintegration of the irrigation systems, farm machinery, markets for crops and supply of chemical inputs. In the subsequent years farmers of the region, both immigrant and the few remaining indigents, practised low input agriculture utilising crop rotation and organic methods to grow the modern agricultural varieties now familiar to them. Very few farmers were able to access the traditional land races or varieties that were

[7] Ethnic Georgian Muslims were resettled in Central Asia during the Second World War as they were perceived to be a threat to security because of their supposed links with Ethnic Georgians in Turkey and that country's membership of the Axis Alliance.

[8] Some material was conserved *ex situ* at the Institute of Botany in Tbilisi due to the farsightedness of a number of plant specialists.

more suitably adapted to this low input form of agriculture, with its dependence upon local resources, specific climatic conditions and ability to withstand stochastic events such as droughts.

2.4 IMMEDIATE AND DEVELOPMENT OBJECTIVES OF THE PROJECT

The Project's goal and development objectives are presented in Section 1.1. Its overall strategy, as described in the Project Document and reflected in the original logical framework matrix, can be summarised thus:

- recover seed and planting material from various *ex situ* and remaining *in situ* sources;
- develop a system of seed distribution and the return of planting material from participating farmers to establish a source for new farmers entering the Project;
- create and strengthen farmers' associations and raise awareness; and
- remove barriers to local and regional markets and develop and implement a replication strategy.

While not explicitly stated in the Project Document, this utilitarian approach to the strategy provides the motivation or incentive to conserve agrobiodiversity because it generates increased food security at the farmer's household level and increased income opportunities for farmers.

2.5 MAIN STAKEHOLDERS

Relevant stakeholders were involved in the design of the Project, specifically the Ministry of Agriculture's Extension Services, Ministry of Environment, non-governmental organisations, research and extension centres, farmer groups and rural communities. The Project Development Fund (PDF-A) initiative invested in extensive field and opinion surveys of three potential pilot regions (including Samtskhe-Javakheti) to assess the status of traditional farming practices and the level of interest in cultivating traditional varieties (see Annex F of the Project Document).

It was anticipated that ELKANA would continue to work closely with these stakeholders during the Project's implementation, as well as other bodies, such as the Parliamentary Committees of Environment and Natural Resources and Agrarian Issues, Institute of Botany, Georgia Research Institute for Viticulture, Fruit Growing and Wine Production, Research Institute of Farming, state breeding stations and eparchial farms of Akhaltsikhe.

The primary stakeholders of the Project, in terms of those who potentially have most to benefit from its interventions, are the local farmers. They will be the leaders in introducing and utilizing traditional crop varieties on their farms, using seed and other plant materials provided by the Farmers Association.

2.6 RESULTS EXPECTED

The Project's goal, as specified in the Project Document, was the conservation and sustainable utilization of threatened local plant genetic resources important to food and agriculture. Its two immediate objectives, on-farm conservation of selected local agricultural biodiversity in Samtskhe-Javakheti on a pilot demonstration basis and the development of a strategy for replication of best practices learned in agricultural biodiversity conservation to other Georgian regions, were modified into three outcomes following the Mid-Term Evaluation as follows:

- *Outcome 1*: Intra and inter specific diversity of crops and wild relatives conserved in Samtskhe-Javakheti region or at local level.
- *Outcome 2*: Land races and wild relatives products contribute to local food security, and market value chain strengthened and sustained.
- *Outcome 3*: Learning, evaluation and adaptive management increased.

The Project was designed to address threats and root causes by focusing its technical and financial resources in five main areas of activity, as listed in Section 1.1. Changes in emphasis and new activities introduced as a result of the Mid-Term Evaluation are outlined in Section 3.1.3.

3. KEY FINDINGS

3.1 PROJECT CONCEPT/DESIGN

3.1.1 Project relevance and country ownership/driveness

Key points concerning the concept and design of the Project that emerged from the Mid-Term Evaluation are as follows:

- The concept for a project targeting agrobiodiversity conservation in Georgia is likely to have originated as a collaborative initiative of the UNDP Country Office in Georgia and the UNDP-GEF Office in Bratislava in response to addressing GEF strategic priorities on agricultural diversity[9]. Furthermore, there were synergies with UNDP's Global Programme on Agriculture and Food Security. Concomitantly, ELKANA, through its association with the Agricultural Biodiversity Protection Society[10], was developing considerable interest in agrobiodiversity in response to the perceived loss of agricultural crop land races and wild relatives.
- UNDP Georgia preferred to adopt the NGO execution modality for the Project because of the lack of financial and technical capacity within government institutions to implement projects at grass-roots level, exacerbated by a high turnover of key positions at that time. A further advantage of NGO execution through ELKANA was the availability of other funds for co-financing.
- ELKANA provided the baseline data and necessary information to secure project development funds (PDF-A[11]) in 2001, which were used to study the land races of the region, identify remaining genetic material and formulate a larger Project Document that focused on piloting this Project in Samtskhe-Javakheti.
- The Project Document was developed by ELKANA[12] with assistance from the UNDP-GEF regional consultant. The justification for the Project was to conserve agricultural biodiversity by safeguarding land races and crop wild relatives through various *in situ* and *ex situ* mechanisms, including *in situ* reserved areas for crop wild relatives, *in situ* traditional farm systems for land races and *ex situ* seed banks. The principle motivation for farmers' participation was the opportunity to improve their livelihoods, based on the utilitarian values of the crops themselves (e.g. frost and disease resistance).
- A key component of the Project strategy was to build upon ELKANA's existing strengths in developing organic farming methods and farmer's associations, and link the cultivation of genetically distinct land races of crops to farmer's livelihoods within a production landscape to ensure sustainability.
- Importantly, the Project Document linked the Project to the World Bank-GEF funded Protected Areas Project and the World Bank funded Agricultural Research and Extension and Training Project, ensuring that the projects would complement and not duplicate each other.

[9] GEF Operational Program #13 *Conservation and Sustainable Use of Agricultural Diversity Important to Agriculture.*

[10] The Agricultural Biodiversity Protection Society (DIKA) was a joint collaborative effort among the Biological Farming Association ELKANA, Dioceses of Khoni and Bodbe, Experimental Farm "Biome" and several scientists. It was establish on 24th of April 1998. The main objectives were to (a) preserve, recover and re-introduce endemic crops and local varieties in farms, (b) disseminate information on agricultural biodiversity protection, conservation and utilization of plant genetic resources, and (c) provide training in conservation and utilization of plant genetic resources. DIKA maintained about 50 local varieties and landraces of wheat, barley, millet, chickpea and lentil through its farmer network in different regions of Georgia. Since 2003, Dika's activities have been included in Elkana's programmes and in 2004 a Department of Agricultural Diversity was formed in Elkana, which now maintains the collections.

[11] Project GEO/01/G41/A/1G/72 Recovery, Conservation and Sustainable Use of Georgia's Agro-biodiversity. UNDP 1G-Global Environment Trust Fund US$ 25,000, in kind (ELKANA) US$ 8,080.

[12] The Project Document was financed using unspent funds from the PDF-A phase.

The main policy drivers cited in the Project Document are as follows:

- The *Biodiversity Strategy and Action Plan of Georgia*, in which there is an entire section devoted to Agriculture and Conservation of Agricultural Biodiversity. Here, the "implementation of projects on rehabilitation of rare endemic breeds and varieties" is identified as a priority action. Elsewhere, in the Species and Habitat Conservation section, the creation of conservation centres, strengthening of existing ones and the development of a national program for *ex-situ* conservation of highly endangered plants are identified as necessary actions to complement *in situ* efforts.
- The *Strategy for the Sustainable Development of Agriculture and Food Security in Georgia*, which reflects the priorities of the *Biodiversity Strategy and Action Plan of Georgia*, identifies the conservation of agricultural biodiversity, promotion of organic farming, and the development of agro-tourism as priorities for Georgia's agro-food sector.
- The importance of conservation of agricultural diversity (cultivated plants and their wild relatives) is emphasized in the *National Report on the Protection of Georgia's Biodiversity*.
- The Government of Georgia has identified the use of agricultural biodiversity as a tool for alleviating poverty in rural areas, as part of its Poverty Reduction and Economic Growth Program[13].

Also relevant to the policy framework in which the project is operating are the following:

- Convention on Biological Diversity
- National Environmental Action Plan
- Law on Breeders Rights
- Law on Certification of Organic Products

The Project's design is entirely relevant to this policy environment and, as evident from the above observations made in the Mid-Term Evaluation, its conception is timely and design is both strategic, in terms of potentially sustainable outcomes and clear linkages with existing policies and initiatives, and tactical with respect to its grass-roots approach and NGO execution.

The few shortcomings in the Project's design concern the weak approach to addressing *in situ* conservation of crop wild relatives and the absence of any measures to improve the enabling environment, with respect to Intellectual Property Rights and Access & Benefit Sharing. These were identified in the Mid-Term Evaluation and measures put in place to enable the *objective* of the Project to be more readily achieved (Section 2.3).

3.1.2 Implementation approach

The overall strategic approach taken to implement the Project is rationale as set out in the Project Document followed a reasonable approach:

- identification, inventory and collection of agricultural biodiversity and wild relatives;
- dissemination of seed and planting material to participating farmers;
- establishment of crops on a demonstration farm and on participating farmers plots;
- establishment of an association of participating farmers;
- market development and promotion of land race crops;
- extension and awareness of land races and agricultural biodiversity;
- study on wild relatives; and
- replication of successful interventions in other areas.

Project management, support and extension staff was provided by ELKANA. Most technical advice was contracted, notably to ORCHIS for the work on crop wild relatives and to several other national consultants. This approach had a number of benefits, such as the rapid establishment of

[13] This is a detailed programme of actions that complements the Poverty Reduction Strategy Paper developed by the Government of Georgia, World Bank and International Monetary Fund.

the demonstration farm at Tsnisi, establishment of good local linkages, prospects of continuity after the GEF Project ended and *buy in* to the ELKANA *ethic* of meeting the specific farmer requirements rather than imposing a *blue print* approach.

Where the technical capacity did not exist, the Project has tried to build this capacity through training, for example with the technical backstopping mission to support development of a strategy for crop wild relatives.

Early on in Project performance was affected by a number of external events beyond its control, notably:

- The start date of the Project in June 2004 did not give an opportunity to put in place the necessary structures to take advantage of the first summer sowing season, which meant that sowing was delayed until the autumn; and
- The drought in 2006 meant yields (including conventional agricultural crops) were too low to operate the seed-sharing scheme that year.

The Project has responded well to these and other challenges, while also being expeditious in the use and deployment of its resources. For example, following changes incurred as a result of the Mid-Term Review (see Section 3.1.3), it was decided to redeploy human resources in ways that would enable specific interventions to be resourced. Thus, the Project Manager position was removed in the knowledge that the Project infrastructure had been established and the team was operating smoothly and could be managed at programme level from ELKANA's head office.

3.1.3 Mid-Term Evaluation

The Mid-Term Evaluation concluded that while considerable success had been achieved with respect to on-farm (*in situ*) conservation[14] of threatened land races, using traditional agricultural systems that are economically sustainable, the Project required more time to address *in situ* conservation of crop wild relatives in order to realise its goal. Priorities to address were identified as follows:

- Creating an enabling environment, in which agrobiodiversity conservation is supported by appropriate policies and laws, including Intellectual Property Rights and Access & Benefit Sharing.
- Identifying and systematically conserving crop wild relatives and their habitats.
- Developing an ecosystem approach to the conservation of all aspects of agricultural biodiversity overlaid upon a production landscape that reflects the nature of the traditional farming systems still being practiced in Samtskhe-Javakheti Region and the close relationship between farming systems, land races and crop wild relatives.

A two-year budget neutral extension[15] was recommended to enable the Project to meet its goal, subject to the following conditions being met:

- The Project engages substantive technical assistance to build its capacity and that of its partners in developing the *in situ* and technical aspects of agricultural biodiversity conservation.
- The Project engages with substantive partners to explore ways in which the *in situ* conservation of wild relatives and the development of a systemic approach to biodiversity conservation in the region can be addressed with consideration to the resources available to the Project.

[14] Throughout this document the term *conservation* is used in its widest sense as including the sustainable use of natural resources (see IUCN, UNEP and WWF 1980. *World Conservation Strategy: Living Resource Conservation for Sustainable Development*).

[15] In the event of there being insufficient funds remaining in the budget, the Mid-Term Evaluation noted that the Project could reasonably decide whether it should be less pro-active in areas such as developing a regional approach and the enabling environment.

- The Project, under the guidance of the UNDP Country Office and in collaboration with its partners, produces a full Logical Framework Matrix according to the revised *outcomes*[16].

This recommendation was adopted and the Project was extended by a further 1¼ years. The log frame was revised, in line with the logical hierarchy recommended in the Mid-Term Evaluation, as follows:

- *Objective*: Conservation and sustainable utilisation of threatened local plant genetic resources important to food & agriculture in Georgia within a production landscape.
- *Outcome 1*: Intra and inter specific diversity of crops and wild relatives conserved in Samtskhe-Javakheti region or at local level.
- *Outcome 2*: Land races and wild relatives products contribute to local food security, and market value chain strengthened and sustained.
- *Outcome 3*: Learning, evaluation and adaptive management increased.

Thus, the original *goa*l of the Project became a singe *objective* with three *outcomes*, replacing the original two *objectives.* The original set of 5 *outputs* (listed above) was incorporated within a new set of 8 *outputs* that relate to the 3 outcomes (see Annex 7). **It should be noted that it is this revised log frame, not the original logical framework matrix in Annex A of the Project Document, which provides the basis upon which the Project is assessed in this Terminal Evaluation.**

3.1.4 Stakeholder participation

The different types of stakeholder have been described in Section 2.5, the primary stakeholders being the farmers who are potentially the principal custodians of agrobiodiversity. Their empowerment to develop sustainable livelihoods from land races is fundamental to the Project concept of conserving these biodiversity resources.

The Project has been hugely effective in its engagement with stakeholders, particularly farmers through the development of Farezi, a regional farmers' association, the regional government and Georgian Orthodox Church to help promote agro-biodiversity conservation through sustainable farming practices, and ELKANA's business partner Begeli to market products.

A reasonably large number of farmers (19 of which 5 were women) and over a dozen other stakeholders, including partners, were interviewed with respect to the strengths and weaknesses of the Project. In general, stakeholders were very complimentary about the Project, its technical support and management and it was a challenge to solicit any weaknesses from them. When weaknesses were mentioned, they tended to reflect external events, such as the trade embargo with Russia[17], or issues beyond the scope of the Project, such as the lack of provision of processing facilities to add value to farmed products at the point of origin (**Table 3.1**). ELKANA, with its partner Begeli, is currently exploring potential markets in Europe to address the trade embargo with Russia. The other weakness concerning seed supplies continues to be addressed by Elkana through Farezi by establishing a critical mass of seed to meet evolving demands.

Most striking was the fact that every farmer interviewed indicated that s/he had become involved in the Project as a result of direct contact with a member of the regional farmers' association (Farezi) or staff member of ELKANA. This highlights the importance of direct and personal engagement with stakeholders, which is a cornerstone of the way in which ELKANA operates at grassroots level. This is a key message, particularly in today's world of networking increasingly *via* electronic media.

[16] The Logical Framework Matrix comprised 2 *objectives* and 5 *outputs*. *Outputs* are lower in the logical hierarchy than *outcomes* and GEF now requires a single *objective*, with *outcomes* that describe a situation change or result *of* specific interventions (*outputs*), to be elaborated in the Project log frame.

[17] While the trade embargo did not directly affect crops targeted by this Project, other products marketed by Begeli, such as wines, have been impacted significantly.

Table 3.1 Project strengths and weaknesses, as perceived by interviewed stakeholders

• **Strengths**	
▪ Only project to address agrobiodiversity in holistic manner (conservation achieved by sustaining livelihoods in an ecologically sustainable manner) ▪ Model works well ▫ Land races recovered and conserved *in situ* on farms ▫ Land races are valuable – frost and drought resistant, less labour inputs, regarded more nutritious and tasty ▫ Can be organically farmed as resistant to disease and frost – minimal environmental impacts ▫ Improved farmers livelihoods - subsistence use and local marketing ▫ Establishment of farmer's association ▫ Market chain established via Begeli	▪ LRs/LVs conserved *ex situ* (seed and field banks) ▪ Distribution of CWRs now known in Project region ▪ Only project in which MOE sits on Steering Committee ▪ Agrobiodiversity now included in National Biodiversity Strategy (2005) ▪ ELKANA ▫ Professional, with relevant expertise and management skills plus capacity to outsource ▫ Strong links with farmers ▫ Strong links with donors, providing access to additional funds ▫ Excellent technical advice, information materials
• **Weaknesses**	
▪ Project design did not address enabling environment ▪ Agrobiodiversity cuts across Ministries of Environment and Agriculture. Not a high priority within MoE, the lead government agency in the Project	▪ Limited outreach to farmers – 189 to date ▪ Income/work for farmers is seasonal ▪ Commercial viability constrained by limited stocks of seed material (wheat) that Elkana has been able to produce within Project's life. ▪ Lack of processing facilities ▪ Exports collapsed with Russian trade ban

3.1.5 Gender

ELKANA has a policy to work equally with men and women and, additionally, supports women's groups. Under the Project, equal participation by men and women is ensured at its workshops and training courses. One women's group of five cow-pea producers was established in 2006 when they sold their produce through a local distributor company; by 2007 they had expanded their fields in order to also produce chick peas.

3.1.6 Replication approach

The development and implementation of a replication strategy is one of two *objectives* around which the Project has been designed, as articulated in its Logical Framework Matrix (see Annex A of the Project Document). Outputs were identified as being (i) a strategic plan for replication of the seed production and distribution model developed by the Project and (ii) at least one farmers' association established in another region of Georgia. This objective was incorporated as an output in the revised log frame.

The replication approach described in the Project Document is considered to have been over-ambitious in terms of the Project's timeframe. Even with a two-year extension, albeit without additional funding, it was not possible to replicate the Samtskhe-Javakheti model in another region although knowledge and best practise has been shared (see evaluation of Output 3.3 in the Log Frame).

However, there is considerable opportunity for replication beyond the life of the Project, given ELKANA's long term commitment to sustainable farming and special interest in promoting the organic farming of land races. ELKANA has other funds from its core partners that will enable

much of the knowledge, experience and best practice acquired from this Project to continue to be transferred to other regions.

3.1.7 Sustainability

The Project has been designed to address the issue of sustainability through increasing food security of farmers at the household level on several fronts including:

- Provision of farmers with varieties of land races selected for their resistance to drought, frost and pests. Such traditional varieties are best adapted to the local environment and can provide stable yields. They are less dependent on irrigation and can be grown on poorer soils, so are not reliant on agrochemical inputs.
- Extension services to farmers growing such traditional varieties, including technical know-how and support to access markets, is assured over the longer term by the ongoing commitments of ELKANA and the Ministry of Agriculture. The later is being significantly strengthened by financial and technical support from the World Bank.

Implicit, though not specifically cited in Section 2c of the Project Document, is the direct linkage between improved food security and increased *in situ* conservation of land races arising from their cultivation on farms.

With respect to Project outcomes, the internal strengths of the Executing Agency, ELKANA, its continuing support to participating farmers after the end of the Project, and the incorporation of land races into farmers' livelihood strategies provides a degree of confidence in their sustainability.

However, as identified in the Mid-Term Evaluation, there is a lack of policy and legislation to protect farmers intellectual property rights, traditional knowledge and future use values and, thereby, support the Project's utilitarian intervention approach.

Furthermore, current sectoral arrangements and the national enabling environment are inefficient as they relate to the sustainable management (conservation) of biodiversity, particularly with regard to agriculture. The compartmentalisation of the environment into discrete policy sectors makes it difficult for the necessary mainstreaming of biodiversity across the economy. Moreover, conflicting policies and a weak enabling environment can create perverse incentives for the conservation of biodiversity.

The Project can only facilitate the process of creating a supportive enabling environment. Ultimately, it is the responsibility of government to create the necessary legislation to support biodiversity and protect the possible social and economic values of its future sustainable use. Arguably, as a signatory to the Convention on Biological Diversity, there is an international obligation for the government to develop laws, *inter alia*, on access and benefit sharing, and the protection of intellectual property rights and traditional knowledge (as they relate to genetic material).

These factors provide the basis for evaluating the sustainability of the Project's outcomes in Section 3.3.3

3.1.8 Linkages between Project and other interventions within the sector

Linkages between the Project, GEF's strategic priorities on agricultural diversity and UNDP's emphasis on food security and sustainable resource use, as part of its corporate goals in environment and sustainable development, have already been discussed in Section 3.1.1. More specifically, the development goal of UNDP's Global Programme on Agriculture and Food Security is to promote sustainable food security through actions that contribute to the alleviation of poverty, protection of the environment, and empowerment of marginalized groups. The UN Common Country Assessment for Georgia lists several areas of work concerning the conservation of the natural resource base, of which "*Promoting community-based management*

systems, employment of the poor in labour intensive activities and agro-biodiversity" is particularly relevant to the Project. Similarly, the UN Development Assistance Framework (2006-2010) and UNDP Country Programme Action Plan (2006-2010) state that UNDP will actively support initiatives intended to improve the management and conservation of natural resources.

Other interventions in the sector during the Project's design included the World Bank/GEF Protected Area Project, which does not overlap geographically with the Project, and the World Bank Agricultural Research, Extension and Training Project. The latter project includes: (i) funding appropriate technology acquisition, adaptation and dissemination to enable farmers to respond better to the challenges of a privatised economy; (ii) implementation of an agricultural research system; and (iii) investment in agricultural nutrient pollution control near the Black Sea. The Project Document indicates that the Project would cooperate with these initiatives to avoid duplication and maximise synergies. Similarly, it would cooperate with the Agricultural University Project, funded through the World Bank Competitive Grant Scheme, which is aimed at multiplying traditional wheat varieties.

The Project Document also considered potential opportunities of collaborating with the International Finance Corporation, which was exploring opportunities in 2003 to invest in Georgian's wine export sector. Potential opportunities were being explored by UNDP to incentivise the conservation of selected local varieties but no investments materialised.

A number of interventions emerged during the implementation of the Project of direct or indirect relevance. These include: various agri-tourism initiatives of Elkana's that complement the conservation of agro-biodiversity; the creation of a Transboundary Joint Secretariat for the Southern Caucasus, funded by KfW/BMZ, under the auspices of which is the establishment of Javakheti National Park; a GTZ/BMZ regional project in South Caucasus to sustainably manage biodiversity in protected areas and forests; and various UNDP-GEF enabling activities concerned with biodiversity conservation[18]. Such interventions provide opportunities for consolidating on the protection of agrobiodiversity and also developing its market values.

3.1.9 Management arrangements

The Project was executed by ELKANA, which is the leading Georgian NGO concerned with organic agriculture and supporting small farmers, in accordance with UNDP's provisions for project execution by national NGOs. The Ministry of Environment was designated as the National Coordinating Agency.

A Steering Committee was set up in agreement with the Ministry of Agriculture, Ministry of Environment and UNDP in accordance with provisions in the Project Document. This Committee, which was responsible for monitoring, evaluating and overseeing the Project's implementation, met five times during the life of the Project. It also approved the annual work plans and financial reports. Steering Committee members comprised representatives of the funding partners, governmental agencies, scientific institutions and environmental NGOs. A list of members is provided in **Annex 5**.

ELKANA appointed a Project Director, in consultation with UNDP and with the approval of the Steering Committee. A Project Manager was tasked with setting up the management of the Project, including the establishment of a Project office at Akhaltsikhe and demonstration plot at Tsnisi from where many of the core activities were initiated. Much later, after the Project infrastructure had been established and management was running smoothly (see Section 3.1.2), the Project Manager position was discontinued and the Project was managed from ELKANA's head office by the Programme Manager.

[18] E.g. Assessment of Capacity Building Needs for Biodiversity Conservation and Sustainable Use, Participation in Clearing House Mechanism and Preparation of a Second and Third National Reports to CBD; and Catalysing Financial Sustainability of Georgia's Protected Areas.

The Project Management Team comprised the Project Director (also Director of ELKANA), Project Manager (latterly ELKANA Programme Manager) and the Office Manager, The Director of ORCHIS, a partner and contractually responsible for the crop wild relatives component of the Project, was also a member of the Management Team and participated in its quarterly planning meetings.

Project activities were implemented to a large extent by ELKANA staff, integrated within the organisation's overall programme by the ELKANA Programme Manager, and technical assistance was contracted in as necessary. Further details of the implementation approach can be Section 3.2.3, including details of the Project's adaptive management framework for monitoring and evaluating Project implementation.

3.2 PROJECT IMPLEMENTATION

3.2.1 Financial management

The total available budget as indicated in the Project Document was US$ 2,704,208, of which US$ 987,408 (36%) is grant-aided by UNDP/Global Environment Facility (US$ 962,408) and UNDP Project Development Fund (US$ 25,000), and US$ 1,716,800 (64%) is co-financed by ELKANA[19]. A substantive revision was made to this budget in February 2009, reflecting an allocation of US$ 20,000 from UNDP TRAC1/2 to cover the costs of a documentary film about the Project and other outreach materials.

Total contributions and disbursements up to June 2009 are shown in **Table 3.2**. Very significant is the US$ 4.04 million of additional co-financing funds raised by ELKANA during Project implementation. This represents more than a doubling of the Project's total budget to US$ 6.74 million, which is hugely impressive in terms of leverage of funds from a GEF perspective. Thus, the grant-aided proportion (GEF and UNDP contributions) represents 15% of the total budget and the rest (85%) is co-financed through ELKANA's core programme.

Most of the total budget had been disbursed by the end of 2009 and in the 2009 fiscal year 86% of that year's budget of US$ 171,526 had been spent (Source: 2009 Annual Report). The balance of US$ 23,637 was required for anticipated expenditures in 2010, such as the Terminal Evaluation.

Table 3.2 Cumulative budget contributions and disbursements in US$ millions to 30 June 2009 (Source: Project Implementation Review 2009)

Name of Partner or Contributor	Amount used in Project Preparation (PDF A, B, PPG)	Amount committed in Project Document[	Additional amounts committed after Project Document finalization	Estimated Total Disbursement to June 30, 2009	Expected Total Disbursement by end of project
GEF Contribution	0.03	0.96	N/A	0.87	0.96
Cash Cofinancing – UNDP managed	N/A	N/A	N/A	N/A	N/A
UNDP (TRAC)	N/A	N/A	0.02	N/A	0.02
Cash Cofinancing – Partner Managed	N/A	1.72	3.84	5.56	5.76
In-Kind Cofinancing	N/A	N/A	N/A	N/A	N/A
Total Cofinancing	0	1.72	3.86	5.56	5.78
Total for Project 2009	**0.03**	**2.68**	**3.86**	**6.44**	**6.74**

[19] Co-financing partners include: EED and Misereor (Germany); OxfamNovib, Cordaid and Avalon (Netherlands); and Swiss Development Cooperation and HEKS/EPER (Switzerland).

Annual budgets and disbursements are shown in **Table 3.3**. Key points to note are as follows:

- Annual budgets allocations are fairly typical of a normal project cycle, with a lower allocation in the first year while the Project got up to speed, establishing the necessary infrastructure, contracting staff and consultants etc, following by years of higher investments.
- NEED TO SAY SOMETHING ON DISBURSEMENTS VERSUS BUDGET ALLOCATIONS, ON RE CEIVING FURTHER FEEDBACK FROM ELKANA.
- Particularly noticeable is the progressively steep rise in co-financing from 2005 onwards, exceeding US $1 million by 2008. Clearly, ELKANA's early successes with the Project enabled it to raise additional funds. This also meant that ELKANA was able to draw upon its own resources to maintain the momentum of the Project, while accommodating the recommendations of the Mid-Term Review.

Table 3.3 Annual budget allocations and disbursements (Source: ELKANA) Review 2009)

Project	Total	Annual Budget Allocation							
Donor	Budget	2001-2002	2004	2005	2006	2007	2008	2009	2010
UNDP/GEF	*960,253		74,939	213,558	195,730	180,874	145,780	129,272	
GEF PDF	25,000	25,000							
UNDP (track1/2)	20,000							20,000	
Cofinance Elkana	5,756,800	0	422,000	704,100	854,200	921,100	1,137,800	1,297,500	240,100

*This total of US $960,253 differs marginally from the official total of US $962,408 due to internal accounting.

Project	Total	Annual Disbursement							
Donor	Disbursement	2001-2002	2004	2005	2006	2007	2008	2009	2010
UNDP/GEF	962,408		74,939	213,558	195,730	180,874	145,780	129,272	
GEF PDF	25,000	25,000							
UNDP (track1/2)	20,000								19,812
Cofinance Elkana									

UNDP Georgia has fulfilled its monitoring and assurance role judging by the various monitoring and review exercises, including field visits (and reports), oversight and contributions to the Annual Project Review / Project Implementation Review reports, and review and follow up on the quarterly progress reports, financial reports and work plans, annual project audits.

The UNDP Georgia's provision of financial resources has also been in accordance with project norms and in a timeframe that is supportive of covering the project expenditures. Early on during the Projects inception phase, there was a risk of delayed allocation of funds as a result of UNDP Georgia having to adopt a new ATLAS system to process NGO financial transactions. This was later resolved through issuing advances to ELKANA, which was a reflection of the trust between the Implementing and Executing Agencies.

3.2.2 Cost-effectiveness

Georgia has a vast agricultural sector that provides direct and indirect employment to about 35-40% of the population and contributes approximately 20% of GDP. The Government gives high priority to the sustainable development of the rural sector as an important component for overall economic growth, general employment and income.

According to the Project Document, baseline contributions that are directly relevant to the objectives of this Project amount to US$ 38,420,000, of which 75%represents support to rural families, rural enterprises and communities in increasing production and accessing markets for

their products and 25% goes to strengthening knowledge of agricultural systems, including research and extension services.

The GEF Alternative adds a layer of global biodiversity concerns to current efforts to promote the sustainable development of the rural sector in Georgia. Based on the specific objective of the GEF project to conserve globally significant agricultural biodiversity on farms, the total cost of the GEF Alternative amounts to US$ 41,099,208.

The incremental cost of the GEF Alternative is the difference between the GEF Alternative and the baseline, which amounts to US$ 2,679,208. This represents the incremental cost of achieving sustainable global environmental benefits (see Annex D of Project Document for incremental cost analysis). This incremental cost needs to be re-evaluated in the light of changed to the Logical Framework Matrix but it is likely to have risen to some US$ 6.5 million, in the light of the additional co-financing received and disbursed during the Project's implementation.

3.2.3 Monitoring, evaluation and risk assessment

ELKANA, in its role as Project Executant, is responsible for all monitoring, evaluation and reporting activities, including the collection, analysis and reporting of data necessary for measuring adherence to the work plan.

The monitoring and evaluation framework of the Project includes the following mechanisms:

- Twice yearly Steering Committee meetings to assess progress against planned outputs, provide strategic direction on implementation of the Project, and to ensure the necessary inter-agency coordination.
- Annual Project Reports that assess performance and progress towards achievement of Project outputs, submitted to the Steering Committee for review and recommendations.
- Quarterly Progress Reports reflecting all aspects of Project implementation, submitted to the Steering Committee for review and recommendations.
- Regular field visits by UNDP with the Project Director and Executing Agency staff.
- External financial audit in accordance to establish UNDP regulations.

The Logical Framework Matrix provides the basis for monitoring progress in the achievement of the Project objective, outcomes and outputs, based on a set of indicators. As described in Section 3.1.3, this was modified in accordance with the recommendations of the Mid-Term Evaluation. This revised version has been evaluated with respect to a set of end of Project targets using a series of performance indicators, based on the methodology outlined in Section 1.3, and the rankings are shown for Project objective, outcomes and outputs in Annex 7. Evaluation of the Project results and the sustainability of its outcomes are addressed fully in Section 3.3.

Overall, the Executing Agency has adopted a robust approach towards monitoring Project implementation, which is a reflection of the internal monitoring that ELKANA routinely undertakes as an organisation across all of its programmes. Additionally, the Project has developed its own adaptive management framework following in the wake of the Mid-term Evaluation. This is designed to improve the monitoring system and hence risk management, work planning and reporting. A copy of this framework is attached as **Annex 6**.

Review of the Steering Committee minutes, Project Implementation Reviews, Annual Performance Reports and Quarterly Progress Reports indicates that Project has been implemented consistently satisfactorily, in line with the work plan, and adapting responsively to external events in appropriate and effective ways, such as the war with Russia and dollar devaluation in 2008.

The main weakness in the monitoring and evaluation framework concerns the assessment of risks, which were developed in relation to the Project's implementation and not its outcomes. Thus, the main risks were identified as political instability and climate extremes, both of which occurred. The war with Russia in 2008 affected the Project's ability to develop international markets but, as

correctly anticipated in the Project Document, the demand for produce from land races continued to be in demand from subsistence use and local markets. The 2006 drought hampered the start of the Project; had it occurred after the Project was fully underway then probably land races would have been at a competitive advantage over introduced commercial varieties due to their greater tolerance of arid conditions. Such risks, however, were focused only on the production values of land races as the mechanism for their conservation and overlooked the wider protection needs of agricultural biodiversity, including wild crop relatives. This was addressed in the Mid-Term Review by refining the Logical Framework Matrix so that risks were related to outcomes, rather than outputs, in respect of the Project's overall intervention (objective).

A further weakness in the log frame becomes apparent when evaluating using the performance indicators to monitor and evaluate the achievement of targets with respect to outcomes. Some of the targets were not sufficiently quantitative to provide for meaningful evaluation; and the same targets were sometime used for several indicators. Thus, there is considerable scope for ensuring that indicators and targets are use consistently and quantitatively and in as SMART[20] a manner as possible. The design of the system is evaluated as Moderately Satisfactory and its application as Satisfactory (**Table 3.4**).

Table 3.4 Application of GEF evaluation criteria to Project monitoring and evaluation system

• **GEF evaluation criteria**	• **Terminal evaluation – summary comments and ranking**
• **Monitoring & evaluation system**	
Design of system	• Overall, the system was comprehensive and and underpinned by ELKANA's own robust performance monitoring system for the organisation. Good initiative was taken to strengthen the system following the Mid-Term Evaluation (see Section 3.2.3). The Logical Framework Matrix, which has proved to be excellent for evaluating progress in achieving the Project's objective and outcomes, despite a lack of SMARTness in some of its indicators and targets, had a design flaw but this was addressed by the Mid-Term Evaluation.
	• **Ranking: M**oderately **S**atisfactory
Application of system	• The system has been used intensively and extensively throughout the Project, and adapted to address particular issues and needs as required (see above comments on the design).
	• **Ranking: S**atisfactory

Satisfaction scale: **H**ighly **S**atisfactory, **S**atisfactory, **M**oderately **S**atisfactory, **M**oderately **U**nsatisfactory, **U**nsatisfactory, **H**ighly **U**nsatisfactory

3.3 PROJECT RESULTS

3.3.1 Attainment of outputs, outcomes and objectives

The Project's objective, *the conservation and sustainable utilization of threatened local plant genetic resources important to food and agriculture in Georgia within a production landscape*, comprises three significant interdependent elements in respect of threatened local plant genetic resources that are important to food and agriculture: their conservation (*in situ* and *ex situ*); their sustainable use, particularly with respect to benefiting local livelihoods; and the conservation of their wild relatives. The first and second elements are explicit and these have been achieved with considerable success in a number of respects, notably:

- Land races are now cultivated by 189 farmers (at least 2-3 land races per household), having initially started with just 12 farmers in 2004. This reflects benefits on social, economic and environmental accounts:
  i. Agrobiodiversity is being effectively and sustainably conserved *in situ* on farms.

[20] **S**pecific, **M**easureable, **A**chevable , **R**ealistic, **T**ime-bound

ii. Households are benefiting in terms of improved levels of food subsistence, claims of improved health (due to better nutritional quality of these land races) and, for some farmers, income from the sale of seeds and/or produce.

iii. Land races are proving to be resistant to drought, frost and pests and can be grown on poorer soils. Thus, they are less dependent on irrigation and less reliant on agrochemical inputs, which avoids polluting the environment and provides farmers with a niche 'organic' type of market.

- *Ex situ* conservation of these land races has been assured, with some 250 accessions held in ELKANA's seed bank and seed material for 17 cereals and 5 legume crops exchanged with the National Gene Bank.

This success has been underpinned by working at grassroots level with farmers and involved the establishment of a Farezi Farmers' Association (with some 254 members), through which technical and practical information, professional support, seed material and access to markets is provided or facilitated. The demonstration farm at Tsnisi has also been pivotal in providing a living bank of land races from which seed has been harvested annually to distribute to farmers, as well as being a showpiece of best practice.

The third element of the Project's objective is implicit and concerns the conservation (*in situ* and *ex situ*) of crop wild relatives. The importance of addressing this aspect was highlighted in the Mid-Term Evaluation and, as a result, specific provisions were introduced to enable the Project to realise its goal (see Section 3.1.3). Much has been achieved as a result of this mid-term intervention, specifically:

- Ecogeographic surveys of 30 priority[21] crop wild relatives were undertaken within Samtskhe-Javakheti to ascertain their distribution, conservation status and propagation requirements; and seed samples were taken for *ex situ* conservation in ELKANA's seed bank, that of the Institute of Botany and the National Gene Bank[22]. This provided the basis for developing a strategy for the conservation of crop wild relatives in the Province[23], which has been submitted to the Minister of Environment for necessary action.
- The ecogeographic survey followed on from a backstopping mission by Nigel Maxted in July 2008 to build capacity among Project partners in plant genetic resource conservation, especially with respect to *in situ* conservation of crop wild relatives (including the identification and designation of genetic reserves), develop a national conservation strategy for crop wild relatives and design an appropriate methodology for developing a strategy to conserve crop wild relatives within Samtskhe-Javakheti.

The other priority identified during the Mid-Term Evaluation was the creation of an enabling environment, something not included within the Project's design but fundamental for the ultimate achievement of its objective. While recognising that the introduction of relevant policies and legislation for agrobiodiversity was well beyond the scope and resources of the Project, it was agreed that preliminary efforts be made to understand the issues in order to pave the way for future initiatives. As a result of the mid-term intervention, significant progress was made in raising awareness and understanding among farmers, government agencies, scientific institutions and non-governmental organisations about the importance of Intellectual Property Rights and Access & Benefit Sharing within the context of agrobiodiversity conservation.

[21] Crop wild relative species were prioritised on the basis of economic value of related native crops in Georgia and relative threat, rarity, endemicity and genetic relationship with the crop.

[22] It is also planned for duplicates to be held in the regional Gene Bank at ICARDA (International Centre of Agricultural Research for Dryland Areas) in Syria.

[23] M. Akhalkatsi (2009). *Conservation and sustainable use of crop wild relatives in Samtskhe-Javakheti*. Georgian Society of Nature Explorers "Orchis" and Biological Farming Association "Elkana".

The Project is evaluated as **Satisfactory** with respect to the overall achievement of its objective, based the above analysis and a more detailed evaluation of the Logical Framework Matrix in which individual outcomes and outputs have been examined in relation to end of Project targets (see **Annex 7**). Rankings of other aspects of the Project's objectives (relevance, effectiveness and efficiency) are provided in **Table 3.5**, along with a brief justification.

Table 3.5 Application of GEF evaluation criteria to Project objective and outcomes

• **GEF evaluation criteria**	• **Terminal evaluation – summary comments and ranking**
• **Achievement of Project objective:**	• **Conservation & sustainable utilisation of threatened local plant genetic resources important to food & agriculture in Georgia within a production landscape**
Relevance	• Project design is highly relevant to social, economic and environment needs of local communities and Georgia as a country. Main design weakness is lack of provisions to create enabling environment, partly met by Mid-Term Evaluation measures. • **Ranking: S**atisfactory
Effectiveness	• Achieved *in situ* and *ex situ* for land races but for crop wild relatives achievement limited to a strategy that now requires *in situ* implementation. • **Ranking: S**atisfactory
Efficiency	• Project delivered in cost effective manner, evident from 2-year no-cost extension and synergies with ELKANA's existing farmers programme. • **Ranking: S**atisfactory
Results/Impacts	• Project represents major invention: demonstrating the social, economic and conservation importance of agrobiodiversity, which is now on regional and national political agendas. (See Annex 7 for more detailed evaluation of Project objective, outcomes and outputs.) • **Ranking: S**atisfactory
• **Sustainability of Project outcomes**	• **Outcome 1: *Intra* and *inter* specific diversity of crops & wild relatives conserved in Samtskhe-Javakheti Region** • **Outcome 2: Land races & wild relatives products contributing to local food security & market value chain strengthened & sustained** • **Outcome 3: Learning, evaluation & adaptive management increased**
Financial resources	• Conservation of land races largely assured by their sustained used, which is driven by their nutritional and economic value, as well as drought, pest and frost resistant characteristics. Conservation of crop wild relatives may need modest financial investment, which is not assured. • **Ranking: M**oderately **L**ikely
Socio-political	• While agrobiodiversity is now on the political agenda, it will require considerable vision and strong, committed partnership working between agricultural and environmental sectors to put in place policies and strategies to protect and sustainably utilise land races and, especially, crop wild relatives within production landscapes and, where necessary, protected areas. The development of agrobiodiversity is also hugely influenced by Georgia's trading terms, especially standards, and relationships with neighbouring countries. That said, it is recognised that the Project has made a significant impact among the farming community in the pilot region and secured their engagement in conserving agrobiodiversity and promoting its sustainable use because it makes good nutritional, economic and environmental sense. • **Ranking: M**oderately Likely
Institutional/governance	• The absence of an enabling environment that provides the necessary policies and laws to protect intellectual property rights, address access and benefit sharing of plant genetic resources and contains the environmental impacts of intensive farming practices is a major handicap that will undermine Project outcomes unless addressed as a future priority. • **Ranking: M**oderately **U**nlikely
Environmental	• The main threat to the sustainable, approach promoted by the Project is that the potential benefits of what is essentially 'organic' farming may be undermined by drives towards intensification of farming, using fast growing, high yield crops that require high agrichemical inputs of fertilisers and pesticides, and large-scale mechanised practices that benefit the few rather than the many members of rural communities. If such development proceeds in an uncontrolled manner with respect to its environmental impacts (nutrient enrichment, sedimentation and pollution of aquatic systems from fertilisers, soil erosion – due to large scale mechanised practices, and pesticides, respectively), it will become increasing difficult for farming of traditional land races to maintain its 'organic' niche within a production landscape that is likely to become 'polluted' by unsustainable aspects of more intensive farming practices. • **Ranking: M**oderately **U**nlikely

Satisfaction scale: **H**ighly **S**atisfactory, **S**atisfactory, **M**oderately **S**atisfactory, **M**oderately **U**nsatisfactory, **U**nsatisfactory, **H**ighly **U**nsatisfactory

Sustainability scale: **L**ikely, **M**oderately **L**ikely, **M**oderately **U**nlikely, **U**nlikely

3.3.2 Project impact

The impact of the Project has been very significant, as already indicated by its achievements described in Section 3.3.1. Key impacts include development of the following models that are or can be replicated elsewhere:

- Recovery, *ex situ* and *in situ* conservation and sustainable use of land races of cereal crops and legumes in Samtskhe-Javakheti Province.
- Identification of national priority crop wild relatives, a survey of their distribution and status in Samtskhe-Javakheti, and a strategy for their future conservation within this province.

Other significant impacts include:

- Wider and heightened awareness of the importance of agrobiodiversity to the extent that it is now included within regional and national political agendas.
- Emerging awareness within the protected areas sector of the importance of agrobiodiversity and potential opportunities to link the conservation of crop wild relatives with ecotourism initiatives.

3.3.3 Prospects of sustainability

The prospects of Project outcomes being sustainable are considered in **Table 3.5** are rankings provided for each of the four dimensions of sustainability The scores of **M**oderately **U**nlikely for two of the four dimensions do not reflect on the Project's implementation but are based on external drivers, such as trading relations and standards with respect to neighbouring countries and the way in which agriculture may be intensified. Such issues largely concern the enabling environment, which was not part of the original Project design and for which there was only limited time and resources to begin to address after the Mid-Term Evaluation. Most encouraging is the potential financial sustainability of Project outcomes, given the climatic, pest-resistance and nutritional competitiveness of land races, but this can be easily undermined by perverse incentives, such as subsidies, which might be introduced in efforts by government (supported by donor agencies) to intensify farming practices.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 FINDINGS

The Project is considered to have achieved its objective with considerable success (see Section 3.3), particularly within the national context of little awareness of the importance of agrobiodiversity and the lack of an enabling policy environment. Its success can be attributed to:

- a well-designed Project concept, albeit lacking with respect to provisions to create an enabling environment;
- choice of the national NGO modality for Project execution;
- competence and commitment of ELKANA, with its professional interest in promoting sustainable farming and self-reliance of local communities that is respected by government, notably the Ministry of Environment;
- collaborative working relationship enjoyed by ELKANA with UNDP Georgia and the Ministries of Environment and Agriculture;
- sound Project management that was able to capitalise on ELKANA's existing farmers association and quickly establish a local infrastructure within the Project site;
- close engagement with farmers who were the primary stakeholders, in the sense of being most directly impacted by the Project;
- strong partnership working, notably with ORCHIS (Georgian Society of Nature Explorers) who delivered the crop wild relatives component of the Project, supported by some excellent technical assistance backstopping; and
- timely interventions recommended in the Mid-Term Evaluation that ensured the Project delivered its objective to maximum effect within the constraints of resources and a two-year extension (see Section 4.2).

4.2 CORRECTIVE ACTIONS TO THE PROJECT DESIGN, IMPLEMENTATION AND EVALUATION

The Mid-Term Evaluation, while acknowledging that the Project was being implemented well by an executing agency with considerable internal capacities and organisational abilities, expressed concerns about the Project's achievements within its current design and time frame, notably:

- no clear Project definition of a land race;
- specific weaknesses in the in situ conservation of CWR strategy and approach;
- no clear strategy to address the enabling environment to support agrobiodiversity conservation
- weaknesses in the adaptive management approach to the conservation of in situ CWR and on-farm resources; and
- failure to include land races of indigenous vegetables[24].

The decision by UNDP Georgia and UNDP-GEF to extend the Project for two years, in line with the specification and conditions recommended in the Mid-Term Evaluation, proved critical in enabling technical assistance to be brought in to build the capacity of ELKANA and its partner ORCHIS to deliver on the conservation of wild crop relatives. The two years provided enough time for training to be imparted, national priority crop wild relatives to be identified using national and global databases, field surveys of 30 priority species to be undertaken and a regional strategy for their conservation to be formulated.

As described further in Section 3.1.3, the recommendations of the Mid-Term Evaluation were based on a clear rationale and lead to a clarification of the Project's goal/objective, outcomes and outputs, necessitating changes to the Logical Framework Matrix. The issues raised in the Mid-

[24] These are identified in the *Study of Field Crop Wild Relatives in Samtskhe-Javakheti* report prepared by the Project in 2006.

term Evaluation have now been largely addressed within the available time although much remains to be done with respect to the enabling environment and specific, *in situ* measures to protect crop wild relatives.

4.3 ACTIONS TO STRENGTHEN OR REINFORCE BENEFITS FROM THE PROJECT

Opportunities to reinforce the benefits from the Project include the following (lead agencies / organisations are indicated in brackets):

- **Mainstreaming.** The conservation and economic importance of agrobiodiversity, in terms of land races and wild crop relatives, to agriculture has been demonstrated by the Project. Agrobiodiversity now needs to be mainstreamed within other sectors, initially through relevant policies and plans such as those listed below.
  - National Biodiversity Action Plan (Ministry of Environment)
  - National cultural strategy (Ministry of Culture)
  - National tourism strategy (Tourism Department)
  - Regional Development Plans (Regional Governments)
  - Regional Strategies (e.g. Ministries of Agriculture and Tourism)
  - Protected area strategy (Protected Areas Agency)
  - Protected area management plans (Protected Areas Agency)
- **Replication.** The model works well and is sustainable, both financially in market terms and economically, in terms of non-market values such as the organic approach to farming land races that does not result in potential costly damage to the environment from agrochemical inputs.
  - Document in a single publication the Project's approach, best practices and lessons learned as guide *cum* handbook to inform others wishing to adopt the model elsewhere.
  - Replicate the model in other regions. (ELKANA / Ministry of Agriculture)
- **Conservation of crop wild relatives.** Adoption and implementation of the conservation strategy formulated for crop wild relatives within Samtskhe-Javakheti.
- **Agri-tourism.** Agrobiodiversity lies at the interface of natural and cultural heritage, providing huge potential for Agri-tourism, which complements ecotourism and cultural tourism. (Tourism Department, Protected Areas Agency, Ministry of Agriculture, Ministry of Culture, Patriarch Church, ELKANA working with farmers)
- **Organic farmers' markets.** Arguably, one of the most effective ways to raise the profile of the values of agrobiodiversity among the public is through farmers' markets. In Istanbul, for example, the weekly organic market is renowned and most of the produce is sold well before the end of the day. Apparently, there used to be a farmers' market in Tbilisi but this was closed down because of the ensuing chaos with traffic and problems of litter. Properly planned and managed, such an initiative could be reinstated but confined to organic products and, thereby, create a level playing field in terms of inequitable competition from cheap, imported products of unknown or dubious quality. Members of the public in Tbilisi, who represent 35% of the country's population, would value the quality assurance provided by such a market and this would contribute significantly to public recognition and support for agrobiodiversity on political agendas. (Ministry of Agriculture, Ministry of Environment, Tbilisi City Council, ELKANA)

ELKANA has a long-term interest in promoting sustainable agriculture and, given resources and political support, is well placed to follow up on many aspects of the Project, working in close collaboration with the many agencies identified above, and especially with the Ministries of Agriculture and Environment and regional government agencies.

4.4 PROPOSALS FOR FUTURE DIRECTIONS UNDERLINING MAIN OBJECTIVES

The Project is the first of its kind in Georgia to address agrobiodiversity in holistic manner whereby conservation is achieved by improving livelihoods in an ecologically sustainable manner, as noted by one the interviewed stakeholders (Table 3.1, Section 3.1.4). Much can be done to capitalise on the Project's achievements as outlined in the previous section. However, new ground needs to be broken on a number of fronts to underpin the models and good practices that have emerged from implementing the Project and this will require additional, new investments of time and resources. Future directions for agrobiodiversity that need to follow on from this Project include:

- **Enabling environment.** As identified during the Mid-Term Evaluation and reinforced by the Terminal Evaluation, a priority need is to create appropriate policies, legislation and internationally credible standards to address such aspects as Intellectual Property Rights, Access & Benefits Sharing, and Biosafety (especially in relation to imported seeds and foods).
- **Biosafety.** Currently, Georgia does not have the capacity to test the biological safety of seeds and produce. This will require significant investment and capacity building.
- **Processing.** Stakeholders, especially farmers, stressed the need to develop processing facilities in the vicinity of their farms. This is justified with respect to adding value to products at source, maximising financial benefits to local communities. However, this needs to be well planned and regulated with respect to potential environmental impacts of such processing facilities.
- **Research.** Considerable research needs to be undertaken with respect to the following:
  - Rigorous scientific testing of land races for drought / frost resistance, pest tolerance etc.
  - Authentication of land races with respect to their genetic identities.
- **Economic valuation** of agrobiodiversity and its potential significance within Georgia's agricultural sector.

UNDP is in a strong position to encourage government to move forward in these directions, providing policy advice, technical assistance and coordination as appropriate.

5. LESSONS LEARNED

The main lessons learned from this Project concern its design, with respect to the enabling environment, and partnership approach to implementation. These are elaborated below.

5.1 LESSONS LEARNED

As identified in the Mid-Term Review, the creation of an enabling environment, in which agrobiodiversity conservation is supported by appropriate policies and laws, was not an inherent part of the Project's design. This was potentially a major stumbling block to the achievement of the Project's long-term goal to conserve and sustainably use threatened plant genetic resources important to food and agriculture, given the current absence of legislation concerning Intellectual Property Rights, Access & Benefit Sharing and also biosafety standards.

The stumbling is evident from the evaluation of sustainability of outcomes (see Section 3.3.1, Table 3.2), which, in socio-political, governance and environmental terms, are potentially undermined by the absence of appropriate policies and laws to create a level playing field on which relatively sustainable, 'organic' approaches to farming can compete with less economically sustainable intensive agricultural practices involving high yield crop varieties reliant on agrochemical inputs.

Clearly, the enabling environment must be taken into account in the design of all projects, particularly with respect to the long-term sustainability of project outcomes.

5.2 GOOD PRACTICES

This Project has demonstrated the value of a strong partnership approach in its implementation involving government, non-governmental organisations, private sector and members of the local community, in this case organised into a regional farmers' association (Farezi). Particular principles that shape this partnership include the following:

- Government ownership is fundamental to success. In this case, the Ministry of Environment is the designated National Coordinating Agency and the Ministry of Agriculture is a key government partner. Ultimately, it is only government that can deliver an appropriate enabling environment to support farmers and stimulate environmentally sustainable markets (see Section 5.1).
- Project execution by a national non-governmental organisation is likely to be more sustainable in view of its long-term interests and commitment, as well as its potential access to other funding sources.
- Direct engagement of the primary stakeholders (farmers), which is often more readily achieved by non-governmental organisations than government *per se*, has been fundamental to the growth of the farming association at grassroots level. All persons interviewed indicated that they first got involved in the Project as a result of direct personal contact with ELKANA staff or a member of the farmers' association, rather than through advertisements via notices, media etc.
- Business partner, in this case Begeli, which is responsible for the marketing and establishment of a value chain. Particularly crucial is the close partnership between ELKANA and Begeli that has led to the development of a brand for agrobiodiversity products. This branding is an expression of the interdependence that exists between the NGO and its business partner: the product label carries ELKANA's name, providing a certain quality assurance to the customer.

A major advantage of a strong partnership approach is the opportunity and flexibility it provides for multidisciplinary working, which is often a requisite for Projects that are breaking new ground. In order to conserve agricultural biodiversity in its entirety, for example, it is necessary to take a multi-disciplinary approach and integrate: research into the status and distribution of crop wild relatives; *in situ* conservation of crop wild relatives and land races (including their sustainable

use) within what is essentially a production landscape (regional ecosystem planning); and establish well-regulated markets for the products through the creation of an enabling environment.

No one organisation has the capacity to address all of these issues. Moreover, there are synergies to be gained by adopting a multi-faceted approach, in this case towards the conservation of agricultural biodiversity. This is evident from the partnerships developed with ORCHIS to address the crop wild relatives component of the Project and with Begeli with respect to marketing.

Finally, it is appropriate to stress that market-led approaches to conservation are on the whole robust and effective, as demonstrated by this Project with its mixture of commercial and subsistence incentives for farmers. While a utilitarian approach to agricultural biodiversity conservation is a very cost-effective way of conserving a number of important land races, this may not be enough to conserve crop wild relatives and possible future use values that are also part of agricultural biodiversity. This may require financial investment to sustain the longer term economic interests.

In conclusion, executing agencies having strong partnerships comprising relevant government agencies, non-governmental organisations, scientific organisations and, as appropriate, private sector enterprises and working at grassroots levels with local communities are likely to be most effective in their delivery of project objectives and outcomes.

UNDP/GEF Project: # 00037324: Recovery, Conservation and Sustainable Use of Georgia's Agrobiodiversity (PIMS 1636)

TERMS OF REFERENCE FOR TERMINAL EVALUATION

1. Introduction

The Monitoring and Evaluation Policy at the project level in UNDP/GEF has two overarching objectives:

a) Promote accountability for the achievement of GEF objectives through the assessment of results, effectiveness, processes and performance of the partners involved in GEF activities. GEF results will be monitored and evaluated for their contribution to global environmental benefits; and

b) Promote learning, feedback and knowledge sharing on results and lessons learned among the GEF and its partners, as basis for decision-making on policies, strategies, program management, and projects and to improve knowledge and performance.

A mix of tools is used to ensure effective Project monitoring and evaluation. These might be applied continuously throughout the lifetime of the project e.g. periodic monitoring of indicators – or as specific time-bound exercise such as mid-term reviews, audit reports and final evaluations.

The evaluation is to be undertaken in accordance with the "GEF Monitoring and Evaluation Policy" (see http://thegef.org/MonitoringandEvaluation/MEPoliciesProcedures/mepoliciesprocedures.html).

Since 2004, UNDP Georgia has been implementing the UNDP/GEF medium-sized project entitled "Recovery, Conservation, and Sustainable Use of Georgia's Agricultural Diversity". The project executing agency is ELKANA, Georgian based NGO. By initial project design, the project duration was 5 years with a completion date of March 2008. However, based on the recommendations of the project mid-term evaluation its duration was extended to the end of 2009.
The long-term goal of the project is the conservation and sustainable utilization of threatened local plant genetic resources important to food and agriculture. The project has two immediate objectives. The first is the on-farm conservation of selected local agricultural biodiversity in Samtskhe-Javakheti, historically the main granary of Georgia, on a pilot demonstration basis. The second is the development and implementation of a strategy for replication of best lessons learned in conservation and utilization of local agricultural biodiversity to other Georgian regions.

To contribute to recovery, conservation and sustainable use of agricultural biodiversity, the project has directed its technical and financial resources towards five main action avenues: (i) establish sources of primary seed and planting material for the threatened crops and fruit varieties; (ii)

strengthen farmers groups' capacity to produce and make available seed and planting material to farmers; (iii) facilitate farmers' access to markets, including organic markets; (iv) assess local resources of wild medicinal and edible plants in the region and associated knowledge; and (v) enhance access of farmers, authorities, research stations, donors and other stakeholders to information on local agricultural biodiversity and improve information sharing among them. After the mid-term evaluation of the project, additional focus of the project was made on the study of crop wild relatives and land races as well as on creation of local knowledge on intelectual property rights and equal benefit sharing.

Samtskhe-Javakheti is a small province in the South of Georgia rich in agroiodiversity. The project has established a 4-ha demonstration plot, which is used for demonstration of local crops and varieties, as well as for multiplication of seed and planting materials. At present, the project reached the phase, when the progress should be reviewed, the project approach analyzed, lessons learned captured, replication strategy developed and implemented. In addition, the project will more actively work on facilitating the farmers' access to local and international markets, including organic markets.

2. Objectives for the Evaluation

The purpose of terminal evaluation is to provide a comprehensive and systematic account of the performance of the completed project by assessing its project design, process of implementation, achievements against project objectives endorsed by the GEF including any agreed changes in the objectives during project implementation and any other results. Terminal evaluations have four complementary purposes:

- To promote accountability and transparency, and to assess and disclose levels of project accomplishments;
- To capture and synthesize lessons that may help improve the selection, design and implementation of future GEF activities as well as to suggest recommendations of replication of project successes;
- To provide feedback on issues that are recurrent across the portfolio and need attention, and on improvements regarding previously identified issues;
- To contribute to the GEF Evaluation Office databases for aggregation, analysis and reporting on effectiveness of GEF operations in achieving global environmental benefits and on the quality of monitoring and evaluation across the GEF system.

Terminal evaluations should not be used as an appraisal for preparation, or as a justification for a follow-up phase of the evaluated project.

To this end, the Terminal evaluation will serve to:

1. Enhance organizational and development learning;
2. Enable informed decision-making;
3. Create the basis of replication of successful project outcomes.

More specifically, the evaluation should assess:

<u>Project concept and design</u>

The evaluator(s) will assess the project concept and design. He/she will review the problem addressed by the project and the project strategy, encompassing an assessment of the appropriateness of the objectives, planned outputs, activities and inputs as compared to cost-

effective alternatives. The executing modality and managerial arrangements should also be judged. The evaluator(s) will assess the relevance of indicators and review the work plan, planned duration and budget of the project.

Implementation

The evaluation will assess the implementation of the project in terms of quality and timeliness of inputs and efficiency and effectiveness of activities carried out. Also, the effectiveness of management as well as the quality and timeliness of monitoring and backstopping by all parties to the project should be evaluated. In particular the evaluation is to assess the Project team's use of adaptive management in project implementation.

Project outputs, outcomes and impact

The evaluation will assess the outputs, outcomes and impact achieved by the project as well as the sustainability of project results. This should encompass an assessment of the achievement of the immediate objectives and the contribution to attaining the overall objective of the project. The evaluation should also assess the extent to which the implementation of the project has been inclusive of relevant stakeholders and to which it has been able to create collaboration between different partners. The evaluation will also examine if the project has had significant unexpected effects, whether of beneficial or detrimental character.

3. Detailed Scope of Work

The evaluator(s) will look at the following aspects:

3.1 Project Concept/design, Expected Results

3.1.1 Project strategy/relevance: the extent to which the project was suited to local and national development priorities and organizational policies, including changes over time as well as the extent the activities contribute towards attainment of global environmental benefits

a. How and why project outcomes and strategies contributed to the achievement of the expected results?
b. Examine their relevance and whether they provided the most effective way towards results.
c. Did the outcomes developed during the inception phase represent the best project strategy for achieving the project objectives (in light of updated underlying factors)? *Consider alternatives.*
d. Did the recipient government maintain its financial commitment to the project? Has the government –approved policies or regulatory frameworks been in line with the project's objectives?

3.1.2 Preparation and readiness

a. Were the project's objectives and components clear, practicable and feasible within the project timeframe?
b. Were the capacities of executing institution and counterparts properly considered when the project was designed?
c. Were lessons from other relevant projects properly incorporated in the project design?
d. Were the partnership arrangements properly identified and the roles and responsibilities negotiated prior to project approval?
e. Were counterpart resources (funding, staff, and facilities), enabling legislation, and adequate project management arrangements in place at project entry?

3.1.3 Stakeholder involvement

a. Did the project involve the relevant stakeholders through information-sharing, consultation and by seeking their participation in the project's design?
b. Did the project consult and make use of the skills, experience and knowledge of the appropriate government entities, NGOs, community groups, private sector, local governments and academic institutions in the design of project activities?

3.1.4 Underlying Factors/assumptions

a. Assess the underlying factors beyond the project's immediate control that influenced outcomes and results. Consider the appropriateness and effectiveness of the project's management strategies for these factors.
b. Assess the effect of any incorrect assumptions made by the project

3.1.5 Management arrangements

a. Were the project roles properly assigned during the project design?
b. Were the project roles in line with UNDP and GEF progamme guides?
c. Can the management arrangement model suggested by the project be considered as an optimum model?

3.1.6 Project budget and duration

Assess if the project budget and duration were planned in a cost-effective way?

3.1.8 Design of Project Monitoring and Evaluation system

a. Examine whether or not the project had a sound M&E plan to monitor results and track progress towards achieving project objectives.
b. Examine whether or not the M&E plan included a baseline (including data, methodology, etc.), SMART indicators and data analysis systems, and evaluation studies at specific times to assess results and adequate funding for M&E activities.
c. Examine whether or not the time frame for various M&E activities and standards for outputs were specified.

3.1.9 Sustainability and Replication Strategies

a. Assess if project sustainability and replication strategies were developed during the project design?
b. Assess the relevance of project sustainability and replication strategies

3.1.10 Gender perspective:
Extent to which the project accounts for gender differences when developing project interventions.

3.2. Project Implementation

3.2.1 Project's Adaptive Management

a. Monitoring Systems

- Assess the monitoring tools used by the project:
  - Did they provide the necessary information?
  - Did they involve key partners?
  - Were they efficient?
  - Were additional tools required?
- Assess the use of the logical framework as a management tool during implementation and any changes made to it
- What impact did the retro-fitting of impact indicators had on project management, if such?
- Reconstruct baseline data if necessary[25]. Reconstruction should follow participatory processes and could be achieved in conjunction with a learning exercise[26]
- Apply the GEF Tracking Tool for OP 6 and provide a description of comparison with initial application of the tool.
- Assess whether or not M&E system facilitated timely tracking of progress towards project's objectives by collecting information on chosen indicators continually; annual project reports are complete, accurate and with well justified ratings; the information provided by the M&E system is used to improve project performance and to adapt to changing needs

b. Risk Management

- Validate whether the risks identified in the project document and PIRs were the most important and whether the risk ratings applied were appropriate. If not, explain why.
- Describe any additional risks identified
- Assess the project's risk identification and management systems: Was the UNDP-GEF Risk Management System[27] appropriately applied?

c. Work Planning

- Assess the use of routinely updated workplans
- Assess the use of electronic information technologies to support implementation, participation and monitoring, as well as other project activities
- Was work planning process result-based[28]?

d. Financial management

- Consider the financial management of the project, with specific reference to the cost-effectiveness of interventions[29]. Any irregularities must be noted.
- Was there due diligence in the management of funds and financial audits?
- Did promised co-financing materialize? (Please fill the form on co-financing).

e. Reporting

Cofinancing

Co financing (Type/Source)	IA own Financing (mill US$)		Government (mill US$)		Other* (mill US$)		Total (mill US$)		Total Disbursement (mill US$)	
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
Grants										
Loans/Concessions (compared to market rate)										
– Credits										
– Equity investments										
– In-kind support										
– Other (*)										
TOTALS										

* Other is referred to contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector and beneficiaries.

- Assess how adaptive management changes have been reported by the project management
- Assess how lessons derived from the adaptive management process have been documented, shared with key partners and internalized by partners.

f. Delays
- Assess if there were delays in project implementation
- Assess if there were delays in project implementation then what were the reasons for deays
- Did the delay affect the achievement of the project's outcomes and/or sustainability, and if it did affect the outcomes and the sustainability then in what ways and through what causal linkages?

3.2.2 Contribution of Implementing and Executing Agencies:

a. Assess the role of UNDP and the project executing agency(s) against the requirements set out in the UNDP Handbook on Monitoring and Evaluating for Results. Consider:
    i. Field visits
    ii. Participation in Steering Committees
    iii. Project reviews, PIR preparation and follow-up
    iv. GEF guidance
    v. Skill mix
    vi. Operational support

b. Assess the contribution to the project by UNDP and the project executing agency(s) in terms of "soft" assistance (i.e. policy advice & dialogue, advocacy, and coordination)

3.2.3 Stakeholder Participation, Partnership Strategy

a. Assess whether or not local stakeholders participated in project management and decision-making. Include an analysis of the strengths and weaknesses of the approach adopted by the project
b. Assess how local stakeholders participated in project management and decision-making.
c. Did the project consult and make use of the skills, experience and knowledge of the appropriate government entities, NGOs, community groups, private sector, local governments and academic institutions in the implementation and evaluation of project activities?
d. Consider the dissemination of project information to partners and stakeholders

3.2.4 Sustainability: extent to which the benefits of the project will continue, within or outside the project scope, after it has come to an end. The evaluators may look at factors such as establishment of sustainable financial mechanisms, mainstreaming project objectives into the broader development policies and sectoral plans and economies or community production

3.2.5 Gender perspective: Explore how gender considerations are mainstreamed into project interventions.

3.3 Project Results (Outputs, Outcomes and Impact)

3.3.1 Progress towards achievement of intended outcomes/measurement of change: Progress towards results should be based on a comparison of indicators before and after (so far) the project

intervention. Progress can also be assessed by comparing conditions in the project site to conditions in similar unmanaged sites (areas of the surrounding forest lands, for instance);

3.3.2 Changes in behaviour/development conditions: Focus on farmers ability to manage, maintain and benefit from agricultural biodiversity and on the perception of change among stakeholders;

4. Evaluation Methodology

The project progress and achievements will be tested against following GEF evaluation criteria:

a. Relevance – the extent to which the activity is suited to local and national development priorities and organizational policies, including changes over time.
b. Effectiveness – the extent to which an objective has been achieved or how likely it is to be achieved.
c. Efficiency – the extent to which results have been delivered with the least costly resources possible.
d. Results/impacts – the positive and negative, and foreseen and unforeseen, changes to and effects produced by a development intervention. In GEF terms, results include direct project outputs, short-to medium term outcomes, and longer-term impact including global environmental benefits, replication effects and other, local effects.
e. Sustainability – the likely ability of an intervention to continue to deliver benefits for an extended period of time after completion. Projects need to be environmentally as well as financially and socially sustainable.

The Project will be rated against individual criterion of relevance, effectiveness, efficiency and impact/results based on the following scale:

- Highly Satisfactory (HS): The project has no shortcomings in the achievement of its objectives.
- Satisfactory (S): The project has minor shortcomings in the achievement of its objectives.
- Moderately Satisfactory (MS): The project has moderate shortcomings in the achievement of its objectives.
- Moderately Unsatisfactory (MU): The project has significant shortcomings in the achievement of its objectives.
- Unsatisfactory (U) The project has major shortcomings in the achievement of its objectives.
- Highly Unsatisfactory (HU): The project has severe shortcomings in the achievement of its objectives.

As for sustainability criteria the evaluator should evaluate the "likelihood of sustainability of outcomes at project termination, and provide a rating for this.

The following four dimensions or aspects of sustainability should be addressed:

Financial resources:

a. Are there any financial risks that may jeopardize sustenance of project outcomes?
b. What is the likelihood of financial and economic resources not being available after the GEF assistance (resources can be from multiple sources, such as the public and private sectors, income generating activities, and trends that may indicate that it is likely that in future there will be adequate financial resources for sustaining project's outcomes)?

Socio-political:

c. Are there any social or political risks that may jeopardize sustainability of project outcomes?

d. What is the risk that the level of stakeholder ownership (including ownership by governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained?
e. Do the various key stakeholders see that it is in their interest that the project benefits continue to flow?
f. Is there sufficient public / stakeholder awareness in support of the long-term objectives of the project?

Institutional framework and governance:
a. Do the legal frameworks, policies and governance structures and processes pose risks that may jeopardize sustenance of project benefits?
b. While assessing this parameter, also consider if the required systems for accountability and transparency, and the required technical know-how are in place.

Environmental:
a. Are there any environmental risks that may jeopardize sustenance of project outcomes? The evaluation should assess whether certain activities will pose a threat to the sustainability of the project outcomes. For example, construction of dam in a protected area could inundate a sizable area and thereby neutralizing the biodiversity related gains made by the project.

On each of the dimensions of sustainability of the project outcomes will be rated as follows:
- Likely (L): There are no or negligible risks that affect this dimension of sustainability.
- Moderately Likely (ML): There are moderate risks that affect this dimension of sustainability.
- Moderately Unlikely (MU): There are significant risks that affect this dimension of sustainability
- Unlikely (U): There are severe risks that affect this dimension of sustainability.

All the risk dimensions of sustainability are critical. Therefore, overall rating for sustainability will not be higher than the rating of the dimension with lowest ratings. For example, if a project has an 'Unlikely' rating in either of the dimensions then its overall rating cannot be higher than 'Unlikely'.

In addition to project relevance, effectiveness, efficiency and sustainability, the evaluator should rate Project M&E system, including design of M&E systems and implementation of the Project M&E plan. More specifically, Project monitoring and evaluation systems should be rated as follows:
- Highly Satisfactory (HS): There are no shortcomings in the project M&E system.
- Satisfactory(S): There are minor shortcomings in the project M&E system.
- Moderately Satisfactory (MS): There were moderate shortcomings in the project M&E system.
- Moderately Unsatisfactory (MU): There were significant shortcomings in the project M&E system.
- Unsatisfactory (U): There were major shortcomings in the project M&E system.
- Highly Unsatisfactory (HU): The Project had no M&E system.

Finally, given the UNDP CO strategy to mainstream gender considerations in all its practice areas, it is recommended that the evaluators use the gender mainstreaming criteria and look at the project from the gender perspective.

The evaluator(s) should develop detailed methodology and work plan for Terminal Evaluation (TE) during the preparatory phase of the TE. The TE tools and techniques may include, but not limited to:

- Desk review;
- Interviews with major stakeholders, including UNDP/GEF project implementing partners, government representatives, NGOs, donors, owners of small hydropower and geothermal companies, etc.
- Field visits to the project sites (not sure that this is necessary);
- Questionnaires;
- Participatory techniques and other approaches for gathering and analysis of data.

An indicative outline of the TE Report is presented below.

5. Deliverables

- Detailed methodology, work plan and outline;
- Terminal evaluation report;
- Lessons learned;
- Recommendations for a strategy for future replication of the project approach for other types of the agrobiodiversity conservation projects, for other countries in the region.

6. Indicative Outline of the Terminal Evaluation Report

The key product expected from this mid-term evaluation is a comprehensive analytical report in English that should, at least, include the following contents:

- Executive summary (1-2 pages)
  - Brief description of the project
  - Context and purpose of the evaluation
  - Main conclusions, recommendations and lessons learned

- Introduction (2-3 pages)
  - Project background
  - Purpose of the evaluation
  - Key issues to be addressed
  - The outputs of the evaluation and how will they be used
  - Methodology of the evaluation
  - Structure of the evaluation

- Project and its development context (3-4 pages)
  - Project start and its duration
  - Implementation status
  - Problems that the project seek to address
  - Immediate and development objectives of the project
  - Main stakeholders
  - Results expected
  - An analysis of the situation with regard to the outcomes, the outputs and the partnership strategy;

- Key findings (including best practice and lessons learned, assessment of performance) – (8-10 pages)
  - Project concept/design
    - Project relevance
    - Implementation approach
    - Country ownership/Driveness
    - Stakeholder participation
    - Replication approach
    - Cost-effectiveness
    - Sustainability
    - Linkages between project and other interventions within the sector
    - Management arrangements
  - Implementation
    - Financial management
    - Monitoring and evaluation
    - Management and coordination
    - Identification and management of risks (adaptive management)
  - Results
    - Attainment of outputs, outcomes and objectives
    - Project Impact
    - Prospects of sustainability

- Conclusions and recommendations (4 – 6 pages)
  - Findings
  - Corrective actions for the design, duration, implementation, monitoring and evaluation of the project
  - Actions to strengthen or reinforce benefits from the project
  - Proposals for future directions underlining main objectives
  - Suggestions for strengthening ownership, management of potential risks

- Lessons learned (3 – 5 pages)
  - Good practices and lessons learned in addressing issues relating to effectiveness, efficiency and relevance.

- Annexes: TOR, itinerary, field visits, people to be interviewed, documents to be reviewed, etc.

The length of the mid-term evaluation report shall not exceed 30 pages in total (not including annexes).

7. Management Arrangements

The terminal evaluation will be carried out by an independent international evaluator. The financial management, logistical support and venue to the Project Evaluator will be provided project executing agency ELKANA. Meanwhile, UNDP CO and UNDP-GEF relevant team at Bratislava Regional Center of UNDP will make sure that the evaluation is conducted in line with UNDP-GEF evaluation policies and guidelines and will provide a final clearance to the evaluation report.

8. Duration of the Terminal Evaluation

It is expected to start Terminal Evaluation no later than 30 November 2009 and complete it no later than 18 December 2009.

9·

Duties, Skills and Qualifications of the Evaluator

International Expert

Duties and Responsibilities:

- Desk review of documents, development of draft methodology, detailed work plan and Terminal Evaluation outline (2-day homework);
- Debriefing with project implementing and executing agencies, agreement on the methodology, scope and outline of the TE report (1 day);
- Interviews with project implementing partner (executing agency), relevant Government, NGO, academic institutions' , donor representatives, UNDP/GEF Regional Technical Advisor (4 days);
- Field visit and interviews with local communities/farmers (3 days);
- Debriefing with UNDP and ELKANA (1 day);
- Development and submission of the first draft of the evaluation report (3 days). Submission due is the 16-th day of the assignement. The draft will be shared with the UNDP CO, UNDP/GEF (UNDP/GEF RCU Bratislava) and key project stakeholders for review and commenting.
- Home work on the final draft of the Final Evaluation report (3 days);

Skills and Qualifications:

- Master's of higher degree in biology, natural resource management, environmental economics or other related fields;
- At least 7 years of experience in in-situ conservation of agricultural genetic resources;
- Experience in working with farmers and rural communities;
- Experience with UNDP/GEF agrobiodiversity projects is an asset;
- Experience in biodiversity conservation project evaluation is an asset;
- Knowledge of result-based management evaluation methodologies is an asset;
- Knowledge of GEF M&E guidelines and procedures;
- Knowledge of the CIS region and particularly Georgia's context is an asset;
- Competence in Adaptive Management, as applied to conservation or natural resource management projects;
- Strong analytical skills;
- Excellent communications and writing skills;
- Fully e-literacy in terms of software and e-networking.
- Excellent team working skills;
- Fluency in English

Suggested Level:

Mid-level/senior expert

Contract Type, Duration and Payment Modality:

The international expert/MTE Team Leader will be hired for 20 days under Special Service Agreement (SSA) with 10 days of home work and 10 days of mission to Georgia. He/she will be paid daily fee and DSAs according to UNDP salary scale for international experts and local DSA rate. Payments will be maid based on following milestones:

20% - First draft of TE report;
80% - Final TE report

Duty Station:

UNDP Georgia while on mission

10. List of Documents to be Reviewed

1. Project document and its annexes;
2. Annual work plans;
3. 2005, 2006 UNDP/GEF Project Implementation Review (PIR) and latest progress reports;
4. Technical reports (e.g. medicinal plants and wild relatives study report, draft replication strategy);
5. Georgian legislation and policy documents in the area of biodiversity conservation and utilization of agro biological resources;
6. Quarterly Operational reports;
7. Minutes of the Steering Committee meetings
8. Project financial work plans and expenditure reports;
9. GEF Monitoring and Evaluation Policies;
10. Other upon request

11. Evaluation Policy

The evaluators should follow the major GEF principles for evaluation[30]:

- Independence
- Impartiality
- Transparency
- Disclosure
- Ethics
- Partnership
- Competencies and Capacities
- Credibility
- Utility

The evaluators must be independent from both the policy-making process and the delivery and management of assistance. Therefore applications will not be considered from evaluators who have had any direct involvement with the design or implementation of the project. Any previous association with the project and project implementing partner ELKANA, must be disclosed in the application.

If selected, failure to make the above disclosures will be considered just grounds for immediate contract termination, without recompense. In such circumstances, all notes, reports and other documentation produced by the evaluator will be retained by UNDP.

[30] See p.16 of the GEF's Monitoring and Evaluation Policy

ANNEX 1

Annex 2: Schedule and list of Project stakeholders interviewed

FINAL EVALUATION MISSION: MEETINGS
3 – 9 February, 2010

February 3
21:00 Meeting with the Project Director, Mariam Jorjadze

February 4
Elkana office
10:30 meeting with Elkana staff – short introduction of Elkana Departments
11:00 Meeting with Elkana/project management (Mariam Jorjadze, Director; Tamaz Dundua, Manager)
12:00 Meeting with ORCHIS director – Ms. Maia Akhalkatsi
14:00 Meeting with Elkana/project management (Mariam Jorjadze, Director; Tamaz Dundua, Manager)
Ministry of Environment
15:00 Meeting with Ms. Nona Khelaia, Biodiversity Department of the Ministry of Environment and Natural Resources (Interpretation by Ms. Elene Shatberashvili)
16:00 Meeting with Mr. Gocha Aronishidze, Responsible for relations with the Orthodox Church Patriarchate of Georgia in the Ministry of Environment and Natural Resources (Interpretation by Elene Shatberashvili)
UN Office
17:00 Meeting with Ms. Marika Gelashvili, UNDP Program Analyst

February 5-7, 2010

Agenda of the Meetings in Akhaltsikhe
Participants: Michael Green, Evaluator; Mariam Jorjadze, Director; Tamaz Dundua, Program Manager; Thea Chitadze, Elkana Akhaltsikhe office manager; Murad Gogoladze – Project Site Coordinator/Director of the Association Farezi; Gia Rukhadze, Elkana administration officer.

February 5
11:30 Visiting the demonstration plot in the village Tsnisi, meeting the legume producer farmers; visiting the plot sown with Tsiteli Doli wheat (next to the demonstration plot in Tsnisi)
13:00 Meeting with Guram Jinchveladze – Director of Rural Advisory Service (Office of the Rural Advisory Service)
13:30 Meeting with Tim Stewart - "Market Alliances against Poverty" Programme Director (Mercy Corps office)
15:00 Dinner
16:30 Meeting with Marina Gachechiladze - Head of the Regional Development Department (Samtskhe-Javakheti Regional Administration)

February 6
11:00 Meeting with the farmers (Elkana, Akhaltsikhe Regional Office)
13:00 Meeting with Sergo Bardzimadze - Head of the Agriculture Department of Samtskhe-Javakheti Region (Elkana, Akhaltsikhe Regional Office)
14:00 Dinner
15:00 Visiting the plots sown with Tsiteli Doli wheat in the village Minadze (4 plots)
16:00 Visiting the fruit orchard in the village Uraveli
17:30 Visiting the fruit orchard in the village Kheoti

Visiting Project Replication Site in Marneuli, Kvemo Kartli
February 7
Participants: Michael Green, Evaluator; Mariam Jorjadze, Director; Tamaz Dundua, Program Manager; Benjamin Memarnishvili, Elkana extension worker for field crops.

12:00 Meeting with Elkana member Julia Darbaidze and her family in village Saimerlo
13:00 Visiting Tsiteli Doli field and winter wheat collection plot in Marneuli district

February 8
Elkana office
09:30 meeting with Elkana director mariam Jorjadze
11:00 Meeting with Begheli director Mr. Irakli Javakhishvili
Academy of Agricultural Sciences
12:00 Meeting with Mr. Guram Aleksidze, vice President
National Gene Bank
14:00 Meeting with Ms. Anna Gulbani, manager
Ministry of Agriculture
15:00 Meeting with Ms. Marika Gelashvili, Deputy Head of the Division of Fields Development department (Interpretation by Ms. Elene Shatberashvili)
Ministry of Environment
16:00 Meeting with Ms. Thea Barbakadze, Protected Areas Agency
Elkana Office
17:00 Meeting with Ms. Marika Gelashvili, the UNDP Program Analyst

February 9
Ministry of Environment
10:30-13:00 – Debriefing Session in the MoE
Elkana office
Review documents

LIST OF FARMERS MET AT PROJECT SITES

Farmers' Meeting in Tsnisi Demonstration Plot

February 5, 2009

N	Farmers	Villages
1	Guram Nemsadze	Tsnisi
2	Valida Gachechiladze	Tsnisi
3	Iamze Khutsishvili	Tsnisi
4	Inga Samsonashvili	Tsnisi
5	Beglar Bekturashvili	Klde
6	Gocha Zumbadze	Klde
7	Bakur Devnosadze	Klde

Farmers' Meeting at Elkana Regional Office in Akhaltsikhe

February 6, 2009

N	Farmers	Villages
1	Meri Maisuradze	Greli
2	Merab Gikoshvili	Ivlita
3	Zaza Sudadze	Tskordza
4	Koba Melikidze	Minadze
5	Shalva Shengelia	Minadze
6	Giorgi Zedginidze	Minadze
7	Tsiuri Gorgadze	Minadze
8	Khachatur Chakhoian	Tskordza
9	Besik Zedginidze	Zveli
10	Koba Zedginidze	Zveli
11	Robert Balakhashvili	Atskuri
12	Levan Baloian	Tsnisi

Annex 3: Documents reviewed

Project documentation

- Project Document
- Mid-Term Evaluation
- Revise Logical Framework Matrix
- Annual Work Plans
- UNDP/GEF Project Implementation Reviews
- Annual Performance Reports
- Planned Annual Budgets
- Quarterly Financial Reports
- Minutes of Steering Committee meetings
- GEF Monitoring and Evaluation Policies;

Technical reports

- M. Akhalkatsi, M. Kimeridze, M. Mosulishvili, I. Maisaia. 2005. Conservation and Sustainable Utilization of the Endangered Medicinal Plants in Samtskhe-Javakheti. Environmental Baseline. Tbilisi. 80 pp..
- Akhalkatsi, M. 2009. Conservation and sustainable use of crop wild relatives in Samtskhe-Javakheti Georgian Society of Nature Explorers "ORCHIS" Biological Farming Association "Elkana"
- Berishvili, T., Dundua, T., Jorjadze, M. 2009. Contribution of Organic Farming to Georgia's Agrobiodiversity. Conference Paper
- Francis Hurst, Mariam Tsereteli. 2007. *Recovery, Conservation, and Sustainable Use of Georgia's Agrobiodiversity Project.* Project: # 00037324. Mid-Term Evaluation Report
- Maxsted, Nigel 2008. Georgia's Agrobiodiversity Project: Mission Report
- National Biodiversity Strategy & Action Plan – Georgia (2005)
- ORCHIS, 2007. Conservation and Sustainable Utilization of the Endangered Medicinal Plants in Samtskhe-Javakheti.
- Recovery, Conservation, and Sustainable Use of Taiul Berishvili. *Forgotten Crops*. 2008, Elkana Publication.

NB Other literature consulted is referenced in the footnotes.

Project - "Recovery, Conservation, and Sustainable Use of Georgia's Agricultural Diversity"
Presentation of External Evaluator

Ministry of Environment Protection
and Natural Resources
09.02.2010
10.30-12.30

List of invited participants [attended]

No.	Name, surname	Organization / position	Contact information
1.	Ioseb Khartsivadze	Ministry of Environment Protection and Natural Resources, Head of the Service of Biodiversity	
2.	Nona Khelaia	Ministry of Environment Protection and Natural Resources, Service of Biodiversity	877 424011
3.	Tea Barbakhadze	Ministry of Environment Protection and Natural Resources, LEPL – Agency of Protected Areas	877903434
4.	Avtandil Mikaberidze	Ministry of Environment Protection and Natural Resources, LEPL – Agency of Protected Areas	877927766
5.	Natia Iordanishvili	Ministry of Environment Protection and Natural Resources, Forestry Department	895300991
6.	Gocha Aronishidze	Ministry of Environment Protection and Natural Resources	
7.	Marika Gelashvili	Ministry of Agriculture, Division of Fields Development, Deputy Head of Division	899 924540
8.	Mariam Shotadze	UNDP	
9.	Sofio Kkemkhadze	UNDP	
10.	Guram Alexidze	Academy of Agricultural Sciences, Vice President	893 200793
11.	Zurab Gurielidze	Ilia Chavchavadze State University, Associate Professor	8 99 568031
12.	Irakli Macharashvili	"Green Alternative", Biodiversity Programme Coordinator	899 509298
13.	Michael Green	Project Evaluator	
14.	Mariam Jorjadze	Biological Farming Association ELKANA, Director	877 497401
15.	Tamaz Dundua	Biological Farming Association ELKANA, Program Manager	895 721970
16.	Medea Gabunia	Biological Farming Association ELKANA, Administrator	899 551068
17.	Taiul Berishvili	Biological Farming Association ELKANA, Consultant in Agrarian Diversity	899 548750
18.	Manana Tsulaia	Biological Farming Association ELKANA, Public Affairs Department officer	899 983262
19.	Elene Shatberashvili	Biological Farming Association ELKANA, Public Affairs Department officer	893 617521
20.	Ia Ebralidze	Biological Farming Association ELKANA, officer of the Department of Economic Development	899 700107
21.	Gia Rukhadze	Biological Farming Association ELKANA	893 538180
22.	Maia Akhalkatsi	Georgian Society of Nature Explorers ORCHIS	
23.	Marine Mosulishvili	Georgian Society of Nature Explorers ORCHIS	
24.	Mariam Kimeridze	Georgian Society of Nature Explorers ORCHIS	
25.	Ana Adamia	Interpreter	

Annex 5: List of Project Steering Committee members

Mariam Shotadze	United Nations Development Programme
Nona Khelaia	Ministry of Environment Protection and Natural Resources of Georgia
Marika Gelashvili	Academy of Agricultural Sciences
Guram Aleksidze	Georgian Academy of Agricultural Sciences
Bidzina Korokhashvili	Georgian Academy of Agricultural Sciences
Kukuri Dzeria	Scientific Research Institute of Horticulture, Viticulture and Winemaking
Giuli Chkutiashvili	Lomouri Research Institute of Farming
Kakha Bakhtadze	CENN
Guram Jinchveladze	CARE International in Georgia
Shalva Kavelidze	Samtskhe-Javakheti Local Self-Government
Zura Gurielidze	World Bank Protected Areas Development Project
Nugzar Zazanashvili	WWF Caucasus Conservation Programme

From *Elkana*:

Mariam Jorjadze	(Project Director/Coordinator)

November, 2007

Project Adaptive Management Framework Document

The project adaptive management framework document has been developed as a result of MTE evaluation of GEF/UNDP finance project "Conservation and Sustainable utilization of Georgia's Agrobiodiversity". Based on MTE recommendation the main emphasis is made to: improvement of monitoring system, and consequently to risk management, work planning and reporting.

1. Monitoring System

- By the end of 2007 based on MTE recommendations make revision of the project logframe to:
  a) conform new GEF structure – one objective and several outcomes (up to 5) and relevant outputs
  b) elaborate respective indicators on objective, outcome and output levels
  c) reflect various requirements for agrobiodiversity conservation, such as national enabling environment, CWR status, and related issues
  d) elaborate formulation of the project objective, outcomes and indicative outputs
- By the end of 2007 translate indicative outputs into 2-years (2008-2009) activity plan, which will serve as a main monitoring instrument for the project
- In the beginning of 2008 agree developed documents (logframe and quarterly activity plan) with UNDP and get approval by project Steering Committee
- Revise Quarterly Activity Plan on half-year basis and present to the project Steering Committee
- Based on Elkana quality management system make annual internal project/staff internal evaluation exercise

2. Risk Management

- Reconsider project risks on a quarterly basis (based on quarterly reporting to UNDP country office) and make relevant measure as needed
- Project risks to be discussed on annual staff retreat

3. Work Planning

- Before the end of each quarter develop detailed quarterly activity plans based on already existed template (contributors – Akhaltsikhe office manager, Orchis director, program manager); final version of the plan sent to UNDP coordinator and staff by the project director (together with the previous quarter report)
- Director makes planning exercise with project administration and public relations staff
- Program manager makes planning exercise with the program staff
- Orchis director makes planning with the Orchis group
- Whenever is needed, joint planning sessions is organised for program/administrative/Orchis/PA staff

4. Reporting

- Reporting to the project Steering Committee – twice a year
- Quarterly reports to UNDP for the first 3 quarters and final annual report (end of each year)
- Annual Project Implementation Report (PIR) – reporting period July-June (Final PIR to be prepared in Summer 2010)
- Tracking tool to b filled in after MTE and after project completion
- Program staff prepared monthly reports to be sent to the program manager
- Akhaltsikhe office manager in cooperation with program manager prepares quarterly report to be sent to director
- Administration, public affairs officer and Orchis director prepare quarterly reports to be sent to director
- In addition, reports/minutes/press-releases for the workshops/ meetings/presentations prepared and kept by responsible persons

Annex 7: Logical Framework Matrix: evaluation of objective, outcomes and outputs

OBJECTIVE/OUTCOME/ Output	Indicator	2004 Baseline	2009 End of Project Target	2009 End of Project Status Evaluation (Objective and Outcomes only)	Rating
OBJECTIVE: Conservation & sustainable utilisation of threatened local plant genetic resources important to food & agriculture in Georgia within a production landscape **Objective rating: S**atisfactory	Increased number of land races in subsistence or commercial use	No land races in subsistence or commercial use Status of vegetable land races unknown	(50%) of LR & LV being utilised for subsistence or commercial use	28 (52%) land races in subsistence use. 7 (13%) land races in commercial use. **Evaluation:** Target met, although not clearly defined with respect to subsistence *versus* commercial use. Commercial use remains low, at lest partly due to limited seed supplies.	**S**
	Improved status of LR, LV & CWR	100% of field cropland races existed only in national seed bank or outside Georgia Status of vegetable land races unknown Regional fruit varieties represented by ageing individual representatives (>70 years)	CWR status is satisfactory; (50%) of CWR species protected through management agreements and "genetic reserves"; (50%) of identified LR & LV in use by farmers; At least 150 households use more than 1 LR & LV annually	Status of CWR assessed in Project area, report completed Dec. 2009. 1 medicinal species (previously endemic to Armenia) identified at road construction site and protected. 189 households use at least 2-3 land races annually. **Evaluation:** Major shortfall in target for protection of CWR, partly due to information being unavailable until end of Project when CWR survey completed. Number of households using land races exceeds target.	**MS**
	Ex situ conservation programme[31] contains LR & LV that currently are not in commercial or subsistence use & CWR	100% of [targeted] field crops kept in national seed bank probably representing a single generation	100% LR, LV & CWR identified Criteria for maintenance in gene bank developed All LR, LV & endangered CWR viably represented in 3 gene banks	100% targeted land races identified. Criteria developed for maintenance in gene bank. Seed material of all land races viably represented in National Gene Bank, and Institute of Botany and ELKANA seed banks. Wheat collections exchanged with Agricultural Research Institute of Hungarian Academy of Sciences and US-based Heritage Wheat Conservancy. Crop wild relative seed material of cornelian cherry, wild apple, wild pear, wild plum varieties and threatened medicinal plants collected and held by Institute of Botany and Elkana. Seeds sown in Botanical Garden for *ex-situ* collection. *Aegilops* seed material is kept in National Gene Bank, Institute of Botany and ELKANA. CWR of barley and some legumes held in Elkana and National Gene Bank. **Evaluation:** Targets largely met; uncertain if all 30 priority CWR held in seed banks.	**S**
	National & local enabling environment supports well-regulated markets, protects IPR and TK and provides legal status for genetic reserves	No enabling environment	Draft national strategy on the conservation of CWR, LR & LV Regional development or sectoral plans/ or strategies mainstream agro-biodiversity (organic farming, CWR, LR & LV) as a regional development strategy	ELKANA supported Ministry of Agriculture with new law on organic farming, introduced in 2007. Regional and national strategies completed for conservation of CWR. Agrobiodiversity included within regional development plan for Samtskhe-Javakheti. **Evaluation:** Targets met. Much more to be achieved post-Project to create enabling environment.	**S**

[31] In this context *ex situ* means the maintenance of land races and CWR outside existing farming systems, that is maintaining land races that currently have little commercial viability as well as threatened wild relatives.

OUTCOME 1: *Intra* and *inter* specific diversity of crops & wild relatives conserved in Samtskhe-Javakheti Region **Outcome 1 rating: S**atisfactory	National & local enabling environment supports genetic reserves	No enabling environment	Draft legal definition of genetic reserve "Genetic reserve" sites identified Recommendations for legal amendment to include into protected area system	Support provided to Ministry of Environment in drafting legislation for establishment and protection of genetic reserves. **Evaluation:** Targets met. Much to be achieved post-Project to create enabling environment.	**n/a**[32]
	Traditional farm systems using LR & LV is viable	Untested	Farmers able to produce own planting material; Farmers trading planting material; Improved incomes/nutrition for Farmers growing LR & LV	All farmers able to produce own seed material. 11 farmers and 3 farmers' groups improved their incomes from trading their harvests or seeds. All 189 farmers maintain that nutrition of their family members has diversified and improved since being involved in Project. **Evaluation:** Targets met, although targets not quantified.	**S**
	Ex situ mechanisms in place for endangered CWR, LR & LV including LR & LV without current commercial value	Ex-situ mechanism enabling for field crops; 100% of field crops kept in national seed bank probably representing a single generation;	Living collection of plants (LR, LV, CWR) contains (100%) LR & LV, (100%) of endangered CWR Seed banks have representative collections of LR & CWR	Living collection of plants on Tsnisi plot comprises 100% targeted land races. National Gene Bank has representative collections of land races cultivated at Tsnisi. **Evaluation:** Targets met for land races and at least largely met for crop wild relatives (uncertain if all 30 priority CWRs collected and stored in seed bans or not.)	**S**
	Reduction in threats to endangered CWR as measured by the GEF TRA[33] Tool	No baseline; Untested in 2004	Reduction of threats to CWR as measured by the TRA Tool	TRA methodology provided by international technical advisor, translated, training handouts developed, and ELKANA staff trained in use of tool. **Evaluation**: TRA tool not used to document threats as Project staff uncertain of its application to CWR. Insufficient capacity developed through the training programme	**MU**
Output 1.1. Status of CWR defined and recommendations for conservation measures developed	Recommendations presented to the GoG for consideration	Short overview produced in the frame of PDF-A phase	Report on CWR CWR database and GIS map for selected species Workshop with GoG representatives Official letter of Recommendations	Technical backstopping mission by Nigel Maxted, UK involving: 2 workshops for Elkana and Orchis staff; one workshop in Akhaltsikhe for local farmers' association and government authorities, another held in Ministry of Environment (44 workshop participants in total, of which 25 were women). Backstopping mission report translated into Georgian; training handouts on Threats Reduction Analysis tool, Access & Benefit Sharing and Intellectual Property Rights developed from materials provided by consultant. Report on Crop Wild Relatives, with database and GIS maps for selected species; recommendations translated into Georgian. Key stakeholders invited to workshop to review findings of CWR study - Government representatives did not attend. Official letter of recommendations sent to Minister of Environment and Natural Resources and to Head of Ministry's Biodiversity Department. **Evaluation**: Targets met. Lack of engagement by Government in understanding CWR issues as a first important step towards beginning to address them.	**HS**

[32] The MTE recognises the Project should not be held responsible for the achievement of this indicator and target(s). It is included in this log frame matrix to reflect the various requirements of conserving agrobiodiversity in its entirety. It should be sufficient for the Project to demonstrate that it is attempting to influence this area through advocacy, publicity and developing draft guidelines given the frequent changes in decision makers

[33] Threat Reduction Analysis Tool

Output 1.2. Seeds and planting material of LR & LV available to farmers	Volume of seed material in seed fund increased Number of farmers who cultivate LR & LV increased	Seeds and planting material of LR&LV are not available	All targeted LR&LV preserved in live collections or in seed banks Arrange 2 farmers' days Farmers are able to produce own seed material Seed rotation fund functions LR&LV play an important role for subsistence needs of local farmers	All targeted land races preserved in live collections or in seed banks. Seeds have been exchanged with National Seed Bank; in addition wheat seeds exchanged with University of Bologna and Farmers' Association in France. 3 farmers' days arranged Farmers are able to produce own seed material Seed rotation fund functions Land races play an important role in meeting subsistence needs of local farmers. **Evaluation**: Targets met. Taret not well defined with respect to monitoring increase in seed stocks, as implicit in the indicator.	**S**
Output 1.3. Local Farmers Association established as the leading organizational vehicle for production and distribution of seed and planting material	Local farmers' Association is capable to perform conservation works	No local farmers association exists	Crop data and farmers' files organised Cooperation with national Seed bank established (seed exchange) Association staff trained in conservation measures and use of TRA tool	Crop data and farmers' files organised and regularly maintained. Cooperation with National Seed Bank established; seed material for 17 cereals and 5 legume crops exchanged. Farmers Association staff trained in conservation measures and use of Threats Reduction Analysis tool. Project team didn't find tool useful for measuring progress at present stage; considered it should be used 1-2 years after project completion. **Evaluation**: Targets met except for application of TRA tool, which does not seem to be fully understood with respect to its application and usefulness to monitor change. This suggests training to have been inadequate in demonstrating its application.	**S**
OUTCOME 2: Land races & wild relatives products contributing to local food security & market value chain strengthened & sustained	National enabling environment & local enabling environment supports and protects farmers interests including future use values[34]	No enabling environment	At least 1 workshop on IPR At least 1 workshop on ABS	1 workshop held on Intellectual Property Rights and Access & Benefit Sharing (31 participants). 1 ELKANA staff member trained in IPR/ABS in Sweden. 1 ELKANA staff member attended IPR/ABS expert meeting, India. 1 workshop on Biodiversity & Business hosted by ELKANA. **Evaluation**: Targets exceeded. Much to be achieved post-Project to create enabling environment.	**HS**

[34] The Mid-Term Evaluation acknowledged that the Project is not responsible for the achievement of this indicator and target(s). It is included in this log frame to reflect the various requirements of conserving agrobiodiversity in its entirety. It should be sufficient for the Project to demonstrate that it is attempting to influence this area through advocacy, publicity and draft guidelines for decision makers.

Outcome 2 rating: **S**atisfactory	Increased locally added value & maximum capture of regional benefit with well regulated links to international and national legitimate markets	No added value and no links to international or local markets	Values of land race & wild relatives products at point of sale are greater than corresponding hybrid varieties; Development & registration of regional brand linked to "naturalness" [35] (3) Agreements signed with retailers (3) collaborative actions & agreements signed between producers, collectors, retailers, researchers, transporters & other stakeholders within the value chain (3) traders/purchasers in the local-level value chain demanding certified production & collection practices, local processing	6 legume crops sold on local market at 10% higher price than imported common beans; 2009 sales almost double 2008. Traditional products branded as traditional regional products under Elkana label stating: "Produced By Farmers from Samtskhe-Javakheti". Agreements with 3 producers groups (all are women's groups) reached with distribution company, Begeli. **Evaluation**: Pricing, branding and retail agreement targets met; no clear evidence of other targets having been met with respect to 3 collaborative actions and agreements signed between range of stakeholders in the value chain, and certification of 3 production and collection practices.	**MS**
	Local Farmers Associations with increased marketing capacity representing producers in commercial negotiations within the agrobiodiversity value chain in national & international commercial negotiations (yes/no)	Existence of Elkana standards on organic Agriculture; Non-existence of a regional association	Local Farmers Association develops standards and Technological instructions for LR & LV crops Framers association develops and registers brand logo for LR & LV Farmers Association negotiates (3) agreements with retailers to use association logo in packaging Farmers Association attends (3) national promotional events and (1) international event	Standards and technological instructions developed for 5 products: grass pea, chickpea, cow pea, horse beans and lentils. Products branded as traditional under ELKANA/Begeli trademark: sold via internet shop (www.begeli.ge) and Tbilisi supermarkets (Goodwill and Nutsubudze19th), flax oil also sold *via* internet shop Traditional products shown at 2 national, 4 international events (Italy 10/08, France 6/09, Bulgaria 9/09, Germany 1/10). 4 producers groups established, with 3 of them linked to distribution company Begeli. Financial resources mobilized from BP/Eurasia Foundation to develop market chain for local wheat Tsiteli Doli. Seed production unit in Tsnisi inspected for organic certification. **Evaluation**: Targets met. Strategic decision taken to consolidate branding and marketing efforts via single company, Begeli, who pays above market rates for farmers' products and has direct links with shops and restaurants.	**HS**
	Local farmers show LR crop preference over hybrid varieties for local subsistence needs	Lost knowledge	At least 150 of local households using 3 or more LR & LV for subsistence needs annually	189 households use 2-3 land races for subsistence annually. **Evaluation**: Target almost met – number of households exceeds target but number of land races below target.	**S**

[35] Organic farming, Land Races, Local Varieties and traditional farming systems

Output 2.1. Local capacities developed in IPR and ABS	Local capacities in IPR and ABS increased in MoE and environmental institutions	No or very limited knowledge on IPR and ABS	Workshop on IPR and ABS 12 persons trained	Workshop on Intellectual Property Rights and Access & Benefit Sharing attended by representatives of Ministry of Environment, Department of Standards, research institutions and NGOs (31 persons); ABS brochure in Georgian, presentations and other ABS/IPR-related information translated from English distributed to participants. 1 ELKANA staff member trained in IPR/ABS in Sweden. 1 ELKANA staff member attended IPR/ABS expert meeting, India. 1 workshop on Biodiversity & Business hosted by ELKANA attended by representatives of Ministries, governmental organizations, NGOs, research centres. **Evaluation**: Targets exceeded. Much greater awareness of IPR and ABS issues.	**HS**
Output 2.2. Markets for local varieties accessed by farmers	Increased sales of LR & LV on local market Increased incomes for farmers	No sales of LR & LV	Technological standards for 6 products developed 5 products sold on local market Market chain for LR & LV developed 4 producers' groups organised	Technological standards formulated for 6 products (chick pea, cow pea, lentil, grass pea, faba beans, and flax oil). 5 products sold on local market Market chain for 5 legume crops developed and under development for local wheat – Akhaltsikhuri Tsiteli Doli. 3 producers' groups organised, 4th group of wheat producers is being established; additionally, 8 individual farmers sell their agrobiodiversity products through Begheli **Evaluation**: Targets largely met (the exception being the establishment of a 4th producer group) or exceeded.	**S**
OUTCOME 3: Learning, evaluation & adaptive management increased **Outcome 3 rating:** **S**atisfactory	Monitoring system (including indicators, risks & assumptions) incorporated into ELKANA management practices	No project monitoring system;	Project monitoring system developed; Project adaptive management practiced; Regional level planning incorporates 3-4 contingency plans into Local Biodiversity Action Plan (or similar plan)	Monitoring & Evaluation System developed and instituted. Management/planning and Steering Committee meetings held regularly. Quarterly monitoring and reporting of Project progress, risks and issues conducted, reinforced by field monitoring visits including UNDP Assessment of Development Results team. Land races treated as a priority in regional development plan for Samtskhe-Javakheti. **Evaluation**: Targets largely met. Lack of clarity as to what is meant by 'contingency plans' but there appears to be a shortfall as very few interventions in regional plans.	**S**
	Farmers responding to stochastic and market changes with LR & LV selection		Farmers demonstrably selecting land races and local varieties in response to market demands and predicted stochastic events (e.g. droughts, pest outbreaks, harsh winters, etc.)	Farmers involved in Project claim that most of land races they cultivate are resistant to droughts, pests, harsh winters, etc. These crops produce stable harvests even in difficult climatic conditions **Evaluation**: Target met, albeit somewhat qualitative. Considerable work to be done post-Project to carry out field trials to test for characteristics of drought, frost, pest resistance.	**S**

	Georgian CHM[36] contains regularly updated page on agrobiodiversity	No CHM mechanism; Agro-biodiversity information system not in place	Elkana develops a database and web-site on *Samtskhe-Javakheti* agrobiodiversity and assures data input to national biodversity CHM	Close collaboration with on-going UNDP-GEF Biodiversity Enabling Activities Project to input agrobiodiversity data into Biodiversity Clearing House Mechanism Database on land races maintained and updated by Project **Evaluation**: Targets partially met: Project contributed information to CHM (see http://chm.moe.gov.ge/); and web page but not web site on *Samtskhe-Javakheti agrobiodiversity*. Currently, there is only limited information about Project on ELKANA's website at (http://www.elkana.org.ge/biodiversity/#), with little/no acknowledgement of GEF and other key partners. Only one Project report is available from this site; none at http://www.elkana.org.ge/publications.php?lang=en (or =ge). (Note: It is understood that Project web page was affected by viruses and closed down until recently. All documents output from Project should be accessible via web page and Project's donors should be clearly profiled up front.)	**MS**
	ELKANA captures and disseminates lessons learned and successes and promotes LR & LV in its programmes in other regions of Georgia	Small scale activities on different regions to multiply seed material of field crops	Lessons learned documented; Promotional materials; Annual food testing events; (2) Regions identified, seed material distributed;	Based on lessons learned from Project, new initiative launched by ELKANA to develop value chain for Tsiteli Doli wheat. Seed materials of targeted land races distributed to farmers in 4 regions (Kakheti, Kvemo Kartli, Imereti and Racha); While Kakhetian, Imeretian and Rachan farmers use crops mainly for own consumption, farmers from Kvemo Kartli successfully sell harvests locally and to the neighboring Azerbaijan. One food tasting event organized; tasting of dishes from targeted crops made at 2-day craft exhibition organised by Georgian Ethnographic Museum; 2 broadcasts on agricultural diversity made on Orthodox Church TV channel; lecture on agrobiodiversity and GMOs delivered to Trinity Church Youth Centre; Tsiteli Doli bread baking presentation made at an international farmers meetings in France and Italy. Scientific review of medicinal plants in Samtskhe-Javakheti published; *Access and Benefit Sharing* brochure translated and distributed among stakeholders; calendar on indigenous vine varieties produced; Project web-page renewed and database on crops and farmers' files regularly updated; 15-minute documentary film produced on Georgia's agrobiodiversity. **Evaluation**: Targets met. Wide range of initiatives to promote conservation of and races through sustainable on-farm use. More of these outputs should be accessible via website.	**S**
Output 3.1. Project monitoring system operational; adaptive management practiced	Smooth management of the project ensured	No project monitoring system	Regular management meetings Steering Committee meeting (4) Meetings with regional government (3)	Regular management meetings (9) Regular Steering Committee meetings (5) Meetings with regional government (4) **Evaluation**: Targets largely met or exceeded.	**S**

[36] Convention on Biodiversity Conservation Clearing House Mechanism – it is an obligation of members of the CBD to develop and maintain such a Mechanism.

Output 3.2. Information on local agricultural diversity available for farmers, authorities, donors and the public	Project is known in the country and outside	No or very limited information	Publications annually: a calendar, a brochure, a poster and/or booklet Web-page regularly updated Food-tasting event – one per year Project presentation – 2 per year (1 outside the country) Press-releases – 2 per year	Publications include: brochure on forgotten crops (English and Georgian versions); posters on agrobiodiversity program; scientific review of medicinal plants in Samtskhe-Javakheti and separate brochure; Project case study in UNEP publication distributed at biosafety negotiations in Bonn, May 2008; calendars with grape varieties (2008) and crops (2010); Access & Benefit Sharing (translated into Georgian); upgraded recipe book. Elkana web-site is operational and updated regularly. Media broadcasts: 8 about agricultural diversity made on Orthodox Church TV channel; several on Public Radio, Radio Palitra and Radio Green Wave. Presentations/demonstrations: Lecture on agrobiodiversity and GMOs delivered to Trinity Church Youth Centre; Tsiteli Doli bread baking on international farmers' day in France; dishes prepared from targeted crops exhibited in residence of Patriarch of Georgia (September 2009); *Rural Diversity* public tasting event in Akhali Gemo Restaurant, with dishes of land races (5 December 2008) and in Trinity Church Youth Centre (26 December 2009); tasting of dishes from targeted crops at 2-day craft exhibition, organised by Ethnographic Museum; traditional bread baking and exhibiting of local wheat species at farmers' festival in France (June, 2009). Agrobiodiversity products exhibited/sold at Expo Georgia: Food Expo (2008 and 2009), Tourism Fair (2008-2009), Christmas Fair (2009); Food Fair in the Ethnographic Museum (2009) during ArtGene Festival; international fair Anuga in Cologne (2009); International Green Week (2010) in Berlin, Germany. Plan to participate in Biofach 2010, Nuremberg, Germany. **Evaluation**: Targets met or exceeded. More information produced from Project should be made available *via* website.	**HS**
Output 3.3. Lessons learnt collected, documented and disseminated to other regions	Best practices copied to other regions	No or very limited experience	Best practices document Interventions in 2 regions Knowledge exchange sessions (2) for farmers from "new" regions	Project experience presented to workshops: international team meeting in Kiev, January 2008; Planet Diversity forum in Bonn, May 2008; Festival – *Let's Liberate Biodiversity* in Ascoli Pecino, Italy (October 2008). Based upon the project experiences an article and a presentation prepared and presented on the international Biodiversity and Business conference in Sofia, Bulgaria (September 30, 2009); the article will be published in conference proceedings and the presentation is available on the conference website; Documentary film produced and presented Trinity Church Youth Centre, 27 January. Workshops and knowledge exchange sessions organised in provinces of Kakheti, Kvemo Kartli, Imereti, Racha, Guria, Svaneti. Millet producers in Svaneti,and Ghomi and Guria are in process joining Project. **Evaluation**: Targets largely met or exceeded. No single compiled document or manual that brings together the full range of best practices generated under the Project; rather, best practices documented in a variety of publications.	**S**