



Mid-Term Evaluation

Atlas Project ID: 00070411; PIMS: 3647

Sustaining agricultural biodiversity in the face of climate change in Tajikistan



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ACRONYMS AND ABBREVIATIONS

ABD	Agrobiodiversity
ADB	Asian Development Bank
AO	Area Office
APR	Annual Progress Report
AWP	Annual Work Plan
CBD	Convention on Biological Diversity
CC	Climate Change
CEP	Committee on Environmental Protection
CIAT	International Centre for Tropical Agriculture
CIS	Commonwealth of Independent States
CSO	Community Support Organization
CTA	Chief Technical Adviser
CWR(s)	Crop Wild Relative(s)
DfID	United Kingdom Department for International Development
FAO	Food and Agricultural Organization of the United Nations
GCM(s)	Global Circulation Model(s)
GEF	Global Environment Facility
JDC	Jamoat Development Committee (now referred as JRC)
JRC	Jamoat Resources Centre (formerly Jamoat Resource and Advocacy Centre)
LFM	Logical Framework Matrix
M&E	Monitoring and Evaluation
METT	Monitoring and Evaluation Tracking Tool
MLF	Micro-Loan Foundation
MoA	Ministry of Agriculture
MTE	Mid-term Evaluation
NBBC	National Biodiversity and Biosafety Centre
NGO	Non-Governmental Organization
OVI	Objectively Verifiable Indicators
PDF-A/B	Project Development Facility – Block A/B
PGRC	Plant Genetic Resources Centre
PIR	Project Implementation Review
PIU	Project Implementation Unit
RTA	Regional Technical Advisor (UNDP – Global Environment Facility)
SDC	Swiss Agency for Development and Cooperation
SGP	Small Grants Programme (GEF)
SWOT	Strengths, Weaknesses, Opportunities and Threats (analysis)
ToR	Terms of Reference
TRAC	Target for Resource Assignments from the Core
UN	United Nations
UNDP AO	United Nations Development Programme Area Office
UNDP CO	United Nations Development Program Country Office
UNCBD	United Nations Convention on Biological Diversity
UNFCCC	United Nations Framework Convention on Climate Change
US\$	United States dollar
WB	The World Bank
WTO	World Trade Organization

PROJECT DETAILS

UNDP/GEF Project Title:	Sustaining Agricultural Biodiversity in the Face of Climate Change in Tajikistan
GEF Project ID No:	3129 (Atlas Project ID: 00070411)
UNDP Project ID No:	PIMS: 3647
Evaluation Time Frame:	16 April – 30 June 2012
Date of Evaluation Report:	December 2012
Region and Countries included in the Project:	Europe & Central Asia, Tajikistan
GEF Focal Area:	Multi-Focal Area (Biodiversity and Climate change)
GEF Operational Program:	13 (Strategic Priority for Adaptation)
GEF Strategic Program:	BD-2
Implementing Agency	UNDP Tajikistan
Executing Agency:	National Biodiversity & Biosafety Centre
Project Partners:	UNDP Communities Programme, GEF Small Grants Programme
Evaluation Team Members:	Michael J.B. Green & Shahrigul Amirjanova

ACKNOWLEDGEMENTS

Appreciation and thanks are due to the many people who willingly and enthusiastically spared their time to meet with the Evaluators, often at short notice, and share their experiences and observations, all of which helped to inform this evaluation. Details of those officially met and interviewed are given in [Annex 3](#) but there were many others, particularly among the village communities, who generously gave their time and hospitality.

The mission was hosted by the Project Implementation Unit, who graciously attended to the needs and many requests of the consultants with diligence and efficiency. Special thanks are due to Neimatullo Safarov (Project Manager), Tatyana Novikova (Deputy Project Manager) and Dilovarsho Dustov (Admin\Finance Assistant) who, together with Olimjon Yatimov (Head of National Biodiversity and Biosafety Centre), dedicated a huge amount of their time, energy and welcome company to our visit. Within UNDP, particular thanks are due Sukhrob Khoshmukhamedov (Asst Resident Representative) and Nargizakhon Usmanova (Programme Analyst) for their support and guidance.

The opinions and recommendations in this report are those of the consultants and do not necessarily reflect the position of GEF, UNDP or the National Biodiversity and Biosafety Centre. The consultants are responsible for any errors or omissions.

EXECUTIVE SUMMARY

Project Summary Table				
Project Title: Sustaining Agricultural Biodiversity in the Face of Climate Change in Tajikistan				
GEF Project ID:	3129		<i>at endorsement</i>	<i>at Mid-Term</i>
Atlas ID:	00070411		(Million US\$)	(Million US\$)
UNDP Project ID:	PIMS: 3647	GEF financing:	*1.900	*0.632
Country:	Tajikistan	IA/EA own:	0.500	0.246
Region:	Europe & Central Asia	Government:		
Focal Areas:	Biodiversity & Climate Change	Other:		
Operational Program:	13 (Strategic Priority for Adaptation)	Total co-financing:	1.600	0.620
Executing Agency:	UNDP	Total Project Cost:	4.000	1.498
Other Partners involved:	UNDP Communities Programme, GEF Small Grants Programme	Prodoc Signature (date project began):	22.06.2009	
		(Operational) Closing Date:	Proposed: 21.06.2014 (5 years)	Actual:

*Excludes costs of PDFA and PPG (US\$ 125,000).

Brief description of Project

Tajikistan is a globally important centre of agro-biodiversity from which cultivated plants have originated. Many on-farm traditional crop varieties (landraces) and their wild relatives (CWRs), which have been lost in large numbers due to changes in farming practices and loss of natural habitat, respectively, potentially house resistances and tolerances to pests, diseases and abiotic stresses. Such landraces and their CWRs are also likely to be better adapted to changing climatic regimes, marked by rising temperatures and increasing frequencies of extreme events, such as periods of intense rainfall, extreme cold and prolonged heat, resulting in more frequent floods and droughts. Thus, agrobiodiversity may represent one of the best and only opportunities for communities in rural areas to maintain and improve their livelihoods in the face of climate change. Moreover, Tajikistan's agricultural biodiversity is also important to global food security.

Sustaining agricultural biodiversity in the face of climate change in Tajikistan is a full-sized UNDP-GEF project, which is aimed at embedding globally significant agro-biodiversity conservation and adaptation to climate change into the agricultural and rural development policies and practices of Tajikistan at national and local levels.

The (development) **objective** of the Project, as defined in the Project Document, is:

"Globally significant agrobiodiversity conservation and adaptation to climate change are embedded in agricultural and rural development policies and practices at national and local levels in Tajikistan."

The project, designed in partnership with the National Biodiversity and Biosafety Centre (NBBC), UNDP Communities Programme and the GEF Small Grants Programme (SGP), will demonstrate

three inter-linked processes that focus on: (i) capacity development at system, institutional and individual levels, through strengthening policy and regulatory frameworks; (ii) *in situ* and *ex situ* agrobiodiversity conservation measures; (iii) and market development; all of which are targeted in conjunction with socio-ecological adaptation to climate change. It takes advantage of important opportunities to develop socio-ecological resilience among agricultural ecosystems and their dependent farming communities by addressing immediate threats to agrobiodiversity while enabling farmers to anticipate and plan for climate-related changes over the longer term.

The project targets the conservation of perennial germplasm, specifically fruits and nuts, by understanding the likely impacts of climate change using a Homologue Approach. This approach relies on pairing sites, based on predictions from global models showing that temperatures in the project pilot areas will have increased by 3°C in 2050. The adiabatic lapse rate is 6°C per 1,000 m, which means that climatic conditions at a given site today will prevail in 2050 at a homologous site that is 500 m higher in altitude. Using this approach, sites having substantial agrobiodiversity were identified by the project and matched in terms of soils and climate to homologous sites located at altitudes 500 m higher.

Four pilot demonstration areas have been chosen, totalling approximately 1.5 million hectares in Zeravshan, Rasht, Baljuvan and Shurobad. Nine jamoats have been targeted, encompassing a total area of 182,718 ha and an altitudinal range from 1,132 m to 2,716 m, within seven districts (Aini, Penjikent, Tajikabad, Nurobod, Khovaling, Baljuvan and Shurobad).

The primary beneficiaries are the local communities, notably farmers, and local authorities (jamoats). The project has been designed to operate at local level through the Jamoat Resource Centres, supported by UNDP's Communities Programme via the UNDP Area Offices. Support has also been generated from the UNDP/GEF Small Grants Programme.

The project officially commenced on 22 June 2009, when the Project Document was signed. Actual implementation began in September 2009 with a six-month inception phase that culminated in March 2010 with a workshop to review the draft Inception Report. This Mid-Term Evaluation (MTE) falls approximately three years into the project and two years before its planned completion in June 2014.

Context and purpose of the evaluation

Mid-term evaluation is an integral part of the UNDP/GEF project cycle. Its purpose is to identify potential project design issues, assess progress towards the achievement of objectives, identify and document lessons learned, and to recommend specific actions that might improve the project. It is expected to serve as a means of validating or filling the gaps in the initial assessment of relevance, effectiveness and efficiency obtained from monitoring. Thus, the MTE provides an opportunity to assess early signs of project success or failure and prompt necessary adjustments.

Evaluation approach and methods

This MTE was carried out by external international and national consultants in May – August 2012. It included 10 days in-country (14-23 May) meeting and interviewing partners and other stakeholders in Dushanbe and in five of the nine target jamoats visited in three of the four pilot areas. Much time was subsequently spent reviewing a large amount of information, report writing and following up on comments received in late August on the draft report.

The evaluation was undertaken in as participatory a manner as possible in order to build consensus on achievements, short-comings and lessons learnt. Stakeholders were interviewed informally, with the help of interpretation as necessary. Interviews focused on: the strengths and weaknesses of Project implementation and its strategic direction to date; and future opportunities for their strengthening through adaptive management and other appropriate means. Evidence was cross-checked (triangulation) between as many different sources as possible to confirm its

veracity. Initial findings were shared at a meeting with the Project Implementation Unit (PIU), partners and experts on 23 May 2012.

In addition to a descriptive assessment of findings ([Chapter 3](#)), project achievements and performance were rated in different ways with respect to **either** the level of satisfaction achieved **or** the likelihood of various dimensions of the outcomes being sustainable, as follows:

- The project objective and outcomes were rated according to their respective outputs ([Table 3.5](#)), based on evidence provided by the Project Implementation Unit (PIU) and assessed by the evaluators ([Annex 5](#)).
- The status and quality of delivery of the project objective and outcomes were evaluated by means of the targets established for the Objectively Verifiable Indicators (OVIs) in the Logical Framework Matrix (LFM), ([Annex 7](#)).
- Project performance was rated using a range of measures to cover key areas, such as monitoring and evaluation, sustainability and impact, as well as project formulation, implementation and results. These ratings are presented in [Table 3.6](#).

Evaluation Results

The Project is evaluated as Satisfactory with respect to the achievement of its overall objective, based on assessment of project outcomes and outputs (detailed in [Annex 5](#) and summarised in [Table 3.5](#)), project performance (summarised in [Table 3.6](#)) and project performance indicators ([Annex 6](#)).

Key results to note with respect to outcomes and outputs are as follows:

- **Outcome 1** is rated as **Moderately Satisfactory**, in line with the ratings of the majority of its outputs. **Outputs 1.4** and **1.6** are rated **Satisfactory** in view of the excellent progress made in the target sites with respect to constructive cooperation between local communities and administrations, including tangible evidence of agrobiodiversity being propagated in nurseries and mother gardens or cultivated on farms for conservation and food production purposes. **Output 1.7** is rated as **Moderately Unsatisfactory** because there is no evidence of any producer societies have been established to link farmers with markets for specific crops. While some progress has been made at policy and institutional levels, much more in depth focus is required to identify specific policy and regulatory changes that are necessary to support agrobiodiversity conservation and its role in food security in the face of climate change. A key output (**1.8**) is the development of a long-term strategy for agrobiodiversity, for which there is currently a concept. Its drafting should now be given high priority.
- **Outcome 2** is rated as **Satisfactory**, a majority of outputs having been rated as either Satisfactory or, in the case of **Outputs 2.2** and **2.3**, **Highly Satisfactory**. The high level of achievement attained under **Output 2.2** reflects a successful, 'model' approach that is community-based, grounded in effective knowledge exchange whereby synergy is generated from sharing scientific and traditional knowledge, and resourced by a sustainable financing mechanism. Achievements under **Output 2.3** are also impressive, having witnessed almost the entire process from collection of seed in the field to its accession and storage at the Plant Genetic Resources Centre just outside Dushanbe, database entry, and subsequent backup of collections by samples sent to seed banks in Svalbard (Norway) and the Vavilov Institute (Russia).

A critically important issue concerns **Output 2.4** (*in situ* gene banks established in 40 home gardens/farms in 4 pilot sites ...) and the related target for one of the OVIs in the LFM ([Annex 7](#)): "*in situ* conservation of wild relatives of globally significant ABD in 40 home gardens/farms in 4 project areas ..." By definition, it is not possible to conserve CWRs *in situ* in home gardens or on farms; such a scenario is commonly defined as *ex situ* conservation of CWRs or 'living collections'. The issue at stake is the removal of CWRs from the wild where they are subject to natural selection pressures, as opposed to artificial

(subject to human influence) pressures in gardens and on farms. The genetic value of CWRs is based on their wild existence, where they adapt over time to changing conditions and develop traits, such as drought and frost tolerance, pest and disease resistance, that are highly desirable for cultivation and horticulture purposes.

- **Outcome 3** is rated as **Satisfactory**, with **Satisfactory** progress in the case of **Output 3.1** (building capacity among agro-enterprises), **Output 3.4** (crop certification), **Output 3.5** (GEF SGP seed grants for agro-enterprises) and **Output 3.6** (MFIs supporting agro-enterprises). The other three outputs concern marketing, international markets, and supply chains, for which progress has been limited to producing a Marketing Development Strategy and examining supply/value chains. Clearly, much more emphasis will need to be devoted to developing agrobiodiversity markets over the remaining period of the project.

Progress towards meeting end of project targets, established for the OVIs in the LFM, has also been assessed and rated ([Annex 6](#)). Ratings indicate **Moderately Satisfactory** or **Satisfactory** progress towards targets for 2014 for the majority of indicators, exceptions being a **Highly Satisfactory** result for the *ex situ* conservation of globally important agrobiodiversity under Outcome 2 and a **Moderately Unsatisfactory** result for the homologue modelling approach. Given the unanticipated limitations of the homologue modelling approach, it seems unlikely that national agencies, such as the Ministry of Agriculture, will have developed the capacity to generate such models to inform farmers of what best to grow where in response to climate change impacts unless there is a radical change to this part of the project.

Project performance has also been rated in terms of project relevance, effectiveness, efficiency, sustainability and impacts, as well as the quality of monitoring and evaluation systems. These ratings are provided in [Table 3.6](#), along with a brief justification based on evidence outlined elsewhere in this Mid-Term Evaluation report.

Conclusions

Overall, the project has made some excellent progress during the first three years of its implementation. Albeit much of the first year was spent getting up to speed, with a PIU in place, consultants procured, partnerships agreed and memorandums signed, and the inception period concluded with a workshop in March 2010.

At the time of this MTE, the project had undertaken the following:

- spent US \$878,444 (37%) of its US\$ 2.4 million GEF/UNDP TRAC funds and utilised US\$ 619,765 (35%) of its US\$ 1.766 million co-financing;
- engaged three international and over 50 national experts in servicing the project, together with five partner organisations;
- hosted some 80 consultative meetings, workshops, study visits etc. involving some 1,700 stakeholders (over 50% held in project areas and the rest in Dushanbe);
- produced (mostly drafts) over 30 reports relating to most of the 23 project outputs.

Importantly, all those met by the evaluators were very complimentary about the project and its PIU and, when challenged to highlight its weaknesses, feedback was limited to a desire for more funds (grants and access to credit) to extend the project's coverage. Such positive feedback was consistent, from farmers in their fields in the project areas to the Chairman of the Committee on Environmental Protection in Dushanbe. The main conclusions of this MTE are summarised in a SWOT analysis ([Table 4.1](#)) that provides the basis to the recommendations and lessons learnt.

Recommendations

Corrective actions for project design, implementation, monitoring and evaluation

Recommendation 1. Revise LFM to address proposed revisions to project targets and other shortcomings, along the lines proposed in [Annex 7](#).

Recommendation 2. Adopt internationally recognised definitions of agrobiodiversity terms to address the present lack of clarity concerning *in situ* and *ex situ* conservation of landraces and CWRs.

Recommendation 3. Provide for *in situ* conservation of wild relatives of fruits and nuts in their natural habitat.

Recommendation 4. Rationalise project outputs to eliminate duplication, ensure consistency between outputs and outcomes, and to achieve a more realistic number of deliverables, as in [Annex 7](#).

Recommendation 5. Identify specific policy and regulatory provisions for agrobiodiversity and integrate them within a strategy for immediate action.

Recommendation 6. Develop an exit strategy with respect to applying the Homologue Approach to fruit and nut agrobiodiversity because there currently appears to be a technical-cum-practical impasse.

Recommendation 7. Ensure that the GIS/database management system is backed-up at least weekly, with an archived copy stored securely off site in addition to a back-up copy being held securely on-site.

Recommendation 8. Develop a communications strategy and action plan that provides an integrated approach to raising local, public and political awareness. Publication of a short series of quality knowledge products (manuals, best practice guidelines, case studies, identification guides etc) should be part of the communications strategy. Consideration should also be given to establishing an agrobiodiversity newsletter. The communications strategy should be developed in tandem with the proposed marketing strategy.

Recommendation 9. Develop a project web site as a matter of priority, ideally hosted by NBBC.

Recommendation 10. Prepare and implement an integrated marketing strategy that is clearly focused on: establishment of supply chains and associated processing opportunities for a limited number of agrobiodiversity products; and certification of agrobiodiversity products for local and overseas markets, in accordance with standards that anticipate Tajikistan's planned membership of WTO.

Recommendation 11. Expose members of the Project Board to developments in the project areas so that they are better informed about implementation progress and, therefore, more able to provide sound guidance as well as be ambassadors for the project.

Actions to follow up or reinforce initial benefits from the project

Recommendation 12. Explore the potential for enhancing the agrobiodiversity brand and consolidating its niche market by piloting agrobiodiversity production with organic farming practices. It should be underpinned by incentives and disincentives such as:

- establishment of 'chemical fertilizer and pesticide free zones' at village or jamoat levels.
- promotion of organic fertilizers and disease resistant varieties of crops.
- grants (GEF SGP) and loans (MLFs) awarded on condition that chemical fertilizers and pesticides are not used.

Recommendation 13. Collaborate closely with GEF SGP and MFLs on the conditions and criteria for securing grants or loans, in order to attract proposals that contribute to the project's objective. Conditions and criteria should include the following provisions:

- Grants or loans should be awarded subject to the funds not being used for purchase or distribution of chemical fertilisers or pesticides.
- Proposals should be screened for potential environmental impacts.

- In the case of loans, there should be special, low interest (i.e. <1% per month) provisions for *in situ* conservation of CWRs (i.e. protection in the wild) by individuals or communities.
- Incentives should be provided to encourage joint proposals involving agrobiodiversity producers, processors and other enterprises in order to encourage collaborative working and distribute limited funding resources more widely among communities.

Recommendation 14. Promote the development of community-based agri-tourism, by means of awareness raising (e.g. study tours), grants and loans, to reinforce agrobiodiversity *in situ* and *ex situ* conservation initiatives. This would also contribute further to the agrobiodiversity brand of 'quality food and healthy lifestyle'. Visitors would be able to experience staying in local homesteads, appreciating traditional varieties of food crops, observing landraces on farms/gardens and CWRs in the wild, all amidst magnificent rural scenery, and participating in a variety of environmentally benign activities, such as walking, fishing, riding, mountain biking, mountain trekking with overnight camping (on foot or horseback).

Proposals for future directions underlining main objectives

Recommendation 15. Procure additional international expertise to advise the project in key areas that could potentially jeopardise its outcomes. Such an advisor should be expert in agrobiodiversity and their role would include such critical aspects as: developing an exit strategy regarding the further application of the Homologue Approach; and overseeing the preparation of a long-term strategy for the conservation of agrobiodiversity and adaptation to climate change, as well as sustainable management strategies for each of the four pilot areas.

Recommendation 16. Extend the project for at least six months at no additional cost in order to make up for the slow start (approximately one year for the inception phase to be completed) and, most importantly, consolidate on its initially very positive series of achievements. In particular, additional time will be required: to develop a national agrobiodiversity conservation strategy and, following public consultation, secure its approval; and to develop sustainable markets for agrobiodiversity, including issues of branding and certification of products. The resources are available, with nearly two-thirds of the budget unspent.

Finally, while not a recommendation *per se* because it is considered to fall outside the scope of the project, there is an important opportunity for the project to **raise awareness of the potential World Heritage 'outstanding universal values' of agrobiodiversity within the pilot areas**. Central Asia is a global hotspot for agrobiodiversity and there is a very good opportunity for one or more Central Asian countries to develop a serial nomination (i.e. comprising several sites, each of which hosts globally significant biodiversity) based on agrobiodiversity values of wild relatives of crops, particularly fruit and nut forests. To date no property has been inscribed on the World Heritage List solely on account of its agrobiodiversity and, at the very least, such an initiative should be included in the long-term, national agrobiodiversity conservation strategy.

Lessons

A number of lessons, based on best and worst practices have been tentatively identified. These will need to be reviewed and expanded on during the terminal evaluation of the project.

1. INTRODUCTION

1.1 PROJECT BACKGROUND

Tajikistan is a globally important centre of agro-biodiversity from which cultivated plants have originated, according to the Russian botanist and geneticist, Nikolai Vavilov. Diverse climatic, geological, and environmental conditions have given rise to this rich biodiversity, best indicated by almost 9,800 plant accessions recorded in Tajikistan. Many of the landraces and their wild relatives potentially house resistances and tolerances to pests, diseases and to abiotic stresses. Tajikistan's agricultural biodiversity is not only of importance to the livelihoods, economies and long-term food security of rural communities but also to global food security, particularly in light of future challenges posed by global climate change.

The overall aim of this project is to embed globally significant agro-biodiversity conservation and adaptation to climate change into the agricultural and rural development policies and practices of Tajikistan at national and local levels. The project has been designed to test and demonstrate replicable ways in which rural farmers and communities can benefit from agro-biodiversity conservation, using the Homologue Approach, while also building their capacities in adapting to climate change. The project, is being executed by the National Biodiversity and Biosafety Centre, in partnership with the UNDP Communities Programme and the GEF Small Grants Programme, and features three inter-linked complementary processes that focus on: (i) strengthening existing policy and regulatory frameworks in support of agro-biodiversity conservation and adaptation to climate change at local levels; (ii) developing community, institutional, and system capacities to enable farmers and agencies to better adapt to climate risks through the conservation and use of agro-biodiversity; and (iii) developing agro-enterprises that support the conservation and production of agro-biodiversity friendly products, with a view to providing farmers and communities with alternative sources of income to offset negative impacts and shocks related to climate change.

1.2 PURPOSE OF THE EVALUATION

The GEF Monitoring and Evaluation Policy¹ has two overarching objectives at the project level, namely: to promote accountability for the achievement of GEF objectives through the assessment of results, effectiveness, processes and performance of the partners involved in GEF activities; and to improve performance by the promotion of learning, feedback and knowledge sharing on results and lessons learned among the GEF and its partners, as a basis for decision-making on policies, strategies, programme management, projects and programmes.

Mid-term evaluation is an integral part of the UNDP/GEF project cycle. Its purpose is to identify potential project design issues, assess progress towards the achievement of objectives, identify and document lessons learned, and to recommend specific actions that might improve the project. It is expected to serve as a means of validating or filling the gaps in the initial assessment of relevance, effectiveness and efficiency obtained from monitoring. Thus, the MTE provides an opportunity to assess early signs of project success or failure and prompt necessary adjustments. To this end, the MTE is intended to:

- i. Strengthen the adaptive management and monitoring functions of the project;
- ii. Enhance the likelihood of achievement of the project and GEF objectives through analyzing project strengths and weaknesses and suggesting measures for improvement;
- iii. Enhance organizational and development learning;
- iv. Enable informed decision-making; and
- v. Create the basis of replication of successful project outcomes achieved so far.

¹ *The GEF Monitoring and Evaluation Policy 2010*, Evaluation Document November 2010, No. 4. 32 pp.

Particular emphasis should be put on the current project results and the possibility of achieving all the objectives in the given timeframe, taking into consideration the speed, at which the project is proceeding. Further details can be found in the Terms of Reference ([Annex 1](#)).

1.3 METHODOLOGY OF THE EVALUATION

This Mid-Term Evaluation follows the aforementioned GEF monitoring and evaluation policy¹ and, as appropriate, the new *Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-Financed Projects* (UNDP Evaluation Office, 2012).

The evaluation process is independent of GEF, UNDP, National Biodiversity & Biosafety Centre (NBBC) and Project partners. Opinions and recommendations in this MTE are those of the Evaluation Team, comprising an international and a national consultant. These do not necessarily reflect the position of GEF, UNDP, NBBC or any other Project stakeholders. Once accepted, the MTE becomes a recognised, publicly accessible component of the Project's documentation.

The MTE has been undertaken in line with GEF principles concerning independence, credibility, utility, impartiality, transparency, disclosure, ethical, participation, competencies and capacities¹. The consultants have signed the Evaluation Consultant Code of Conduct Agreement Form ([Annex 2](#)), thereby agreeing to abide by the UNEG Code of Conduct in the UN System (2008).

Mid-term evaluation is an evidence-based assessment of the Project concept and design, its implementation and its outputs, outcomes and impacts as documented in the Annual Progress Reviews (APRs), Project Implementation Reports (PIRs) and Logical Framework Matrix (LFM), which provides indicators and targets for measuring success in implementation.

The MTE was carried out in May - August 2012. The field mission comprised: 10 days in-country (14-23 May inclusive) meeting and interviewing partners and other stakeholders in Dushanbe and during field visits to five of the nine target jamoats in three of the four pilot areas ([Table 1.1](#)). Farmers from Dashtijum Jamoat, Shurobad District, were also met. It was not possible to visit the more remote, fourth pilot area, Zeravshan, because of difficult access at this time of year.

Table 1.1 List of target jamoats met (highlighted) during visits to three of the four pilot areas*

Target Jamoats*			Districts	Pilot Areas	Selected Fruit and Nuts
Name	Area (ha)	Altitude ² (m)			
1) Anzob	28,346	2,716	Aini	Zeravshan	Apricot
2) Khalifa Khasan	15,394	1,132	Penjikent	Zeravshan	Apricot, Apple
3) Nushor	519	1,626	Tajikabad	Rasht	Apricot
4) Khumdon [#]	9,992	1,216	Nurobod	Rasht	Pear
5) Jombakht	12,000	1,426	Khovaling	Baljuvan	Walnut, Mulberry
6) Dektur	25,000	1,293	Baljuvan	Baljuvan	Mulberry, Almond, Apricot
7) Sarikhosor	60,700	1,450	Baljuvan	Baljuvan	Walnut
8) Yol	18,066	1,262	Shurobad	Shurobad	Pomegranate, Fig
9) Shurabad	12,701	2,002	Shurobad	Shurobad	Apple
Total	182,718	1,132-2,716			

* Spellings of jamoats, districts and other geographic or administrative areas vary, so for purposes of this table they are consistent with those used in the map ([Figure 1.1](#)).

* The project is also working with Dashtijum Jamoat (1052 m, Shurobad) and Satalmush Jamoat (Baljuvan).

[#] Darband, which is listed as a target jamoat in the Inception Report, was renamed Khumdon following changes in administrative boundaries.

² Source of altitude records, from where latitudes and longitudes of each target site can be found: M.J. Fisher, (2010), Report of the international consultant on *Modeling of agrobiodiversity adaptation to climate change employing the Homologue Approach*.

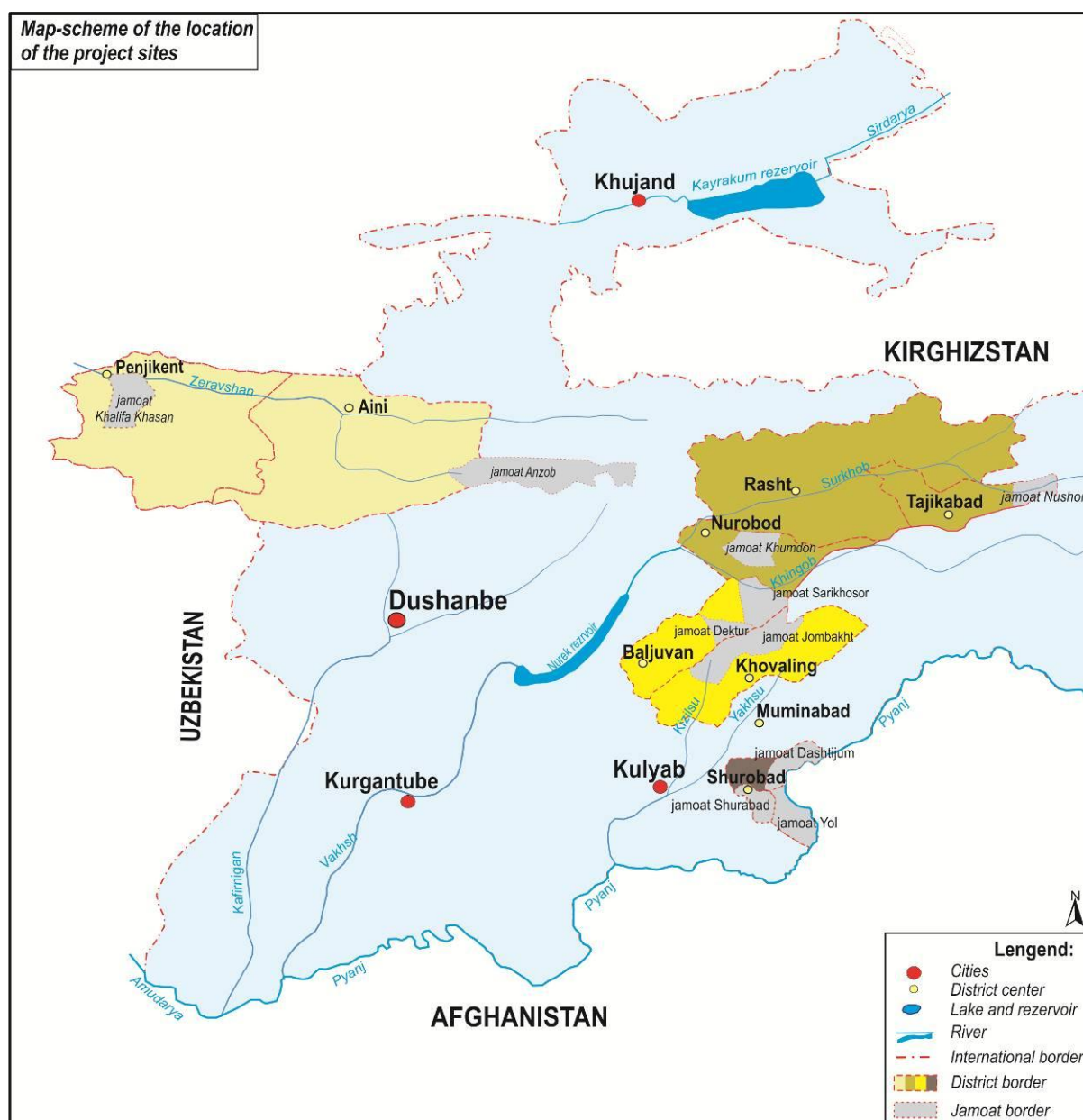


Figure 1.1 Locations of the 10 target jamoats within the four pilot areas - Zeravshan (north-west of Dushanbe), Rasht (north-east), Baljuvan (east) and Shurobad (south-east).

A map of the target jamoats within their respective pilot areas is provided in [Figure 1.1](#). Details of the in-country itinerary, including field visits, and stakeholders met are provided in [Annex 3](#).

The approach was based on the ToR in [Annex 1](#). It included:

- desk review of project documents and relevant related literature ([Annex 4](#));
- interviews with major stakeholders, including Project implementing partners, government agencies and administrations, and local communities (mostly farmers); and
- visits to three of the four pilot areas to meet UNDP and jamoat officers, and farmers.

The evaluation was undertaken in as participatory a manner as possible in order to build consensus on achievements, short-comings and lessons learnt. Stakeholders were interviewed informally, with the help of interpretation as necessary. Interviews focused on: strengths and weaknesses of project implementation and its strategic direction to date; and future opportunities for their strengthening through adaptive management and other means. Evidence was cross-checked (triangulation) between as many different sources as possible to confirm its veracity.

Opportunities were taken to acknowledge, challenge and encourage Project partners in an open, objective manner on the basis of preliminary findings from Project reports and interviews, before committing these to paper. Initial findings were shared at a meeting with the Project Implementation Unit (PIU), partners and experts on 23 May 2012.

In addition to a descriptive assessment, Project achievements (outputs and outcomes), sustainability of outcomes, monitoring and evaluation system (design and application), were rated with respect to **either** the level of satisfaction achieved **or** the likelihood of various dimensions of the outcomes being sustainable at Project termination. Also, three criteria (relevance, effectiveness and efficiency) were used, as appropriate, to evaluate the levels of achievement attained with respect to the Project objective and outcomes in accordance with GEF requirements. The different scales for rating various criteria are shown in [Table 1.2](#), and further defined in [Table 1.3](#) in the case of the likelihood of sustainability.

Table 1.2 Ratings and their scales defined for different evaluation criteria (UNDP, 2012)³

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

Table 1.3 Definitions of levels of risk to sustainability of Project outcomes (UNDP, 2012)

Rating	Definition
Likely (L)	Negligible risks to sustainability, with key outcomes expected to continue into the foreseeable future.
Moderately Likely (ML)	Moderate risks , but expectations that at least some outcomes will be sustained.
Moderately Unlikely (MU)	Substantial risk that key outcomes will not carry on after project closure, although some outputs and activities should carry on.
Unlikely (U)	Severe risk that project outcomes as well as key outputs will not be sustained.

The Project objective and outcomes were rated according to their respective outputs ([Table 3.5](#)), based on evidence provided by PIU and assessed by the evaluators ([Annex 5](#)), and by means of performance indicators ([Annex 6](#)) using the 6-point satisfaction scale ([Table 1.2](#)). Other aspects of performance were assessed using the full range of ratings shown in [Table 1.1](#).

UNDP CO was provided with feedback on the LFM in July and a draft report on 21 August 2012 to share with the Executing Agency and its partners. Feedback was received by the Evaluators on 30 August and reviewed, contributing to significant improvements in the report. There was a final iteration of feedback and review in October – November, during which changes to the LFM were made by the project in consultation with the RTA. In a few cases where the Evaluators

³ *Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-Financed Projects*, UNDP Evaluation Office, 2012

have not incorporated feedback from the Implementing or Executing agencies directly into the body of the report due to differences in opinion or interpretation, such feedback has been presented in the footnotes along with the response of the Evaluators.

1.4 STRUCTURE OF THE EVALUATION REPORT

The structure of this MTE report is based on that provided in ToR, while taking into account UNDP's latest, 2012 guidance on evaluations of GEF-Financed Projects⁵. This first introductory chapter describes the purpose of evaluation and methods used. [Chapter 2](#) describes the Project and its objectives, within the development context of Tajikistan. Findings from the MTE are presented in [Chapter 3](#), focusing in turn on the formulation, implementation and results (outputs, outcomes and impacts) of the Project. Aspects of each of these three components of the project cycle were assessed using the rating systems outlined above in [Table 1.2](#). Conclusions are drawn in [Chapter 4](#), highlighting the strengths, weaknesses and outcomes of the Project. Lessons learned from the experience are identified, along with practical, feasible recommendations that build on the Project's interventions.

1.5 DEFINITIONS AND TERMS

Agrobiodiversity is a relatively new field of interest to those concerned with biodiversity conservation and some of its concepts and terms may be to unfamiliar to some. Thus, some useful definitions are provided below, along with some guidance on what does and does not constitute *in situ* or *ex situ* conservation within an agrobiodiversity context.

- A **crop wild relative** (CWR) is commonly defined in terms of a wild species that is relatively closely related to agricultural and horticultural crops; therefore, a broad definition of a CWR would be any taxon belonging to the same genus as a crop (Maxted and Kel (2009)⁴. While this definition is intuitively accurate, sometimes it is necessary to estimate the degree of CWR relatedness in order to prioritise limited conservation resources.

Thus, a working definition of 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).*

- “A **landrace** of a seed-propagated crop is a variable population, which is identifiable and usually has a local name. It lacks 'formal' crop improvement, is characterized by a specific adaptation to the environmental conditions of the area of cultivation (tolerant to the biotic and abiotic stresses of that area) and is closely associated with the uses, knowledge, habits, dialects, and celebrations of the people who developed and continue to grow it.” (Maxted et al., 2009).

In some situations it is necessary to distinguish between landraces that have been cultivated for one or more centuries in a region (autochthonous) and those more recently introduced in a region where they have become locally adapted (allochthonous), following the definition given by Mayr (cited by Zeven 1998).

- **Genetic reserve conservation** may be defined as “the location, designation, management and monitoring of genetic diversity in natural wild populations within defined areas designated for active, long-term conservation” (Maxted et al., 1997b)⁵.

⁴ Maxted, N. and Kell, S.P. (2009). *Establishment of a Global Network for the In Situ Conservation of Crop Wild Relatives: Status and Needs*. FAO Commission on Genetic Resources for Food and Agriculture, Rome, Italy. 266 pp. [See page 32 on *in situ* and *ex situ* conservation of CWR]

⁵ Maxted, N., Hawkes, J.G., Ford-Lloyd, B.V. and Williams, J.T., (1997b). A practical model for *in situ* genetic conservation. In: *Plant genetic conservation: the in situ approach* (eds. Maxted, N., Ford-Lloyd, B.V. and Hawkes, J.G.), Chapman & Hall, London. Pp. 339–367.

- **Ex situ seed conservation** involves “the location, sampling, transfer and management of seed from its original location to a gene bank where it is dried and stored at sub-zero temperatures” (Maxted *et al.*, 1997d)⁶.
- **On-farm conservation** is “the management of genetic diversity of locally developed crop varieties (landraces) by farmers within their own agricultural, horticultural or agri-silvicultural systems”. Very often, especially in such parts of the world as Central Asia where crops were originally domesticated, landraces occur alongside wild relatives (Maxted *et al.*, 2009).

Regarding this project, it is important to distinguish between the following types of intervention:

- i. **In situ conservation of CWRs in genetic reserves:** CWRs are protected and conserved in the wild (wild fruit forests etc), with little or no management intervention⁷ so that they continue to adapt (evolve) to changing environmental conditions.
- ii. **Ex situ conservation of CWRs as ‘living collections’:** CWRs are taken from the wild and introduced to farms/home gardens/botanic gardens etc where they are maintained.
- iii. **Ex situ conservation of CWRs** in (a) **seed banks** or (b) as **explants in tissue culture** or **cryopreserved** (currently not relevant in Tajikistan as no facilities for this type of preservation).
- iv. **In situ conservation of landraces** on farms/home gardens.
- v. **Ex situ conservation of landraces** in seed banks (also in vitro and cryopreservation etc – not relevant in Tajikistan at present).

⁶ Maxted, N., Ford-Lloyd, B.V. and Hawkes, J.G., (1997d). Complementary Conservation Strategies. In: Plant genetic conservation: the in situ approach (eds. Maxted, N., Ford-Lloyd, B.V. and Hawkes, J.G.), Chapman & Hall, London. Pp. 20–55.

⁷ Interventions, for example, might include protection of fruit forests from fire and grazing by domestic livestock but not use of biocides to control diseases and pests or fertilizers to enrich soils with nutrients.

2. PROJECT AND ITS DEVELOPMENT CONTEXT

2.1 PROJECT START AND DURATION

Implementation of this UNDP/GEF full-size project entitled *Sustaining Agricultural Biodiversity in the Face of Climate Change in Tajikistan* officially commenced on 22 June 2009, when the Project Document was signed. This was approaching two years from when the original Project Identification Form (PIF) was submitted on 15 October 2007. The duration of the Project is five years. Thus, this Mid-Term Evaluation (MTE) falls approximately three years after the Project Document was signed and two years prior to project completion in June 2014.

The inception phase began in September 2009, commensurate with the establishment of the Project Implementation Unit (PIU) in September-October, and culminated six months later with a two-day Inception Workshop held on 9-10 March 2010 to review the draft Inception Report. The final version of this Report was completed in June 2010 and approved at a meeting of the Project Board⁸ on 6 April 2011.

2.2 PROBLEMS THAT THE PROJECT SEEKS TO ADDRESS

Central Asia is a centre of origin for many species of importance to agriculture and Tajikistan's agrobiodiversity, found mostly between 500 m and 3,500 m a.s.l., is outstanding. Following the collapse of the former Soviet Union, wild and on-farm biodiversity have become increasingly threatened by over-harvesting of forests for timber, fuel wood and non-timber forest products, overgrazing by livestock, forest clearance for pastures and agricultural land, disease and pests, and invasive alien species.

Concomitant with the loss of large numbers of on-farm crop varieties and their wild relatives is the impact of changing climatic regimes, marked by rising temperatures and increasing frequencies of extreme events, such as periods of intense rainfall, extreme cold and prolonged heat, resulting in more frequent floods and droughts. Tajikistan already has a 20% food deficit, which is vulnerable to these and other impacts of climate change.

The International Centre for Tropical Agriculture (CIAT), in preparation for this project, has interpolated data from global circulation models (GCMs) in order to predict the influence of climate change on cereals currently cultivated in Tajikistan (barley, rice and wheat) by 2050. Their results show that yields of barley and wheat will fall by about 10% over the next 40 years, which can probably be overcome by plant breeding and/or using varieties that have different physiological response functions (i.e. tolerances/resistances to certain climatic conditions). Moreover, adaptive strategies that will be needed in 2050 are likely to be similar to those currently used by farmers at lower altitudes. Thus, for example, Khishkat at 1,440 m is projected to have a similar climate in 2050 to what Penjikent at 990 m currently experiences today.

While it has not been possible to extrapolate from simulations of these cereals to perennial fruits, nuts and vegetables, it is likely that local communities will be able to cope by bringing back into production local varieties that are better adapted to climate extremes. Furthermore, increasing temperatures due to global warming may benefit some agrobiodiversity, such species responding by simply colonising higher altitudes. As a result of these findings, it has been realised that agrobiodiversity may represent one of the best and only opportunities for communities in rural areas to maintain and improve their livelihoods in the face of climate change, provided the aforementioned threats to this natural resource base can be averted.

The long-term solution is to embed considerations of globally significant agro-biodiversity and climate resilience in agricultural and rural development policies and production practices at

⁸ Project Board is also referred to as the National Coordinating Committee.

national and local levels. At the same time, agrobiodiversity conservation will provide crucial opportunities to address climate change risks and vagaries threatening the mountainous ecosystems and rural livelihoods of Tajikistan. The main barriers to achieving this solution include:

- lack of institutional capacity, compounded by an inadequate policy and legislative framework to support agrobiodiversity conservation and its sustainable use;
- inadequate capacities and mechanisms to cope with increasingly frequent and intense climatic irregularities (floods, droughts, harsh winters) among rural communities; and
- market barriers, such as lack of access to markets and lack of value chains linking producers to consumers, exacerbated by poor infrastructure in rural areas and increasing competition in export markets.

Thus, the project has been designed to focus on the *in situ* conservation of perennial germplasm, specifically fruits and nuts, by understanding the likely impacts of climate change using a *homologue approach*. This approach relies on pairing sites, based on predictions from GCMs showing that temperatures in the project pilot areas will have increased by 3°C in 2050. The adiabatic lapse rate is 6°C per 1,000 m, which means that climatic conditions at a given site today will prevail in 2050 at a homologous site that is 500 m higher in altitude. Using this approach, sites having substantial agrobiodiversity were identified by the project and matched in terms of soils and climate to homologous sites located at altitudes 500 m higher. The final list of jamoats selected for targeting by the project is shown in [Table 1.1](#), together with their key fruit and nut crops which exist either as crop wild relatives (CWRs) in natural forests or as landraces (traditional varieties) on farms, in home gardens and around settlements, or both.

The project, designed in partnership with the National Biodiversity and Biosafety Centre (NBBC), UNDP Communities Programme and the GEF Small Grants Programme (SGP), will demonstrate three inter-linked processes that focus on: (i) strengthening existing policy and regulatory frameworks in support of agrobiodiversity conservation and adaptation to climate change, with emphasis on local level implementation; (ii) developing community, institutional and system capacity to enable farmers and agencies to address climate-related risks through the protection and sustainable use of agrobiodiversity; and (iii) development of enterprises to support the production of agro-biodiversity friendly products that provide farmers and their communities with alternative sources of income to offset the negative impacts of climate change.

2.3 IMMEDIATE AND DEVELOPMENT OBJECTIVES OF THE PROJECT

The overall (development) objective of the Project, as defined in the Project Document, is:

“Globally significant agrobiodiversity conservation and adaptation to climate change are embedded in agricultural and rural development policies and practices at national and local levels in Tajikistan.”

The project seeks to remove the barriers to conserving Tajikistan’s globally significant agrobiodiversity by a combination of interventions that focus on: (i) capacity development at system, institutional and individual levels; (ii) *in situ* and *ex situ* agrobiodiversity conservation measures; (iii) and market development; all of which are targeted in conjunction with socio-ecological adaptation to climate change. It is designed to take advantage of important opportunities to develop socio-ecological resilience among agricultural ecosystems and their dependent farming communities by addressing immediate threats to agrobiodiversity while enabling farmers to anticipate and plan for climate-related changes over the longer term.

Much has already been done by national and international research centres to conserve the wild relatives of major food crops, such as cereals and legumes, by collecting their seeds and storing them *ex situ* in gene banks at low temperatures. This is a relatively straightforward procedure. A much more intractable problem is the *in situ* conservation of recalcitrant species that cannot be conserved as seeds at low temperature. The identification and *in situ* conservation of landraces is

one way of making immediate good use of the locally adapted germplasm currently grown in home gardens throughout the country. Anticipating what will be best suited for the same site by 2050, using the homologue approach, will provide a more sustainable, longer term solution in the face of climate change.

In order to achieve the development objective, three outcomes were formulated, together with a set of outputs, as listed in [Table 2.1](#). These were subsequently reviewed during the Inception Phase of the project, resulting in some minor changes to a few outputs, as highlighted in [Table 2.1](#), and also some changes to the activities, details of which can be found in Section 1.3 of the Inception Report (3 June 2010).

Table 2.1 Project outcomes and respective outputs, as specified in Project Document and modified subsequently in Inception Report (*changes shown in italics and highlighted*)⁹

OUTCOME 1: Agrobiodiversity conservation and adaptation to climate change through supportive policy, regulatory and institutional frameworks.	
1.1.	Agrobiodiversity conservation and adaptation principles mainstreamed into local and national <i>agricultural, trade and industry</i> policies and programmes;
1.2.	Extension package for promoting climate resilient farming varieties developed and integrated into the national extension service and delivery system;
1.3.	Capacity of local government to enforce policies, sectoral guidelines and spatial plans in support of agrobiodiversity conservation and adaptation to climate change increased in 4 pilot areas;
1.4.	CSOs and local government in pilot areas have skills to actively support communities to integrate agrobiodiversity conservation into farming systems, build adaptive capacity, and link such production to markets;
1.5.	Capacity building programs implemented to ensure institutions charged with responsibility for managing the ex-and in-situ gene banks are effective;
1.6.	ABD policies applied in 4 pilot areas & adopted in >40 home gardens/farms;
1.7.	Local level producer societies for specific crops (such as fig, pistachio, walnut, pomegranate, apricot, almond, mulberry) promoted to provide incentives for adoption (linking farmers to markets, and credit);
1.8.	Development of long-term strategy for conservation of ABD and adaptation to climate change.
OUTCOME 2: Improved capacity for sustaining agrobiodiversity in the face of climate change	
2.1.	Farmers in the 4 pilot areas provided with skills and knowledge to increase farm productivity (and food security) using climate resilient agrobiodiversity friendly practices;
2.2.	Community-based participatory methods (building on traditional knowledge) developed and implemented for <i>ex situ</i> conservation especially of recalcitrant materials (seed that cannot be stored <i>ex situ</i>);
2.3.	Tajik ABD germplasm available to national, regional and global crop improvement programmes;
2.4.	<i>In situ</i> “gene banks” established in 40 home gardens/farms in 4 pilot sites, including collection, geo-referencing, identification, characterization, and/or germplasm-banking of prioritized ABD (largely fruit and nuts);
2.5.	Climate change and crop modelling (<i>logical and software</i>) facilitates the selection of the most appropriate homologue sites that represent present and future conditions;
2.6.	Sustainable management strategies for the 4 project areas and areas certified as sources of climate resilient wild crop relatives;
2.7.	A network of databases established on materials maintained in situ and ex situ;
2.8.	Awareness campaigns in partnership with the GEF SGP address conservation of agrobiodiversity and adaptation to climate change.
OUTCOME 3: Market conditions favour sustainable agrobiodiversity production	
3.1.	Capacity building programme to ensure that institutions charged with responsibility for supporting

⁹ Some of these changes were not adopted uniformly in subsequent Project documents, which is confusing. PMU has indicated that this is because the 2010 Annual Work Plan was signed off on 2 February 2010, whereas review of the draft Inception Report began in March 2010. However, this does not fully explain such anomalies, as changes agreed in the Inception Report should have adopted subsequently and certainly by 2012.

- the development of agrobiodiversity based agro-enterprises are effective;
- 3.2. Identification, differentiation and marketing programs for certified products from 4 pilot areas and non-certified ABD climate resilient products grown, developed and implemented through a supply chain approach;
 - 3.3. International marketing campaign (trade fairs, online) to establish Tajikistan as an international source of ABD-friendly climate resilient products for consumers concerned about the point of origin, sustainability and heritage of food in face of CC;
 - 3.4. Declaration form ~~Crop certification~~ established for products increasing farmer's ability to sell products and services at a premium, ~~verified and monitored by Protocol to verify and monitor compliance of certification~~;
 - 3.5. Seed grants (through partnership with GEF Small Grants Programme) support development of agrobiodiversity based agro-enterprises at each site;
 - 3.6. Increased funding available for start-up initiatives and SMEs, provided by existing MFIs (supported by JRCs/UNDP Communities Programme) to ABD agro-enterprises;
 - 3.7. Enhanced business advisory Centres and Jamoat Resource Centres support efforts to bring climate resilient ABD-friendly products to markets.

2.4 BASELINE INDICATORS ESTABLISHED

Project baselines were established in 2009 using a suite of Objectively Verifiable Indicators (OVIs) for each of the three outcomes. They are detailed in the Logical Framework Matrix (LFM) that accompanies the Project Document (Section II, Annex A). Their review during the Inception Phase resulted in a relative small number of changes, details of which can be found in the Inception Report (3 June 2010). In summary, the following changes to the LFM were identified to be necessary:

Outcome 1

- The target area for mainstreaming agrobiodiversity conservation is cited as 1.5 million hectares of production landscape. This is a mistake as it represents the total area across the project's four pilot areas (Baljuvan, Rasht, Shurobad and Zeravshan). Reference to the 2005 Land Cadastre of the Republic of Tajikistan shows that the total agricultural land (productive landscape) within these four areas is 575,228 ha, of which 90.6% is pasture, 7.8% is arable and 1.6% is 'long-term plantings'.
- Apricot, almond, pistachio and fig were originally specified for climate-resilient production practices in the four pilot sites but numerous other fruit and nut species were found to be traditionally produced and so the choice of species has been extended.

Outcome 3

- The OVI for value chains in overseas markets has been realigned to the creation of favourable conditions for farmers to access such markets.
- The OVI for agrobiodiversity friendly agro-enterprise income generation has been changed from US\$ 500,000 by 2014 to 20% increase in the current baseline.
- Marketing of up to four fruit and nut species is changed from certified to declared products, given the current lack of capacity in Tajikistan to certify products.

Outputs

- A few minor changes to outputs were identified, as already highlighted in [Table 2.1](#).

Risks and assumptions

- Many more risks and assumptions were identified for each outcome and added to the LFM.

A very significant new risk/opportunity emerged from discussions held during the MTE and that concerns Tajikistan's ongoing discussions to join the World Trade Organization. The challenge will be in meeting the necessary international quality assurance standards in order to export agrobiodiversity products. However, there is also a huge opportunity for Tajikistan to capitalise on this niche market, especially if it can link agrobiodiversity products with organic farming practices (see [Section 4.3](#)).

2.5 MAIN STAKEHOLDERS

The main stakeholders and their roles, as identified in the Project Document and Inception Report, are listed in [Table 2.2](#). All were consulted during the project formulation process.

Table 2.2 Main stakeholders, their roles and interests in the project

Stakeholder	Roles/Interests in Project
Committee on Environmental Protection	Formulation and implementation of nature conservation policy, including its sustainable use.
Ministry of Agriculture	Formulation and execution of policies concerning agricultural production, including utilisation of natural resources. Key role in facilitating local efforts to conserve agrobiodiversity in light of climate change, including support to farmers to conserve traditional crops using traditional knowledge.
State Agency for Forestry & Hunting, Committee on Environmental Protection	Protection and regeneration of forests; cultivation of tree nurseries; identification of CWRs in mountain forests; cooperation with local communities.
Ministry of Economic Development & Trade	Provision of annual data on actual and forecast trade in agro-biodiversity. Member of Coordinating Council on Development of Agrobiodiversity Capacity Building Strategy
Agency for Land Management, Geodesy & Cartography	Land use and reform policies, executed through functional zoning of land, based on its value. Will support agrobiodiversity mapping.
State Agency for Hydrometeorology, Committee on Environment Protection	Implementation of Tajikistan's commitments to UN Framework Convention on Climate Change; provision of information on climate change and its impacts on agrobiodiversity to local communities.
Tajik Academy for Agricultural Sciences	Support establishment and evaluation of trials and nurseries.
Agency for Standardization, Metrology, Certification and Trade Inspection (Tajikstandart)	Develop standardization procedures for production of agrobiodiversity and advise farmers on certification procedures.
National Biodiversity and Biosafety Centre	Provides the implementation of activities linked with the implementation of Tajikistan's commitments to UNCBD.
National Republican Centre for Genetic Resources, Tajik Academy for Agricultural Sciences	Establishment and management of the national gene bank. Support <i>ex situ</i> agrobiodiversity conservation efforts.
Academy of Sciences of the Republic of Tajikistan	Scientific advisory role in prioritisation of activities concerning sustainable use of natural resources.
Institute of Botany, Academy of Sciences	Assessment of status of agro-ecosystems and identification of indicator species of plants that thrive in face of climate change.
Regional Government (Oblast Hukumat)	Governors and deputies facilitate interaction with relevant national Ministries and Committees. Supervise district government activities.
District Government (Rayon Hukumat)	Support and oversee local economic and land use activities, mostly through Jamoats.
Sub-district Government (Jamoat - group of villages)	Support and oversee local economic activities. Jamoat head represents those villages engaging in project activities.
Jamoat Resource Centre	Support local governance and development of micro-enterprises, providing technical assistance and credit facilities as appropriate.
Micro-Finance Institutions	Ensure efficient, transparent and effective use of low-interest loans by communities in support of rural development and livelihood objectives.
National Union of Dekhan Farms	NUDF, apex of Oblast and Rayon Associations of Dekhan (private) farms, provides services to member farmers, such as preferentially

	priced fuel, advances of seed (repayable in kind) and legal support.
Local farmers	Holders of traditional knowledge about agrobiodiversity, which they currently use at unsustainable rates along with other natural resources.
Boghparvar ¹⁰ , Zan va Zamin ¹¹ (NGOs)	Support and raise awareness about biodiversity conservation principles, providing linkages between communities and government.

The primary beneficiaries of the project are the local communities, notably farmers, and local authorities (jamoats). The project has been designed to operate at local level through the Jamoat Resource Centres, supported by UNDP's Communities Programme via the UNDP Area Offices. Support has also been generated from working in partnership with the UNDP/GEF Small Grants Programme.

2.6 RESULTS EXPECTED

According to the Project Document, the results expected by the end of the Project can be summarised as follows:

- i. The collection, characterisation and *ex situ* / *in situ* conservation of agrobiodiversity, particularly with respect to recalcitrant species, will make genetic material more readily available to crop improvement schemes, resulting in better crop adaptation to changing climate.
- ii. Agrobiodiversity conservation will have been mainstreamed across Tajikistan's agricultural sector through policy interventions and targeting 150,000 ha of productive landscape across 9 pilot jamoats for *in situ* / *ex situ* interventions. This will address the main barriers that constrain the recovery and sustainable use of Tajikistan's endemic plant agrobiodiversity.
- iii. The livelihoods of rural farming communities will have been improved through sustainable use of agrobiodiversity; and their ability to anticipate and adapt to climate change will have been strengthened through application of the homologue approach in the demonstration sites.

Thus, the conserved agrobiodiversity (item i. above) represents the global environmental benefit of the project, as well as being part of the national environmental benefit. Domestic benefits will include broad stakeholder participation in conservation of fruit and nut species, availability and accessibility of genetic stock for development of new robust and resilient varieties, stability in agricultural production, and increased incomes and well-being from agro-enterprises based on local fruit and nuts and associated value-added products.

While climate change will bring higher summer temperatures and increased potential of flooding, agro-enterprises built on local agrobiodiversity resources are likely to represent a singular and important opportunity within future climate-change scenarios. The project's provision of tools and methods to conserve and sustainably use genetic diversity will help to strengthen the national agricultural economy, reduce poverty in the region and enable Tajikistan to adapt to climate change and offset related shocks at national and local levels.

Further, more specific, details of expected results can be found in the LFM ([Annex 7](#)).

¹⁰ *Boghparvar* trains farmers and provides agricultural advice and support to local farms.

¹¹ *Zan va Zamin* provides support and training for women across a broad range of issues.

3. FINDINGS¹²

3.1 PROJECT FORMULATION

3.1.1 Project concept and design, including logical framework

The project has been well conceived with respect to linking the conservation of globally important agrobiodiversity with opportunities to improve local livelihoods, by farming traditional varieties of fruits and nuts, exploring niche markets using the equivalent of 'organically grown' labels and by anticipating climate change impacts using a homologue approach. An overall assessment of the key strengths and weaknesses of the concept and its design is provided in [Table 3.1](#).

Table 3.1 Analysis of key strengths, weaknesses, opportunities and threats (SWOT) of the project concept and its design

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> Provides for <i>in situ</i>* / <i>ex situ</i> conservation of globally important agrobiodiversity. <i>Ex situ</i> conservation of landraces on farms and in gardens provides opportunities to improve local livelihoods through direct consumption and/or sale of agrobiodiversity produce (fruits and nuts). Homologue approach enables farmers to anticipate impacts of climate change and identify and cultivate traditional varieties more tolerant of environmental extremes (e.g. drought, heat, cold etc). Effective delivery mechanism already in place over much of project area, involving partnerships between UNDP Area Offices and JRCs. Micro-credit available to community members for small enterprises and readily accessed from MLFs via JRCs. GEF SGP grants available to community members for agro-enterprises. <p style="text-align: right;">* Limited to land races.</p>	<ul style="list-style-type: none"> Confusion in application of term '<i>in situ</i>' regarding CWRs, for which conservation provisions are actually <i>ex situ</i>. There is a mistake in the target area, cited as 1.5 million hectares of production landscape, for mainstreaming agrobiodiversity conservation. It should be 575,228 ha. Outcomes insufficiently differentiated with respect to their outputs, resulting in some lack of clarity and duplication among outputs. For example, Output 1.6 should be under Outcome 2 where it could incorporate Output 2.4. Output 2.4 concerns establishment of "<i>in situ</i> gene banks ... in 40 home gardens/farms" and its related target is "<i>in situ</i> conservation of wild relatives of globally significant ABD in 40 home gardens/farms ...", indicating a clear misunderstanding of agrobiodiversity conservation principles as such provisions will only address landraces. Lack of any outputs that focus on conservation of fruit and nut CWRs in the wild, natural forests. Homologue approach has only previously been piloted for cereals. Its application to fruits and nuts requires further, complex development of the methodology.
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> Close partnership with GEF Small Grants Programme provides further opportunities for resourcing agro-enterprises and community initiatives. Opportunities for developing niche markets using traditional varieties of fruits and nuts, especially if linked with organic production methods. Tajikistan's forthcoming membership of WTO. 	<ul style="list-style-type: none"> Tajikistan's forthcoming membership of WTO could initially constrain exports of agrobiodiversity products until such time as products can be verified as having met international standards. Increasing affluence of farmers generated from recovering and farming landraces provides them with means of increasing productivity through purchase and application of chemical fertilisers and pesticides.

In this SWOT analysis are identified two important aspects of the project design that should be addressed in so far as is possible during the remaining period of implementation:

- A key confusion that had not been identified until this MTE concerns the misleading use of the term '*in situ*' conservation with respect to Crop Wild Relatives (CWRs) in the Project Document. *In situ* conservation of CWRs refers to their conservation in the wild, as defined in [Section 1.5](#), but in the Project Document it has been used to describe conservation of CWRs as 'living collections' in gardens and on farms. Thus, the project's provisions for *in*

¹² In addition to a descriptive assessment, all criteria marked with an asterisk are rated. The relevant subsections are marked by an asterisk and the rating and its justification are provided immediately at the beginning of the subsection, followed by the evidence.

situ conservation are limited to the *in situ* conservation of traditional varieties (landraces) of fruits and nuts on farms and in home gardens. There are no provisions for the *in situ* conservation of CWRs in the wild, only the *ex situ* conservation of CWRs within agricultural/domestic systems. The latter amounts to *ex situ* conservation of CWRs as 'living collections', as defined in Section 1.5, and while it may have a role in maintaining genetic diversity it is not the same thing as conserving CWRs in their wild, native habitat where they continue to evolve in response to their changing environment. Thus, there needs to be more concrete outputs by way of conserving CWRs *in situ* in genetic reserves. This is discussed further in [Section 4.2](#).

- Tajikistan's plans to become a member of the World Trade Organisation (WTO)¹³ represent a long-term opportunity for marketing agrobiodiversity products but, in the short-term, additional hurdles will need to be cleared in order that such commodities comply with international quality assurance standards. The project will need to find ways of helping farmers and those involved in marketing agrobiodiversity products to get ahead of the game, establishing markets in other countries ahead of their in-country competitors. This is discussed further in [Section 4.3](#).

3.1.2 Project relevance and country ownership

The project is entirely relevant to Tajikistan's rural and national development. If anything, it has become more relevant since its formulation due to the global financial crisis, resulting in more commodities being imported and inflation officially rising to 13%, or more in rural areas where farming is still largely a subsistence economy (Source: Inception Report).

Agriculture is likely to remain the basis of the national economy for the foreseeable future and its reform is a high priority, particularly with respect to diversifying the sector from its dependence on monoculture (cotton) to fruit and vegetables, along with food processing. Other aspects of its reform include: social development of rural areas, new mechanisms of funding, marketing land use rights, integration of water resources management and the development of an agriculture management system at regional and local levels.

National priorities to conserve agrobiodiversity and adapt to climate change are laid out in the *Poverty Reduction Strategy Paper for 2007-2009* and the *National Development Strategy for the period up to 2015*. These national development planning documents specify that agricultural production and natural resources will provide the backbone to economic development and poverty reduction over the coming decade. Specifically, environmentally sustainable development is targeted, including the need to promote the effective conservation and management of biodiversity (i.e. genes, species and ecosystems) and the measures necessary to adapt to or mitigate against the impacts of climate change. These policies underpin the government's ownership of the project, albeit augmented by many other policies, regulations and plans that are outlined in the Project Document.

Other recent policy and regulatory developments are noted in the Inception Report as follows:

- *Law on Local Self-Governance Bodies*, which enhances the budget capacities of jamoats;
- Decree No. 406, which approves the action plan *On Transformation of Agriculture in the Republic of Tajikistan*. This plan stipulates that social development should envisage a "transition from the social function of cotton farming towards a transparent mechanism of distribution of budget resources to create employment opportunities and ensure development of social infrastructure".

¹³ A workshop was held on 7 December 2010, organised by the branch of the Open Society Institute (Tajikistan), Centre IDEAS 'Partnership for Development' (Switzerland) and the Centre for Strategic Studies under the President of the Republic of Tajikistan, to consider the issues involved in Tajikistan's entry to WTO.

Land reform is still on-going and government has yet to clarify land ownership and land access rights. The current land use system is dysfunctional, lacking instruments to ensure positive benefits for sustainable use (both by state institutions and local communities).

3.1.3 Stakeholder participation

The main stakeholders, identified in [Table 2.2](#) of [Section 2.5](#), were involved closely in the development of the Project. It is recorded in the Project Document (paragraph 66) that the major institutional stakeholders expressed their unanimous support for the project, namely:

- The National Biodiversity and Biosafety Centre and UNCBD Focal Point,
- Committee for Environment Protection and Forestry,
- Ministry of Agriculture,
- Agency for Land Management, Cartography and Geodesy,
- Ministry of Economy, Trade and Development,
- Agency on Hydrometeorology and UNFCCC Focal Point,
- Oblast, district and local authorities in proposed project areas,
- Civil society bodies, such as the JRCs and general public, and
- Major relevant donor community players such as ADB, WB, FAO, SDC, EU, and others.

Work with these and other stakeholders began in the Inception Phase, during which a series of reconnaissance visits were made to the four pilot areas to meet with local administrations and farmers to collect basic information, as well as with partners (UNDP Communities Programme, JRCs and GEF Small Grants Programme) to define areas of cooperation for implementation of project activities. Feedback from these meeting indicated that stakeholders were keen to participate in project activities and, more specifically, local communities within the target jamoats were willing to set up nurseries for conservation and propagation of landraces etc.

3.1.4 Replication approach

Replication has been an important consideration in the design of the project, for which there is huge potential given the following:

- Tajikistan is a storehouse of globally significant agrobiodiversity, by virtue of which it has an international role;
- opportunities for the impacts of climate change on agriculture to be mitigated through use of agrobiodiversity (i.e. landraces and CWRs); and
- opportunities for income generation, based on agrobiodiversity conservation and its sustainable use.

The three main demonstrations of the project are *in situ* and *ex situ* conservation of globally significant agrobiodiversity, and the development of agro-enterprises based on locally existing agrobiodiversity. These approaches will provide important lessons that can be extended, first and foremost, to areas where globally significant agro-biodiversity is located, both within and outside Tajikistan.

More broadly, experience gained from these demonstrations will help inform the government's development and implementation of land reform and land use policies and regulations that: (i) promote and facilitate the conservation of the globally-significant agrobiodiversity in the face of climate change; (ii) enable communities to adapt and cope with climate change; and (iii) develop agrobiodiversity-based markets that help farmers to generate additional sources of income.

3.1.5 Cost-effectiveness

Cost effectiveness is described in the Project Document in terms an area of 1.5 million hectares in four pilot areas (Baljuvan, Rasht, Shurobad and Zeravshan) and 36 sub-districts (jamoats), having a population of approximately 152,000 people, being targeted with the conservation and

sustainable use of globally significant agrobiodiversity. As mentioned in [Section 2.4](#), this is misleading because it represents the total extent of the project's four pilot areas, whereas the total agricultural land (productive landscape) within these four areas is very much less (575,228 ha). Cost-effectiveness with respect to efficient use of project resources is considered in [Section 3.3.3](#).

The project is also heralded as being innovative in national and international terms. The project strategy is to strengthen the regulatory framework by complementing ongoing market and governance reforms under the UNDP Communities Programme at national level. From an international perspective, this will be the first GEF project within Central Asia to use a bottom-up approach to policy and institutional development within the biodiversity sector that is fully responsive to actual needs, rather than based on national trends or international guidance.

3.1.6 UNDP comparative advantage

According to the original PIF, the project complies fully with comparative advantages matrix provided by the GEF Council. It builds on UNDP's solid foundation created under its US \$ 20 million Communities Programme in support of Tajikistan's Poverty Reduction Strategy by developing capacities at jamoat and district levels to provide services to villages, communities and farmers, much of which is facilitated through the 86 JRCs and associated micro-financing initiatives that UNDP has created under its Programme. Thousands of villages have been able to gain access to micro-loans from these revolving funds.

The Communities Programme evolved from the stability and reconstruction activities initiated during the Civil War in 1996 and did not have much emphasis on environmental security. Increasingly, UNDP has been mainstreaming environment, notably biodiversity and energy conservation, into the Programme and agrobiodiversity conservation is an exceptionally relevant complement to securing local livelihoods and the environment on which they are dependent.

3.1.7 Linkages between project and other interventions within the sector

As indicated in the previous [Sections 3.1.3](#) and [3.1.9](#) above, the Project is closely aligned with UNDP's Communities Programme and GEF's SGP. The former is financed by UNDP, United Kingdom (DfID), European Union (ECHO and TACIS), World Bank, Canadian International Development Agency, Swiss International Development Agency, Government of Finland and others.

The project is aligned with the Central Asian Countries Initiative for Land Management (CACILM) initiative with respect to: (i) *Demonstrating Local Responses to Combating Land Degradation and Improving Sustainable Land Management in SW Tajikistan* - funded by GEF and implemented by UNDP, beginning in April 2007; and (ii) *Rural Development in Tajikistan* - funded by ADB and GEF, beginning in May 2008.

The project has also had the opportunity to collaborate with and incorporate lessons learnt from the UNEP/GEF regional project on *In Situ/On-Farm Conservation and Use of Agricultural Biodiversity (Horticultural Crops and Wild Fruit Species) in Central Asia*, which covers all five countries of Central Asia. In Tajikistan, this project focused on the *ex situ* conservation of stone fruit species. Lesson learnt from this project led to the inclusion of *ex situ* conservation of CWRs.

3.1.8 Assumptions and risks

Assumptions and risks are identified in the Project Document, together with a strategy to mitigate the latter. Moderate risks include: a stalling in economic development; insufficient economic returns from the sustainable use of agrobiodiversity; insufficient access to credit for farmers; climate change threats to agrobiodiversity; and outstanding legal issues concerning land ownership and access rights.

Further moderate risks were identified during the Inception Phase, namely: resignation of the CTA on whom the climate change modelling is dependent; inability to develop the homologue approach for the situation prevailing in Tajikistan and also to build national capacity in applying it post-project; and administrative barriers at local and national levels that could delay implementation. Various other risks and assumptions are identified in the LFM but without any supporting mitigation strategy.

A new risk that surfaced during the MTE is Tajikistan's planned membership of the World Trade Organization, as mentioned in [Sections 2.4](#) and [3.1](#), which will mean that new trading standards will apply to exports. This will be both a challenge and opportunity.

3.1.9 Management arrangements

The project has been designed to be implemented by UNDP and nationally executed, in accordance with UNDP procedures, by the National Biodiversity & Biosafety Centre (NBBC) under the purview of the Committee for Environmental Protection. Overall guidance is provided by the Project Board, for which the ToR are provided in the Inception Report (Annex V). Its membership, which is supposed to be gender balanced according to the Project Document, comprises the following:

- UNDP CO (represented by Sukhrob Khosmukhamedov);
- Department of Ecology and Emergency Situations of the President's Administration of the Republic of Tajikistan (represented by Zaynullo Sharipov);
- State Agency on Forestry and Hunting under the Committee on Environment Protection (represented by Kholmumin Safarov);
- Academy of Science of the Republic of Tajikistan (represented by Khurshed Hilolov); and
- Representatives of target jamoats (communities), represented by Muhabbat Mahmadalieva from the NGO Zan van Zamin. This lady is the only female member of the Board.

The Project Board is supposed to meet at least every six months. To date meetings have been held on 10 December 2009, 22 May 2010, 6 April 2011 and mostly recently on 15 February 2012, when the meeting was extended to include representatives of all stakeholders, including farmers.

The NBBC is responsible for establishing a Project Implementation Unit (PIU), with provisions in the Project Document for a National Project Manager, Deputy Project Manager, National Project Experts (3), Finance Assistance and Project Assistant. These provisions were modified during the Inception Phase, key changes being the inclusion of a part-time Chief Technical Advisor and the redundancy of the three National Project Experts in lieu of technical support received from national/international consultants and also the UNDP Area Offices, as shown in [Figure 3.1](#). The UNDP Area Offices working in close collaboration with JRCs and relevant experts provide a particularly effective mechanism for local delivery of certain project outputs in target jamoats.

A key challenge to the implementation approach identified in the Inception Report has been the instability of national environmental and conservation institutions, which were in an almost continuous state of flux with respect to their structures and remits, as well as their senior staff during and prior to the project's inception. This poses serious problems for sustainable capacity building, quite apart from jeopardising effective collaboration and partnerships. On the positive side, the Ministry of Agriculture and Environmental Protection was transformed into national, independent committees, agencies, centres, making it easier for the project to work directly and less bureaucratically with the relevant functional unit.

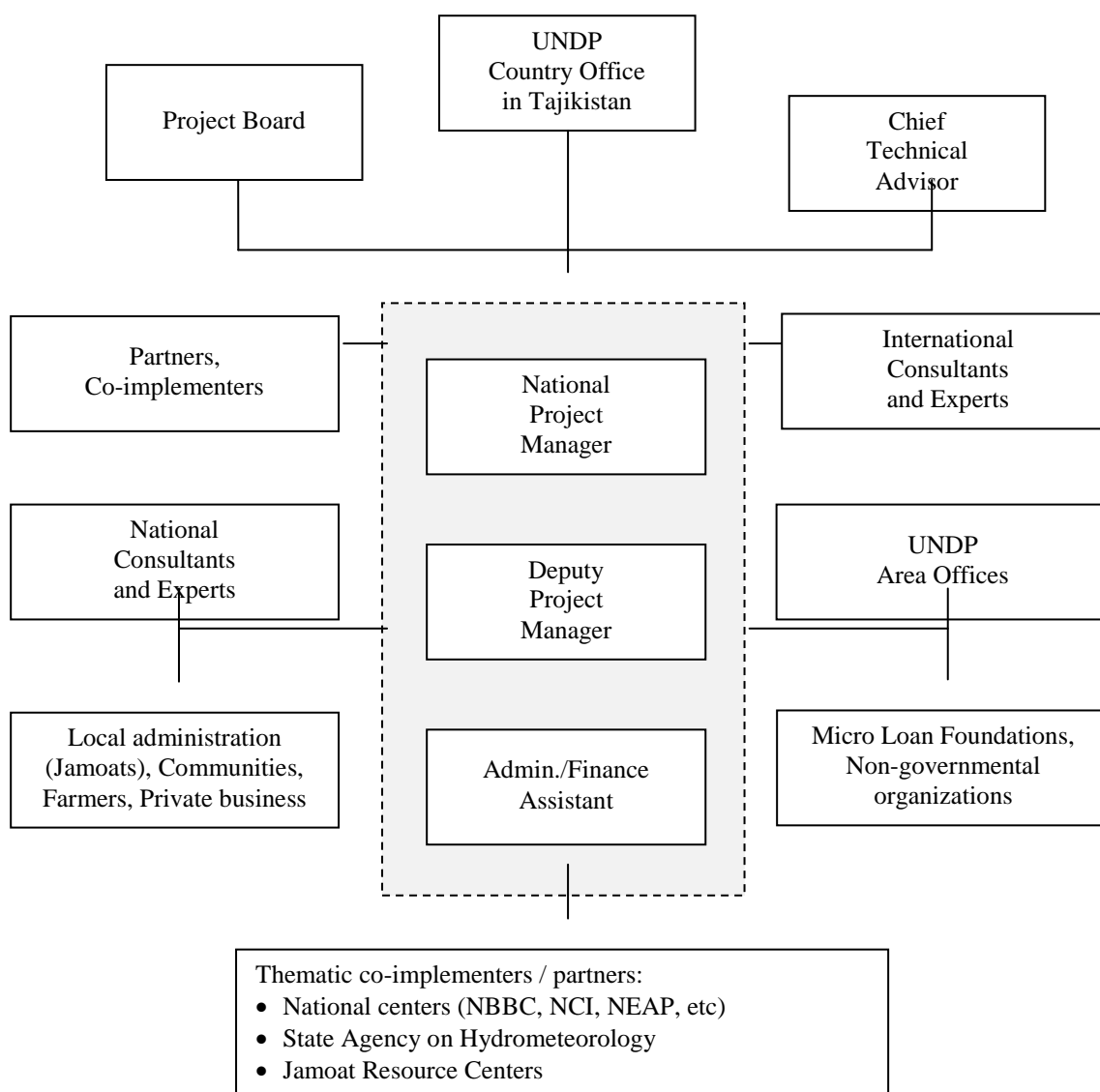


Figure 3.1 Project management structure (Source: Inception Report)

3.2 PROJECT IMPLEMENTATION

3.2.1 Financial planning

The total budget in the Project Document is US\$ 4.00 million, of which US\$ 1.90 million (48%) is grant-aided by GEF, US\$ 0.50 million (13%) is grant funding from UNDP and the remaining US\$ 1.60 million (40%) is in kind co-financing, equivalent to US\$ 1.03 (26%) from UNDP and US\$ 0.57 (14%) from Government (NBBC).

In addition to the US\$ 1.6 million of in-kind co-financing identified during the formulation of the project, a further US\$ 165,580 has been invested in-kind in the project by a wide range of public organisations and productive corporations, a large proportion of which has come from the GEF Small Grants Programme. Details are provided in [Table 3.2](#).

Table 3.2 Sources and amounts of co-financing committed at the time of CEO endorsement of the Project Document in June 2009 (i.e. proposed) and subsequently allocated during implementation in 2009-2014 (i.e. actual)

Cofinancing Type/Source	IA own financing (US\$)		Government (US\$)		Other sources* (US\$)		Total financing (US\$)	
	Proposed [#]	Actual ⁺	Proposed [#]	Actual ⁺	Proposed [#]	Actual ⁺	Proposed [#]	Actual ⁺
Grant								
UNDP (TRAC)	500,000	246,234					500,000	246,234
Credits							0	0
Loans							0	0
Equity							0	0
In-kind								
NBBC			570,000	256,035			570,000	256,035
UNDP Area Offices	1,030,000	198,150					1,030,000	198,150
GEF SGP					0	70,800	0	70,800
Institute of Farming					0	12,987	0	12,987
NRCGR					0	12,377	0	12,377
Hydrometeorology Agency					0	12,209	0	12,209
SAFH					0	11,915	0	11,915
PO "Istochnik Zhizni"					0	8,330	0	8,330
PO "Kuhistoni Dashtijum"					0	3,000	0	3,000
PO "Safari"					0	2,143	0	2,143
PO "Rushdi Shurobod"					0	6,464	0	6,464
JRC "Nushor"					0	3,060	0	3,060
PC "Komron"					0	1,413	0	1,413
PC "Yoghuk"					0	3,235	0	3,235
PC "Khujai Sabz"					0	2,200	0	2,200
FA "Hojiyon"					0	6,514	0	6,514
MLF "Imodi Khutal"					0	8,932	0	8,932
Non-grant instruments							0	0
Other *							0	0
TOTAL	1,530,000	444,384	570,000	256,035	0	165,579	2,100,000	865,998

*Contributions from multilateral agencies, bilateral development cooperation agencies, NGOs, private sector and others.

PC = Productive Corporation, PO = Public Organisation, FA = Farm Association, JRC – Jamoat Resource Centre.

[#]Proposed co-financing refers to co-financing proposed at time of CEO endorsement.

⁺Actual co-financing refers to co-financing disbursed to date (i.e. 2009-2012).

Table 3.3 Annual budgets, including cash and in-kind co-financing for 2009 - 2014

PIMS 3647	Total	Annual budget (US \$)					Total
Donor	2009-2011	2009	2010	2011	2012	2013-2014	2009-2014
GEF Contribution	848,890	76,100	439,000	333,790	590,500	460,610	1,900,000
Total	848,890	76,100	439,000	333,790	590,500	460,610	1,900,000
Cash co-financing – partner managed							
UNDP (TRAC)	236,175	34,175	100,500	101,500	100,500	163,325	500,000
Total	236,175	34,175	100,500	101,500	100,500	163,325	500,000
In-kind co-financing							
NBBC	210,000	30,000	90,000	90,000	120,000	240,000	570,000
GEF Agencies	0	0	0	0	0	0	0
UNDP Area Offices	515,000	103,000	206,000	206,000	206,000	309,000	1,030,000
Others	0	0	0	0	0	0	0
Total	725,000	133,000	296,000	296,000	326,000	549,000	1,600,000
Grand Total	1,810,065	243,275	835,500	731,290	1,017,000	1,172,935	4,000,000

Table 3.4 Annual disbursements, including cash and in-kind co-financing, up to 30 June 2012

PIMS 3647	Total	Annual disbursements (US \$)				Planned	Total
Donor	2009-2012	2009	2010	2011	30-6-2012	2012-2014	2009-2014
GEF Contribution	632,210	72,427	242,770	259,190	57,823	1,267,790	1,900,000
Total	632,210	72,427	242,770	259,190	57,823	1,267,790	1,900,000
Cash co-financing – partner managed							
UNDP (TRAC)	246,234	29,083	73,026	103,531	40,594	253,766	500,000
Total	246,234	29,083	73,026	103,531	40,594	253,766	500,000
In-kind co-financing							
NBBC	256,035	29,100	91,500	90,290	45,145	313,965	570,000
GEF SGP	70,800	0	25,800	30,000	15,000	0	70,800
UNDP Area Offices	198,150	56,400	56,700	56,700	28,350	831,850	1,030,000
Others	94,780	0	24,862	60,986	8,932	0	94,780
Total	619,765	85,500	198,862	237,976	97,427	1,145,815	1,765,580
Grand Total	1,498,209	187,010	514,588	600,697	195,844	2,667,371	4,165,580

The total annual budgets for 2009-2014 and disbursements for 2009-30.06.2011 are shown in [Tables 3.3](#) and [3.4](#), respectively. Reference to [Figure 3.2](#) shows the pattern of expenditure during the initial three years of the project. Key points to note are:

- Very little (4%) of the total budget was dispersed in 2009-2010, which is often the case during the Inception Phase, and is in accord with the fact that project did not become fully operational until mid-2010.
- Expenditure picked up in subsequent years (2010-2011), with about 15% of the budget being spent annually.
- Over 65% of the budget remained unspent at the beginning of 2012. Based on earlier rates of expenditure, it may be difficult to disburse the remaining funds effectively, in the most sustainable way, by June 2014 when the project is due to be completed (see [Section 4.4](#)).

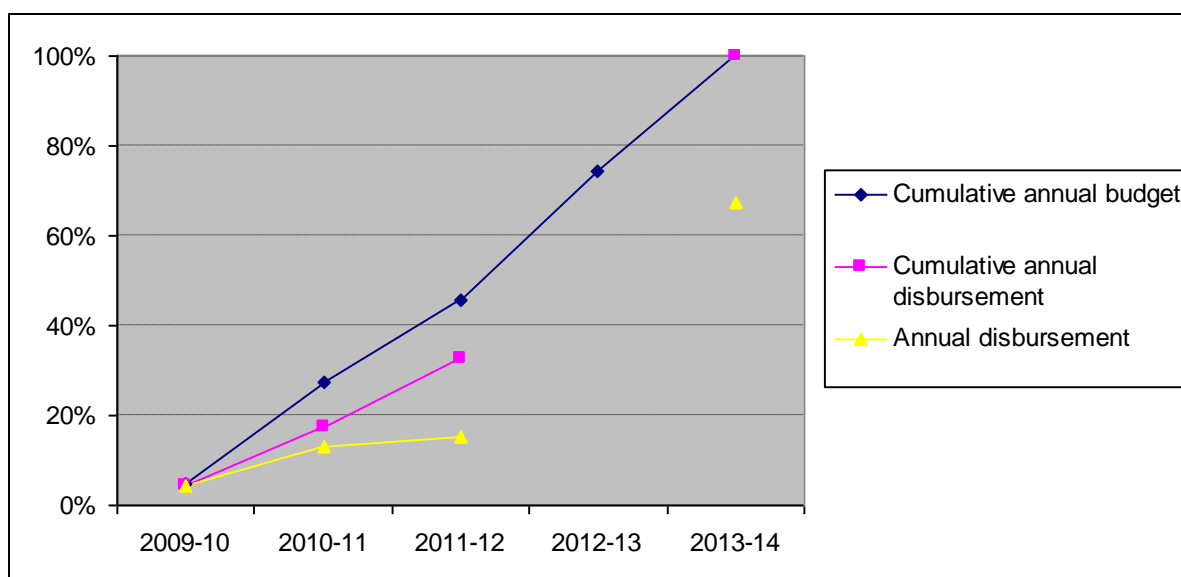


Figure 3.2 Cumulative annual budgets and disbursements of GEF and UNDP (TRAC) funds for 2009-10 to 2011-2012 (31 December 2011), expressed as a percentage of the total project budget (US\$ 2.4 million). Over 65% of the budget awaits disbursement during 2012-2014, as indicated by the annual disbursements shown separately as a percentage of the total budget.

3.2.2 Monitoring and evaluation*

Monitoring and evaluation is rated as **Satisfactory** with respect to project implementation, as indicated in [Table 3.5](#). In general, the Monitoring and Evaluation Plan outlined in the Project Document has been followed rigorously, including routine quarterly (Quarterly Progress Reports) and annual (APR/PIR) reporting. The M&E Plan was reviewed and updated during the inception phase, details of which are documented in the Inception Report. Particularly encouraging is the comprehensive documentation of all project outputs, much of which can be developed into a series of publications providing technical guidance and well as a scientific record of technical findings.

The Project Board has met annually ([Section 3.1.9](#)), which is less frequent than specified in the Project Document (six monthly), and all meetings to date have been in Dushanbe. It is important for Board members to be exposed to what is actually happening in the field, as well as providing stakeholders with the opportunity to engage with them directly.

The Logical Framework Matrix (LFM), attached as [Annex 6](#), provides the basis for monitoring performance in project implementation and the GEF Tracking Tool, attached as [Annex 8](#), measures progress in achieving the impacts and outcomes established at portfolio level under the biodiversity focal area. There are a number of weaknesses in the design of the LFM, limiting its usefulness as a monitoring tool. These mostly concern the correctness and SMARTness²² of its OVs and targets. Proposed changes to the LFM have been discussed with UNDP and PIU, including rationalisation of outputs (without making to changes to outcomes), and a revised version is tentatively provided in [Annex 7](#) for further consideration.

3.2.3 Execution and implementation modalities

The project is being executed well, founded on a strong and committed day-to-day working relationship between NBBC and PIU in close collaboration with the Committee on Environmental Protection. Together with the implementing agency, UNDP, these bodies have raised the profile of agrobiodiversity nationally and locally and in so doing they have engaged effectively with a

wide range of stakeholders. Many of these stakeholders are partners, contributing to project outputs in vital ways. They include the micro-financing institutions and also the GEF Small Grants Programme, all of whom are able to provide the resources necessary for local people to be able to empower themselves.

The project and those responsible for its implementation were consistently applauded, without exception, by stakeholders whom the evaluators encountered. The only 'short-coming' in the eyes of most stakeholders in the project areas is the limited access to and amount of funding available via MLFs. This is not a short-coming *per se*, it is an inevitable consequence of any successful demonstration project, hence the importance of sustainability provisions and opportunities for replication.

Other aspects of implementation are considered elsewhere, such as adaptive management, technical capacities and partnerships in [Table 3.5](#).

3.2.4 Management by UNDP Country Office

The Implementing Agency, UNDP Country Office, has contributed significantly to the successful implementation of this project to date in a number of fundamental ways, notably:

- TRAC funding, amounting to 21% of the US\$ 2.4 million project budget.
- The services of its Area Offices, including UNDP managerial and technical staff, to support implementation in the different project areas and procure local experts for the project as necessary.
- Support and linkages with UNDP's Communities Programme, including the institutional infrastructure established at jamoat level (existing JRCs and associates MLFs), enabling implementation to be fast-tracked.

While much of the above was anticipated in the project's design, it is important not to take this context for granted because it has enabled implementation to proceed more rapidly than would have been possible otherwise, despite the slow start to this project.

Clearly, UNDP enjoys good working relationships with the Executing Agency and this is further enhanced by PIU. UNDP is also maintaining close oversight of project implementation, which is particularly important given the technical complexities of the Homologue Approach adopted by the project.

The challenging areas for particular support by the Implementing Agency over the remaining term of the project are considered to be:

- Development, mainstreaming and packaging of agrobiodiversity policy at national and local levels, much of which needs to be framed with a national agrobiodiversity strategy (Outcome 1).
- Developing a sustainable exit strategy for the Homologue Approach, given modelling limitations and the need to develop technical capacity nationally to support the further development of agrobiodiversity in the face of climate change post-project (Output 2.5).
- Demonstrating sustainable markets through a supply chain approach for a number of agrobiodiversity products, including appropriate branding and certification (Outcome 3).

3.3 PROJECT RESULTS

3.3.1 Attainment of objectives*

The Project is evaluated as Satisfactory with respect to the achievement of its overall objective, based on assessment of project outcomes and outputs (detailed in **Annex 5** and summarised in **Table 3.5**), project performance (summarised in **Table 3.6**) and project performance indicators (**Annex 6**).

The Project's overall (development) objective, "*Globally significant agrobiodiversity conservation and adaptation to climate change are embedded in agricultural and rural development policies and practices at national and local levels in Tajikistan*", comprises three outcomes. The first addresses the policy, regulatory and institutional framework for conserving agrobiodiversity and utilising it sustainably to improve the livelihoods of farming communities in rural areas; the second focuses on improving capacities to sustainably manage agrobiodiversity resources for conservation and development purposes; and the third concerns the development of agrobiodiversity enterprises and markets that support agrobiodiversity production. All three outcomes are inter-connected and bound by the common thread needing to manage and adapt to the impacts of climate change, notably rising temperatures and more frequent extreme events, such as periods of very cold or hot conditions, droughts and flooding. Agrobiodiversity, it is considered, provides local communities with possibly the best opportunity to cope with climate change by bringing back into production local varieties of food plants that are better adapted to climate extremes than cultivars introduced from other regions and, indeed, parts of the world.

A qualitative, evidence-based assessment of the extent to which these outcomes have been addressed, is provided in [Annex 5](#) for each project output. This takes into account what was originally planned (Project Document) and subsequently modified at the onset of project implementation (Inception Report), while also providing a self-assessment by PIU on the project's progress to date. Outputs have also been rated on the basis of this qualitative assessment, the results of which are shown in [Table 3.5](#). Key points to note are as follows:

- **Outcome 1** is rated as **Moderately Satisfactory**, in line with the ratings of the majority of its outputs. **Outputs 1.4** and **1.6**, which certainly complement each other, are rated **Satisfactory** in view of the excellent progress made in the project sites with respect to constructive cooperation between local communities and administrations and tangible evidence of agrobiodiversity being propagated in nurseries or cultivated in gardens and on farms for conservation and food production purposes. **Output 1.7** is rated as **Moderately Unsatisfactory** because there is no evidence of any producer societies have been established to link farmers with markets for specific crops. If there is unlikely to be any mileage in this concept, then it should be dropped at this juncture.

While some progress has been made at policy and institutional levels, much more in depth focus is required to identify specific policy and regulatory changes that are necessary to support agrobiodiversity conservation and its role in food security in the face of climate change. A key output (**1.8**) is the development of a long-term strategy for agrobiodiversity, for which there is currently a concept. Its drafting should now be given high priority to allow adequate time for public consultation, adoption and, ideally, some degree of implementation during the life of the project.

- **Outcome 2** is rated as **Satisfactory**, a majority of outputs having been rated as either Satisfactory or, in the case of **Outputs 2.2** and **2.3**, **Highly Satisfactory**. The high level of achievement attained under **Output 2.2** reflects a successful, 'model' approach that is community-based, grounded in effective knowledge exchange whereby synergy is generated from sharing scientific and traditional knowledge, and resourced by a sustainable financing mechanism (revolving fund). Achievements under **Output 2.3** are also impressive, having witnessed almost the entire process from collection of seed in the field to its accession and storage at the Plant Genetic Resources Centre just outside Dushanbe, database entry, and subsequent backup of collections by sending samples to seed banks in Svalbard (Norway) and the Vavilov Institute (Russia).

A critically important issue¹⁴ concerns **Output 2.4** (*in situ* gene banks established in 40 home gardens/farms in 4 pilot sites ...) and the related target for one of the OVIs in the LFM

¹⁴ This issue arises from a flaw in the project's design, as noted in Annex 5, and should have been picked up by the RTA and/or GEF Secretariat prior to the approval of the Project Document. The fact that it passed unnoticed may partly reflect the fact that agrobiodiversity is a relatively recent branch of conservation biology

([Annex 7](#)): “*in situ* conservation of wild relatives of globally significant ABD in 40 home gardens/farms in 4 project areas ...” By definition, it is not possible to conserve CWRs *in situ* in home gardens or on farms; such a scenario of introducing CWRs to home gardens/farms by seed or transplant is commonly defined as *ex situ* conservation of CWRs as ‘living collections’ (see [Section 1.5](#)). The issue at stake is the removal of CWRs from the wild where they are subject to natural selection pressures, as opposed to artificial (subject to human influence) pressures in gardens and on farms. The genetic value of CWRs is based on their wild existence, where they adapt over time to changing conditions and develop traits, such as drought and frost tolerance, pest and disease resistance, that are highly desirable for cultivation and horticulture purposes.

This target has been inaccurately specified (see [Section 3.1.1](#)), referring instead to the *in situ* conservation of landraces and *ex situ* conservation of CWRs as ‘living collections’ in home gardens and on farms. Thus, the project is focusing its CWR conservation efforts on establishing living collections of CWRs in gardens, nurseries and on farms as opportunities present themselves. There is nothing wrong in such provisions, provided all partners and stakeholders, mostly importantly the local farmers, fully understand what is being done and appreciate that this is a short-term, fall-back option, the long-term and ultimately only sustainable solution being to conserve such CWRs in the wild. **However, even if farmers understand what they are doing, the message that is being unintentionally communicated by the project to the public and uninformed decision makers is that it is more important to conserve CWRs in living collections than in the wild.**

Thus, the project needs to address this weakness in its design, which gives a misleading impression in the Project Document that *in situ* conservation of CWRs is among its targets when actually this is not the case (see [Section 3.1.1](#)). Ideally, **the project should demonstrably deliver a clear message that conservation of wild fruit and nut forests is of paramount importance for sustaining future livelihoods** that are likely to become increasingly dependent on traditional varieties of cereals, vegetables, fruits and nuts adapted to local climate and other conditions.

- **Outcome 3** is rated as **Satisfactory**, with **Satisfactory** progress in the case of **Output 3.1** (building capacity among agro-enterprises), **Output 3.4** (crop certification), **Output 3.5** (GEF SGP seed grants for agro-enterprises) and **Output 3.6** (MFIs supporting agro-enterprises). The other three outputs concern marketing, international markets, and supply chains and in all cases there has been less marked progress other than producing a Marketing Development Strategy and examining supply/value chains. Clearly, much more emphasis will need to be devoted to developing agrobiodiversity markets over the remaining period of the project.

Progress towards meeting end of project targets, established for the Objectively Verifiable Indicators in the LFM, has also assessed and rated ([Annex 6](#)). Ratings indicate **Moderately Satisfactory** or **Satisfactory** progress towards targets for 2014 for the majority of indicators, exceptions being a **Highly Satisfactory** result for the *ex situ* conservation of globally important agrobiodiversity under Outcome 2 and a **Moderately Unsatisfactory** result for homologue

and some of its concepts are complex and, therefore, less readily grasped. Importantly, this oversight, repeated in the RTA's presentation at the project's Inception Workshop in June 2010 (as evident from the slide reproduced in Annex 5), highlights the inadequate technical oversight afforded to the project by the GEF Secretariat and its implementing agency (UNDP) global and regional levels. Given this wider context, the evaluators have refrained from downgrading an otherwise Satisfactory rating for Output 2.4 because this would undermine the project's considerable progress in establishing gene banks that essentially conserve landraces *in situ* and CWRs *ex situ* in nurseries and gardens and on farms. That said, having identified this issue at mid-term, it now needs to be resolved as a matter of priority in order to fully implement what is at the core of the project's development objective. Where necessary, PIU and the project executing (NBBC) and implementing (UNDP Tajikistan) agencies should be given every support by the GEF Secretariat and UNDP Regional Office in Bratislava to make the necessary refinements to the LFM and relevant outputs so that the project and its partners can deliver a satisfactory or better than satisfactory result.

Table 3.5 Mid-Term Evaluation ratings of project outcomes and outputs, based on evidence provided in Annex 5

Objectives and Outputs	Rating*					
	HS	S	MS	MU	U	HU
Outcome 1 Agrobiodiversity conservation and adaptation to climate change through supportive policy, regulatory and institutional frameworks.			✓			
Output 1.1 Agrobiodiversity conservation and adaptation principles mainstreamed into local and national agricultural, trade and industry policies and programmes.			✓			
Output 1.2 Extension package for promoting climate resilient farming varieties developed and integrated into the national extension service and delivery system.			✓			
Output 1.3 Capacity of local government to enforce policies, sectoral guidelines and spatial plans in support of agrobiodiversity conservation and adaptation to climate change increased in 4 pilot areas.			✓			
Output 1.4 CSOs and local government in pilot areas have skills to actively support communities to integrate agrobiodiversity conservation into farming systems, build adaptive capacity, and link such production to markets.		✓				
Output 1.5 Capacity building programs implemented to ensure institutions charged with responsibility for managing the ex-and in-situ gene banks are effective.			✓			
Output 1.6 ABD policies applied in 4 pilot areas & adopted in >40 home gardens/farms.		✓				
Output 1.7 Local level producer societies for specific crops (such as fig, pistachio, walnut, pomegranate, apricot, almond, mulberry) promoted to provide incentives for adoption (linking farmers to markets, and credit).				✓		
Output 1.8 Development of long-term strategy for conservation of ABD and adaptation to climate change.			✓			
Outcome 2 Improved capacity for sustaining agrobiodiversity in the face of climate change		✓				
Output 2.1 Farmers in the 4 pilot areas provided with skills and knowledge to increase farm productivity (and food security) using climate resilient agrobiodiversity friendly practices.		✓				
Output 2.2 Community-based participatory methods (building on traditional knowledge) developed and implemented for ex situ conservation especially of recalcitrant materials (seed that cannot be stored ex situ).	✓					
Output 2.3 Tajik ABD germplasm available to national, regional and global crop improvement programmes.	✓					
Output 2.4 In situ "gene banks" established in 40 home gardens/farms in 4 pilot sites, including collection, geo-referencing, identification, characterization, and/or germplasm-banking of prioritized ABD (largely fruit and nuts).		✓				
Output 2.5 Climate change and crop modelling facilitates the selection of the most appropriate homologue sites that represent present and future conditions.			✓			
Output 2.6 Sustainable management strategies for the 4 project areas and areas certified as sources of climate resilient wild crop relatives.				✓		
Output 2.7 A network of databases established on materials maintained in situ and ex situ.		✓				
Output 2.8 Awareness campaigns in partnership with the GEF SGP address conservation of agro-biodiversity and adaptation to climate change.			✓			
Outcome 3 Market conditions favour sustainable agrobiodiversity production		✓				
Output 3.1 Capacity building programme to ensure that institutions charged with responsibility for supporting the development of agrobiodiversity based agro-enterprises are effective.		✓				
Output 3.2 Identification, differentiation and marketing programs for certified products from 4 pilot areas and non-certified ABD climate resilient products grown, developed and implemented through a supply chain approach.			✓			
Output 3.3 International marketing campaign (trade fairs, online) to establish Tajikistan as an international source of ABD-friendly climate resilient products for consumers concerned about the point of origin, sustainability and heritage of food in face of CC.				✓		

Objectives and Outputs	Rating*					
	HS	S	MS	MU	U	HU
Output 3.4 Crop certification established for products increasing farmer's ability to sell products and services at a premium.		✓				
Output 3.5 Seed grants (through partnership with GEF Small Grants Programme) support development of agrobiodiversity based agro-enterprises at each site.		✓				
Output 3.6 Increased funding available for start-up initiatives and SMEs, provided by existing MFIs (supported by JRCs/UNDP Communities Programme) to ABD agro-enterprises.		✓				
Output 3.7 Enhanced business advisory Centres and Jamoat Resource Centres support efforts to bring climate resilient ABD-friendly products to markets.				✓		

* **HS** = Highly Satisfactory; **S** = Satisfactory; **MS** = Moderately Satisfactory;

MU = Moderately Unsatisfactory; **U** = Unsatisfactory; **HU** = Highly Unsatisfactory

modelling approach. Given the unanticipated limitations of the homologue modelling approach, it seems unlikely that national agencies, such as the Ministry of Agriculture, will have developed the capacity to generate such models to inform farmers of what best to grow where in response to climate change impacts unless there is a radical review of this part of the project.

In line with GEF requirements (UNDP-GEF 2012), performance has also been rated in terms of project relevance, effectiveness, efficiency, sustainability and impacts, as well as the quality of M&E systems. These ratings are provided in [Table 3.6](#), along with a brief justification based on evidence outlined earlier in this report or in the sub-sections below.

Table 3.6 Project performance ratings

Project Component / Objective	Rating	Comments
Project Formulation (using 6-point satisfaction scale)		
Conceptualization/Design	MS	Significant flaw in design of project with respect to <i>in situ</i> conservation of CWRs, resulting in inadequate <i>in situ</i> provisions (see Section 3.1.1 and SWOT analysis in Table 3.1).
Stakeholder participation	HS	Close involvement of key stakeholders from outset of project formulation has undoubtedly contributed to strong collaboration and good rapport during implementation (see Sections 2.5 and 3.1.3).
Project Implementation (using 6-point satisfaction scale)		
Implementation Approach	S	
<i>Use of logical framework</i>	S	LFM has been used extensively during implementation, beginning with its thorough review during project inception phase (see Inception Report), although it appears that not all the approved changes have been consistently adopted. Implementing Agency has been pragmatic about weaknesses in LFM, advising its client to await MTE recommendations before making any significant changes that might otherwise delay implementation.
<i>Adaptive management</i>	MS	PIU is competent and highly committed in its work, with the ability to adapt implementation as needs arise. Examples include: <ul style="list-style-type: none"> ▪ Signing contracts with national experts caused delays in 2009. This was avoided subsequently by adopting institutional contracts and Inter-Office Memorandums. ▪ Establishment of ABD, climate and marketing experts groups to provide technical advice on implementation of project components. ▪ Establishment of Community Councils in target jamoats resulted in more efficient implementation of activities under Output 1.6. ▪ Inexperience of UNDP reporting procedures among partner organizations hampered completion of contracts, so partners were given additional training in financial reporting.
<i>Use / establishment of information technologies</i>	MS	Project has developed a sound GIS/database system for managing and mapping agrobiodiversity data; and it currently uses Facebook for communicating the work

		of the project. It will have a web page hosted by UNDP in 2012. It should have its own website, ideally hosted by NBBC, providing better access to its information products (training manuals, best practice guidance, technical reports etc). Plans to network the GIS/database system have yet to be implemented. A web-based GIS would seem to be appropriate.
<i>Operational relationships between the institutions involved</i>	S	These appear to be healthy and productive. Certainly the Executing Agency (NBBC) and PIU work closely together, and NBBC was noticeably proactive in its engagement with partners and other stakeholders in the field.
<i>Technical capacities</i>	S	Observations suggest that the project is staffed with technically competent and highly committed professionals, supported by core national consultants proficient in their respective areas of expertise.
Monitoring and evaluation	S	See comments in Section 3.2.2 .
Stakeholder participation	HS	There has been close involvement and collaboration with partners and other stakeholders throughout project implementation to date. All stakeholders and have spoken highly of the project without exception.
<i>Production and dissemination of information</i>	MS	It is difficult to assess the technical quality of reports, strategies, training manuals, best practice guidance etc as most of these are in Russian or Tajik. However, the fact that reports have been drafted for on most project outputs is very encouraging and the sooner these are available via a project website the more readily will stakeholders and members of the public be able to help themselves to information relevant to their needs. Currently, some of the draft reports and brochures focus too much on describing the activities undertaken rather than including vital knowledge, best practice, policy guidance and so. Very little of this information is readily accessible.
<i>Local resource users and NGOs participation</i>	HS	Strong levels of engagement with farmers who have responded very positively to the project's concept and approach, for which a large body of evidence is documented in Annex 5 .
<i>Establishment of partnerships</i>	HS	Much of the success in the project areas can be attributed to the model partnership approach involving the target jamoat, its JRC, an MLF and the UNDP Area Office working together in support of farmers learning to conserve and cultivate agrobiodiversity and others seeking agro-business opportunities. GEF SGP is another key partner contributing to the success of pilot demonstrations.
<i>Involvement / support of government institutions</i>	S	High level of ownership of project by NBBC (Executing Agency) and, in general, good support from key government stakeholders, as reported in Section 3.1.3.
Project Results (using 6-point satisfaction scale)		
Achievement of objective	S	Overall rating based on Table 3.5 and evidence provided in Annex 5 .
Attainment of Outcome 1	MS	Rating taken from Table 3.5 and based on evidence provided in Annex 5 .
Attainment of Outcome 2	S	Rating taken from Table 3.5 and based on evidence provided in Annex 5 .
Attainment of Outcome 3	S	Rating taken from Table 3.5 and based on evidence provided in Annex 5 .
Overall Quality of Project Outcomes (using 6-point satisfaction scale)		
<i>Relevance</i>	R	See comments under Section 3.3.2 .
<i>Effectiveness</i>	MS	See comments under Section 3.3.3 .
<i>Efficiency</i>	S	See comments under Section 3.3.3 .
Sustainability (using 4-point likelihood scale)		
Overall Likelihood of Sustainability ¹⁵	ML	See comments under Section 3.3.4 .
<i>Financial resources</i>	ML	See comments under Section 3.3.4 .
<i>Socio-economic</i>	L	See comments under Section 3.3.4 .
<i>Institutional framework and governance</i>	L	See comments under Section 3.3.4 .

¹⁵ The 2012 Guidance for conducting terminal evaluations of UNDP-supported, GEF-financed projects states in the Rating Project Performance table on page 30: Overall likelihood of risks to sustainability. This is misleading as it is the likelihood of sustainability which is supposed to be assessed, not the likelihood of the risk occurring.

<i>Environmental</i>	ML	See comments under Section 3.3.4 .
Impact (using 3-point impact scale)		
<i>Environmental status improvement</i>	S	Likely significant improvement in conservation status of agrobiodiversity, largely though <i>in situ</i> conservation of landraces on farms and gardens and <i>ex situ</i> conservation of CWRs in living collections (botanical gardens and on farms).
<i>Environmental stress reduction</i>	M	Increase in environmental stress likely to be avoided IF agrobiodiversity and organic production are allied, eliminating need for chemical fertilisers / pesticides. Currently, environment in these remote areas is likely to be minimally stressed from chemicals, as farmers cannot afford them (see Section 3.3.5).
<i>Progress towards stress/status change</i>	S	Likely significant improvement in livelihoods for farming communities engaged in agrobiodiversity production and associated enterprises indicative of minimal reduction in pressures on environment and significant improvements in its status.
Overall Project Results (using 6-point satisfaction scale)	S	

Satisfaction scale: Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory

Sustainability scale: Likely, Moderately Likely, Moderately Unlikely, Unlikely
Impact scale: Significant, Minimal, Negligible

Relevance scale: Relevant; Not Relevant

3.3.2 Relevance*

Relevance is rated as **Relevant** ([Table 3.6](#)). The overall (development) objective of the Project and its three immediate objectives remain as relevant today, in respect of conserving and sustainably using globally significant biodiversity in the face of climate change, as when the Project was conceived over a decade ago.

3.3.3 Effectiveness and efficiency*

Effectiveness and efficiency are rated as **Moderately Satisfactory** and **Satisfactory**, respectively ([Table 3.6](#)). Effectiveness concerns the extent to which objectives are achieved or likely to be achieved, Efficiency concerns the extent to which results have been delivered with the least costly resources possible; also called cost effectiveness or efficacy¹⁴.

Effectiveness To date, the project objective of *embedding globally significant agrobiodiversity conservation and adaptation to climate change in agricultural and rural development policies and practices at national and local levels in Tajikistan* has been delivered satisfactorily with respect to Outcomes 2 and 3, and moderately satisfactorily with respect to Outcome 1 in terms of outputs ([Table 3.5](#)). Reference to the evaluation of performance indicators and delivery status of project objective and outcomes in [Annex 6](#), however, shows a wider range of performance achievements (MU to HS), with concerns raised about the limited success of the Homologue Approach and its sustainability post-project. However, the highly satisfactory rating with respect to building awareness and capacity in conserving and using agrobiodiversity sustainably at local community and administrative levels should not be overlooked. This is a major achievement and should pave the way for sound policy and strong market chain development during the remaining term of the project, justifying and reinforcing the bottom-up approach that the project has adopted.

Efficiency Reference to the project's financial planning ([Section 3.2.1](#)) shows that expenditure to date has been expeditious, with 37% of the US\$ 2.4 million budget (GEF and UNDP/TRAC funds) spent by mid-term (30 June 2012). In terms of cost effectiveness, in excess of US\$ 1.6 million of 'in kind' funding has been generated, much of which is a direct result of partnership working. This does not include additional support received from GEF SGP projects. The small size of the PIU and its close working relationship with its client, NBBC, have also contributed to cost effective implementation of the project. (Note that cost effectiveness in relation to the project's area is considered in [Section 3.1.5](#)).

3.3.4 Sustainability*

The project has been designed with considerable attention to sustainability, which overall is rated as **Moderately Likely**¹⁶. The four dimensions of sustainability are rated separately in [Table 3.6](#) and evidence, taken from the Project Document, is provided below with respect to each:

- **Institutional sustainability** The approach is based on building capacity among existing institutions rather than supporting the establishment of new ones.
- **Environmental sustainability** The emphasis of the project is biodiversity conservation and, therefore, no policies or practices are anticipated to negatively impact on the environment. [Note: This does exonerate the project from possible indirect negative repercussions on the environment. For example, as the purchasing power of farmers improves, there are increasing signs of some farmers considering the purchase of chemical fertilisers and pesticides to improve productivity of their agrobiodiversity products.]
- **Social sustainability** by building on the work of UNDP's Communities Programme, which has been operating for over a decade in the rural development of Tajikistan, and the GEF Small Grants Programme, which has a similar length of experience related to securing global environment benefits through community-based approaches that also generate local benefits. Partnership with both of these initiatives will enhance existing social capital rather than undermine it.
- **Financial sustainability** The financial investments of the project are directed towards self-sustaining initiatives, based on grants and micro-credits that enable farming communities to help themselves, rather than capital costs and the creation of new institutions that require long-term support to sustain them. The establishment of revolving funds for agrobiodiversity, using existing Micro-financing Institutions (*Imdodi Hutal* in Kulyab, *Rushdi Odii Zarafshon* in Zaravshan and *Faizi Surhob* in Rasht), ensures that increasing levels of funds will be available beyond the life of this project.

3.3.5 Impact

Project impacts concern longer term global environmental benefits.¹⁷ Very often such impacts cannot be discerned until long after a project's completion. While it is premature to assess impacts in the case of the present project, it is instructive to consider 'likely' impacts and these are considered in [Table 3.6](#), based on the following considerations:

- Most of the global environmental benefit arising from the project is likely to be the long-term *in situ* conservation of landraces on farms and in gardens and *ex situ* in seed banks in Tajikistan and overseas. CWRs will be conserved *ex situ* in living collections on farms and in gardens, as well as in seed banks but the project design does not make any specific provisions for their *in situ* conservation in the wild. It may be possible to address this inadequacy to a limited extent during the remaining term of the project through the partners.
- Currently, in the remote parts of rural Tajikistan farmers continue to seek out their livelihoods at subsistence levels, as a result of which they cannot normally afford to buy chemical fertilisers or pesticides to improve production. Thus, the soil and water in areas of cultivated land tends not to be heavily impacted (stressed) from such chemical pollutants. In the absence of an agrobiodiversity revolution in such rural areas, it is probably only a matter of time before the development process rolls out subsidies and other incentives to increase agricultural production, heralding the widespread use of these chemicals. Under normal circumstances, therefore, environmental stresses would be expected to increase from

¹⁶ All the risk dimensions of sustainability are critical. Therefore, the overall rating for sustainability should not be higher than the lowest rated dimension (2012 UNDP Guidance for Terminal Evaluation of GEF-funded and UNDP-implemented Projects).

¹⁷ Project impacts are defined in the 2012 UNDP Guidance for Terminal Evaluation of GEF-funded and UNDP-implemented Projects as: Actual or anticipated, positive or negative changes in global environmental benefit, as verified by environmental stress and/or status change, and also taking into account sustainable development impacts, including changed livelihoods.

inorganic pollutants, impacting the natural functioning of ecosystems and ultimately contributing dis-benefits to the global environment.

- The emergence of agrobiodiversity as a financially and environmentally sustainable option for farmers in rural Tajikistan may **avert** such predicted increase in stress on the environment, **albeit not reduce** them because they currently do not exist at significantly high levels. The key to averting such stresses is to ensure that agrobiodiversity production is developed hand-in-hand with organic farming practices, as has been highlighted throughout this report and is the subject of Recommendation 11 ([Section 4.3](#)).

4. CONCLUSIONS, RECOMMENDATIONS AND LESSONS

4.1 CONCLUSIONS

Overall, the project has made some excellent progress during the first three years of its implementation. Albeit much of the first year was spent getting up to speed, with a PIU in place, consultants procured, partnerships agreed and memorandums signed, and the inception period concluded with a workshop in March 2010.

At the time of this MTE, the project had undertaken the following:

- spent US\$ 878,444 (37%) of its US\$ 2.4 million GEF/UNDP TRAC funds and utilised US\$ 619,765 (35%) of its US\$ 1.766 million co-financing up to June 2012;
- engaged three international and over 50 national experts in servicing the project, together with five partner organisations;
- hosted some 80 consultative meetings, workshops, study visits etc. involving some 1,700 stakeholders (over 50% held in project areas and the rest in Dushanbe);
- produced (mostly drafts) over 30 reports relating to most of the 23 project outputs.

This provides a quick glimpse of the size and scope of the project. Importantly, all those met by the evaluators were very complimentary about the project and its PIU and, even when challenged to voice its weaknesses, there was little or no feedback other than a desire for more funds (grants and access to credit) to extend the project's coverage. Such positive feedback was consistent, from the farmers in their fields in the project areas to the Chairman of the Committee on Environmental Protection in his office in Dushanbe.

The main conclusions to this MTE with respect to the implementation of the project are summarised by way of a SWOT analysis in [Table 4.1](#) that provides the basis to the recommendations and lessons learnt in the subsequent sections.

Table 4.1 SWOT analysis of project implementation

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> ▪ Project concept is attractive to local communities as focuses on (i) improving their welfare (ii) in the face of climate change using ABD. ▪ Delivery mechanism is effective and efficient, based on triage of Jamoats – UNDP Area Offices/JRCs – MLFs. ▪ Close collaboration with GEF SGP has provided farming communities with additional opportunities to secure grants for agrobiodiversity conservation and production. ▪ Talented, committed PIU with common vision that is championed by National Project Manager. ▪ Vision shared and championed by NBBC (Executing Agency) and its Director, and supported by partners. ▪ Stakeholders, especially those at grassroots level (farmers and local administrations), enthusiastic and committed. ▪ Project has high profile, including President's participation ▪ Much has been achieved in last two years following project inception phase. 	<p>Weaknesses in Project design that should be addressed:</p> <ul style="list-style-type: none"> ▪ lack of quantifiable OVIs/targets in LFM (where possible). ▪ lack of clarity re: <i>in situ</i> and <i>ex situ</i> conservation in relation to wild relatives and land races. ▪ overlap between some outputs. ▪ inadequate emphasis on <i>in situ</i> conservation of wild relatives of fruits and nuts, which jeopardises long-term sustainability of ABD and, therefore, livelihoods. <p>Weaknesses in current delivery of outputs to address:</p> <ul style="list-style-type: none"> ▪ no specific interventions/strategy identified to strengthen national legal/policy instruments with respect to ABD, despite their review by national expert. ▪ no provision to conserve CWRs <i>in situ</i> (i.e. in wild). ▪ CIAT Homologue software programme is limited to sub/tropics and unsuitable for temperate Tajikistan. While there has been some success with cereals by use of proxy data, its application to fruits and nuts requires further, complex development of methodology. ▪ limited processing and marketing of ABD products to date. ▪ demand for grants / loans exceeds funding supplies. ▪ lack of holistic, integrated communications strategy. ▪ website awaits development, constraining communication and ready access to project's information resources.
THREATS	
<ul style="list-style-type: none"> ▪ Access to grants and loans increases likelihood of farmers purchasing chemical fertilizers and pesticides to increase ABD production. This will undermine current quality of ABD fruits and nuts, which currently are mostly produced 	

<p>free of chemical applications to fields and orchards.</p> <ul style="list-style-type: none"> Government is negotiating membership to WTO, which will inevitably result in (i) adoption of international standards for food security and (ii) more food products from overseas competing with ABD products in Tajikistan's markets. 	
OPPORTUNITIES	
<ul style="list-style-type: none"> Close partnership with GEF SGP will provide further opportunities for resourcing agro-enterprises and community initiatives. Enhanced opportunity of developing niche markets using traditional varieties of fruits and nuts if linked with organic production methods. This will strengthen the ABD brand (quality and health food – healthy because it is free from chemicals). NB Needs implementing now as a few farmers beginning to use pesticides now that they have access to credit. Interest rates as low as 0.01, 1.0, & 1.5% p.m. are potentially available from some MLFs. An interest rate of 0.01%, currently applied to gardening initiatives by Farizi (Rasht pilot area), might provide a village community (or other body) with an affordable means of conserving local fruit and nut CWRs <i>in situ</i> (i.e. in the wild). In addition to ensuring no use of chemical fertilizers/pesticides, GEF SGP criteria should be strengthened to encourage integrated, partnership approaches (e.g. ABD production in combination with processing) at village and jamoat levels (i.e. benefits of grant awards are shared among more of the community). 	<p>This principle can also be applied to some of the larger loans from MLFs, while still leaving every opportunity for individuals to apply for small loans.</p> <ul style="list-style-type: none"> Development of agri-ecotourism within jamoats would reinforce ADB <i>in situ</i> and <i>ex situ</i> conservation efforts, providing visitors with the opportunity to enjoy traditional varieties of food crops and to observe CWRs in the wild, all amidst magnificent rural landscapes and linked to other eco-activities, such as walking, fishing, riding, mountain trekking with overnight camping (on foot or horseback). NB Advantageous to pilot now, ahead of unsustainable forms of national and international tourism taking root. Tajikistan's forthcoming membership of WTO may represent a potential, short-term threat, with respect to ABD products needing to meet international trading standards, but it also provide an opportunity for the project to enable its primary stakeholders (those most dependent on ABD resources) to get ahead of their existing and potential competitors thereby consolidating ABD's place in local, national and international markets as quality, healthy food.

4.2 CORRECTIVE ACTIONS FOR PROJECT DESIGN, IMPLEMENTATION, MONITORING AND EVALUATION

The strengths of the project's design and implementation have been identified, respectively, in the SWOT analyses provided in [Table 3.1 \(Section 3.1\)](#) and [Table 4.1](#) (above), along with their weaknesses. Corrective actions to address the weaknesses are identified below.

4.2.1 Project design recommendations

Recommendation 1. Revise LFM to address project targets and other shortcomings. The end of project target for the project's objective is not only incorrect with respect 1.5 million hectares of productive landscape where climate resilient agrobiodiversity is mainstreamed but, in reality, it is not specific or readily measurable and, therefore, is not a 'SMART'²² indicator. Much more tangible and, therefore, useful would be knowing how much has been achieved in the pilot areas with respect to *in situ* and *ex situ* conservation of landraces and CWRs, even if it is difficult to establish baselines.

It is recommended to change this target to the following:

1.5 million hectares in four districts (Shurobod, Rasht, Baljuan and Zeravshan) and 36 sub-districts (jamoats), of which 9 jamoats covering 150,000 hectares of productive landscape are targeted for project interventions.

- Total number and area of wild forests (genetic reserves) protected to conserve CWRs *in situ*, based on at least XX wild forests covering a combined area of YY ha within each target jamoat.
- Total number and area of farms/home gardens/nurseries (living collections) managed to conserve CWRs *ex situ*, based on at least XX farms/home gardens/nurseries covering a combined area of YY ha within each target jamoat.

- iii. Total number of species and accessions of CWRs collected by the project to conserve *ex situ* in the national Plant Genetic Resources Centre seed bank.
- iv. Total number and area of farms/home gardens/nurseries managed to conserve landraces *in situ*, based on at least XX farms/home gardens/nurseries covering a combined area of YY ha within each target jamoat.
- v. Total number of varieties and accessions of landraces collected by the project to conserve *ex situ* in the national Plant Genetic Resources Centre seed bank.

A proposed, revised LFM that includes a small number of other less significant changes, based on a series of exchanges between PIU and the evaluators, is provided in [Annex 7](#).

Recommendation 2. Adopt internationally recognised definitions of agrobiodiversity terms to address the present lack of clarity concerning *in situ* and *ex situ* conservation of landraces and CWRs, using the guidance provided in [Section 1.5](#) of this report. These definitions should also provide the basis for monitoring progress in implementation and achievement of targets as, for example, demonstrated in Recommendation 1.

Recommendation 3. Provide for *in situ* conservation of wild relatives of fruits and nuts in their natural habitat in accordance with Output 2.4. This is extremely important in terms of demonstrating that farmers and jamoat leaders understand the principles of *in situ* conservation of CWRs and how it links directly to the long-term sustainability of agrobiodiversity and, therefore, their food security in the face of climate change. As identified in [Table 4.1](#), there may be opportunities to fund this provision over the long-term by means of low-interest loans (i.e. <1% per month) to cover costs of strictly protecting such ‘genetic reserves’ from livestock grazing, wild fires, illicit felling etc. using trained community wildlife guards or similar approaches.

It is acknowledged that the project was probably never intended to address the *in situ* conservation of CWRs in the wild, given the ambiguous use of the term ‘*in situ*’ in the Project Document ([Section 3.1.1](#)), but the absence of such provisions is resulting in the delivery of incomplete demonstrations in the pilot target sites of the full set of measures necessary to safeguard Tajikistan’s agrobiodiversity over the long-term. While the project is not designed or resourced to establish a network of protected areas to safeguard CWRs, it should be possible to at least establish mechanisms for protecting stands of CWRs in the vicinity of project demonstration sites that are currently being used by local communities as sources of CWRs. Rather than, or in addition to, taking seeds, rootstocks and saplings from CWRs in the wild to conserve as living collections in gene banks, the project should demonstrate practical measures to ensure the long-term conservation of such wild fruit forests. Community-based approaches are likely to be the most readily achieved, given that local communities are the principal beneficiaries of agrobiodiversity conservation.

Recommendation 4. Rationalise project outputs to eliminate duplication, ensure consistency between outputs and outcomes (some outputs appear to be placed under the ‘wrong’ outcome), and to achieve a more realistic number of deliverables. A revised set of outputs, which have benefitted from a series of exchanges between PIU and the evaluators, are provided at the foot of the LFM in [Annex 7](#). Proposed considerations and/or changes include the following:

- **Output 1.7** should be reviewed and, if there is no likely advantage to setting up producer societies, it should be dropped at this juncture. Provision of opportunities for producers to network via the project’s planned website might be a less time-consuming and more accessible option in the longer term (as internet access becomes more readily available in rural areas, perhaps with public internet ‘cafes’ provided in JRCs).
- **Output 3.7** The role of Business Advisory Centres appears not to have been clearly defined or thoroughly explored/piloted, particularly with respect to existing functions of JRCs. It may be more appropriate and sustainable to enhance the role of JRCs rather than establish new infrastructures.

4.2.2 Project implementation recommendations

Recommendation 5. Identify specific policy and regulatory provisions for agrobiodiversity and integrate them within a strategy for immediate action. As noted in **Annex 5**, the Legislative Overview Report, *Preparation of current policy of adaptation to climate change and recommendations to new principles of adaptation to climate change*, does not clearly spell out the policy and legislative changes necessary to plug the gaps in respect of agrobiodiversity.

Recommendation 6. Develop an exit strategy with respect to applying the Homologue Approach to fruit and nut agrobiodiversity because there currently appears to be a technical-cum-practical impasse. Such a strategy would best be developed independently by an agrobiodiversity expert who is also familiar with modelling approaches. Discussions with PIU and review of the two technical reports by the international consultant responsible for modelling agrobiodiversity adaptation to climate change by means of the Homologue Approach indicate the current situation to be approximately as follows:

- The CIAT (International Centre for Tropical Agriculture) Homologue computer programme attempts to answer the question, “where else in the world is like this plot that I am standing on?” It is designed for application to cereals in the sub/tropics and unsuitable for temperate Tajikistan because the programme does not hold climate and soil data for Tajikistan, which are essential to the modelling.
- In the Vulnerability and Adaptation Study¹⁸ that informed the Project Document with respect to adopting the Homologue Approach, CIAT scientists overcame the limitations of the Homologue programme by using an altitudinal gradient to make use of the established adiabatic lapse rate of 6°C for each 1000 m difference of altitude. They simulated the influence of climate change on three cereal food staples (barley, rice and wheat) in the Zeravshan Valley and demonstrated a 10% decline on yields for barley and wheat by 2050, which could probably be overcome by plant breeding or even by using crop varieties (including landraces) that are adapted to such changes.
- It was not possible, however, to extrapolate from these simulations of cereal crops (annuals) to perennial fruits and nuts, although the data suggest that some agrobiodiversity will benefit from higher temperatures and longer growing seasons.
- Thus, it was decided to use this Homologue Approach in order to select 2050 analogous sites for the 10 jamoat sites targeted by the project by manually extracting 2050 data for a particular target site from the Global Circulation Models and searching elsewhere for sites that currently experience that same climate. This was done in September 2010¹⁹.
- While the 2050 homologues meet the requirements of the OVI under Outcome 2 (Farming communities have skills, knowledge and tools to implement homologue approach in 4 project areas so as to enable the adaption of their production practices to current and future climate risks and variability), these do not specifically address the issue of conservation of agrobiodiversity because the model currently lacks information on the distribution of landraces for the selected species of fruit and nuts targeted by the project. This could be addressed by using MAXENT (maximum entropy procedure), for which the international consultant identified the information required by this method in his September 2010 report. Such information was not available by the time of his subsequent mission in May 2011²⁰.

¹⁸ Myles Fisher, Sam Fujisaka and Andy Jarvis (2008). *Sustaining Agro-biodiversity in the face of Climate Change: Vulnerability and Adaptation Study*, prepared under contract to UNDP Country Office, Dushanbe.

¹⁹ M.J. Fisher, (2010), Report of the international consultant on *Modeling of agrobiodiversity adaptation to climate change employing the Homologue Approach*.

²⁰ M.J. Fisher, (2011), *Mission May, 2011 to conduct a training course for a small group of national staff on simulation modelling*.

- Regarding the future, the international consultant concludes in the report on his May 2011 mission: “How is it possible to counsel farmers on practices that might render them less vulnerable to climate change, if there is no understanding of how vulnerable the *taxa* on which their livelihoods depend are unknown? ... The Consultant has now identified this as a limitation in the Project’s implementation, but Management has yet to indicate that it is a priority of concern. Almost all the activities that are proposed for the remainder of the Project depend on this issue being addressed.”
- There followed in July 2011 various email exchanges between the international consultant and the Project Manager, annexed to the May 2011 Mission Report, that indicate a perceived mismatch by between models and training delivered by the consultant and the expectations of the project. Doubtless, some of the differences arise from difficulties in understanding due to everything having to be translated from English to Russian and vice versa. What is clear, however, is that it is extremely ambitious to expect to be able to develop and apply modelling techniques without ‘teething’ problems and to be able to train others in their use without the need for regular, hands-on, supervision. Thus, the activity is more than likely to be unsustainable when delivered through a series of short-term assignments. This is the issue that needs to be addressed: providing adequate time and opportunity for the modelling to be full-proof and the training to become embedded through experiential learning, by doing the modelling on the job under appropriate means and levels of supervision.
- It is unlikely that the Homolog programme will be developed sufficiently within the life of this project to be useful. Even if it were updated with soil data for Tajikistan, their use for modelling in mountainous areas of the project is unlikely to be reliable. A number of other options to complement Homolog are considered in the international consultant’s May 2011 Mission Report, one of which was being developed by the Walker Institute for Climate System Research, University of Reading, UK. It is an analogue method for examining both spatial and temporal analogues based on multiple climate projections under to contract CGIAR Climate Change, Agriculture and Food Security Challenge Program. Its revised completion date, scheduled for December 2011, would be worth ascertaining.

Recommendation 7. Ensure that the GIS/database management system is backed-up at least weekly, with an archived copy stored securely off site in addition to a back-up copy being held securely on-site. While back-up copies are made and held on site, no back-ups have been routinely stored securely off site. This practice should be unacceptable, particularly given the increasing value of the data as more records of landraces and CWRs are accumulated.

Recommendation 8. Develop a communications strategy and action plan that provides an integrated approach to raising local, public and political awareness about key agrobiodiversity issues, achievements, events pertaining to the project. This should build on the rather more *ad hoc* approach adopted by the project to date and ensure that targets are identified and prioritised in a more strategic manner in relation to project outcomes and outputs. The communication strategy should be developed in tandem with the proposed marketing strategy, as growing awareness among the public is likely to result in more people looking to purchase ABD products in markets.

Consideration should be given to establishing an **agrobiodiversity newsletter** for jamoats and farmers in particular. Ideally this should be produced by an appropriate agency or institution (e.g. NBBC, Institute of Farming) or even a leading JRC, initially with the support of the project but in the expectation that it will be sustained beyond the life of the project.

Publication of a short series of quality knowledge products (manuals, best practice guidelines, case studies, identification guides etc) should be part of the communications strategy.

Recommendation 9. Develop a project web site as a matter of priority, ideally hosted by NBBC. This needs to be done now for a number of good reasons:

- It will help to raise the profile of NBBC, as well as the project.
- It is important to make accessible to stakeholders the many useful publications and other information produced by the project as soon as possible, to support awareness and understanding of agrobiodiversity, practitioners (farmers) and replication of project initiatives.
- It allows the potential for other web-based initiatives to be developed, such as networking among agrobiodiversity farmers; marketing details of nursery/farm/garden suppliers of particular traditional varieties of fruit and nut trees etc.
- It will complement the development of a communications strategy, providing another medium for communicating with stakeholders.

Recommendation 10. Prepare and implement an integrated marketing strategy that is clearly focused on key outstanding outputs under Outcome 3, specifically to pilot: establishment of supply chains and associated processing opportunities for a limited number of agrobiodiversity products; and certification of agrobiodiversity products for local and overseas markets, in accordance with standards that anticipate Tajikistan's planned membership of WTO. Points to note in relation to the recommendation are as follows:

- Sustainable links to markets remain undeveloped for many ABD products. This is among the most significant outstanding challenges for the project, hence the need for a clear, focussed and strategic approach to agrobiodiversity market development
- The first part of a contract concerning agro-enterprise development and marketing has already been undertaken in 2010²¹. This is somewhat generic and does not address require project outputs specifically, hence the recommendation for a more focused, action-oriented approach. Clearly, the proposed strategy should build on relevant findings from this initial piece of work.
- Given time and resources limitations it would be prudent to limit the demonstration of processing and marketing to one agrobiodiversity product per pilot area (i.e. total of four, in addition to the ongoing processing and marketing of mulberry). Selection of these pilots should be based on brief feasibility studies, including value chain assessment, undertaken as part of the marketing strategy.
- The GEF Small Grants Programme may be an ideal mechanism for funding several of these pilots and, therefore, it may be beneficial to collaborate directly with this Programme during the development of the strategy.
- It may be appropriate to establish a high-level working group comprising representatives from the State Standards Institution, Ministry of Agriculture, Ministry of Economic Development and Trade and other relevant government agencies to advise on and help fast-track the processes necessary for certification of agrobiodiversity products to be marketed in WTO member countries.
- It will be beneficial to ensure that the marketing of these products is tied into the proposed Communications Strategy.

4.2.3 Monitoring and evaluation

In general, M&E is considered to be satisfactory ([Table 3.5](#)). The main weakness concerns that project's objective which relates to embedding globally significant agrobiodiversity conservation and adaptation to climate change in the development practices of Tajikistan. Currently, the OVIs in the LFM are neither specific nor measurable (SMART²²) with respect to *in situ* and *ex situ*

²¹ C. Wheatley (2011). Report of International Consultant on Agroenterprise Development and Marketing.

²² Specific, Measurable, Achievable, Relevant and Time-bound (UNDP-GEF 2012, *Guidance for Conducting*

conservation of landraces and CWRs. In order to monitor the extent to which the project is improving the conservation status of globally significant biodiversity it is necessary to distinguish between the different types of agrobiodiversity and how they are conserved. This matter has already been covered under **Recommendation 1**.

Recommendation 11. Expose members of the Project Board to developments in the project areas so that they are better informed about implementation progress and, therefore, more able to provide sound guidance as well as be ambassadors for the project. This can be achieved by holding at least one meeting in one of the project's four areas each year. It is recognised that Board members are senior officials with busy diaries and, therefore, it will be necessary to combine such meetings in the field with other business, such as visiting a farm, processing enterprise etc to ensure that their trips are worthwhile for them.

4.3 ACTIONS TO FOLLOW UP OR REINFORCE INITIAL BENEFITS FROM THE PROJECT

A number of opportunities are identified in [Table 4.1](#) that would enhance or reinforce the benefits of the project. They are elaborate further under the respective recommendation.

Recommendation 12. Explore the potential for enhancing the agrobiodiversity brand and consolidating its niche market by piloting agrobiodiversity production with organic farming practices in one or more target jamoats. Such an initiative would reinforce the values of landraces, complement marketing of other organic products (e.g. honey), and potentially attract premium prices. It should be underpinned by incentives and disincentives such as:

- establishment of 'chemical fertilizer and pesticide free zones' at village or jamoat levels.
- promotion of organic fertilizers and disease resistant varieties of cereals, vegetables, fruits and nuts.
- grants (GEF SGP) and loans (MFLs) awarded on condition that chemical fertilizers and pesticides are not used.

Representatives met from several jamoats were supportive of the idea of establishing zones within their administrative areas free from use of chemical fertilisers and pesticides. There is already a Government Order to promote organic production, which is quite adequate in itself to provide the mechanism for such zones to proceed at local level; apparently no permissions are needed at district level. Note that timing is of the essence because in a few years time farmers are likely to have become more affluent and some will be looking towards chemical treatments to increase their agrobiodiversity productivity. (Also, refer to MTE comments under Outcome 3 in **Annex 5** for further rationale.)

Recommendation 13. Collaborate closely with GEF SGP and MFLs on the conditions and criteria for securing grants or loans, in order to attract proposals that contribute to the project's objective. Conditions and criteria should include the following provisions:

- Grants or loans should be awarded subject to the funds not being used for purchase or distribution of chemical fertilisers or pesticides.
- Proposals should be screened for potential environmental impacts.
- In the case of loans, there should be special, low interest (i.e. <1% per month) provisions for *in situ* conservation of CWRs (i.e. protection in the wild) by individuals or communities.
- Incentives should be provided to encourage joint proposals involving agrobiodiversity producers, processors and other enterprises in order to encourage collaborative working and distribute limited funding resources more widely among communities.

Recommendation 14. Promote the development of community-based agri-tourism, by means of awareness raising (e.g. study tours), grants and loans, to reinforce agrobiodiversity *in*

situ and *ex situ* conservation initiatives. This would also contribute further to the agrobiodiversity brand of 'quality food and healthy lifestyle'. Visitors would be able to experience staying in local homesteads, appreciating traditional varieties of food crops, observing landraces on farms/gardens and CWRs in the wild, all amidst magnificent rural scenery, and participating in a variety of environmentally benign activities, such as walking, fishing, riding, mountain biking, mountain trekking with overnight camping (on foot or horseback).

Other considerations include:

- Timing is key to the success of such agri-tourism enterprises because unsustainable forms of national and international tourism are likely to take root in the foreseeable future, so now is the time to pilot such an initiative, if not by the project then by one of its partners, such as GEF SGP.
- There is a potential partnership opportunity with an ecotourism initiative in the Gissar Mountains, established under a previous GEF project. This initiative combined the development of ecotourism with construction of energy saving guest rooms for visitors (fuel efficient stoves, well-insulated rooms). A study tour could be arranged as a first step (contact: Bakhrudin Isomatdinov, Community-based Tourism).
- Key requirements for community-based tourism are: guest rooms with bathroom/toilet facilities; awareness and training in hospitality and hygiene; local produce; marketing via website (link up with national ecotourism NGO(s), villagers with some foreign languages, and activities for visitors.

4.4 PROPOSALS FOR FUTURE DIRECTIONS UNDERLINING MAIN OBJECTIVES

Recommendation 15. Procure additional expertise to advise the project in key areas that could potentially jeopardise its outcomes. Such an advisor should be expert in agrobiodiversity and their role would include the following:

- Review the project's implementation strategy and progress twice yearly and make recommendations, as necessary.
- Develop the proposed exit strategy regarding the further application of the Homologue Approach.
- Develop frameworks for the preparation of a long-term strategy for the conservation of agrobiodiversity and adaptation to climate change (Output 1.8) and sustainable management strategies for each of the four pilot areas (Output 2.6); oversee their drafting; and quality assure the final products.
- Contribute to and quality assure a series of knowledge products produced by the project.
- Advise on/develop the exit strategy for the project.

Recommendation 16. Extend the project for at least six months at no additional cost in order to make up for the slow start (approximately one year for the inception phase to be completed) and, most importantly, consolidate on its initially very positive series of achievements. Further justifications for this proposed extension include:

- Agrobiodiversity conservation and its sustainable use in the face of climate change is a new and relatively technical topic that takes much time and effort to grasp.
- It will take more time than the remaining two years to develop a national agrobiodiversity conservation strategy and, following public consultation, secure its approval.
- Demonstration of policy, practical and resource measures necessary to conserve CWRs *in situ* (in the wild) will also require more time than the remaining two years to implement.
- Developing sustainable markets for agrobiodiversity is among the most challenging of tasks, with additional hurdles posed by Tajikistan's planned membership of the WTO. Branding and certification are among the key outputs that will help to secure markets for

agrobiodiversity products, for which additional time is necessary to achieve sustainable results.

- Resources are available, with nearly two-thirds of the budget unspent by the time of this MTE.

Finally, while not a recommendation *per se* because it is considered to fall outside the scope of the project, there is an important opportunity for the project to **raise awareness of the potential World Heritage ‘outstanding universal values’ of agrobiodiversity within the pilot areas**. Central Asia is a global hotspot for agrobiodiversity and there is a very good opportunity for one or more Central Asian countries to develop a serial nomination (i.e. comprising several sites, each of which hosts globally significant biodiversity) based on agrobiodiversity values of wild relatives of crops, particularly fruit and nut forests. To date no property has been inscribed on the World Heritage List solely on account of its agrobiodiversity.

The project should be cognisant of this potential opportunity for Tajikistan to take a lead on agrobiodiversity conservation in Central Asia and solicit technical support in identifying any globally unique agrobiodiversity values within its pilot areas. Such information can then inform the development of a serial nomination, should the government decide to capitalise on this potential opportunity to raise the profile of Tajikistan’s agrobiodiversity and, at the very least, such an initiative should be included in the long-term, national agrobiodiversity conservation strategy.

4.5 LESSONS LEARNED

4.5.1 *Best practices in addressing issues relating to relevance, performance and success*

The project’s main strengths have already been identified in [Table 4.1](#). Best practices that warrant further highlighting are considered to be as follows:

- Agrobiodiversity provides a fairly unique opportunity within the nature conservation agenda to conserve biodiversity while at the same time improve livelihoods because of the interdependence of their interdependence, particularly in the face of climate change. The farming of traditional crops has advantages over modern cultivars, particularly in a changing climate where extreme events become more frequent and temperature continue to rise. Such farming, de facto, ensures that valuable genetic diversity inherent within these landraces is conserved by the very practice of farming. It is tantamount to a win-win situation.
- Strong, mutually supporting partnerships between the Implementing Agency (UNDP), Executing Agency (NBBC) and its partners, all of which have been well facilitated and technically supported by a committed PIU are clearly evident in this project, giving rise to much of its success.
- Similarly, the PIU’s good relations and high reputation among stakeholders (jamoats and farmers alike) at grassroots levels is the second part of the equation that makes for a successful formula. In particular, the triage involving the UNDP Area Office, jamoats, respective JRC and associated MLF is proving to be an indispensable model approach to nurturing support for agrobiodiversity conservation and livelihood improvements in the face of climate change. This approach is further reinforced in Output 2.2, which is grounded in effective knowledge exchange whereby synergy is generated from sharing scientific and traditional knowledge, and resourced by a sustainable financing mechanism (revolving fund).

4.5.2 *Worst practices addressing issues relating to relevance, performance and success*

The project’s main weaknesses have also been identified in [Table 4.1](#). Arguably, the most significant lesson concerns the importance of rigorous technical oversight of the development of project concept and its elaboration in the logical framework, for which the GEF Secretariat, RTAs

and implementing agencies all have certain responsibilities. The potential repercussions of a flaw such as has emerged in this MTE (i.e. *in situ* conservation of CWRs in gardens and farms) are really quite profound because ultimately the primary stakeholders (those most dependent on the conserved natural resources for their livelihoods) are misinformed and potentially alienated when they learn that their inputs represent less than best practice.

The other issue concerns the excessive reliance on modelling from a distance, with the inevitable result that when something does not appear to work or is not understood, often due to language barriers, Short training course are no substitute for experiential learning by doing the work on the job and this requires mentoring or supervision over significant periods of time. In the case of the Homologue Approach, either more regular visits by the expert should have been built into the application of this tool or provision should be made for the national counterpart(s) to be seconded to the expert's institution and continue the work from overseas under direct supervision.

Annex 1: Terms of Reference for Mid-Term Evaluation²³*Tajikistan*

**TERMS OF REFERENCE
FOR
MID-TERM EVALUATION OF THE UNDP/GEF PROJECT:**

**PIMS 3647 - “SUSTAINING AGRICULTURAL BIODIVERSITY IN THE FACE OF
CLIMATE CHANGE IN TAJIKISTAN”**

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NOTE: The Procurement Notice and ToR run to 49 pages. Thus, to reduce the size of this document, the Annexes to the ToR have been not included here.

²³ The Procurement Notice and ToR run to 49 pages and so, in the interests of space, the Procurement Notice and ToR Annexes are not included here.

Project Title: **Sustaining agricultural biodiversity in the face of climate change in Tajikistan, PIMS 3647**

Functional Titles: International Consultant / Team Leader
National Consultant

Duration: estimated 20 working days
over the period of: March – April 2012.

Terms of Payment: Lump sum payable upon satisfactory completion and approval by UNDP of all deliverables, including the Mid-Term Evaluation Report

Travel costs: The costs of in-country mission(s) of the consultant are to be included in the lump sum.

1. INTRODUCTION

In accordance with UNDP/GEF M&E policies and procedures, all full-size projects supported by the GEF should undergo a mid-term evaluation in the course of project implementation.

The Monitoring and Evaluation (M&E) policy at the project level in UNDP/GEF has four objectives:

- i) to monitor and evaluate results and impacts;
- ii) to provide a basis for decision making on necessary amendments and improvements;
- iii) to promote accountability for resource use; and
- iv) to document, provide feedback on, and disseminate lessons learned.

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

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

This Mid-Term Evaluation is initiated by UNDP Country Office in Tajikistan and Bratislava Regional Centre as the GEF Implementing Agency for this project and it aims to provide managers (at the level of regulatory bodies of the Committee for Environmental Protection under the Government of the Republic of Tajikistan and the Ministry of Agriculture of the Republic of Tajikistan, and UNDP/GEF) with a comprehensive overall assessment of the project and with a strategy for replicating the results. It also provides the basis for learning and accountability for managers and stakeholders.

2. PROJECT DESCRIPTION

Summary: The UNDP/GEF’s project of “Sustaining agricultural diversity in Tajikistan in the face of climate change” is a five-year nationally implemented project. The implementing partner is the National Biodiversity and Biosafety Center under the Government of the Republic of Tajikistan. The project has a GEF budget of USD 1,900,000 and co-financing commitments (including in-kind contributions) of USD 2,100,000. The Project Document was signed between the Deputy Prime Minister of the Republic of Tajikistan, National Biodiversity and Biosafety Center and UNDP Country Office on 22 June 2009.

The aim of this project is to test and demonstrate the replicable ways in which rural farmers and communities can benefit from agro-biodiversity conservation in ways that also build their capacities toward adapting to climate change. This will be achieved using local pilot activities based on the Homologue Approach. The project, in partnership with the National Biodiversity and Biosafety

Centre, the UNDP Communities Programme and the GEF Small Grants Programme, features three inter-linked complementary processes. The first of these focuses on strengthening existing policy and regulatory frameworks in support of agro-biodiversity conservation and adaptation to climate change, emphasising the local level implementation. The second focuses on developing community, institutional, and system capacities to enable farmers and agencies to better adapt to climate risks through the conservation and use of agro-biodiversity. The third focuses on the development of agro-enterprises that support the conservation and production of agro-biodiversity friendly products, with a view to providing farmers and communities with alternative sources of income to offset the negative impacts and shocks related to climate change.

The inception phase began in September 2009 and included an inception workshop several months later on March 9-10, 2010. The inception report documents the review of the project strategy and those changes made during the inception phase.

From the point of view of the design and implementation of the project, the key stakeholders are:

- Committee for Environmental Protection under the Government of the Republic of Tajikistan (CEP) and its subsidiary bodies
- Ministry of Agriculture
- National Center for Genetic Resources
- Agency on Hydrometeorology
- Agency on Land Management
- Academy of Science of the Republic of Tajikistan
- Institute of Botany
- Local government authorities at jamoat (sub-district,) district and regional levels
- Jamoat Resource Centers
- Micro Finance Institutions
- Local farmers
- Non-governmental organizations
- UNDP Country Office
- UNDP/GEF Regional Center for Europe and CIS (Bratislava)
- The GEF Secretariat, who is not involved in project implementation, but to whom the Evaluation Report to be prepared under this Terms of Reference will be submitted.

Three project outcomes are defined in the Project Document:

1.	Agrobiodiversity conservation and climate resilience are embedded into the national policy and local development plans
2.	Farmers have the knowledge and skills to address climate change risks and protect agrobiodiversity
3.	Enabling environment for market development for agrobiodiversity products developed

Associated with these outcomes there are a number of Outputs (please see Annex 1 for the Revised Logical Framework of the project). Progress towards them is reported in 2010-2011 Annual Project Implementation Review (to be available for the evaluation team).

3. OBJECTIVES OF THE EVALUATION

The evaluation is initiated and commissioned jointly by UNDP Tajikistan Country Office and by the UNDP/GEF Regional Coordination Unit (Bratislava). Mid-term evaluations (MTEs) are intended to identify potential project design issues, assess progress towards the achievement of objectives, identify and document lessons learned (including lessons that might improve design and implementation of other UNDP/GEF projects), and to make recommendations regarding specific actions that might be taken to improve the project. It is expected to serve as a means of validating or filling the gaps in the initial assessment of relevance, effectiveness and efficiency obtained from monitoring. The mid-term

evaluation (MTE) provides the opportunity to assess early signs of project success or failure and prompt necessary adjustments. To this end, the MTE will serve to:

1. Strengthen the adaptive management and monitoring functions of the project;
2. Enhance the likelihood of achievement of the project and GEF objectives through analyzing project strengths and weaknesses and suggesting measures for improvement;
3. Enhance organizational and development learning;
4. Enable informed decision-making;
5. Create the basis of replication of successful project outcomes achieved so far.

Particular emphasis should be put on the current project results and the possibility of achieving all the objectives in the given timeframe, taking into consideration the speed, at which the project is proceeding. More specifically, the evaluation should assess:

Project concept and design

The evaluation team will assess the project concept and design. The evaluation team should 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 evaluation team will revise and re-assess the relevance of indicators and targets, review the work plan, planned duration and budget of the project.

Implementation

The MTE 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 MTE is to assess the Project Management Unit's use of adaptive management in project implementation.

Project outputs, outcomes and impact

The MTE will assess the outputs, outcomes and impact achieved by the project as well as the likely sustainability of project results. MTE should encompass an assessment of the achievement of the immediate objectives and the contribution to attaining the overall objective of the project. The evaluation team 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 team will also examine if the project has had significant unexpected effects, whether of beneficial or detrimental character.

Project progress will be measured based on Project Logical Framework (see Annex 1), which provides clear performance and impact indicators for project implementation along with their corresponding means of verification.

The evaluation will assess the aspects as listed in evaluation report outline attached in Annex 2.

4. DETAILED SCOPE OF WORK

The Evaluation Team will look at the following aspects:

1. Project concept/design, relevance and strategy

1.1 Project relevance, country ownership/drivenness (R): the extent to which the project is 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. Is the project concept in line with the sectoral and development priorities and plans of the country?
- b. Are project outcomes contributing to national development priorities and plans?
- c. How and why project outcomes and strategies contribute to the achievement of the expected results?
- d. Examine their relevance and whether they provide the most effective way towards results.

- e. Do the outcomes developed during the inception phase still represent the best project strategy for achieving the project objectives (in light of updated underlying factors)? If no, please come up with suggestions and recommendations.

1.2 Preparation and readiness:

- a. Are the project's objectives and components clear, practicable and feasible within its 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?
- e. Were counterpart resources (funding, staff, and facilities), enabling legislation, and adequate project management arrangements in place at project entry?

1.3 Stakeholder involvement (R):

- a. Did the project involve the relevant stakeholders through information-sharing, consultation and by seeking their participation in the project 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?

1.4 Underlying factors/assumptions:

- a. Assess the underlying factors beyond the project's immediate control that influence outcomes and results. Consider the appropriateness and effectiveness of the project's management strategies for these factors.
- b. Re-test the assumptions made by the project management and identify new assumptions that should be made.
- c. Assess the effect of any incorrect assumptions made by the project.

1.5 Management arrangements (R):

- a. Were the project roles properly assigned during the project design?
- b. Are the project roles in line with UNDP and GEF programming guidelines?
- c. Can the management arrangement model suggested by the project be considered as an optimum model? If no, please come up with suggestions and recommendations.

1.6 Project budget and duration (R):

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

1.7 Design of project M&E system (R):

- a. Examine whether or not the project has a sound M&E plan to monitor results and track progress towards achieving project objectives.
- b. Examine whether or not the M&E plan includes 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 timeframe for various M&E activities and standards for outputs are specified.

1.8 Sustainability:

- a. Assess if project sustainability strategy was developed during the project design?
- b. Assess the relevance of project sustainability strategy

2. Project implementation

2.1 Project's adaptive management (R):

- a. Monitoring systems
 - Assess the monitoring tools currently being used:
 - Do they provide the necessary information?

- Do they involve key partners?
- Are they efficient?
- Are 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 retrofitting of impact indicators have on project management, if such?
- Assess whether or not M&E system facilitates timely tracking of progress towards project's objectives by collecting information on chosen indicators continually; tracking tools are finalized properly, 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 are the most important and whether the risk ratings applied are appropriate. If not, explain why.
 - Describe any additional risks identified and suggest risk ratings and possible risk management strategies to be adopted.
- 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.
 - Are work planning processes result-based²⁴? If not, suggest ways to re-orientate work planning.
- d. Financial management
 - Consider the financial management of the project, with specific reference to the cost-effectiveness of interventions. (Cost-effectiveness: the extent to which results have been delivered with the least costly resources possible.). Any irregularities must be noted.
 - Is there due diligence in the management of funds and financial audits?
 - Did promised co-financing materialize (please fill out the co-financing form provided in Annex 2)?
- e. Reporting
 - 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 and what were the reasons.
 - Did the delay affect the achievement of project's outcomes and/or sustainability, and if it did then in what ways and through what causal linkages?

2.2 Stakeholder participation, partnership strategy (R):

- a. Assess whether or not and how local stakeholders participate in project decision-making.
- b. Does 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 of project activities?
- c. Consider the dissemination of project information to partners and stakeholders and if necessary suggest more appropriate mechanisms.
- d. Identify opportunities for stronger partnerships.

²⁴ RBM Support documents are available at <http://www.undp.org/eo/methodologies.htm>

2.3 Sustainability:

- a. Assess the extent to which the benefits of the project will continue, within or outside the project scope, after it has come to an end; commitment of the government to support the initiative beyond the project.
- b. The evaluators may look at factors such as mainstreaming project objectives into the broader development policies and sectoral plans and economies.

The sustainability assessment will give special attention to analysis of the risks that are likely to affect the persistence of project outcomes. The sustainability assessment should also explain how other important contextual factors that are not outcomes of the project will affect sustainability. The following four dimensions or aspects of sustainability will be addressed:

- *Financial resources:* Are there any financial risks that may jeopardize sustenance of project outcomes? What is the likelihood of financial and economic resources not being available once the GEF assistance ends (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:* Are there any social or political risks that may jeopardize sustenance of project outcomes? 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? Do the various key stakeholders see that it is in their interest that the project benefits continue to flow? Is there sufficient public / stakeholder awareness in support of the long term objectives of the project?
- *Institutional framework and governance:* Do the legal frameworks, policies and governance structures and processes pose risks that may jeopardize sustenance of project benefits? While assessing this parameter, also consider if the required systems for accountability and transparency, and the required technical know-how are in place.
- *Environmental:* Are there any environmental risks that may jeopardize sustenance of project outcomes?

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.

3. Project results (outputs, outcomes and objectives)

3.1 Progress towards achievement of intended outputs, outcomes/measurement of change:

Progress towards results should be based on a comparison of indicators before and after (so far) the project intervention, e.g. by comparing current conditions for sustainable reserves management (legal and regulatory frameworks, biodiversity conservation practices and results, etc.) to the baseline ones.

The evaluation should, inter alia, look into:

- Adequacy of the level and proposed modes of enforcement of the regulatory, policy and programmatic documents developed within the project for creating of an enabling environment, inter alia, through introduction of agrobiodiversity conservation concerns into relevant policies and practices;
- Verification of the Tracking Tool data, as collected and reported by the project;
- Validation of the adequacy and viability of the homologue approach applied within the project;
- Validation of the economic activities (nurseries, microfinance, etc.) on the project target territories.

To determine the level of achievement of project outcomes and objectives following three criteria should be assessed:

- *Relevance*: Are the project's outcomes consistent with the focal areas/operational program strategies and country priorities?
- *Effectiveness*: Are the actual project outcomes commensurate with the original or modified project objectives? In case the original or modified expected results are merely outputs/inputs then the evaluators should assess if there are any real outcomes of the project and if yes then whether these are commensurate with the realistic expectations from such a project.
- *Efficiency*: Is the project cost effective? Wherever possible, the evaluator should also compare the cost-time vs. outcomes relationship of the project with that of other similar projects.

Outcomes should be rated as follows for relevance, effectiveness, efficiency:

- *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.

In addition to a descriptive assessment, **criteria should be rated** using the rating scales as in GEF Evaluation guidelines (<http://www.thegef.org/gef/sites/thegef.org/files/documents/Policies-TEguidelines7-31.pdf>). The guidelines use the 6-point satisfaction and 5-point sustainability scales are defined in Table 1.2 and Table 1.3 of Annex 4 respectively. Thus, the Project objective and outcomes are to be rated in accordance with their respective measurable indicators, as well as for each of its components, using a 6-point scale that is defined in Table 1.2. Other aspects of the Project's objective (relevance, effectiveness, efficiency and impact) and sustainability of its outcomes are rated, respectively, according to satisfaction and sustainability scales. Also the Overall Rating of the project should be indicated.

5. PRODUCTS EXPECTED FROM THE EVALUATION

The key product expected from this mid-term evaluation is a comprehensive analytical report in English that should, at least, follow minimum GEF requirements as indicated in Annex 2.

The Report of the Mid-Term Evaluation will be stand-alone document that substantiates its recommendations and conclusions. The report will have to provide to the GEF Secretariat complete and convincing evidence to support its findings/ratings.

The Report will include a table of planned vs. actual project financial disbursements, and planned co-financing vs. actual co-financing in this project, according the table attached in Annex 3 of this TOR

The Report will be supplemented by Rate Tables, attached in Annex 4 of this TOR.

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

6. EVALUATION APPROACH

An outline of an evaluation approach is provided below; however it should be made clear that the evaluation team is responsible for revising the approach as necessary. Any changes should be in-line with international criteria and professional norms and standards. They must be also cleared by UNDP before being applied by the evaluation team.

The evaluation must provide evidence-based information that is credible, reliable and useful. It must be easily understood by project partners and applicable to the remaining period of project duration. The evaluation should provide as much gender disaggregated data as possible.

The evaluation will take place mainly in the field. The evaluation team is expected to follow a participatory and consultative approach ensuring close engagement with the government counterparts, UNDP CO, Steering Committee, project team, and key stakeholders.

The evaluation team is expected to consult all relevant sources of information, such as the project document, project reports – incl. Annual Reports, outcome/component level reports, project files, strategic and legal documents. The list of documentation to be reviewed is included in Annex 5 of this Terms of Reference.

The evaluation team is expected to use interviews as a means of collecting data on the relevance, performance and success of the project. S/He is also expected to visit the project sites. In preparation for the evaluation mission, the project manager, with assistance from UNDP country office, will arrange for the completion of the tracking tool (in currently valid GEF tracking tool template). The Tracking tool will be completed/endorsed by the relevant implementing agency or qualified national research /scientific institution, and not by the international consultant or UNDP staff. The tracking tool will be submitted to the international evaluation consultant, who will need to provide his/her comments on it. Upon incorporation of the comments from the international evaluation consultant to the tracking tool, it will be finalized and attached as mandatory annex to the MTE report. The methodology to be used by the evaluation team should be presented in the report in detail. It shall include information on:

- Documentation reviewed;
- Interviews;
- Field visits;
- Questionnaires;
- Participatory techniques and other approaches for the gathering and analysis of data.

Although the Evaluation Team should feel free to discuss with the authorities concerned, all matters relevant to its assignment, it is not authorized to make any commitment or statement on behalf of UNDP or GEF or the project management.

The Evaluation Team should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

7. DUTIES, SKILLS AND QUALIFICATIONS OF THE EVALUATION TEAM

International Consultant

Duties and Responsibilities:

- Desk review of documents, development of draft methodology, detailed work plan and MTE outline (maximum 4-day homework);
- Debriefing with UNDP CO, agreement on the methodology, scope and outline of the MTE report (1 day);
- Interviews with project implementing partner (executing agency), relevant Government, NGO and donor representatives and UNDP/GEF Regional Technical Advisor (maximum 3 days);
- Field visit to the pilot project site and interviews (2 days);
- Debriefing with UNDP (1 day);

- Development and submission of the first MTE report draft (maximum of 4 days). Submission is due on the 16-th day of the assignment. The draft will be shared with the UNDP CO, UNDP/GEF (UNDP/GEF RCU Bratislava) and key project stakeholders for review and commenting;
- Finalization and submission of the final MTE report through incorporating suggestions received on the draft report (maximum 5 days);
- Supervision of the work of the national consultant (during entire evaluation period).

Required Qualifications:

- Master's degree in Biodiversity Conservation, Natural Resource Management, Environmental Economics or other related areas;
- 7 years of working experience in providing management or consultancy services to the agrobiodiversity conservation projects, preferably with components on climate change;
- Experience in monitoring and evaluating agrobiodiversity conservation projects for UN or other international development agencies (at least in one project);
- Recent knowledge of the GEF Monitoring and Evaluation Policy;
- Recent knowledge of UNDP's results-based management policies and procedures;
- Recognized expertise in the biodiversity conservation and excellent understanding of climate change issues;
- Familiarity with biodiversity policies in CIS would be an asset;
- Conceptual thinking and analytical skills;
- *Fluent in English both written and spoken;*
- Fluency in Russian will be considered an asset;
- Computer literacy.

National Consultant

Duties and Responsibilities

- Collection of background materials upon request by Evaluation Team Leader/International Consultant;
- Provision of important inputs in developing methodologies, work plans and evaluation report outlines;
- Desk review of materials;
- Participation in debriefings with UNDP CO representatives;
- Assistance to the Evaluation Team Leader in conducting interviews with relevant stakeholders; provide both oral and written translation from/to English/Russian/Tajik, whenever necessary;
- Field visit and assistance to the Evaluation Team Leader in interviewing local stakeholders at project sites;
- Participation in debriefing with UNDP and project implementing partners;
- Assistance to the Evaluation Team Leader in developing the first draft of the MTE report;
- Assistance to the Evaluation Team Leader in finalization of the Mid-Term Evaluation report.

National Consultant will assist International Consultant with the oral and written translation between English and Russian/Tajik as required. The National Consultant will work closely with the International Consultant and coordinate all activities with the responsible staff of the project, National Biodiversity and Biosafety Center, Programme Unit of the UNDP Country Office. Travels are also planned in the due course to the project sites throughout the country.

Required Qualifications:

- Advanced university degree in social sciences or other related field. Postgraduate degree(s) will be an advantage;
- Minimum 3 years of relevant experience, preferably in the field of environmental management/biodiversity conservation;
- Previous experience with the development projects implementation, monitoring and evaluation;

- Participation in the similar evaluations in the past is a strong advantage;
- Proven analytical skills;
- Good interpersonal, communication, facilitation and presentation skills;
- Fluency in English, Russian and Tajik both written and spoken is essential;
- *Computer literacy*.

8. IMPLEMENTATION ARRANGEMENTS

The principal responsibility for managing this evaluation lies with UNDP Country Office (UNDP CO) in Tajikistan. UNDP CO will contract the evaluation team. The responsible staff of the project and UNDP will be responsible for liaising with the Evaluation Team to provide the project documentation, set up stakeholder interviews, arrange field visits, coordinate with the government counterparts, etc.

The evaluation will be conducted within the period of **March-April 2012**.

The activity and tentative timeframe are broken down as follows:

Activity	Timing	Estimated duration
Desk review	March 2012	2 days
Briefings for evaluators by UNDP CO and UNDP EEP	Till 20 March 2012	1 day
Field visits, interviews, questionnaires, de-briefings, presentation of main findings	In the end of March – beginning of April	10 days
Drafting of the evaluation report	Within 10 working days after the mission	3 days
Validation of preliminary findings with stakeholders through circulation of draft reports for comments, meetings and other types of feedback mechanisms	Till 30 th April 2012	2 days
Finalization of the evaluation report (incorporating comments received on first draft)	Till 30 th April 2012	2 days
		20 days

The report (draft and final version) shall be submitted to the UNDP Country Office in Tajikistan.

Prior to approval of the final report, UNDP contact person will circulate the draft for comments to government counterparts and project management: responsible staff of the project, UNDP Country Office in Tajikistan, National Biodiversity and Biosafety Center, Committee for Environmental Protection under the Government of the Republic of Tajikistan, UNDP/GEF RTA.

UNDP and the stakeholders will submit comments and suggestions **within 10 working days after receiving the draft**.

The finalised Evaluation Report shall be submitted latest on **10 May 2012**.

If any discrepancies have emerged between impressions and findings of the evaluation team and the aforementioned parties, these should be explained in an annex attached to the final report.

Annex 2: Evaluation Consultant Code of Conduct Agreement Form**Evaluators:**

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and: respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study limitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Evaluation Consultant Agreement Form²⁵**Agreement to abide by the Code of Conduct for Evaluation in the UN System****Name of Consultant:** Shahrigul Amirjanova**Name of Consultancy Organization** (where relevant):**I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.****Signed at Dushanbe on 15 May 2012****Signature:**

Evaluation Consultant Agreement Form**Agreement to abide by the Code of Conduct for Evaluation in the UN System****Name of Consultant:** Michael J.B. Green**Name of Consultancy Organization** (where relevant):**I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.****Signed at Dushanbe on 15 May 2012****Signature:**

²⁵ www.unevaluation.org/unegcodeofconduct

Annex 3: Itinerary and Persons Interviewed

Evaluators: Michael Green, Amirjanova Shahrigul
Place: Dushanbe, Tajikistan
Date: 14-23 May, 2012

Time	Activity	Participants	Venue	Notes
May 14, 2012				
04.00-06.00	Arrive in Dushanbe	Michael Green	Atlas B&B	Airport pick-up
11.20-12.30	Meeting with Project Implementation Unit	Neimatullo Safarov, Project Manager Tatyana Novikova, Deputy Project Manager Dilovarsho Dustov, Admin\Finance Assistant, Olimjon Yatimov, Head of National Center for Biodiversity and BioSafety, Khisravsho Shermatov, Head of Working Group (II & III Components), Zaynullo Sharipov, Chief Specialist, Ecology & Emergency Situations Department, President's Office, NCC Member	Project Office, 47 Shevchenko str Dushanbe	Presentation on Project Activities
12.30	Lunch			
13.30-17.00	Meeting with key national consultants	Neimatullo Safarov, Project Manager Safarali Naimov, Head, Working Group on Component I, Academy of Science, Olimjon Yatimov, Head, of National Center for Biodiversity and BioSafety, Khisravsho Shermatov, Head of working group on II and III components, Rahmatullo Sattorov, National Consultant, Botanist, Tolib Ergashev, National Expert, Pasture Ecosystems, Komron Saidahmadzoda, Member, Group on Homologue Modeling, Saidahmad Dustov, Deputy Director, State Institution on Hydrometeorology, Ramziya Khudoyorova, National Expert, Group on Climate Change, Murodali Safarov, Project Small Grants Program Manager	Project Office, 47 Shevchenko str Dushanbe	Discussion on ABD policy, Homologue approach, climate change and adaptation and local ABD market development
May 15, 2012				
09.30-11.30	Meeting with Republican National Center on Genetic Resources. and Institute of farming of Tajik Academy for Agricultural Sciences	Toshali Narzulloev, Deputy Director, Science, Farming Institute, Academy of Agriculture Sciences Mavlon Pulodov, Director Genetic Resources Center Marifat Shamieva, Director, Operative Information Department, Genetic Resources Center Farhod Pulodov, Director, Agricultural Crops Department, Genetic Resources Center	RNCGR Office, jamoat Sarikhisht, Rudaki	Discussion of the activities of the organizations within the project framework
12.00-13.00	Meeting with SOFH, "Safari" and Standardization Agency	Kholmumin Safarov, Head, State Institution of Forestry and Hunting Tohir Odinaev, Deputy, State Inspection Directorate, State Standardization Institution Safar Nasriddinov, Head, PU "Safari"	SOFH Office, 3 Buston str., Dushanbe	project related activities of the organizations
13.30	Lunch			

Time	Activity	Participants	Venue	Notes
14.30-15.30	Meeting with GEF SGP Manager	Khurshed Kholov, Coordinator, GEF Small Grants Program	Project Office, 47 Shevchenko str., Dushanbe	Grants of GEF SGP supporting the project
16.00	Meeting with UNDP	Mr. Sukhrob Khoshmukhamedov, UNDP Asst Resident Representative Ms. Nargizakhon Usmanova, UNDP Programme Analyst	UNDP CO, Ayni 39, Dushanbe	Briefing on project and ToR
17.00	Meeting with CEP	Talbak Salimov, Chairman, Committee on Environmental Protection (CEP)	Office of the Committee, Dushanbe	Courtesy meeting confirming support and cooperation with project
May 16, 2012				
08.00-11.00	Departure from Dushanbe to Dangara	Michael Green, Amirjanova Sh., Olimjon Yatimov, Head, of National Center for Biodiversity and BioSafety, Dilovarsho Dustov, Admin\Finance Assistant, Khisravsho Shermatov, Head, Working Group on II and III components, Safar Nasriddinov, Head, PU "Safari"		
11.00-12.00	Meeting in SOFH nursery	Kurbon Asomiddinov, Senior Worker, Dangara Nursery Saidkhuja Alimahmadov, Worker, Dangara Nursery Kuchkor Ashurov, Worker, Dangara Nursery Gulniso Odinaeva, Worker, Dangara Nursery Momajon Sherova, Worker, Dangara Nursery Khairiddin Ganiev, Worker, Dangara Nursery Mahmadi Tagoev, Agronomist, Dangara Nursery	SOFH nursery, Dangara	Meeting with the nursery employees
12.00	Lunch			
13.00-15.00	Departure to Kulob	Michael Green, Amirjanova Sh., Olimjon Yatimov, Head, of National Center for Biodiversity and BioSafety, Dilovarsho Dustov, Admin\Finance Assistant, Khisravsho Shermatov, Head, Working Group on II and III components, Murodali Safarov, Project Small Grants Program Manager		
15.00-16.00	Meeting with UNDP Kulyab Area Office	Abdullo Guliev, Head, UNDP Kulyab Area Office Sojidamo Tagaeva, Program Analyst & Deputy Manager, UNDP Kulyab Area Office,	UNDP Kulob AO	Discussion of the project activities in Kulyab (focus of six pilot jamoats)
16.00-17.00	Meeting with MLF "Imdodi Khutal"	Isuf Makhadov, Chairman, MLF "Imdodi Khutal" Fakhriddin Makhmudov, Credit Manager, Micro-Loan Fund "Imdodi Khutal"	Kulyab	Briefing on activities of MLF and management of the micro funds allocated from project to MLF
May 17, 2012				
08.00-11.00	Departure to Shurobod	Michael Green, Amirjanova Sh., Olimjon Yatimov, Head, of National Center for Biodiversity and BioSafety, Dilovarsho Dustov, Admin\Finance Assistant, Khisravsho Shermatov, Head, working group on II and III components, Murodali Safarov, Project Small Grants Program Manager		
10.00-11.00	Meeting Jamoat Shurobod and PO "Rushdi Shurobod"	Ismoil Zulfiev, former Head of the Jamoat, farmer, Shurabad District Hotam Safarov, Head, "Rushdi Shurobod" Public Union, Shurabad District Rustam Safarov, Deputy Head, "Rushdi Shurobod" Public Union, Shurabad District	Jamoat Shurobod Office	Discussion on cooperation with the project and achieved results

Time	Activity	Participants	Venue	Notes
11.00-13.00	Departure to Jamoat Yol	Michael Green, Amirjanova Sh., Olimjon Yatimov, Head, of National Center for Biodiversity and BioSafety, Dilovarsho Dustov, Admin\Finance Assistant, Khisravsho Shermatov, Head, working group on II and III components, Murodali Safarov, Project Small Grants Program		
13.00	Lunch			
14.00-16.00	Meeting with Head of Farm Association "Hojiyon", Head of Jamoat Yol, Head of JRC Yol, Head and farmers from Dashtijum jamoat having SGP grant	Abdughafor Najmiddinov "Yoguk" Production Cooperative, Jamoat 'Yol', Shurabad District Nozim Eshonov, "Dashti Jum" JRC, Surabad District Sabzali Bozorov, "Komron" Production Cooperative, Shurabad District Ismoil Faizov, Head, "Hojiyon" Dekhkan Farm, Shurabad District Kurbanmahmad Begmatov, Head, "Yol" JRC, Shurabad District Murodali Sidikov, Representative, Yol Jamoat, Shurabad District	FA "Hojiyon" nursery, jamoat Yol, Shurobod	Exposure to the activities of the farmers supported by the project
16.00-19.00	Departure to Kulob	Michael Green, Amirjanova Sh., Olimjon Yatimov, Head, of National Center for Biodiversity and BioSafety, Dilovarsho Dustov, Admin\Finance Assistant, Khisravsho Shermatov, Head, working group on II and III components, Murodali Safarov, Project Small Grants Program		
May 18, 2012				
08.00-10.30	Departure to jamoat Dektur, Baljuvan	Michael Green, Amirjanova Sh., Olimjon Yatimov, Head, of National Center for Biodiversity and BioSafety, Dilovarsho Dustov, Admin\Finance Assistant, Khisravsho Shermatov, Head, Working Group on II and III components, Murodali Safarov, Project Small Grants Program		Due to the heavy precipitation and landslide, part of road to jamoat Dektur destroyed. So travel took an extra one hour.
10.30-13.00	Meeting with jamoat Dektur and JRC Dektur	Shomiddin Muhiddinov, Head, "Dektur" JRC, Kurbon Sharifkhonov, Head, Dektur Jamoat,	Jamoat Dektur, Baljuvan District	Briefing on MLF achievements and project results
13.00	Lunch			
14.00-16.00	Meeting with the farmers in the public garden in Dektur	Shomiddin Muhiddinov, Head, "Dektur" JRC, Kurbon Sharifkhonov, Head, Dektur Jamoat, Hamrokhon Safarov, Gardener, Saidmumin Davronov, Gardener, Dektur Jamoat, Saimahmud Umarov, Loan taker, Dektur Jamoat, Idimo Mahmudova, Loan taker, Dektur Jamoat, Fozilamo Dostieva, Loan taker, Dektur Jamoat,	Jamoat Dektur, Baljuvan District	Interview with the farmers regarding the garden, loans
16.00-17.00	Meeting with Dektur farmer	Saidmahmud Umarov, Foreman, Solar Drier Maker,	Jamoat Dektur, Baljuvan District	Briefing on construction of solar driers to process ABD products
17.00-19.00	Departure to Kulob	Michael Green, Amirjanova Sh., Olimjon Yatimov, Head, of National Center for Biodiversity and Biosafety, Dilovarsho Dustov, Admin\Finance Assistant, Khisravsho Shermatov, Head, Working Group on II and III components, Murodali Safarov, Project Small Grants Program		
May 19, 2012				
09.00-13.00	Departure to Dushanbe	Michael Green, Amirjanova Sh., Olimjon Yatimov, Head, of National Center for		

Time	Activity	Participants	Venue	Notes
		Biodiversity and BioSafety, Dilovarsho Dustov, Admin/Finance Assistant, Khisravsho Shermatov, Head, Working Group on II and III components, Murodali Safarov, Project Small Grants Program		
13.00	Lunch			
14.00-16.00	Presentation on Ayni and Rasht project areas.	Michael Green, Amirjanova Sh. and Project team	Project Office, 47 Shevchenko str., Dushanbe	Presentation on study-tour and training for jamoat administration and farmers of project
16.00-17.00	Meeting with Focus group on dissemination of principles of ABD genetic resources conservation in Universities	Safarbek Rahimov, Dean, Biology Faculty, State Pedagogical University named after s.Aini Khairiddin Rahmonov, Lecturer, Biology Faculty, State National University Davron Akhmedov, Lecturer, Biology Faculty, Tajik State National University Rahmatullo Sattorov, Senior Lecturer, Botany Chair, Tajik State National University Nuriddin Mirzoev – Postgraduate, Biological Sciences, Tajik State National University Mahmad Iskandarov – Assistant, Zoology Chair, Tajik State National University Juraboy Boboev – Assistant, Botanic Chair, Tajik State National University Jamoliddin Bobokalonov – Lecturer, Botanic Chair, Tajik State National University	Tajik National University	
May 20, 2012				
08.00-12.00	Departure to Nurobod	Michael Green, Amirjanova Sh., Khisravsho Shermatov, Head, Working Group on II and III components		
12.00	Lunch			
13.00-14.00	Meeting in Khumdon Jamoat Nurobod District	Nazrijon Sanoev – Head of “Ahtam” Dekhkan Farm, Jamoat ‘Khumdon’, Nurobod District Najmiddin Roziev – Deputy Head of ‘Khumdon’ Jamoat, Nurobod District Sulaymon Davlatov – Head of ‘Sulaymon’ Dekhkan Farm, Nurobod District Bahodur Eshonov – Head of Jamoat Resource Center, Nurobod District Abdujalil Sharipov – Head of Khumdon Jamoat Council, Nurobod District	Jamoat Khumdon	Interview with the farmers on the activities within the project framework
14.00-15.30	Departure to Gharm	Michael Green, Amirjanova Sh., Khisravsho Shermatov, Head, working group on II and III components		
15.30-17.00	Meeting with UNDP Gharm AO	Saimuddin Muhiddinov – Governance Advisor, UNDP Gharm AO	UNDP Gharm AO Office	
May 21, 2012				
08.00-9.00	Departure to jamoat Nushor	Michael Green, Amirjanova Sh., Khisravsho Shermatov, Head, working group on II and III components		

Time	Activity	Participants	Venue	Notes
9.00-13.00	Meeting in Nushor Jamoat	Mahmadrahim Gadoev – Head of “Nushor” JRC, Sulaymon Huseinov – Head of MLF “Ehyoi Kuhiston”, Tohir Shomahmadov – Loan specialist in Nushor Village, Habibullo Mahmadshev – Head of “Saifullo” Dekhkan Farm, Nushor Village, Saidkhujabekov – Head of Nushor Jamoat	Jamoat Nushor, Rasht District	On the project supported activities
12.00	Lunch			
14.00-15.00	Meeting with MLF “Faizi Surkhob”	Ghazalshoh Sherov – Head of MLF “Faizi Surkhob”, Rasht District	Garm, MLF Office	MLF portfolio, future perspectives with the project
16.00-18.00	Departure to Dushanbe	Michael Green, Amirjanova Sh., Khisravsho Shermatov, Head, Working Group on II and III components		
May 22, 2012				
09.00-13.00	Departure to Dushanbe	Michael Green, Amirjanova Sh., Khisravsho Shermatov, Head, Working Group on II and III components		
13.00	Lunch			
14.00-17.00	Discussion of project initiatives and activities.	Michael Green, Amirjanova Sh., Project team	47 Shevchenko str., Dushanbe	
May 23, 2012				
10.00-12.00	Desk review	Michael Green, Amirjanova Sh.,	Atlas Hotel., Dushanbe	Preparation of the presentation for partners
12.00	Lunch			
13.00-15.00	Presentation of initial findings	Project team and experts	47 Shevchenko str., Dushanbe	
15.00-16.00	Debriefing in UNDP Office.	Mr. Sukhrob Khoshmukhamedov, UNDP Asst Resident Representative Ms. Nargizakhon Usmanova, UNDP Programme Analyst	UNDP CO, Ayni 39, Dushanbe	
16.00-17.00	Final meeting with Project team	Neimatullo Safarov, Project Manager Tatyana Novikova, Deputy Project Manager Dilovarsho Dustov, Admin\Finance Assistant Ekaterina Yuldasheva, Office Manager\ Project Assistant	Project Office, 47 Shevchenko str., Dushanbe	Discussion of the logframe, indicators, arising opportunities

Annex 4: List of Documents Reviewed

Project documentation

- Project Document
- Request for CEO Endorsement/Approval
- Inception Report, June 2010
- Logical Framework Matrix, status of targets updated for MTE May 2012
- Report of Development of METT Analysis Table for Medium Term Project Evaluation
- Quarterly Progress Monitoring Matrix Reports, 2009-2012
- Annual Project Reports, 2009-2011

Technical reports and other documents

- GEF Monitoring and Evaluation Policies
- International Consultant's reports by Miles Fisher (2010, 2011)
- International Consultant's report by Christopher Wheatley (2011)
- Forest Genetic Resources of Tajikistan, CEP 2012
- Series of technical reports on project outputs – see table below

No.	Topic	Output
Outcome 1. Agrobiodiversity conservation and adaptation to climate change through supportive policy, regulatory and institutional frameworks		
1.	Survey on legislation related to ABD adaptation to climate change	1.1
2.	Consultative package for conducting workshops and practical consultations to farmers and households of project districts	1.2
3.	Operative hydrometeorological information on developing a model on ABD adaptation	1.2
4.	Local genetic resources of project areas – a guarantee of food security	1.3
5.	Formation of skills on communities support in the integrated approach to biodiversity conservation in agricultural systems, development of adaptive capacity and linking production with private sector markets	1.4
6.	Formation of skills on communities support in the integrated approach to biodiversity conservation in agricultural systems, development of adaptive capacity and linking production with private sector markets (methodical manual)	1.4
7.	Cultivation agrotechnology for cereals and legumes	1.2; 1.5
8.	Establishment of a nursery for living mother collection gardens of local forms of ABD genetic resources in project areas	1.5
9.	Registration form for collections of planted and wild relatives	1.6
10.	Social-economic and agro-climatic information on 11 target Jamoats of project areas	1.8
11.	Maps of activities and results in project areas	1.8; 2.2-2.6
12.	Album of maps	1; 2
13.	Agrobiodiversity of Tajikistan	1; 2
Outcome 2. Improved capacity for sustaining agrobiodiversity in the face of climate change		
14.	Sustaining agrobiodiversity in the face of climate change in Tajikistan (Report of the international consultant on ABD adapting to climate change modeling using homological approach. Myles Fisher, BAgrSc)	2
15.	Local cereals selected within SGP and MLF	2.1
16.	"Genetic resources – a source of food security" – Materials of science-practical conference	2.1
17.	Practical measures on development of agroenterprises on processing and preservation of local ABD products in project areas	2.1
18.	Module of the workshop "Garden agrotechnology and methods of grafting for improvement of ABD fruit sort status"	2.1
19.	SGP implemented project and achieved results (in model Jamoats: Shuroabad, Yol, Dashtidzhum, Sari Khosor, Nushor, Dehibaland, Khalif Khasan)	2.4. 3.5

20.	Nature and climatic features of project Jamoats and their homologues for modeling	2.5
21.	Training on modeling, creation of a database on climate, soil and crops for cereals crop capacity modeling in project areas	2.5
22.	Climate and crop capacity modeling	2.5
23.	Diary of observations for farmers' ABD collections	2.6
24.	Map of location of local fruit genetic resources wild relatives in project areas	2.6
25.	Raising awareness on ABD conservation and development of adaptive capacity among farmers on climate change	2.8
Outcome 3. Enabling environment for market development for ABD products developed		
26.	Small business in rural areas	3
27.	Market development strategy	3
28.	Practical measures on development of local fruit ABD products processing in project areas	3.1
29.	Fair trades of local ABD products of project areas	3.3
30.	Financial mechanisms and micro-crediting for communities capacity building and local ABD conservation	3.6
31.	Results of the work of International consultant on marketing and agroenterprises development	3.7

NB Other literature consulted is referenced.

Annex 5:

Progress in delivery of project outcomes and outputs

Outcomes / outputs, with constraints and overachievements noted by PIU	Progress (achievements) reported by PIU	Mid-Term Evaluation comments
<p>Outcome 1: Agrobiodiversity conservation and adaptation to climate change (CC) through supportive policy, regulatory and institutional frameworks</p> <p>Constraints: Attempt to sign individual contracts with national experts delayed project implementation in 2009. Therefore it was decided to sign institutional contracts and Inter-Office Memorandums to ensure timely and efficient project implementation.</p>	<ul style="list-style-type: none"> Provided practical advice to farmers on local traditional varieties of valuable ABD and methods of taking climate changes into account to improve farm operations. Developed project database on local varieties and species of fruits and nuts present in the four project areas. Developed and implemented agreements and detailed work plans with project partners and UNDP Communities Program facilitating successful implementation of project activities. Reached agreement with key national institutions (i.e. partners) regarding organization and introduction of ex-situ and in-situ stock as part of national and local policy (see Inception Report for details). More than 1,500 samplings of species and varieties adapted to CC distributed to farmers and now under cultivation in project areas. Project team supported farmers through training and consultations. Drafted concept of a National Strategy for ABD Conservation in the context of climate change in Tajikistan. 	<ul style="list-style-type: none"> Outcome 1 concerns supportive policy and regulatory and institutional frameworks, for which there has been little progress to date because a bottom-up approach has been adopted whereby outputs to date have focused on building capacity at local level with support from project partners. Such an approach is in line with the Inception Report. While good progress has been made in delivering capacity building outputs under Outcome 1, arguably, such outputs would have been more appropriately placed under Outcome 2 (building capacity). This is not a reflection on implementation but indicative of a weakness in the design on the Logical Framework. As planned, much more emphasis will need to be given during the remainder of the project to identify the policies and regulatory frameworks necessary for ABD resources to be conserved, farmed and marketed in sustainable ways that help to improve local livelihoods in the face of climate change and its impact on ABD resources. Outputs have been well documented but somewhat limited to describing the activities and methodologies. They should be more oriented towards policy guidance and promoting best practice in conserving, farming and marketing of ABD resources.
<p>Output 1.1: Agrobiodiversity conservation and adaptation principles mainstreamed into local and national agricultural, trade and industry policies and programmes</p> <p>Constraints: Lack of qualified specialists caused delay in implementation of planned activities – recruitment announcements were placed three times in Mass Media.</p>	<ul style="list-style-type: none"> Developed recommendations on strengthening CC adaptation policy across sectors (e.g. agriculture, land and water resources management) based on wide analysis of existing policies and assessment of their conformity with national strategies and plans. Developed principles of conservation and adaptation of agrobiodiversity implemented at all pilot project sites through signing of workplans with local administrations, JRCs and UNDP AOs; Developed recommendations on improvement of national legislation and on climate change adaptation mechanisms for implementation under a range of conditions. 	<ul style="list-style-type: none"> Legislative Overview Report, <i>Preparation of current policy of adaptation to climate change and recommendations to new principles of adaptation to climate change</i>, identifies weaknesses in existing policies and regulatory provisions for ABD and CC adaptation but does not clearly specify the policy and legislative changes necessary to plug the gaps. Mainstreaming clearly evident at local levels on farms and in gardens. Lack of evidence of ABD principles having been mainstreamed into national policies within agricultural and other sectors.
<p>Output 1.2: Extension package for promoting climate resilient farming</p>	<ul style="list-style-type: none"> Developed consultative package (toolkits, practical recommendations, guidelines, presentations, modules, 	<ul style="list-style-type: none"> Over 250 farmers (180 households) were consulted in the four pilot areas during a series of 16 workshops on local, traditionally cultivated

Outcomes / outputs, with constraints and overachievements noted by PIU	Progress (achievements) reported by PIU	Mid-Term Evaluation comments
<p>varieties developed and integrated into the national extension service and delivery system</p> <p>Constraints: Low capacity of government organizations hampers the process of integration of key project ideas into the national consultative package.</p>	<p>questionnaire) on: sustainable ABD conservation in the face of CC; wild relatives of ABD; genetic resources database; local valuable species of ABD; and cultivation of ABD genetic resources, including information about seed materials and seedlings available from project partners, agronomists, farmer associations and households at project sites;</p> <ul style="list-style-type: none"> Conducted practical consultations on agro-technology care after seedlings for improvement of sort status of fruit cultures (grafting, gardening, organic fertilizing, preparation of fertilizers) for local community; Prepared a resource CD with on main issues regarding policy and capacity on climate change and agrobiodiversity. On a basis of information provided on CD have been prepared awareness materials that have been distributed during conferences, workshops and meetings. 	<p>plants (landraces) and the importance of their wild relatives for coping with climate change, using homologue modelling to inform future cultivation. This material is produced in a series of five publications, of which one on cereals and legumes and another on hydro-meteorological information for adaptation of ABD to climate change were seen by the evaluators. The latter describes the methodology but is not helpful to farmers. Much more useful but not included in the document is the matrix that documents the tolerances of ABD varieties to temperature, soil type, altitude, rainfall etc. This should be made readily available to farmers and other community members via the JRCs and other means.</p> <ul style="list-style-type: none"> This package for promoting climate resilient ABD varieties is being introduced to the national extension service of MoA by project partners within the Tajik Academy of Agricultural Sciences.
<p>Output 1.3: Capacity of local government to enforce policies, sectoral guidelines and spatial plans in support of agro-biodiversity conservation and adaptation to climate change increased in 4 pilot areas</p> <p>Constraints: Statistical data are not systematically or consistently organized by the different local government administrations, nor are they readily accessible, making their timely collection difficult to achieve.</p>	<ul style="list-style-type: none"> Information from genetic resources database developed on species, varieties and cultivars of ABD on 10 pilot jamoats for use by beneficiaries to adapt to climate change on project sites. Brochure on <i>Physic-geographic description of homologue sites</i> prepared, providing descriptions of 10 pilot jamoats and 20 homologue sites with photos and maps for further use on modelling local adaptive species of ABD to climate change. Local communities of project sites provided with prepared guidance and modules on local cultivars of cereals, wild relatives, agro-technological care of gardens, and grafting to improve fruit trees, etc. Collected and collated data on socio-economic conditions, natural resources (land and water), climate, market products of local ABD etc.) for evaluation and development of various models of adaptation of ABD to climate change at project sites. 	<ul style="list-style-type: none"> Output supported by a database and draft document, <i>Genetic resources of project areas – guarantee of food security</i>, in which ABD wild relatives and landraces are registered, mapped and described for each of the 10 target jamoats. Coverage is not yet comprehensive but the final output will be very valuable, especially if more, good photographs can be included and clear guidance on how to distinguish between the different CWRs, varieties and cultivars. It is not entirely clear, however, precisely how this specific output will improve the capacity of local government to enforce policies in support of agrobiodiversity. It would appear that some other form of policy guidance is required that builds on the above knowledge base.
<p>Output 1.4: CSOs and local government in pilot areas have skills to actively support communities to integrate agrobiodiversity conservation into farming systems, build adaptive</p>	<ul style="list-style-type: none"> Developed conditions for improvement of friendly relations with local administration, farmer communities, JRCs and UNDP AOs on a basis of third-party memorandums and work plans that promoted joint achievement of project targets and goals with project partners at project sites. 	<ul style="list-style-type: none"> Activities included the establishment of living collections of ABD in gardens and farms, using traditional varieties (landraces). Lack of clarity concerning distinction between landraces and crop wild relatives needs to be addressed, particularly for registration and monitoring purposes.

Outcomes / outputs, with constraints and overachievements noted by PIU	Progress (achievements) reported by PIU	Mid-Term Evaluation comments
<p>capacity, and link such production to markets</p> <p>Overachievement: Local public organizations actively participate in the project's implementation.</p>	<ul style="list-style-type: none"> ▪ Raised awareness of local living collections of ABD and their values among 1,000 community representatives from project sites through workshops and consultations held in cooperation with project partners (NRCGR, Institute of Farming, SAFH and Hydrometeorology Agency). Farmers trained in agro-technological practices for improvement of characteristics of ABD varieties. ▪ Consultations and cooperation of project with local administration, farmers and agronomists lead to production of local ABD products and participation in national agricultural exhibitions 	<ul style="list-style-type: none"> ▪ Emerging signs of ABD products being linked to markets, based on site visits, but yet to be consolidated. ▪ High levels of commitment evident among farmers, jamoats and JRCs (supported by UNDP AOs).
<p>Output 1.5: Capacity building programs implemented to ensure institutions charged with responsibility for managing the ex-and in-situ gene banks are effective</p>	<ul style="list-style-type: none"> ▪ In cooperation with State Agency on Forestry and Hunting, National Republican Centre on Genetic Resources and Institute of Farming, local varieties of cereals and legumes that are resistant to climate change have been cultivated. Similarly, live collections of ABD varieties have been established on farms and in gardens in each of the four project sites, monitored and distributed to others. ▪ Database of ex-situ genetic resources of plants developed in cooperation with project partner, NRCGR, and provided to farmers and agronomists at project sites for selection of varieties adapted to their local climate conditions. ▪ During the study tour on <i>Introduction to database on genetic resources of Tajikistan</i>, representatives of pilot jamoats introduced to valuable ABD species and, with NRCGR support, informed about access to seeds and seedlings, and ABD materials maintained at project sites. ▪ In cooperation with project partner, Institute of Farming, adaptiveness of ABD cereals varieties tested at Panjakent, Tojikobod and Shurobod districts in areas totalling 3,29 ha. Varieties showing high harvest potential selected and their seed collected and disseminated for replication in other project sites. ▪ Together with project partner, State Agency on Forestry and Hunting, certified 62 thousand seedlings of 8 varieties of local fruit for expansion of fruit gardens in pilot jamoats. ▪ 15 technical staff of Forestry Agency trained in grafting of valuable ABD genetic resources, and in ABD nursery, farming and gardening techniques. 	<ul style="list-style-type: none"> ▪ Output documented in <i>Establishing live collection nursery of mother gardens with valuable local ADB genetic resources forms within project areas</i>. Sources of local ADB landraces documented, along with best practice for their cultivation and maintenance. ▪ Available evidence suggests activities are focused on ex situ conservation, with ABD saplings introduced to the nurseries/mother gardens from the vicinity. ▪ The project area includes 23,000 ha of protected areas within which in situ conservation of CWRs is promoted. This should be monitored. ▪ Currently, project interprets ex situ as being conservation of ABD genetic resources within seed banks; and in situ as being conservation of such resources in nurseries, farms and gardens. Much clearer distinction and documentation needs to be made between landraces and CWRs, and their conservation in situ (i.e. in the wild in the case of CWRs or in farms/gardens in the case of landraces) or ex situ, following international standards and the guidance on definitions and terms provided in Section 1.5.

Outcomes / outputs, with constraints and overachievements noted by PIU	Progress (achievements) reported by PIU	Mid-Term Evaluation comments
<p>Output 1.6: ABD policies applied in 4 pilot areas & adopted in >40 home gardens/farms</p> <p>Overachievement: Establishment of a Communities Council in each pilot jamoat facilitated more efficient implementation of project activities. Target of 1,500 saplings exceeded: 3,000 saplings were distributed and planted.</p>	<ul style="list-style-type: none"> ▪ Six farmers from Dektur, Sari Khosor, Shuroabad, Dashtijum, Nushor and Khumdon jamoats received 1000 seedlings of fruit trees from the nursery established by the State Agency of Forestry and Hunting and planted them at their households. These seedlings were adapted to climate change, having been developed through selection and grafting of wild relatives tolerant to climate change impacts. ▪ Using the methodology of selection and grafting of ABD species, Dangara and Dashtijum nurseries grew about 150 thousand specimens of fruit trees for establishing in mountainous areas of project sites. ▪ Under GEF SGP, 17.5 ha of gardens developed in Kulyab and Rasht regions for ex situ conservation of fruit landraces and, on 8.5 ha, ex situ conservation of CWRs (pistachios, walnuts, oleaster (<i>Elaeagnus</i>) as living collections. Note that CWRs were collected from a variety of climatic conditions; and at Dangara and Dashtijum nurseries they were grafted with landraces prior to being disseminated to pilot jamoats. 	<ul style="list-style-type: none"> ▪ ABD policies applied in 3 of 4 pilot areas and adopted in 6 home gardens. ▪ 6 home gardens/farms in 6 jamoats established with Project funds and 8 gardens in other jamoats without Project funds (inspired just by workshops etc). This is a good example of replication. ▪ Output includes <i>Registration form for planting collections and wild relatives</i>, which also provides information on the importance of CWRs and from where to obtain varieties of fruit plants for establishing collections. According to this document, over 3,000 saplings of fruit plants adapted to climate change impacts were distributed to 10 farms and 20 households in the four pilot areas. Over 80 farmers and households across the 10 target jamoats in Kulyab and Rasht improved their technical knowledge and skills in ABD horticulture. ▪ Crop registration and monitoring forms developed and used for SGP-funded farms and home gardens. ▪ Establishment of Community Councils in each pilot jamoat was not a planned activity. Provides good example of adaptive management. ▪ No clear guidance documenting exactly what are ABD policies.
<p>Output 1.7: Local level producer societies for specific crops (such as fig, pistachio, walnut, pomegranate, apricot, almond, mulberry) promoted to provide incentives for adoption (linking farmers to markets, and credit)</p> <p>Overachievement: Small-budget sun dryers for fruit allowed farmers from pilot districts to find alternative way of promoting local ABD production.</p> <p>Constraints:</p>	<ul style="list-style-type: none"> ▪ Prepared resource materials on markets based on reports and recommendations of international and national consultants; and trained farmers in development of ABD enterprises. This resulted in improvement of local ABD at 4 households. ▪ Head of farmer associations and producers from Shurobod, Baljuvan, Khumdon and Tojikobod districts participated in training workshops on business planning, project proposals, and marketing. ▪ Farmers of pilot jamoats trained to can ABD products at Production Cooperative "Kavola" in Panjakent District. Participants learnt the principles of developing private agro-enterprise and production techniques. ▪ As a result of promotional events about SGP, over 500 farmers and 	<ul style="list-style-type: none"> ▪ Output documented in <i>Business planning and development of agro-entrepreneurship in project jamoats</i>, which describes the activities undertaken but does not provide guidance on, for example, how to develop a business plan. Such and related guidance needs to be addressed to maximize sustainability and replication during and post-project. ▪ Unclear how activities address the output. No evidence of establishment of 'producer societies' for specific crops. If this output is no longer considered an appropriate option, it should be justified and the output refined, replaced or removed altogether. As currently implemented, this output would seem to be more appropriately placed under Outcome 3 or incorporated within existing Output 3.7 which has involved business planning.²⁶

²⁶ PMU states that: "Procedure of establishment of any organizations takes really long period of time ..." and that "... it is impossible to protect project sustainability without agreement of local governments and government institutions." Both of these points are well founded, which is why now, mid-term, is the time to decide whether or not it is realistic to continue to pursue this Output.

Outcomes / outputs, with constraints and overachievements noted by PIU	Progress (achievements) reported by PIU	Mid-Term Evaluation comments
Regular limits in power supply in project territories hamper integration of mini-plants to process ABD products.	householders trained in project proposal development to access such financing.	
Output 1.8: Development of long-term strategy for conservation of ABD and adaptation to climate change	<ul style="list-style-type: none"> Conducted reconnaissance interviews with local population in project sites to identify status quo of ABD conservation in relation to the planned project targets and goals. Based on material inputs from international and national consultants, a concept of a <i>National Strategy on ABD Conservation in the Face of CC</i> has been prepared. 	<ul style="list-style-type: none"> Socio-economic and agro-climatic data collated into a statistical compendium for 11 of 36 jamoats in 4 pilot areas, based on modelling results from Output 2.5. Concept for a <i>National Strategy for ABD Conservation in the Face of Climate Change</i> needs developing into a comprehensive draft.
Outcome 2. Improved capacity for sustaining agro-biodiversity in the face of climate change Constraints: Insufficient experience of partner organizations on UNDP reporting procedures hampered implementation of contracts, therefore causing some delays in meeting the deadlines of the contracts. To eliminate these problems it was decided to conduct additional training on financial reporting for partners.		<ul style="list-style-type: none"> Much has been achieved by the project in building capacities at grassroots levels among farmers and other members of local communities, resulting in greater awareness and understanding of the conservation issues and livelihood opportunities afforded by agrobiodiversity. Likewise, awareness of the importance of agrobiodiversity has been raised more widely at regional and national levels through a series of initiatives and events. The homologue approach has had limited success due to technical issues concerning the modelling, some of which are insurmountable within the life of the project. Other weaknesses include: confused understanding of provisions necessary to conserve CWRs <i>in situ</i>, lack of routine back-up of project's information system, absence of a communication strategy.
Output 2.1: Farmers in the 4 pilot areas provided with skills and knowledge to increase farm productivity (and food security) using climate resilient agro-biodiversity friendly practices Overachievement: FOR THE FIRST TIME - farmers got access to PGRC database of genetic resources.	<ul style="list-style-type: none"> In cooperation with UNDP AOs, householders from 10 pilot jamoats selected for involvement in project activities including application of sustainable ABD methods. 40 representatives of 6 pilot jamoats of Jonbakht, Dektur, Sarikhsor, Shurobod, Nushor and Khumdon at 4 workshops gained knowledge on optimal seasons, densities and climatic conditions for planting traditional cereal varieties, and times for fertilizing, etc. to improve food security. Conducted 6 workshops on genetic resources database, local communities gained knowledge on values of ABD collections and importance of selecting varieties adapted to climate change impacts. 	<ul style="list-style-type: none"> Output supported by two manuals: <i>Agrotechnology of garden and vaccination methods for improvement of varietal status of ABD products</i>, which provides guidance on cultivation and care of plants (e.g. row spacing, pruning, grafting, use of fertilizers, disease and pest control, use of wild relative stock); and <i>In the frame of partnership with SGP and MLF selected ABD local varieties</i>, which provides guidance on locally adapted varieties of wheat, triticale and barley that suitable for cultivating in the foothills and mountain areas of project sites. Increased knowledge from workshops, training modules, study tours etc. Farmer access to Plant Genetic Resources Centre (PGRC) database is also a significant achievement. Training and guidance needs to be clearer/more emphatic about

Outcomes / outputs, with constraints and overachievements noted by PIU	Progress (achievements) reported by PIU	Mid-Term Evaluation comments
	<ul style="list-style-type: none"> Conducted 6 workshops on values of crop wild relatives (CWRs). Farmers and agronomists from project sites (Panjakent, Nurobod and Shurobod) improved their knowledge on CWRs adapted to climate change impacts. Hosted national conference for representatives from local administration, jamoats, JRCs and scientific organizations on adaptation principles of ABD genetic resources at project sites. Conference provided forum for scientists and farmers to exchange scientific knowledge and practical experience of ABD genetic resources at jamoat and JRC levels. Recommendations from national conference disseminated among local population of 10 jamoats. 200 farmers and 50 households, strengthening their practices on use of local, traditional ABD varieties. 	<p>organic (natural) rather than chemical approaches to fertilisers and disease/pest control. This is a particularly important issue because (i) farmers are increasingly talking about improving production by use of fertilisers and controlling disease/pests as their income and, therefore, spending power rises; and (ii) there is huge potential for linking agrobiodiversity production with organic production in order to capitalise on a potential niche market and maximise income generation.</p>
<p>Output 2.2: Community-based participatory methods (building on traditional knowledge) developed and implemented for ex situ conservation especially of recalcitrant materials (seed that cannot be stored ex situ).</p> <p>Constraints: Some varieties of fruit (e.g. members of families Pomoideae, Punicaceae and Vitaceae) cannot be stored as seeds, according to experts from the Academy of Science. Thus farmers supported by project to establish mother gardens (i.e. nurseries comprising 'mother' stock).</p>	<ul style="list-style-type: none"> Homologue sites selected for 10 pilot jamoats and mapped. Brochure prepared on <i>Physic-geographic description of 10 pilot jamoats and 20 homologue sites</i>, with tables on cultivated ABD species and 30 climatic maps and diagrams. Homologue modelling maps developed for 10 pilot sites and 20 homologue sites, with indication of possible threats and risks to ABD. 	<p>Much achieved in target jamoats, indicating a successful 'model approach' that is community-based, grounded in effective knowledge exchange (based on synergy generated from sharing scientific and traditional knowledge), and resourced from sustainable funding sources (revolving fund). Achievements include:</p> <ul style="list-style-type: none"> Mother gardens (14 ha in total) established for recalcitrant varieties of traditional fruit (e.g. pomegranate, apple) through community-based approach involving jamoats, reinforced by JRCs, and resourced by setting up revolving micro-loan funds (MLFs). Knowledge of local ABD varieties secured from communities and recorded in GIS. Further resourcing on stream for 2012 via GEF Small Grants Programme.
<p>Output 2.3: Tajik ABD germplasm available to national, regional and global crop improvement programmes</p> <p>Overachievement: Farmers received access to seeds and saplings of local genetic resources.</p>	<ul style="list-style-type: none"> Varieties of cereals and legumes adapted to climate change selected from three project demonstration sites and seeds collected for replication elsewhere in similar agro-climatic zones within project areas. Tajik germplasm materials have been collected for marketing via the internet. 	<p>Policy of collecting, identifying and storing germplasm ex situ in national seed bank, while also sending samples to repositories overseas to further safeguard the genetic resource in perpetuity and for crop improvement programmes is being applied well.</p> <ul style="list-style-type: none"> Mother Garden established at Plant Genetic Resources Centre with material from project. ABD seed material (land races and wild relatives) stored at PGRC.

Outcomes / outputs, with constraints and overachievements noted by PIU	Progress (achievements) reported by PIU	Mid-Term Evaluation comments
		<ul style="list-style-type: none"> PGRC deposited duplicate material for 1023 wheat varieties and >600 barley varieties in seed banks in Svalbard (Norway) and Vavilov Institute (Russia). (35-40% originates from project) PGRC also provided Sweden with 4 wheat varieties and Agricultural Academy, Xinjiang, China with 80 varieties (wheat, barley, faber beans etc). PGRC's database was designed by ICARDA using FoxPro. PGRC staff trained in data entry but unable to query database so, for example, cannot readily compute a dataset of all landrace or CWR accessions provided by project.
<p>Output 2.4: In situ “gene banks” established in 40 home gardens/farms in 4 pilot sites, including collection, geo-referencing, identification, characterization, and/or germplasm-banking of prioritized ABD (largely fruit and nuts)</p> <p>Overachievement: FOR THE FIRST TIME – good crops of legumes were harvested in Penjikent district within SGP that contributed to raising local population's interest and expansion of sewing areas.</p>	<ul style="list-style-type: none"> Workshops and consultations with farmers on ABD, CC and development of local ABD businesses held in cooperation with JRCs, to promote use of and improvements in local varieties of ABD. Nurseries of climate change tolerant varieties of ABD established in 4 gardens of farmer households. Adaptive forms of fruits selected for farmers and grafted. 1500 seedlings, adapted to local climate changes, made available to beneficiaries for their gardens in range of agro-climatic zones. Farmers from 4 project sites developed 18 proposals for SGP funding (8 programs on gardening, cereals and legumes and 1 program on ABD product development). On a basis of project implementation at Mumnobod and Panjakent pilot sites, 15 tons of local varieties of cereals and legumes harvested for further dissemination elsewhere in project sites. 	<ul style="list-style-type: none"> Note that Output 2.4 (and also Output 1.6) is funded from GEF SGP (US\$ 82,000), hence the similarities with Output 2.2 which is funded directly by the project. Thus, gardens and farms established under Output 2.4 were selected through SGP application procedure, whereas those targeted in Output 2.2 were selected by the project. Output 2.4 has not been clearly defined in the Project Document with respect to exactly what should be conserved in situ in the gene banks established in gardens and farms. However, the intention becomes clearer in the LFM, one of the targets being: “In situ conservation of wild relatives of globally significant ABD in 40 home gardens/farms ...” Such an approach is endorsed in Slide 10 of the Monitoring & Evaluation presentation given by the RTA at the Inception Workshop on 8 March 2010, which specifically cites this LFM target (see copy of Slide 10 on last page of this Annex). As outlined in Section 1.5 of this MTE report, conservation of CWRs in home gardens and on farms is a form of ex situ conservation and represents a short-term strategy, since the CWRs are removed from the prevailing pressures of natural selection in the wild. In order to achieve some degree of in situ conservation of CWRs, therefore, the project will need to ensure that measures are taken to protect CWRs in the wild through the establishment of genetic reserves or other appropriate mechanisms.²⁷

²⁷ PIU states that: “Unfortunately, this is not neither in log frame, nor in the budget. However, we will search for options to develop this initiatives in the frames of project.” This is a fair comment but, presumably, it should be possible to accommodate some element of in situ conservation provisions (especially with support from GEF SGP) given that

Outcomes / outputs, with constraints and overachievements noted by PIU	Progress (achievements) reported by PIU	Mid-Term Evaluation comments
<p>Output 2.5: Climate change and crop modelling facilitates the selection of the most appropriate homologue sites that represent present and future conditions</p> <p>Constraints: In order to conduct crop modelling there has been tested the software developed and recommended by CIAT. In the course it was found out that this program can be used only in tropical zones and for annual cultures; and there is not version adapted to mountain areas and multi-year cultures. Thus, it was decided to make modelling for annual cultures (barley and wheat) as indicator species.</p>	<ul style="list-style-type: none"> Homologue modelling software has been purchased from CIAT. On a basis of these software trainings for national consultants have been conducted and climatic models for pilot jamoats have been developed up to 2050; Project personnel have been trained to simulate the models for climate, soil and crops through DSSAT, DivaGis and MarkSim; Consultative materials (training modules and presentations) on homologue modelling and ABD adaptation methods for farmers and agronomists have been developed; In cooperation with international consultant selected model sites for practical homologue modelling up to 2050 for some crops. Maps and diagrams of CC modelling have been prepared for thematic reports; 80 farmers and household representatives from 4 project areas have been trained with principles of homologue modelling at 4 workshops; With consultation of international consultant for identification of valuable varieties, adapted to climate change and conservation of genetic resources have been developed homologue model of 10 jamoats. Harvest modelling of barley “Kharjav” at Khumdon condition and wheat “Navruz” at Dektur condition have been developed up to 99 years. 	<ul style="list-style-type: none"> 20 homologue sites (10 pairs) established in each of 10 jamoats. Characteristics of these sites (socio-economic conditions, climate, soils, landscapes, plant and ABD genetic resources) documented in <i>Natural climatic conditions of project jamoats and their homologues</i>, using data from Output 1.8 and other sources. Also see further comments in Section 4.2.2 and M.J. Fisher (2010), Report of the international consultant on <i>Modelling of agrobiodiversity adaptation to climate change employing the Homologue Approach</i>. Local fruits germplasm exchanged at 6 homologue sites. Modelling has been possible only for cereals in Tajikistan, based on modifications to existing software. It is currently not possible to apply the model to fruit and nut trees due to limitations in the software algorithms, which do not hold relevant data for conditions in Tajikistan. In view of the unanticipated limitations of the homologue modelling for fruit and nut trees, a clear exit strategy needs to be developed regarding how best to achieve those project outputs under Outcome 2 that are dependent on such modelling. It may also be necessary to develop some alternative outputs for delivery of Outcome 2.
<p>Output 2.6: Sustainable management strategies for the 4 project areas and areas certified as sources of climate resilient wild crop relatives</p>	<ul style="list-style-type: none"> Group of national experts on ABD and group of national experts on CC conducted field trips, researches and prepared analytic reports for 4 project sites and recommendations on development of national strategy on ABD conservation in the face of climate change; During the field-trips the maps, statistics and analytic data for jamoats have been analyzed. Tables on valuable sorts and species of each project sites have been prepared; In cooperation with SAFH, NRCGR and Institute of Farming have been conducted practical activities on growing the fruit trees, local sorts of cereals and legumes adapted to climate change; 	<ul style="list-style-type: none"> Proforma (<i>Diary for monitoring of ABD farmers collection</i>) designed for recording indicator species of crops, such data being used to develop models. Map of wild relatives of local genetic resources of ABD in project areas produced for 4 biogeographic zones: Rasht, Zeravshan, Baljuvan, Shurobad. As yet, no management strategies drafted or plans for certification of areas with CWRs.

tThe project area includes 23,000 ha of protected areas within which in situ conservation of CWRs is being promoted.

Outcomes / outputs, with constraints and overachievements noted by PIU	Progress (achievements) reported by PIU	Mid-Term Evaluation comments
	<ul style="list-style-type: none"> ▪ National database on genetic resources prepared for project aims and goals and is available for practical use at project sites for all stakeholders; ▪ The map on wild relatives of fruit trees for 4 project areas developed with linkages to data. 	
<p>Output 2.7: A network of databases established on materials maintained in situ and ex situ</p> <p>Constraints: Mountainous roads in project areas are disaster prone (landslides, mudflows) thereby causing delays in collecting relevant data and systematizing it</p>	<ul style="list-style-type: none"> ▪ Collected and systematized as tables data on valuable sorts and varieties of ABD for 4 project sites. Characteristics of their adaptation capability to climate change have been developed; ▪ Conducted activities lead to easy access of farmers to National Centre of Genetic Resources collection. 	<p>GIS/database system is impressive in its design and contents, as demonstrated to MTE team by project's GIS/database expert. Also, maps of ABD resources have been generated for production of posters to raise awareness and understanding about ABD resources, their values and distribution. Current short-comings include:</p> <ul style="list-style-type: none"> ▪ Large number of records of in situ and ex situ ABD resources yet to be entered into database. ▪ GIS/database system yet to be networked for access within Project sites. ▪ System is not routinely backed up, with copy stored off-site. [NB This is an important security issue that should be addressed immediately.]
<p>Output 2.8: Awareness campaigns in partnership with the GEF SGP address conservation of agrobiodiversity and adaptation to climate change</p> <p>Overachievements: Participation in the national trade fairs was not included into AWP. But as a result of a series of consultations with local authorities it was decided to demonstrate ABD products (produced within SGP) at the trade fairs. This contributed to population's access to local genetic resources of fruits, conservation and dissemination of genetic pool of valuable fruit breeds in agricultural practice that had positive impact on development of local ABD market.</p>	<ul style="list-style-type: none"> ▪ In cooperation with UNDP CP at Baljuvan district has been established new JRC Dektur and engaged MLF "Imdodi Khutal" for development of microcredit capacity of local community at jamoat Dektur with valuable agroecosystems and genetic resources; ▪ Workshops and consultations with UNDP AOs, field visits to JRCs lead to develop specific mechanisms for more efficient joint work for project targets; ▪ Cooperation and consultation with SGP GEF improves capacity for involvement of beneficiaries into conservation of ABD market issues; ▪ Students, teachers and scientists through workshops and conference have been aware on agrobiodiversity of Tajikistan and its adaptation to climate change and formulated effective mechanism for joint work on project targets; ▪ More than 300 students and teachers of national Universities that participated scientific conference "Ecological problems and rational use of natural resources" aware of problems on environment protection and ways of solving the nature conservation problems. Students learned value of local agrobiodiversity at food security; 	<ul style="list-style-type: none"> ▪ Wide range of awareness raising initiatives undertaken (e.g. conferences, exhibitions, fairs, posters). ▪ However, there is no overall strategic, 5-year communications plan that integrates inputs and outputs to maximise opportunities for public awareness raising at local, regional (and national) levels in a progressive and cohesive manner. ▪ Initiatives to engage with the wider public and raise ABD awareness at national level included: occasional articles and broadcasts via radio or television; trade fairs; youth and student events; and a national workshop on agrobiodiversity conservation, conducted with participation of all financial institutions in the Republic of Tajikistan. ▪ Communication strategy should be developed in tandem with marketing strategy, as greater awareness among public is likely to result in more people looking to purchase ABD products in markets.

Outcomes / outputs, with constraints and overachievements noted by PIU	Progress (achievements) reported by PIU	Mid-Term Evaluation comments
	<ul style="list-style-type: none"> ▪ Around 500 students of State pedagogic university got familiarized with photos of wild relatives of cultural ABD plants and learned about valuable ABD genetic resources at photo-exhibition at International Biodiversity Day; ▪ In cooperation with Academy of Sciences has been held scientific conference “Ecological features of biodiversity” at Kulob, where participated 200 representatives of science, ministries, Universities. Participants have been informed about valuable ABD genetic resources and their wild relatives and adaptation methods in the face of climate change; ▪ For broader awareness of specialists the article on targets and goals of project has been published at Committee on Environment Protections newspaper “Navruzgoh”; ▪ Farmers through project consultative and practical activities trained produce local ABD products from dried and canned fruits (as an example: mulberry). As an incentive for farmers President of Republic of Tajikistan Mr.Emomali Rahmon has visited the exhibition at Sarikhosor and highly appreciated and evaluated ABD products. Film on this issue has been demonstrated through national TV; ▪ 40 farmers from 8 jamoats informed on new MLF initiative on conservation and implementation of ABD at project sites. 	
<p>Outcome 3. Market conditions favour sustainable agro-biodiversity production</p> <p>Overachievements: Successful trade fairs contributed to creation of sustainable image of traditional varieties of local fruits.</p> <p>Constraints: Lack of marketing specialists and market analysts. Lack of international consultant.</p>	<ul style="list-style-type: none"> ▪ Local ABD processing is being implemented in project areas by farmers. ▪ Farmers certify their products thereby increasing their income and guarantee of local ABD sale. ▪ Farmers benefitted from ABD products 3-5 times more than before participation in the project. ▪ Special branding and packaging facilitated recognition of processed ABD products in the market. ▪ Local marketing research identified weaknesses and strengths for formulation of market and goods development strategy. ▪ Interviews and marketing research provided basis of analysis of the value chain for further planning of activities related to the market development strategy. 	<ul style="list-style-type: none"> ▪ There is a major opportunity to link agrobiodiversity products with organic farming practices, as landraces often characterised by disease, frost, drought resistance so less need to use chemical methods of disease and pest control. Similarly, use of organic fertilizers should be promoted and disincentives introduced to curb use of inorganic fertilizers. For example, MLF micro-credits and SGP grants could be conditional upon no use of chemical fertilizers or pesticides. ▪ Representatives met from several jamoats (e.g. Yol, Dektur) were very attracted to the idea of establishing zones within their administrative areas free from use of chemical fertilisers and pesticides. There is already a Government Order to promote organic production but no funds to support it. Apparently this legal provision is quite adequate in itself, providing the mechanism for such zone to proceed at local level;

Outcomes / outputs, with constraints and overachievements noted by PIU	Progress (achievements) reported by PIU	Mid-Term Evaluation comments
Production of huge volumes of ABD is impossible in terms of small areas farmed in mountain landscapes, resulting in limitation of methods of impact on market development.	<ul style="list-style-type: none"> ▪ Successful implementation of grants and credits promoted strengthening of local ABD products value chain components. ▪ Based on the project AWP every year there is designed the Business Development Plan to be further agreed upon by UNDP. 	no permissions are needed at district level. Dektur, for example, used to be renowned for its organic "Surabad" wheat , so such an initiative would link directly back to this jamoat's cultural heritage.
<p>Output 3.1: Capacity building programme to ensure that institutions charged with responsibility for supporting the development of agrobiodiversity based agro-enterprises are effective</p> <p>Overachievements: It was not planned but supposed that the project impact would bring benefit to the ABD conservation policy at the national level: "Developed informative materials on the value of local genetic resources and policy on market development to be further used for report to RIO+20 and presentation for GEF consultations in Berne, 30-31 May 2012"</p> <p>Constraints: Lack of specialists significantly hampered project progress; recruitment announcements for Coordinator of Experts' Group and individual experts on target marketing, economic assessment, analysis of efficiency of agro-enterprises development were advertised 3 times in national press.</p>	<ul style="list-style-type: none"> ▪ Local authorities of target jamoats actively participate and support project activities on agro-business development. 3 meetings conducted in each project area facilitated agreement and support of measures to strengthen vertical component of the value chain; ▪ Interviews with local authorities regarding importance of local ABD conservation, entrepreneurship and market were televised locally; video records of all interviews are available. 	<ul style="list-style-type: none"> ▪ Six training workshops on business planning for small and medium sized enterprises, attended by 90 farmers, supported by a manual produced in 2010: <i>Small business in rural areas</i>. ▪ Market Development Strategy, informed by socio-economic and agro-biodiversity surveys/assessments, appears to provide detailed and thorough analysis of markets. ▪ Target jamoats agreed to support development of ABD enterprises. ▪ No strategic programme for building capacity among institutions responsible for development of agro-enterprises, having clear, integrated inputs, targets and outputs to which partner institutions have signed up.
Output 3.2: Identification, differentiation	<ul style="list-style-type: none"> ▪ A summary report on market development has been prepared in 	<ul style="list-style-type: none"> ▪ Market research conducted on ABD products, including detailed

Outcomes / outputs, with constraints and overachievements noted by PIU	Progress (achievements) reported by PIU	Mid-Term Evaluation comments
<p>and marketing programs for certified products from 4 pilot areas and non-certified ABD climate resilient products grown, developed and implemented through a supply chain approach</p> <p>Overachievements: Encouragement of farmers on sustainable local ABD promoted their interest to participate in market. It was the first time when farmers received orders for their saplings through participation in trade fair and certification of their products.</p> <p>Constraints: Lack of the national programme for local market development that hampers mechanisms, cooperation of farmers, suppliers, processors especially in remote mountain areas.</p>	<p>cooperation with the international consultant. It contains general recommendations, suggestions regarding business plan preparation and some strategic measures aimed at market development on the basis of the price chain analysis.</p> <ul style="list-style-type: none"> Target marketing research of ABD products have been conducted at local markets. Regulatory mechanisms of local and national markets have been identified during meetings and consultations with suppliers, procurement specialists, wholesale dealers, processors, etc. A price chain analysis of local fruit species in pilot areas was conducted on the basis of consultations with the international consultant and in cooperation with the project partner, NGO "Amon". 	<p>assessment of value/price chain for mulberry.</p> <ul style="list-style-type: none"> Value chains for other products need to be assessed.
<p>Output 3.3: International marketing campaign (trade fairs, online) to establish Tajikistan as an international source of ABD-friendly climate resilient products for consumers concerned about the point of origin, sustainability and heritage of food in face of CC</p> <p>Overachievements: <i>Not planned but supported:</i> Farmers participated in 5 trade fairs with their local ABD products,</p>	<ul style="list-style-type: none"> Organized and conducted 5 marketing events – demonstration of project results and local ABD products during the trade fair of 5 districts. The products provided within the project is highly demanded and appreciated during trade fairs and exhibitions of Baljuvan, Muminabad, Khovaling and Shouroabad districts and in Dushanbe city. During the trade fair in Sari Khosor jamoat there have been presented the results of SGP projects and products. Informative materials and video-film have added to the project exposition during the exhibition with participation of President RT. The quality of project exposition was highly evaluated and facilitated interest by the approach to local business development 	<ul style="list-style-type: none"> Progress on international marketing has been limited to trade fairs in Tajikistan (hence reliant on those visiting from overseas) and opportunistic encounters with VIPs from overseas, such as UN representatives. As such, there has been no clear, consolidated 'marketing campaign' which would necessarily involve working closely with government agencies, business and NGOs involved in overseas markets. Some of the products are show-cased in a brochure: <i>Exhibitions and sales of ABD products of project areas.</i> The project should engage with those parts of government responsible for promoting international trade in national commodities. Given that Tajikistan plans to join the World Trade Organization, the project should anticipate the new hurdles to be jumped in order for ABD

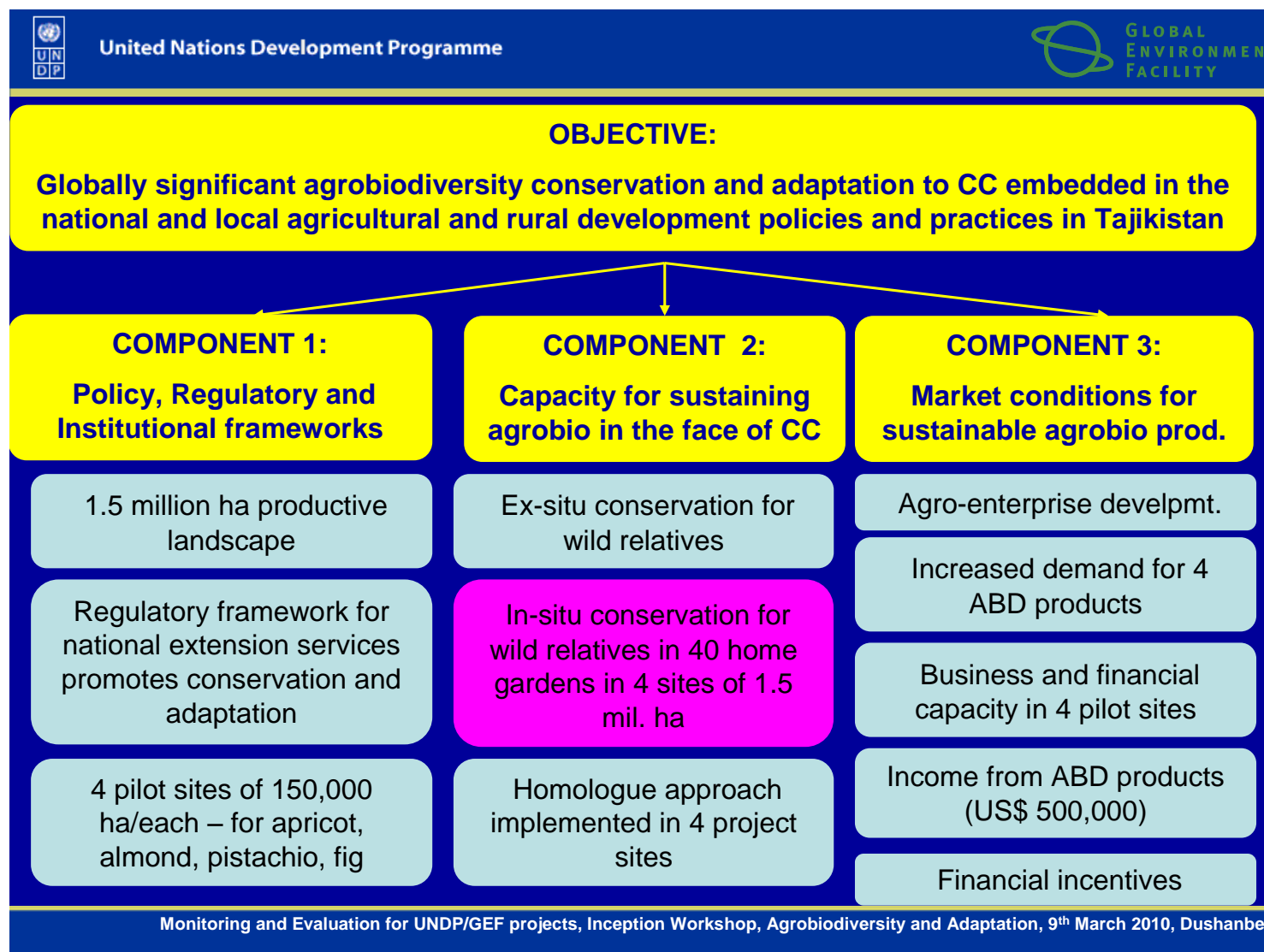
Outcomes / outputs, with constraints and overachievements noted by PIU	Progress (achievements) reported by PIU	Mid-Term Evaluation comments
<p>establishing contacts for further cooperation and receiving orders for their products and saplings. This contributed to strengthening the value chain using a “bottom-up” approach. Flexible project strategy enabled this activity to be supported.</p>	<p>based on ABD.</p> <ul style="list-style-type: none"> ▪ All marketing activities on trade fairs and exhibitions were accompanied by public information/awareness. Interviews with local khukumats and jamoats on the project activities were demonstrated by local and national TV. ▪ In the course of trade fairs farmers and partners provided consultations on processing, growing, selection of ABD, and established contacts for cooperation. 	<p>products to meet international trading standards with respect to quality assurance, labelling and certification.²⁸</p>
<p>Output 3.4: Crop certification established for products increasing farmer’s ability to sell products and services at a premium</p> <p>Overachievements: <i>Not planned but supposed:</i> The marking of mulberries processed products obtained within the project is already known in the market in the country and demonstrated outside the country.</p> <p>There are some periodic unplanned orders for ABD products supply (from the Government of Tajikistan, CEP GRT, international organizations)</p> <p>Constraints: Tajikistan is preparing to enter WTO, and a special group in the Ministry of Economic Development and Trade is elaborating on new legislation</p>	<ul style="list-style-type: none"> ▪ New packaging materials for local ABD products prepared for the first time and piloted at trade fairs with SGP funding support. ▪ The cooperation agreement with Agency for Standardization is being implemented to ensure farmers’ access to products certification and promotion to the markets. ▪ Due to certification, proper packaging, marking and demonstrations at the national trade fair and local exposition the local ABD products has yielded profit to the participating farmers which is 80% higher than that of the last year. ▪ Implemented technical certification of saplings provided by GULHO for the trade fair in Dushanbe. 	<ul style="list-style-type: none"> ▪ Range of products certified by State Agency for Standardization. Certification and Metrology. ▪ New packaging for ABD products developed and marketed successfully at national trade fair. ▪ New WTO trading standards being adopted by Tajikistan, for which Project needs to prepare and adopt (see MTE comments above under Output 3.3).

²⁸ PIU has commented that: “There is no need to work on risks related to WTO, as there is no impact for the period of project implementation. During the consultation with governmental working group there was determined that entry of Tajikistan to WTO is a long-term prospective.” While this statement may be true, the project will be judged ultimately, *inter alia*, on the sustainability of its outcomes. Therefore, it is important to anticipate this eventuality in ways that are appropriate to the timeframe not so much of the project but of the fruition of its initiatives.

Outcomes / outputs, with constraints and overachievements noted by PIU	Progress (achievements) reported by PIU	Mid-Term Evaluation comments
principles, methods and approaches to, among others, international trades, market development, supplies, agreements, etc. Therefore certification that has become accessible for farmers within the project can be cancelled (this was not taken into account during planning of project activities).		
<p>Output 3.5: Seed grants (through partnership with GEF Small Grants Programme) support development of agro-biodiversity based agro-enterprises at each site</p> <p>Overachievement: Co-financing for farmers SGP applications was higher than expected</p> <p>Constraints: Seasonal works, strict limits in power supplies and bad roads, none of which can be overcome, are delaying implementation of activities at project sites, especially SGP.</p>	<ul style="list-style-type: none"> 9 SGP projects have been implemented. Monitoring of the projects implementation was conducted. Announcement on SGP for ABD business development for project areas has been placed. 8 consultative workshops on preparation and filling-in project proposals, rules and procedures of SGP project in Kulyab and Rasht zones. 	<ul style="list-style-type: none"> GEF SGP awarded 9 grants for 9 ABD projects covering 10 jamoats in its first tranche of funding. Over 17.5 ha of gardens belonging to farming households were restored or created for production of local varieties of fruits adapted to climate change. Also more than 15 tons of seed was harvested from high-yielding varieties of cereals and legumes. Results from these grants are detailed in <i>SGP projects and achieved results</i>. A 2nd tranche of funding is now underway. Awareness raised among jamoats of new policies for micro-financing ABD, including documentation on financial tools and micro-financing.
<p>Output 3.6: Increased funding available for start-up initiatives and SMEs, provided by existing MFIs (supported by JRCs/UNDP Communities Programme) to ABD agro-enterprises</p> <p>Overachievements: Use of "bottom-up" approach and the MLF and SGP methods allowed to have positive impact on strengthening of value chain components. (Successful joint application of these measures)</p>	<ul style="list-style-type: none"> In cooperation with the MLF "Imdodi Huta", a program was implemented to improve farmers' access to microcredits in Dektur Jamoat, located in a remote part of Baljuvan District. The program outcomes are supported by monitoring and evaluation report corroborating efficiency of microlending to contribute to the project goals. A report and recommendations on lending activities have been prepared and are used to plan future activities and initiatives. 170 farmers from Dektur Jamoat of Baljuvan district gained access to loans through the microloan foundation "Imdodi Huta" for conservation and dissemination of adaptive local ABD varieties, including cereals and legumes, and for small business development in remote mountain areas. 	<ul style="list-style-type: none"> Project established new MLF in Dektur Jamoat with US\$30,000 revolving fund. Dektur chosen as remote, higher altitude and without any micro-credit scheme unlike many other jamoats. So Dektur agreed to establish JRC to manage its MLF. Enterprises related to ABD production beginning to emerge as micro-credits schemes put in place, often catalysed by training workshops. For example, training workshop on construction and use of solar driers has led to new enterprise(s) in solar driers production. Experience in financing at community levels is documented in <i>Financial tools and microcrediting for capacity building of communities on local agrobiodiversity conservation</i>. Not all MLFs yet in place. 'Farizi', for example, due to set up an ABD

Outcomes / outputs, with constraints and overachievements noted by PIU	Progress (achievements) reported by PIU	Mid-Term Evaluation comments
<p>was not planned by the project.) Study-tours and practices of farmers on agro-entrepreneurship strengthened another component of the value chain – “processors”, that will contribute to the approach to the Strategy. (Successful joint application of these measures was not planned by the project.) The earned funds from the revolving fund of MLF “Imdodi Hotal” were used for establishment of the public garden in Dektur jamoat - FOR THE FIRST TIME. (This initiative was not planned. It is the personal project incentive.)</p>	<ul style="list-style-type: none"> Quarterly missions to the project districts with visits to JRC and consultations on application of financial mechanisms for project activities contributed to efficiency of crediting activity, formed new approaches to micro-crediting policy on sustainable ABD. 10 persons were trained on construction of sun dryers for ABD products processing. This resulted in production of 10 sun dryers to be demonstrated in model jamoats and further development of agro-entrepreneurship. 8 farmers have been trained on creation of agro-enterprises, processing and preserving of ABD fruit products through participation in study-tour at a private processing and preserving enterprise in jamoat Khalif Khasan, Penjikent district. 	<p>scheme in Rashte District and waiting to hear from the project.</p> <ul style="list-style-type: none"> Relatively high cost of borrowing money, even at 1-2.5% per month from MLFs, which is very much less than bank rates, must still be an impediment for the poorest members of a community. There may be opportunities with Farizi, for example, to secure interest rates between 0.1% and 1.0% per month for ABD <i>in situ</i> conservation activities. Gardening, bee-keeping and animal husbandry, for example, are supported as 0.1% for loans of up to 5,000 somoni (US\$ 1,050) over long periods (5 years), subject to meeting certain conditions. Main short-comings are the slow start to setting up financial mechanisms and limited amount of funds available. Clearly, it does take time to assess capacity, train and finally implement such initiatives. Given the considerable support that the project has received from UNDP Community Programme, it is important that the contribution of existing MFLs established under this Programme is accounted and documented with respect to ABD conservation. It is understood, for example, that a public garden for agrobiodiversity has been established with funds from an existing MFL.
<p>Output 3.7: Enhanced business advisory centres and Jamoat Resource Centers support efforts to bring climate resilient ABD-friendly products to markets</p>	<ul style="list-style-type: none"> 35 employees of JRC and UNDP CP participated in business development activities, including among other, as responsible persons and organizing staff. 170 farmers from Dektur Jamoat received training in business planning to apply for investment and subsequently received loans for activities in line with the project goals. Special 2 workshops have been conducted in Kulyab and Rasht zones for representatives of local jamoats, MLF and JRC on the issue of new directions of the second round of credit portfolio on agro-entrepreneurship initiatives. In collaboration with UNDP CP there have been developed materials on business-planning and organization of private enterprises, conducted trainings, workshops and consultations for farmers on various subjects of ABD, climate change and market development in three project districts. The book on small business development was published in Tajik and disseminated among farmers in project districts. 	<ul style="list-style-type: none"> Marketing and agro-enterprise development study undertaken by IC and PIU. Study builds on Market Development Strategy and business planning manual, both Output 3.1, and examined value chains, all of which is documents in <i>Results of international consultant working on marketing and agro enterprises development</i>. Sustainable links to markets remain undeveloped for many ABD products – this is among the most significant outstanding challenges for the project. It is understood the role of Business Advisory Centres, particularly with respect to existing functions of JRCs, has been assessed by PIU and that such previously established Centres no longer exist. Thus, this Output needs to be revised in the light of such developments.

Copy of slide presented at the Inception Workshop on 9 March 2010, showing the flawed target for *in situ* conservation of wild relatives in 40 home gardens - highlighted in purple (see MTE comments for Output 2.4 above).



Annex 6: Evaluation of Project Performance Indicators and Delivery Status

#Status of delivery colour codes: Green / completed – indicator shows successful achievement
Yellow – indicator shows expected completion by the end of the project
Red – Indicator show poor achievement - unlikely to be complete by end of Project

***Satisfaction rating scale:** Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory

GOAL/ OBJECTIVE/ Outcome	Objectively Verifiable Indicator	2009 Baseline	2014 End of Project Target	Status of Target at MTE (4/2012)#	Mid-Term Evaluation Comments	Rating*
Objective: Globally significant agro-biodiversity (ABD) conservation and adaptation to climate change (CC) are embedded in the national and local agricultural and rural development policies and practices of Tajikistan.	Number of hectares of productive landscape where climate resilient agrobiodiversity conservation is mainstreamed	Oblast/jamoat plans are not considering climate resilient agrobiodiversity	Oblast/jamoat plans incorporate priority ABD and CC issues covering 1.5 million hectares in four districts (Shurobod, Rasht, Baljuvan and Zerafshan) and 36 sub-districts (Jamoats)	<ul style="list-style-type: none"> Project activities have been approved and integrated into the annual plans of 10 pilot jamoats in 4 project areas. Local administrations of 10 pilot jamoats from 4 project areas take part in all Project activities, thereby facilitating Project implementation. There are some films, interviews, radio performances, page on Facebook. The President of Tajikistan, Mr. Emomali Rakhmon, has approved measures on local ABD products promotion onto markets and requested to enhance this kind of working practice. There are film, video record and a photo essay. The project has been requested to take part at new trade fairs organized by the Government to demonstrate the products that have been produced in cooperation with farmers. Involvement of all interested partners to Project activities allowed to raise interest of the Government of RT, local administrations, scientists, the Committee on Environment Protection, farmers, communities in sustainable conservation of local ABD adopted to climate change. The best practices of project activities are reported to the Government of the Republic of Tajikistan by local administrations of project areas. There have been established 3 hectares of mother gardens in Yol jamoat in which 1500 samplings of local fruits were grafted. 350,000 seedlings of local fruit trees, adapted to climate change has been produced at the 4 ha nursery established by State Agency of Forestry and Hunting. 	Work on strategic oblast/ jamoat plans yet to commence, following bottom-up approach of piloting Homologue Approach from which policies will be developed. It will be important to ensure that this work is prioritised during remaining term of project. End of project target of 1.5 million ha of productive landscape in which agrobiodiversity is mainstreamed is incorrect, as this represented total area of project's 4 pilot areas (Baljuvan, Rasht, Shurobad and Zerafshan). Reference to the 2005 Land Cadastre of Republic of Tajikistan shows that the total agricultural land (productive landscape) within these four areas is 575,228 ha, of which 90.6% is pasture, 7.8% is arable and 1.6% is 'long-term plantings'. This target has been amended (see	S

GOAL/ OBJECTIVE/ Outcome	Objectively Verifiable Indicator	2009 Baseline	2014 End of Project Target	Status of Target at MTE (4/2012)#	Mid-Term Evaluation Comments	Rating*
				<ul style="list-style-type: none"> • A germplasm exchange approach has been applied to 4 ha in Baljuan District, using various climatic models. • 1500 seedlings were passed to farmers' territories on 4 hectares in jamoats Dektur and Satalmush. • 17 hectares of new local fruit gardens have been established by 79 households from project areas under the SGP. • 10 hectares of local varieties and forms of mulberries have been restored and products are processed and delivered into the markets. • 12 hectares of farming lands in 4 districts, serving as a practical polygon of seed production, has provided 100 hectares of farms from closest jamoats of Muminabad, Tajikabad, Shurabad and Pendjikent districts with local seeds; farmers are trained on selection of adapted sorts of legumes and adaptation methodologies based on agro-technology. • 152 households have created 250 hectares of gardens (ex-situ) in Baljuvan district at the expense of credits and launched the working of local forms and varieties of fruits. • 30 hectares of climate homologues of 2050 in 10 model jamoats were selected for description of genetic resources and use for adaptation methods. • 5 successful trade fairs at Dushanbe and other regions facilitated creation of sustainable image for local varieties and types of fruits and increased interest in their cultivation and use. 	Annex 7).	
	Farms in pilot areas have the capacity to implement in situ and ex-situ conservation of climate resilient ABD as means to cope with impacts of CC through implementation of Homologue Approach	Limited local capacity for in-situ and ex-situ conservation of climate resilient agrobiodiversity. Few ex-situ collections of germplasm as identified through	Ex situ and in situ conservation that provides adapted germplasm for crop improvement and climate resilience programmes in Tajikistan and globally	<p>There were 32 initiatives implemented for farmers, specialists and agronomists for understanding, improvement and application of in-situ and ex-situ conservation policy. In-situ conservation policy is being successfully implemented by farmers and partner organizations:</p> <ul style="list-style-type: none"> • 30 farmers from 6 out of 10 pilot jamoats are trained on selection of valuable local germplasm material of wild fruits, and methodology of planting of mother gardens and collections; • National Republican Center on Genetic Resources in cooperation with project has entered into their database collection 70 sort samples of cereals and legumes and 835 	Much has been achieved towards this target, particularly with respect to ex situ conservation initiatives. Less clear, due to lack of precise understanding and accounting, is the extent to which landraces and CWRs have been conserved in situ. This can be addressed by establishing ledgers for each pilot jamoat in	MS

GOAL/ OBJECTIVE/ Outcome	Objectively Verifiable Indicator	2009 Baseline	2014 End of Project Target	Status of Target at MTE (4/2012)#	Mid-Term Evaluation Comments	Rating*
		GBIF database	Tajik germplasm used and valued by farms/ communities as means to adapt to climate change	<p>species and sorts of fruits from all project areas and in the territory of 0.2 ha a nursery collection of local varieties of genetic resources from the project areas has been established.</p> <ul style="list-style-type: none"> • GIS maps (more than 30) on the basis of satellite image, topographic maps of homological modelling contain 25 species of genetic resources that allows identifying ways of genetic resources search for support of local fruits through 4 project areas. • 30 farmers from 6 out of 10 pilot jamoats are trained on agro-technology care on local fruits with consideration of its adaptation to climate change. • Communities have applied processing method of local mulberries on forest territories with genetic resources and received berries that invested into improvement of this forest area for successful business. • At 2 trade fairs with participation of project partners and farmers from 2 out of 4 project areas 65 thousand seedlings of fruit genetic resources have been provided for germplasm exchangeas, well as at international level (profitable germplasm exchange Dashtijum-Afghanistan, with further orders for next year). <p>Ex-situ conservation policy is being successfully applied by farmers and partner organizations:</p> <ul style="list-style-type: none"> • Through markets and trade fairs under the project initiatives from all 4 project areas 65 thousand seedlings of 9 species of fruit trees adapted to climate change has been disseminated to population. • 1.09 ha mother garden of adapted local fruits on the basis of genetic forest resources has been established at Dektur jamoat of Baljuvan district and is available for the entire local community consisted of 14000 people. • 100 seedlings adapted to climate change consisted of 6 fruit species from the collection of National Republican Centre on Genetic Resources were disseminated at pilot jamoats and climatic homologue sites. 	<p>which, for example, the following can be recorded:</p> <ul style="list-style-type: none"> i. total number and area of wild forests (genetic reserves) protected to conserve CWRs in situ; ii. total number and area of farms/home gardens managed to conserve landraces in situ; iii. total number and area of farms/home gardens (living collections) managed to conserve CWRs ex situ; iv. total number of species and accessions of CWRs conserved ex situ in seed banks; and v. total number of varieties and accessions of landraces conserved ex situ in seed banks. 	

GOAL/ OBJECTIVE/ Outcome	Objectively Verifiable Indicator	2009 Baseline	2014 End of Project Target	Status of Target at MTE (4/2012)#	Mid-Term Evaluation Comments	Rating*
				<ul style="list-style-type: none"> Credits were used by farmers for establishment of 14.13 ha gardens on the basis of seedlings obtained from the State Agency on Forestry and Hunting nursery and 53 ha of cereals and legumes. 		
Outcome 1: Agro-biodiversity conservation and adaptation to climate change through supportive policy, regulatory and institutional frameworks.	Regulatory framework at the national and local level promotes: (i) conservation of agrobiodiversity within current production systems and the adaptive capacity to cope with climate change; (ii) implementation of in-situ and ex-situ conservation measures	Enabling environment at national and local level is not conducive for agrobiodiversity conservation and its potential role for climate adaptation and future food security	Agro-biodiversity friendly and climate resilient policies and practices embedded into national policy and local development plans contributing to improved agrobiodiversity conservation in the face of climate change on over 20 thousand hectares;	<p>The project has achieved significant results at national and local level through political, legislative, educational, consultative and practical measures:</p> <ul style="list-style-type: none"> Project achievements at 10 pilot jamoats from 4 project sites have been approved by the Government and the President of the Republic of Tajikistan. Gained project experience has been integrated into jamoat plans and programs and projects' lessons learnt have been recommended to replicate at other project sites. 6 training modules, 1 film, 10 methodic materials for training the farmers, households, specialists, etc. have been developed on a basis of achieved results. Most positive project results have been brought to attention of politics, farmers, beneficiaries through mass media (radio, TV, newspapers, Facebook). 10 training modules and activities served to train around 1700 people from project sites. Integrated processes of joint planning (workshops and working groups with participation of various agencies and partners) established conditions for formation of ABD conservation in the face of climate change policy and helped for experience sharing between communities and jamoats. Barriers identified and proposals prepared for policy and legislation for ABD conservation (analytic report, cooperation with partners, genetic resources accounting guide, observation diaries). "Project's positive lessons learnt" are used by the Government for implementation of policy and regulations as conservation and adaptation to climate change methods (fairs, exhibitions, etc.). Draft concept of ABD conservation strategy developed. 	<p>Much has been achieved towards developing agrobiodiversity policies through bottom-up approach of building capacity among farmers, communities and jamoats to conserve and sustainable use agrobiodiversity, as a precursor to development of policies. Inevitably, therefore, policies and practices have yet to be embedded into national policies and local development plans. This will need to be expedited during the remaining term of the project, particularly with respect to Outputs 1.2, (extension package for promoting climate resilient farming varieties), Output 1.8 (national agrobiodiversity strategy) and also Output 2.6 (sustainable management strategies for 4 project areas and sites certified as sources of CWRs).</p> <p>NB There is some discrepancy between the OVI, which focuses on both policy and its</p>	MS

GOAL/ OBJECTIVE/ Outcome	Objectively Verifiable Indicator	2009 Baseline	2014 End of Project Target	Status of Target at MTE (4/2012)#	Mid-Term Evaluation Comments	Rating*
					implementation, and the targets, which focus only on having policy in place (i.e. there is no target here to monitor implementation of <i>in situ</i> and <i>ex situ</i> conservation measures.	
	Institutional framework in place at the national and local level facilitates implementation of ABD relevant policies, legislation and regulation in 4 pilot areas;	Lack of climate and crop models prohibit strategic planning and adaptive capacity development in face of climate change and threats to food security.	<p>National CC agencies generate climate and crop models that provide accurate and timely information to local stakeholders;</p> <p>National extension services develop farmer training scheme on ABD conservation and management of climate resilient crop wild relatives;</p> <p>Extension package in place in 4 pilot sites covering approx. 20,000 ha (each using one important crop as entry point to ABD friendly, climate resilient production practices.</p>	<p>The strategic approach used by the project is based on the system of modelling. This ensures successful implementation of climate change adaptive measures (taking into account climatic, soil, agricultural features) for further achievement of food security and development of local agricultural crops.</p> <ul style="list-style-type: none"> • The project created climatic models for the indicator annual species of barley and wheat facilitated selection of adapted sorts of cereals and legumes for various soil and climate conditions. • Capacity development programs implemented within the 10 pilot jamoats (encompassing total area of 200 thousand hectares). 	<p>The homologue modelling approach has had limited success (with cereals by use of proxy data) because (i) the algorithms held in the software have been designed for sub-tropical/tropical conditions and do not hold climate and soil data for Tajikistan and (ii) the model currently lacks information on the distribution of landraces for the selected species of fruit and nuts targeted by the project.</p> <p>The modelling approach is quite technical and still dependent on external input from international consultants. Thus, the likelihood of national agencies, such as Ministry of Agriculture, being able to generate such models to inform farmers of what best to grow where in response to climate change is judged unlikely unless there is a radical review of this part of the project.</p>	MU

GOAL/ OBJECTIVE/ Outcome	Objectively Verifiable Indicator	2009 Baseline	2014 End of Project Target	Status of Target at MTE (4/2012)#	Mid-Term Evaluation Comments	Rating*
Outcome 2: Improved capacity for sustaining agro-biodiversity in the face of climate change	Improved capacity for ex-situ conservation measures of globally significant and climate resilient agrobiodiversity	Local communities are not aware of implications of climate change and are not working towards the development of adaptive strategies and capacities;	Ex situ (gene bank) conservation of globally significant ABD established in collaboration with local institutions to protect wild relatives of important crops (including walnut, pistachio, pomegranate, fig, mulberry, apricot, almond, others)	<p>Farmers informed on affects of climate change and adaptation methodology. On a basis of workshops, trainings and joint practices local farmers from 10 pilot jamoats in cooperation with project partners received practical knowledge and experience on adaptation methodology of local fruits, mother garden planting at their households, use of national database resources and trained the methodology of improvement and adaptation forms of fruits for gardening at households. Successful ex-situ gardens of farmers have been established under practical project initiatives and participation through small grants and credits. More detailed achievements are given below:</p> <ul style="list-style-type: none"> Local community from pilot jamoats are aware of: <ul style="list-style-type: none"> Climate change; Methodologies of agrobiodiversity adaptation to climate change; Methodologies of homologue modelling; Principles of climate change account while establishing nurseries and gardens. Farmers have been trained the grafting technology of seedlings and improvement of sorts status on a basis of fruits wild relatives selection in order to establish adaptive mother collections at households. NRCGR National database is available for project beneficiaries that have been trained the principles of data keeping and collection storage. Album of maps on a basis of homologues up to 2050 developed for selection of gardening and adaptation measures. 4 sets of GIS maps with indication of wild relatives of local agrobiodiversity habitats serve as a basis for selection of rootstock/graft while establishing garden or nursery for farmers and local agronomists. Mother nurseries of SAFH and NRCGR with ex-situ seedlings of valuable fruits (peach, apricot, almond, apple, mulberry, walnut) support germplasm exchange at local communities at Doshamndi and Satalmush jamoats as a climate change adaptation methodology. 	<p>Excellent progress has been made to date in raising awareness among local communities and local government administrations of the values of agrobiodiversity and potential opportunities of using traditional varieties (landraces) to mitigate impacts of climate change. This has been followed up by training and supporting farmers in the conservation, multiplication and distribution of agrobiodiversity within the 4 project areas in gardens, nurseries and farms, as well as production and marketing of fruit and nut trees and bushes in gardens and farms. Thus, huge capacity has been developed in the project areas to conserve agrobiodiversity (mostly ex situ) and develop production systems to improve local livelihoods.</p> <p>While much more will be achieved with respect to this target during the remaining term of the project, essentially the target has been met.</p>	HS

GOAL/ OBJECTIVE/ Outcome	Objectively Verifiable Indicator	2009 Baseline	2014 End of Project Target	Status of Target at MTE (4/2012)#	Mid-Term Evaluation Comments	Rating*
				<ul style="list-style-type: none"> In 14 ha 4 ex-situ gardens with fruit trees have been established in Nushor, Shurobod and Sarikhosor jamoats. 		
	Improved capacity of farmers in four project areas to design and implement agrobiodiversity conservation measures for the in-situ conservation of landraces and ex situ conservation of CWRs in home gardens/farms, as an adaptive capacity to climate risks and variability.	<p>Lack of socio-ecological resilience to climate variability and shocks;</p> <p>Negligible national and local capacity to cope with climate risks and variability</p>	In situ conservation of landraces and ex situ conservation of wild relatives of globally significant ABD in 40 home gardens/farms in 4 project areas covering 20 thousand hectares.	<p>Base resources for socio-ecologic adaptation to climate change and in-situ conservation principles established:</p> <ul style="list-style-type: none"> 4 packages of GIS maps for all 4 project areas with indication of 25 species of fruit wild relatives has been developed, as well as the database on local valuable genetic resources of ABD. Accounting system and registration of valuable genetic resources and local ABD varieties from project sites developed. In cooperation with NRCGR an expedition has been conducted to identify GPS locations of wild relatives of fruits and cereals in accordance with developed methodology of NRCGR. The data are collated and currently being processed. 	<p>The end of project target is inherently flawed because, by definition, it is not possible to conserve wild relatives <i>in situ</i> in home gardens and on farms (also, see comments under Output 2.4 in Annex 5). Such measures are usually referred to as <i>ex situ</i> conservation of 'living collections' of CWRs. Thus, it has been necessary to amend the target and the OVI to reflect the establishment of living collections <i>ex situ</i> in home gardens and on farms, which is very different from conserving CWRs <i>in situ</i> in their natural habitats (wild forests).</p> <p>Target status needs to be assessed in terms of the number of landraces and CWRs conserved in how many farms and home gardens, totally how many hectares. It is understood that such data are being compiled for future status updates.</p>	MS
	Farming communities have skills, knowledge and tools to implement homologue approach implemented in 4	No existing community-to-community seed and germplasm exchange programmes	Improved capacity of farmers (men/women) in >40 home gardens/farms in 4 pilot sites to	<p>On the basis of climatic models of homologues the pilot schemes of germplasm exchange has been conducted at 6 homologue sites that have been followed by additional achievements:</p> <ul style="list-style-type: none"> Project experts have been trained climatic homologue modelling on a basis of purchased software from CIAT. 	Capacity of local farming communities has been well developed with regard to understanding and implementing the Homologue Approach, facilitated by	MS

GOAL/ OBJECTIVE/ Outcome	Objectively Verifiable Indicator	2009 Baseline	2014 End of Project Target	Status of Target at MTE (4/2012)#	Mid-Term Evaluation Comments	Rating*
	project so as to enable the adaptation of their current production practices to current and future climate risks and variability;	based on climate change impacts;	participate in implementation of the Homologue Approach and to initialize own germplasm exchanges to cope with future impacts of CC;	<ul style="list-style-type: none"> For 10 pilot jamoats have been developed 30 maps of climatic homologues that are available for project partners and beneficiaries. Workshops and trainings on homologue modelling use have been conducted at each project pilot jamoat for JRCs and specialists. Practical identification of ecosystem structure for homologue climatic sites up to 2050 has been started for correction and further planning of adaptation to climate change of local agrobiodiversity. For homologue modelling on a basis of CIAT software have been collected data for pilot jamoats on soil and genetic coefficient of cultures. 30 soil maps for 10 jamoats have been developed. Genetic coefficient calculations on a basis of phenology and published data have been prepared for two cereals (barley and wheat). Database on barley harvest modelling has been developed for 3 jamoats, on a basis of what the simulation model of CIAT software has been launched ("step by step" guide of international consultant). Pilot program of germplasm exchange of local fruits have been implemented at 6 homologue sites. Farmers from homologue sites received adapted to climate change seedlings of local fruits and they are conducting monitoring. 	training, establishment of banks of germplasm (nurseries, mother gardens etc), and distribution and exchange of germplasm. Further application of Homologue Approach is limited by the lack of information on the distribution of landraces and related climatic data for the selected species of fruit and nuts targeted by the project. Unless the vulnerability of such taxa on which local livelihoods depend is determined, it will not be possible to advise farmers on appropriate strategies to render them less vulnerable to climate change.	
Outcome 3: Market conditions favour sustainable agro-biodiversity production	ABD friendly agro-enterprises generate sustainable income of at least 20% more than the current baseline by 2014.	Agro-enterprises are small-scale, localized and seasonal, with negligible access to international or national markets and business opportunities	Sustainable national – international value chains for diverse organic agricultural products based on ABD are developed and improve local livelihoods	<p>Agro enterprises' sustainability in model jamoats and local markets capacity building was strengthened:</p> <ul style="list-style-type: none"> Farmers received benefits from fruit varieties and ABD products adapted to climate change which are 3 to 5 times higher than those before participation in the Project. Local ABD production is conducted by farmers on project districts and increases their income. Special marking and packing promotes the familiarization of produced ABD and are valuable on the market, including as a souvenir, such as bottled jam from mulberry, dried mulberry, mulberry halva and other mulberry products with project logo. 	Significant progress in production of agrobiodiversity products by farmers in project areas, including packaging. Much more needs to be achieved in branding (as part of packaging), processing and marketing. There are major opportunities to link agrobiodiversity to organic niche markets,	S

GOAL/ OBJECTIVE/ Outcome	Objectively Verifiable Indicator	2009 Baseline	2014 End of Project Target	Status of Target at MTE (4/2012)#	Mid-Term Evaluation Comments	Rating*
				<ul style="list-style-type: none"> Market research provided for the formulation of a market development strategy and value chain for ABD products. 	provided policies and practices put in place to ensure that chemical fertilisers and pesticides are not applied to agrobiodiversity farms/gardens.	
	Value chains of ABD-friendly products in domestic market and favourable conditions are existent for access to overseas markets.	Non-existent and/or unorganized marketing of local ABD goods to national and international markets	Up to four (fruit and nuts) agrobiodiversity certified (declared) and/or non-certified products marketed and sold in new national and/or international markets;	<ul style="list-style-type: none"> International markets accessed (Khirmanjou – Afghanistan: selling of saplings grown in farmer's collection). Annual business development plan for pilot jamoats is being developed in accordance with UNDP on the basis of Project Annual working plan. Each plan prioritises 1 fruit species. Surveys conducted and market assessments allowed to conduct price chain analysis for further activities planning on the market development strategy. Farmers certified 3 types of mulberry production and 4 types of fruit species (apples, pears, persimmon and nut) that had great demand at local and national trade fairs, increasing their incomes and guaranteeing local ABD sales. Successful implementation of grants and credits promotes strengthening of ABD production value units and firstly serves as a basis for strengthening trust between participants of the horizontal context of the value chain. 	Some limited progress in certification of fruit and nut crops and in exploring international markets. To date, study of value/price chains has been undertaken only for mulberry in domestic markets.	MS

Annex 7:

Logical Framework Matrix and Outputs – proposed changes

	Objectively Verifiable Indicators (OVIs)				
Goal	To conserve the agro-biodiversity of Tajikistan in the face of climate change				
Project Strategy	Objectively Verifiable Indicators	Baseline	Target	Sources of verification	Risks and Assumptions
Objective: Globally significant agro-biodiversity (ABD) conservation and adaptation to climate change (CC) are embedded in the national and local agricultural and rural development policies and practices of Tajikistan.	Number of hectares of landscape where climate resilient agrobiodiversity conservation is mainstreamed.	Oblast/jamoat plans are not considering climate resilient agrobiodiversity	Oblast/jamoat plans incorporate priority ABD and CC issues covering 1.5 million hectares in four districts (Shurobod, Rasht, Baljuan and Zerafshan) and 36 sub-districts (jamoats), of which 9 jamoats covering 150,000 hectares are targeted for project interventions.	BD2 Tracking Tool (Annex F)	Oblast and jamoats supportive of the conservation of climate resilient agrobiodiversity.
	Farms in pilot areas have the capacity to implement in situ and ex-situ conservation of climate resilient ABD as means to cope with impacts of CC through implementation of Homologue Approach;	Limited local capacity for in-situ and ex-situ conservation of climate resilient agrobiodiversity. Few ex-situ collections of germplasm as identified through GBIF database	Ex situ and in situ conservation that provides adapted germplasm for crop improvement and climate resilience programmes in Tajikistan and globally. Tajik germplasm used and valued by farms/ communities as means to adapt to climate change.	Accessions of viable germplasm and germplasm exchange systems, typified by the GBIF database. Use of germplasm in crop improvement programmes as typified by the reports of the relevant national and international plant breeding institutes	Support for community based in situ conservation and management. Germplasm is collected, characterized, and viably conserved. Lack of inter-agency dialogue at the local and national level prevents development of adaptive and institutional capacity and strategies to manage CC.
Outcome 1: Agro-biodiversity conservation and adaptation to climate change through supportive policy, regulatory and institutional frameworks	Regulatory framework at the national and local level promotes: (i) conservation of agrobiodiversity within current production systems and the adaptive capacity to cope with climate change. (ii) implementation of in-situ and ex-situ conservation measures	Enabling environment at national and local level is not conducive for agrobiodiversity conservation and its potential role for climate adaptation and future food security	Agro-biodiversity friendly and climate resilient policies and practices embedded into national policy and local development plans contributing to improved agrobiodiversity conservation in the face of climate change in four project areas covering 150,000 ha.	Official gazette Policies and regulations. Monitoring and control will be conducted through existing scientific, political and legislative acts at national and local level.	Food security, poverty reduction and development related strategies take priority over biodiversity conservation. Assumption that crop and climate modelling is accurate: A risk is a lack of confidence in modelling results by national institutions. The same strategies work to reduce ABD through

	Objectively Verifiable Indicators (OVIs)				
Goal	To conserve the agro-biodiversity of Tajikistan in the face of climate change				
Project Strategy	Objectively Verifiable Indicators	Baseline	Target	Sources of verification	Risks and Assumptions
	Institutional framework in place at the national and local level facilitates implementation of ABD relevant policies, legislation and regulation in 4 pilot areas.	Lack of climate and crop models prohibit strategic planning and adaptive capacity development in face of climate change and threats to food security.	<p>National CC agencies generate climate and crop models that provide accurate and timely information to local stakeholders.</p> <p>Extension services to increase farmer capacity regarding ABD conservation and management of climate resilient crop wild relatives exist.</p> <p>Extension package in place in 4 pilot sites covering approx. 150,000 ha (each using one important landrace or locally adapted cultivar as entry point to ABD friendly, climate resilient production practices).</p>	<p>By-laws of extension services</p> <p>Project reports</p>	<p>development-oriented land use change.</p> <p>Bureaucratic barriers:</p> <ul style="list-style-type: none"> • Unwillingness of Hukumat and Jamoats to introduce new methods of ABD conservation in face of CC. • Low awareness of current climatic change scenarios. • Farmers interest in other crops for planning and developing their households. • Natural climatic and geographical conditions of project areas do not favour the growth of one indicator crop (selected by project) for benefits in long term period. • National Genetic Resources Center is not able to develop as a policy development agency without constant support of donors; its activity is limited to specific scientific research; and/or it does not impact on forming of sustainable ABD on the base of genetic resources. However, the Center actively maintains a national data base on ABD resources. • Restructuring of partner agencies- (mainly state organizations) and change of authority may complicate finalizing regulatory frameworks for ABD conservation. • Lifestyle peculiarities of local communities in mountain areas will constrain establishment of agro-enterprises²⁹. (Very small villages and households, with minimum 2-3 families;

²⁹ The term agro-enterprise is used in the sense of small-scale (farmer or farming community) processing and/or marketing facilities for local produce. It does not imply large-scale task-oriented production facilities, as understood in the Russian language.

	Objectively Verifiable Indicators (OVIs)				
Goal	To conserve the agro-biodiversity of Tajikistan in the face of climate change				
Project Strategy	Objectively Verifiable Indicators	Baseline	Target	Sources of verification	Risks and Assumptions
					remoteness, relief with steep slopes and lack of transport.)
Outcome 2: Improved capacity for sustaining agro-biodiversity in the face of climate change	Improved capacity for ex-situ conservation measures of globally significant and climate resilient agrobiodiversity	Local communities are not aware of implications of climate change and are not working towards the development of adaptive strategies and capacities.	Ex situ conservation of globally significant ABD (landraces and CWRs) in gene (e.g. seed) banks and as living collections (in botanic gardens, nurseries, farms) in the case of recalcitrant CWRs, in collaboration with local institutions (including walnut, pistachio, pomegranate, fig, mulberry, apricot and almond)	Numbers of viable accessions conserved ex situ. Reports confirm existence of programmes.	Ex situ facilities are incapable of conserving viable germplasm. Natural disasters (drought, flood, diseases, parasites) in project areas and locations of situ and ex situ conservation interventions
	Improved capacity of farmers in four project areas to design and implement on-farm agrobiodiversity conservation measures as an adaptive capacity to climate risks and variability.	Lack of socio-ecological resilience to climate variability and shocks. Negligible national and local capacity to cope with climate risks and variability	On-farm conservation of wild relatives and landraces of globally significant ABD in 40 home gardens/farms in 4 project areas.	Numbers or total area of CWRs conserved on-farm and numbers of viable landraces conserved in situ on farms and home gardens. Project reviews Remote sensing tools, GIS.	<ul style="list-style-type: none"> Local interest in alternative poverty reducing strategies work against in situ conservation. Natural disasters in mountain areas could complicate the progress of in-situ conservation of wild relatives of global significant ABD.
	Increased awareness of the importance of conserving CWRs in their natural habitat	Farmers are permitted to collect CWRs in reserves (IUCN IV) and not considering the long-term conservation of ABD	Farmers are capacitated in in-situ conservation of wild relatives of globally significant ABD in its natural habitat (including reserves) in 4 project areas.	Number of CWR species growing in natural habitat identified and categorised in project area (including areas).	
	Farming communities have the capacity to implement the results of homologue approach implemented in 4 project so as to enable the adaptation of their current production practices to current and	No existing community-to-community seed and germplasm exchange programmes based on climate change impacts.	Improved capacity of farmers (men/women) in >40 home gardens/farms in 4 pilot sites to participate in implementation of the Homologue Approach and to initialize own germplasm	Reports, quantification of seed and germplasm exchange.	Farmers/communities willing to engage and participate in Homologue Approach. Community interest and participation in the exchange schemes. <ul style="list-style-type: none"> Germplasm exchanges between communities in

	Objectively Verifiable Indicators (OVIs)				
Goal	To conserve the agro-biodiversity of Tajikistan in the face of climate change				
Project Strategy	Objectively Verifiable Indicators	Baseline	Target	Sources of verification	Risks and Assumptions
	future climate risks and variability.		exchanges to cope with future impacts of CC.		<p>small remote villages (the same are very many in project areas) will be ineffective, since there is one or two communities in the village and one community as a rule consists of only a few households.</p> <ul style="list-style-type: none"> Global and regional germplasm exchanges will be limited (until elaboration of special mechanism) due to establishment of international genetic resources transition regime in accordance with Nagoya Protocol to CBD).
Outcome 3: Market conditions favour sustainable agro-biodiversity production	ABD friendly agro-enterprises generate sustainable income of at least 20% more than the current baseline by 2014.	Agro-enterprises are small-scale, localized and seasonal, with negligible access to international or national markets and business opportunities	Sustainable national or international value chains developed for at least one organic environmentally-friendly ADB product in each of 4 project areas and improvements in local livelihoods demonstrated.	<p>Local incomes, cost benefit analyses, independent sustainability of agro-enterprises as obtained by project surveys</p> <p>Evidence of local income generation. Existence of agro-enterprises based on ABD</p>	<ul style="list-style-type: none"> Lack of demand for ABD products in developed countries due to financial crisis. It will require a few years for ABD agro-enterprises will to become established and start generating income, as they are absent from the project sites. Moreover, there are no mechanisms in place for compiling income statistics at local or national levels. Thus, it will only be possible to generate such income data from those engaged in the project. In view of lack of infrastructure in remote mountain areas, it is impossible to deliver ABD goods to markets in a timely manner. Consultative agribusiness centres will not become financially sustainable for a long time without project support and farmers will not be able to pay for their services following project completion.
	<p>Value chains of ABD-friendly products in domestic market</p> <p>Favourable conditions exist for access to overseas markets.</p>	Non-existent and/or unorganized marketing of local ABD goods to national and international markets	Up to four (fruit and nuts) agrobiodiversity certified and/or non-certified products marketed and sold in new national and/or international markets.	<p>Reports on volume and timeliness of production. Cost benefit analysis.</p> <p>Action Plan on development of markets for agrobiodiversity in mountain areas.</p>	

Outputs (reviewed and revised 13-09-2012):
<ul style="list-style-type: none"> 1.1. Agrobiodiversity conservation and adaptation principles mainstreamed into local and national policies and programmes. 1.2. Extension package for promoting climate resilient farming varieties developed and integrated into the national extension service and delivery system. 1.3. Local authority capacities improved with regard to strengthened policy, sector guidelines and plans in support of ABD conservation and adaptation to CC in 4 pilot areas, which is implemented in cooperation with NGOs, communities, farmers through joint integrated practices, including market development. 1.4. Capacity building programs implemented to ensure institutions charged with responsibility for managing ex-and in-situ gene banks are effective. 1.5. ABD policies applied in 4 pilot areas and adopted in >40 home gardens/farms. 1.6. Development of long-term strategy for conservation of ABD and adaptation to climate change.
<ul style="list-style-type: none"> 2.1. Farmers in the 4 pilot areas provided with skills and knowledge to increase farm productivity (and food security) using climate resilient agro-biodiversity friendly practices. 2.2. Community-based participatory methods (building on traditional knowledge) developed and implemented for ex situ conservation, especially of recalcitrant materials (seed that cannot be stored ex situ). 2.3. Database of Tajikistan's valuable ABD germplasm established and networked for global, regional, national and local access (including communities) to support development of ABD programmes and improvement of cultivars. 2.4. Identification of CWRs of local ABD and its in situ protection in natural forest ecosystems, ensures its long-term conservation and provides a reservoir of germplasm adapted to climate change impacts for use in increasing productiveness of local fruits and nuts in 4 pilot areas. 2.5. Climate change and crop modelling facilitates the selection of the most appropriate homologue sites that represent present and future conditions. 2.6. Sustainable management strategies for the 4 project areas and their designation as sources of climate resilient wild crop relatives. 2.7. Awareness campaigns in partnership with the GEF SGP address conservation of agro-biodiversity and adaptation to climate change.
<ul style="list-style-type: none"> 3.1. Supply chain approach developed for marketing certified, climate resilient ABD products from 4 project areas. 3.2. Improved marketing of climate resilient ABD products (including international export) in 4 project areas, based on added values, strengthened supply chains, branding and certification. 3.3. Crop certification established for ABD products, increasing farmers' ability to market products and sell them at a premium. 3.4. Establishment and development of food processing agro-enterprises supported by small grants (GEF SGP) and microcredits (MLFs facilitated by UNDP Communities Programme, JRCs and Business Advisory Centres) within 9 target jamoats. 3.5. Improved Business Advisory Centres and Jamoat Resource Centres implement programs on capacity development to support agro-enterprises and farmers supply markets with climate resilient ABD products.

Annex 8:

GEF Tracking Tool for Biodiversity Projects

Objective 2:
Mainstreaming Biodiversity Conservation in Production Landscapes/Seascapes and Sectors

Objective: To measure progress in achieving the impacts and outcomes established at the portfolio level under the biodiversity focal area.

Rationale: Project data from the GEF-3, GEF-4, and GEF-5 project cohort will be aggregated for analysis of directional trends and patterns at a portfolio-wide level to inform the development of future GEF strategies and to report to GEF Council on portfolio-level performance in the biodiversity focal area.

Structure of Tracking Tool: Each tracking tool requests background and coverage information on the project and specific information required to track portfolio level indicators in the GEF-3, GEF-4, and GEF-5 strategy.

Guidance in Applying GEF Tracking Tools: GEF tracking tools are applied three times: at CEO endorsement, at project mid-term, and at project completion.

Submission: The finalized tracking tool will be cleared by the GEF Agencies as being correctly completed.

Important: Please read the Guidelines posted on the GEF website before entering your data

I. General Data	Please indicate your answer here	Notes
Project Title	Sustaining agricultural biodiversity in the face of climate change in Tajikistan	
GEF Project ID	3129	
Agency Project ID	3647	
Implementing Agency	UNDP	
Project Type	FSP	FSP or MSP
Country	Tajikistan	
Region	ECA	
Date of submission of the tracking tool	April 20, 2012	Month DD, YYYY (e.g., May 12, 2010)
Name of reviewers completing tracking tool and completion date	Dr. Khikmat Muminov, PhD, National Expert; April 06, 2012	Completion Date
Planned project duration	5	years
Actual project duration	3	years
Lead Project Executing Agency (ies)	National Biodiversity and Biosafety Centre of the Republic of Tajikistan	
Date of Council/CEO Approval	February 1, 2008	Month DD, YYYY (e.g., May 12, 2010)
GEF Grant (US\$)	1 900 000	
Cofinancing expected (US\$)	2 100 000	
Please identify production sectors and/or ecosystem services directly targeted by project:		
Agriculture	1	1: Primarily and directly targeted by the project 2: Secondary or incidentally affected by the project
Fisheries		1: Primarily and directly targeted by the project 2: Secondary or incidentally affected by the project

Forestry	1	<p>1: Primarily and directly targeted by the project 2: Secondary or incidentally affected by the project</p> <p>Please note: The project team considers the forestry production sectors as primarily and directly impacted by the project - in contrast with the baseline TT - as the project activities are mostly implemented within the forest area, and the project also partly addresses the conservation of wild relatives of fruit tree genetic resources in these forests</p>
Tourism		<p>1: Primarily and directly targeted by the project</p> <p>2: Secondary or incidentally affected by the project</p>
Mining		<p>1: Primarily and directly targeted by the project</p> <p>2: Secondary or incidentally affected by the project</p>
Oil		<p>1: Primarily and directly targeted by the project</p> <p>2: Secondary or incidentally affected by the project</p>
Transportation		<p>1: Primarily and directly targeted by the project</p> <p>2: Secondary or incidentally affected by the project</p>
Other (please specify)		

II. Project Landscape/Seascape Coverage

1. What is the extent (in hectares) of the landscape or seascape where the project will directly or indirectly contribute to biodiversity conservation or sustainable use of its components? An example is provided in the table below.

Foreseen at project start (to be completed at CEO approval or endorsement)		
Landscape/seascape ^[1] area directly ^[2] covered by the project (ha)	000	150
Landscape/seascape area indirectly ^[3] covered by the project (ha)	000	1 500
Explanation for indirect coverage numbers:	<p>The primary landscape component targeted by the project is the land used for gardens in the four proposed sites, a total of about 150,000 ha. The overall project will impact an area of 1.5 million hectares in a productive landscape covering four districts (Shurobod, Rasht, Baljuan and Zerafshan) and 36 sub-districts (Jamoats) with a total population of approximately 152,000. Implementation of the project including the key component of market-chain development will be available to home gardens/farms in the 4 districts, covering the major part of the population. The success of the market chain will impact on agriculture more generally as the mix of activities from which the population derives income changes, so the broader indirect impact will be on the whole agricultural sector.</p>	

Actual at mid-term		
Landscape/seascape ^[1] area directly ^[2] covered by the project (ha)	150 000	
Landscape/seascape area indirectly[3] covered by the project (ha)	1 500 000	
Explanation for indirect coverage numbers:	At its mid-term stage, the project has been able to proceed with implementation and currently the globally important species of agrobiodiversity are being stored in home gardens and nurseries of farmers in all four target districts, directly benefiting the area of 150,000 ha while indirectly contributing to ABD mainstreaming and conservation on 300,000 ha. The project includes interventions targeting capacity development (at systemic, institutional and individual levels), in-situ and ex-situ agrobiodiversity conservation measures and market development in support of socio-ecological adaptation to climate change, implemented throughout all four target districts covering 1,500,000 ha. The project also developed recommendations for a national agrobiodiversity conservation strategy in partnerships with the National Centre for Genetic Resources, Institute of Farming of the Tajik Academy of Agricultural Sciences, and State Agency for Forestry and Hunting, which will have an indirect impact on the whole agricultural sector of the country. The project also developed 30 models of climatic homologues to identify the placement of genetic agrobiodiversity resources, including globally important ones, for conservation purposes, as well as for improved productivity of local varieties and species, covering an area of 3,000 ha.	
Actual at project closure		
Landscape/seascape ^[1] area directly ^[2] covered by the project (ha)	N/A	
Landscape/seascape area indirectly[3] covered by the project (ha)	N/A	
Explanation for indirect coverage numbers:	N/A	Please indicate reasons

[1] For projects working in seascapes (large marine ecosystems, fisheries etc.) please provide coverage figures and include explanatory text as necessary if reporting in hectares is not applicable or feasible.

[2] Direct coverage refers to the area that is targeted by the project's site intervention. For example, a project may be mainstreaming biodiversity into floodplain management in a pilot area of 1,000 hectares that is part of a much larger floodplain of 10,000 hectares.

[3] Using the example in footnote 2 above, the same project may, for example, "indirectly" cover or influence the remaining 9,000 hectares of the floodplain through promoting learning exchanges and training at the project site as part of an awareness raising and capacity building strategy for the rest of the floodplain. Please explain the basis for extrapolation of indirect coverage when completing this part of the table.

2. Are there Protected Areas within the landscape/seascape covered by the project? If so, names these PAs, their IUCN or national PA category, and their extent in hectares

Name of Protected Areas	IUCN and/or national category of PA	Extent in hectares of PA
3		
4		

3. Within the landscape/seascape covered by the project, is the project implementing payment for environmental service schemes? If so, please complete the table below. Example is provided.

Foreseen at project start (to be completed at CEO approval or endorsement)	N/A	Please Indicate Environmental Service
	N/A	Extent in hectares
	N/A	Payments generated (US\$)/ha/yr
Actual at mid-term	N/A	Please Indicate Environmental Service
	N/A	Extent in hectares
	N/A	Payments generated (US\$)/ha/yr
Actual at project closure	N/A	Please Indicate Environmental Service
	N/A	Extent in hectares
	N/A	Payments generated (US\$)/ha/yr

Part III. Management Practices Applied

4. Within the scope and objectives of the project, please identify in the table below the management practices employed by project beneficiaries that integrate biodiversity considerations and the area of coverage of these management practices. Please also note if a certification system is being applied and identify the certification system being used. Note: this could range from farmers applying organic agricultural practices, forest management agencies managing forests per Forest Stewardship Council (FSC) guidelines or other forest certification schemes, artisanal fisherfolk practicing sustainable fisheries management, or industries satisfying other similar agreed international standards, etc.

Foreseen at project start (to be completed at CEO approval or endorsement)	(i) Ex situ/In situ conservation of globally significant agro-biodiversity (ii) Development of agro-biodiversity based agro-enterprises	Please indicate specific management practices that integrate BD
	NA	Name of certification system being used (insert NA if no certification system is being applied)
	(i) 150,000 hectares (ii) 150,000 hectares	Area of coverage

Actual at mid-term	<p>(i) Ex situ/In situ conservation of globally significant agro-biodiversity: The project, in cooperation with the State Agency on Forestry, established a nursery of 350,000 seedlings of local varieties of apples, pears, figs, nuts for to setting up gardens in farms in pilot areas.</p> <p>With the Small Grant Programme run within the project, communities from targeted districts established home gardens with application of “ex-situ” conservation methods and grow local apples, plums, apricots, almond, peach and grapes, covering the area of 17 ha, and mulberry gardens of 10 ha.</p> <p>(ii) Development of agrobiodiversity based agro-enterprises: With the Small Grant Programme run within the project, communities from targeted districts established home gardens with application of “ex-situ” conservation methods and grow local apples, plums, apricots, almond, peach and grapes, covering the area of 17 ha, and mulberry gardens of 10 ha. 170 households benefited from the micro-credit scheme established by the project, and were able to expand their home gardens (now covering 250 ha) and establish small-scale agro-processing shops. 12 hectares of local forms of cereals and legumes adapted to climate change are grown by farmers in the demonstration plots in Muminabad, Tajikabad, Shurabad and Penjikent areas. Farmers from all target areas benefited from practical trainings and workshops, covering a number of issues, such as the use of local traditional varieties of agrobiodiversity species, principles of climate change adaptation, agrotechnical care, grafting, agrobiodiversity conservation, climate change adaptation, entrepreneurship, etc.</p>	<p>[Note: The project area covers 1.5 million hectares, out of which 150,000 hectares are productive lands. The project implements homologue modeling, institutional, legislative and awareness raising activities (indirect impact) on 1.5 million hectares. Nevertheless, the practical measures (grants, demo-plots, marketing, etc.: direct impact) are conducted on 150,000 hectares of the productive lands. By the end of 2012, the project was able to introduce the homologue modeling on 1.5 million ha (totaling to 36 project jamoats), while practical measures (grants, demo-plots, trainings etc.) were covered on the area of 276,084 ha (which is partially productive). This figure refers to the 10 model jamoats in four project pilot sites. In 2013-2014, it is expected to replicate/mainstream the best practices on agrobiodiversity conservation to the remaining territory of 26 jamoats (which will totally make 1.5 million ha, including 150,000 ha of the productive land).]</p>
	NA	Name of certification system being used (insert NA if no certification system is being applied)
	(i) 150,000 hectares (ii) 150,000 hectares	Area of coverage
Actual at project closure	N/A	Please indicate specific management practices that integrate BD
	N/A	Name of certification system being used (insert NA if no certification system is being applied)
	N/A	Area of coverage

Part IV. Market Transformation

5. For those projects that have identified market transformation as a project objective, please describe the project's ability to integrate biodiversity considerations into the mainstream economy by measuring the market changes to which the project contributed. The sectors and subsectors and measures of impact in the table below are illustrative examples, only. Please complete per the objectives and specifics of the project.

Foreseen at project start		
		Unit of measure of market impact
National and international consumer markets for agro-biodiversity products, mainly high value fruits (dried and semi-dried, processed jams and pastes and nuts (raw and processed)	US\$ sales of up to 4 certified and branded or non-certified fruit and nut products by final year of project	Weak: lack of value chains linking producers to consumers in new and existing markets; lack of access to markets; limited local participation in national markets; lack of local participation in international markets
Actual at mid-term		
National and international consumer markets for agro-biodiversity products, mainly high value fruits (dried and semi-dried, processed jams and pastes and nuts (raw and processed)	<p>US\$ sales of up to 4 certified and branded or non-certified fruit and nut products by final year of project</p> <p><i>[findings will be presented in % increase in income as it proved difficult for farmers to report on US\$ amounts]</i></p>	<p>ABD friendly agro-enterprises generate sustainable income which would be at least 20% more than the current baseline (by 2014). At mid term, the situation is as follows:</p> <p>a) Local farmers exhibited different goods at the national level fairs, including fresh fruit and nuts, plants, mulberry products (three types), nuts, dried fruits, herbs. The income increase reported is at average 40%;</p> <p>b) Certification and standardization of seedlings at the national level enabled the income increase by more than 30%, and helped to ensure sustainability of agro-enterprises dealing with seedling production (several contracts for the wholesale supply for the subsequent period);</p> <p>c) Income increase reported is at 13.4% as a result of micro-loans targeting agrobiodiversity conservation issues introduced by the project in the project target territories.</p>
Actual at project closure		
Name of the market that the project seeks to affect (sector and sub-sector)		Unit of measure of market impact
	N/A	
	N/A	
	N/A	

Part V. Policy and Regulatory frameworks

6. For those projects that have identified addressing policy, legislation, regulations, and their implementation as project objectives, Please complete these tables for each sector that is a primary or a secondary focus of the project. Please answer (1 for YES or 0 for NO) to each statement under the sectors that are a focus of the project.

<i>Biodiversity considerations are mentioned in sector policy</i>		
Agriculture	1	Yes = 1, No = 0
Fisheries		Yes = 1, No = 0
Forestry	1	Yes = 1, No = 0
Tourism		Yes = 1, No = 0
Other (please specify)		Yes = 1, No = 0
<i>Biodiversity considerations are mentioned in sector policy through specific legislation</i>		
Agriculture	1	Yes = 1, No = 0
Fisheries		Yes = 1, No = 0
Forestry	1	Yes = 1, No = 0
Tourism		Yes = 1, No = 0
Other (please specify)		Yes = 1, No = 0
<i>Regulations are in place to implement the legislation</i>		
Agriculture	1	Yes = 1, No = 0
Fisheries		Yes = 1, No = 0
Forestry	1	Yes = 1, No = 0
Tourism		Yes = 1, No = 0
Other (please specify)		Yes = 1, No = 0
<i>The regulations are under implementation</i>		
Agriculture	1	Increased understanding and implementation of environmental and agricultural legislation at the local level (jamoats and districts) since project inception. This resulted in the increased rate for this category from 0 to 1.
Fisheries		Yes = 1, No = 0
Forestry	1	Conducting of practical capacity building initiatives and educational trainings allowed to introduce advanced technology of land use in the project area and to ensure the access of farmers and households to new methods of selecting seeds and widespread use of genetic resources. This resulted in the increased rate for this category from 0 to 1.
Tourism		Yes = 1, No = 0
Other (please specify)		Yes = 1, No = 0
<i>The implementation of regulations is enforced</i>		
Agriculture	0	Yes = 1, No = 0
Fisheries		Yes = 1, No = 0
Forestry	0	Yes = 1, No = 0
Tourism		Yes = 1, No = 0
Other (please specify)		Yes = 1, No = 0

<i>Enforcement of regulations is monitored</i>		
Agriculture	0	Yes = 1, No = 0
Fisheries		Yes = 1, No = 0
Forestry	0	Yes = 1, No = 0
Tourism		Yes = 1, No = 0
Other (please specify)		Yes = 1, No = 0

All projects please complete this question at the project mid-term evaluation and at the final evaluation, if relevant:

7. Within the scope and objectives of the project, has the private sector undertaken voluntary measures to incorporate biodiversity considerations in production? If yes, please provide brief explanation and specifically mention the sectors involved. An example of this could be a mining company minimizing the impacts on biodiversity by using low-impact exploration techniques and by developing plans for restoration of biodiversity after exploration as part of the site management plan.

N/A

Part VI. Tracking Tool for Invasive Alien Species Projects in GEF 4 and GEF 5

Objective: The Invasive Alien Species Tracking Tool has been developed to help track and monitor progress in the achievement of outcome 2.3 in the GEF-5 biodiversity strategy: “improved management frameworks to prevent, control, and manage invasive alien species” and for Strategic Program 7 in the GEF-4 strategy.

Structure of Tracking Tool: The Tracking Tool addresses four main issues in one assessment form:

- 1) National Coordination Mechanism;
- 2) IAS National Strategy Development and Implementation;
- 3) Policy Framework to Support IAS Management; and
- 4) IAS Strategy Implementation: Prevention, Early Detection, Assessment and Management.

Assessment Form: The assessment is structured around six questions presented in table format which includes three columns for recording details of the assessment, all of which should be completed.

Next Steps: For each question respondents are also asked to identify any intended actions that will improve performance of the IAS management framework.

Prevention, control, and management of invasive alien species (IAS) Tracking Tool

Issue	Please select your score from drop down menu	Scoring Criteria		
National Coordination Mechanism				
1) <i>Is there a National Coordination Mechanism to assist with the design and implementation of a national IAS strategy? (This could be a single “biosecurity” agency or an interagency committee).</i>		0: National Coordination Mechanism does not exist 1: A national coordination mechanism has been established 2: The national coordination mechanism has legal character and responsibility for development of a national strategy 3: The national coordination mechanism oversees implementation of IAS National Strategy	Comment:	Next Steps:
		Bonus point: Contingency plans for IAS emergencies exist and are well coordinated 0: NO 1: Yes		
IAS National Strategy Development and Implementation				
2) <i>Is there a National IAS strategy and is it being implemented?</i>		0: IAS strategy has not been developed 1: IAS strategy is under preparation or has been prepared and is not being implemented	Comment:	Next Steps:

		<p>2: IAS strategy exists but is only partially implemented due to lack of funding or other problems</p> <p>3: IAS strategy exists, and is being fully implemented</p>		
Policy Framework to Support IAS Management				
3) <i>Has the national IAS strategy lead to the development and adoption of comprehensive framework of policies, legislation, and regulations across sectors.</i>		<p>0: IAS policy does not exist</p> <p>1: Policy on invasive alien species exists (Specify sectors in comment box if applicable)</p> <p>2: Principle IAS legislation is approved (Specify sectors in comment box if applicable. It may be that harmonization of relevant laws and regulations to ensure more uniform and consistent practice is most realistic result.)</p> <p>3: Subsidiary regulations are in place to implement the legislation (Specify sectors in comment box if applicable)</p> <p>4: The regulations are under implementation and enforced for some of the main priority pathways for IAS (Specify sectors in comment box if applicable)</p> <p>5: The regulations are under implementation and enforced for all of the main priority pathways for IAS (Specify sectors in comment box if applicable)</p> <p>6: Enforcement of regulations is monitored (Specify sectors in comment box if applicable)</p>	Comment:	Next Steps:
Prevention				
4) <i>Have priority pathways for invasions been identified and actively managed and monitored?</i>		<p>0: Priority pathways for invasions have not been identified.</p> <p>1: Priority pathways for invasions have been identified using risk assessment procedures as appropriate</p> <p>2: Priority pathways for invasions are being actively managed and monitored to prevent invasions (In comment section please specify methods for prevention of entry: quarantine laws and regulation, database establishment, public education, inspection, treatment technologies (fumigation, etc) in the comment box.)</p> <p>3: System established to use monitoring results from the methods employed to manage priority pathways in the development of new and improved policies, regulations and management approaches for IAS</p>	Comment:	Next Steps:
Early Detection				
5) <i>Are detection, delimiting and monitoring surveys conducted on a regular basis?</i>		<p>0: Detection surveys[1] of aggressively invasive species (either species specific or sites) are not regularly conducted due to lack of capacity, resources, planning, etc</p>		

		<p>1: Detection surveys (observational) are conducted on a regular basis</p> <p>2: Detection and delimiting surveys[2] (focusing on key sites: high risk entry points or high biodiversity value sites) are conducted on a regular basis</p> <p>3: Detection, delimiting and monitoring surveys[3] focusing on specific aggressively invasive plants, insects, mammals, etc are conducted on a regular basis</p>		
		<p>Bonus point: Data from surveys is collected in accordance with international standards and stored in a national database.</p> <p>0: NO</p> <p>1: Yes</p>		
		<p>Bonus point: Detection surveys rank IAS in terms of their potential damage and detection systems target the IAS that are potentially the most damaging to globally significant biodiversity</p> <p>0: NO</p> <p>1: Yes</p>		
Assessment and Management: Best practice applied				
6) Are best management practices being applied in project target areas?		<p>0: Management goal and target area undefined, no acceptable threshold of population level established</p> <p>1: Management goal and target area has been defined and acceptable threshold of population level of the species established</p> <p>2: Four criteria are applied to prioritize species and infestations for control in the target areas: a) current and potential extent of the species; b) current and potential impact of the species; c) global value of the habitat the species actually or potentially infests; and d) difficulty of control and establishing replacement strategies.</p> <p>3: Eradication, containment, control and management strategies are considered, and the most appropriate management strategy is applied to achieve the management goal and the appropriate level of protection in the target areas (Please discuss briefly rationale for the management strategy employed.)</p>	Comment:	Next Steps:
		<p>Bonus point: Monitoring system (ongoing surveys) established to determine characteristics of the IAS population, and the condition of the target area.</p> <p>0: NO</p> <p>1: Yes</p>		

		Bonus points: Funding for sustained and ongoing management and monitoring of the target area is secured. 0: NO 1: Yes		
		Bonus point: Objective measures indicate that the restoration of habitat is likely to occur in the target area. 0: NO 1: Yes		
		TOTAL SCORE		
	29	TOTAL POSSIBLE		

[1] Detection survey: survey conducted in an attempt to determine if IAS are present.

[2] Delimiting survey: survey conducted to establish the boundaries of an area considered to be infested or free from a pest.

[3] Monitoring survey: survey to verify the characteristics of a pest/IAS.