

United Nations Development Programme Country: Azerbaijan



PROJECT DOCUMENT

Project Title:	Conservation and sustainable use of globally important agro- biodiversity	
Country Programme Outcome(s) and Output(s):	Outcome 1.3: Relevant national strategies, policies, and capacities strengthened to address environmental degradation, promote the green economy, and reduce vulnerability to climate change	
Outcome	Output 1.3.3: Priority ecosystems/economic sectors vulnerable to climate change identified, strategies for improving their resilience developed	
Executing Entity/ Implementing Partner:	Ministry of Agriculture of the Azerbaijan Republic	
Implementing Entity/Responsible Partners:	UNDP	

Programme Period:	5 years	Total budget USD 24,860,502
Atlas Award ID: Project ID: PIMS # Start date: End Date Management Arrangements PAC Meeting Date	00085294 00092996 5482 June 2016 June 2021 NIM TBD	GEF USD 4,160,502 National Government USD 20,500,000 UNDP USD 200,000

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Brief Description

Azerbaijan is considered to be part of Vavilov's Asia Minor centre of origin of cultivated plants.

In general, the wild relatives of cultivated crops in Azerbaijan are genetically diverse, locally adapted and represent a potential source of genes and alleles for adapting crops to the ever-changing environmental conditions and human needs of the country.

The project seeks to: (i) improve the protection of viable populations of indigenous wild relatives of crops and local landraces in their natural habitats; (ii) augment the conservation of indigenous wild relatives of crops and local landraces in plant genebanks to ensure an adequate source of genetic resources for plant breeding; and (iii) increase the production, and extent of use, of local landraces in agricultural smalloldings and commercial farms.

The project will be implemented in three rayons - Sheki, Goranboy and Goychay. Within these three rayons, the project will further focus on selected crop wild relatives, cultivated native species and cultivated landraces of wheat, vegetable and forage crops.

The project has been structured into three complementary components.

The first component will seek to expand the state of knowledge of agro-biodiversity, enhance the conservation of this agro-biodiversity and increase the intensity and extent of use native crops in the agricultural sector in the three project rayons. Work under this component will be focused around four key areas of project support, as follows: (i) Improve the knowledge base of crop wild relatives (CWRs) and local crop landraces (Output 1.1); (ii) Establish and manage a network of conserved areas for CWRs (Output 1.2); (iii) Establish and maintain field gene banks for crop landraces (Output 1.3); and (iv) Increase the production, storage and distribution of native crop seeds (Output 1.4).

The second component will seek to build the capacities of, and improve the collaboration and cooperation between, agricultural institutions and small farmers in order to improve agricultural productivity and reduce land degradation using native crops (i.e. the targeted crop species) in the three project rayons. Work under this component will be focused around three key areas of project support: (i) Build the capacity of agricultural institutions (Output 2.1); (ii) Support the development of local farmer organisations (Output 2.2); and (iii) Improve the knowledge and skills of local farmers (Output 2.3).

The third component will seek to strengthen incentives that encourage the planting of, and improve access to commercial markets for agricultural products derived from, the targeted native crop species across the three rayons. Work under this component will be focused around two key areas of project support: (i) Strengthen the agricultural incentives toolbox for farmers (Output 3.1); and (ii) Improve access to markets for local farmers (Output 3.2).

The total cost of investment in the project is estimated at US\$24,860,502, of which US\$4,160,502 constitutes grant funding from GEF and US\$ 20,700,000 constitutes co-financing from national government and UNDP.

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ACRONYMS

ACIP	Agricultural Competitiveness Improvement Project
AIC	Agro-Information Centre
ANAS	Azerbaijan National Academy of Sciences
APO	Annual Plan of Operation
APR	Annual Progress Report
APW	Annual Plan of Work
AS	(Project) Agricultural Scientist
ASAU	Azerbaijan State Agrarian University
AWP	Annual Work Plan
AZN	Azerbaijani Manat
AzRIP	Azerbaijan Rural Investment Project
CBD	Convention on Biological Diversity
СО	(UNDP) Country Office
СР	Country Programme
CPI	Consumer Price Index
CWR	Crop Wild Relative
EU	European Union
FAO	Food and Agriculture Organisation
FC	(Project) Field Coordinator
GABA	Ganja Agri-Business Association
GDP	Gross Domestic Product
GEF	Global Environment Facility
GIS	Geographical Information System
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GMO	Genetically Modified Organism
GNI	Gross National Income
GPA	Global Plan of Action (on PGRFA)
GRI	Genetic Resources Institute
HDI	Human Development Index
IRBD	International Bank for Reconstruction and Development
LD	Land Degradation
LOA	Letter of Agreement
MoA	Ministry of Agriculture
M&E	Monitoring and Evaluation
MDG	Millennium Development Goal
MEI	Ministry of Economy and Industry

MENR	Ministry of Ecology and Natural Resources
MoU	Memorandum of Understanding
NAPC	National Action Plan to Combat Desertification
NBSAP	National Biodiversity Strategy and Action Plan
NDC	National Development Concept
NGO	Non-Government Organisation
NIM	National Implementation (Modality)
PA	Project Administrator
PC	Project Coordinator
PD	Project Director
PFA	Project Financial Assistant
PGM	Project Grants Manager
PGRFA	Plant Genetic Resources for Food and Agriculture
PIR	Project Implementation Report
PMU	Project Management Unit
PPR	Project Progress Report
RCBD	Randomised Complete Block Design
RSC	Regional Service Centre
RTA	Regional Technical Adviser
SAAC	State Agency for Agricultural Credits
SBAA	Standard Basic Assistance Agreement
SC	(Project) Steering Committee
SO	Strategic Objective
SP	Strategic Programme
SPNA	Specially Protected Natural Area
TBWP	Total Budget and Work plan
UN	United Nations
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNFCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
WB	World Bank
WP	Work Plan

SECTION I: ELABORATION OF THE NARRATIVE

PART I: Situation Analysis

CONTEXT AND GLOBAL SIGNIFICANCE

Geographical context

1. Azerbaijan is the largest (with a total land surface area of \sim 86,600 km²) and most populous country (with a population of \sim 9.5 million) in the Southern Caucasus. The greatest concentration of the population is found in the coastal areas, with more than 4 million people located in and around the capital, Baku. Azerbaijan has a special administrative sub-division - the *Nakhchivan Autonomous Republic* - separated from the rest of Azerbaijan by a strip of Armenian territory. In addition, *Daghlig -Garabakh* has been occupied by Armenian forces, along with 7 adjacent districts (*Rayons*) in Azerbaijan's southwest, for more than 20 years. The occupied area constitutes ~20% of the total territory of Azerbaijan.

2. Azerbaijan is bordered by Georgia to the north-west, Russia to the north, Iran to the south, and Armenia to the south-west and west (see Map 1 below). A small part of Nakhchivan also borders Turkey to the north-west.



Map 1: Contextual map of Azerbaijan

3. Geographically, Azerbaijan is dominated by the Caspian Sea forming its eastern border, the Greater Caucasus mountain range to the north, the Lesser Caucasus in the southwest, the Talish Mountains to the south

and the extensive flatlands in the centre of the country. About 60 percent of the country consists of mountains and their foothills; the elevation changes over a relatively short distance from lowlands to highlands. Except for its eastern Caspian shoreline and some areas bordering Georgia and Iran, Azerbaijan is surrounded by mountains. The highest elevations occur in the Greater Caucasus, where Mount Bazardüzü rises to 4,466 metres above sea level.

4. Eight large rivers flow from the Greater and Lesser Caucasus Ranges into the central Kura-Araz lowlands, named after Azerbaijan's longest river, the Kura, and its main tributary, the Araz. The Kura drains into the Caspian, forming a delta a short distance downstream from the junction with the Araz.

5. The climate varies from subtropical and dry in central and eastern Azerbaijan to subtropical and humid in the southeast, temperate along the shores of the Caspian Sea, and cold at higher elevations. Most of Azerbaijan receives limited rainfall – on average 152 to 254 mm annually. Consequently, large parts of the country are covered by semi-desert and dry steppe. High precipitation - with more than 1,000 mm annually - occurs at high elevations of the Caucasus and in the Lenkaran lowlands in the southeast.

Socio-economic context

6. For the past decade, Azerbaijan's economy has boomed, general macro-economic stability has been maintained, and inflation - on the whole - has been controlled. While some of this improvement was driven by high growth rates, a strong increase in wages, and the introduction of a well-targeted social benefit system, much of it resulted from a jump in oil and gas revenues. However, these revenues are likely to stagnate over the coming decade and then to decline, so the country needs to diversify in order to strengthen its economic position. Even the new natural gas fields coming into production are unlikely to compensate for the revenues that the oil sector has provided. To foster continued improvement in the economy and to increase employment rates, Azerbaijan must find new, sustainable sources of growth in the non-oil sector.

7. Azerbaijan's gross domestic product (GDP) grew by 2.1% during the first half of 2014, sharply decelerating from 5% in the same period in 2013. The slowdown reflected mainly a 3.9% contraction in the oil sector, which accounts for half of GDP¹. Despite the slowdown, the annual real GDP growth for the period 2015-2019 is forecast at 3.3%. The consumer price index (CPI) showed a 1.6% increase in the first half of 2014, as food prices rose by only 1.2% and inflationary pressures from higher fuel tariffs were offset by price-controlled food markets and lower import costs from tax exemptions for some agricultural items and equipment. However, a cut in the central bank's policy rate from 4.75% to 4.25% is expected to accelerate credit growth, boosting domestic demand and monetary expansion.²

8. External trade remains robust despite lower oil production during the first half of 2014. The current account surplus narrowed slightly to 6.2 billion in the first half of 2014. The imposition of new standards for imported cars and a slowdown in consumer lending reduced imports by some 20% in the first half of 2014 from the same period of $2013.^3$

9. The high levels of economic growth have resulted in significantly improved human development in the country. Azerbaijan's HDI global ranking was elevated from 98 in 2005 to 76 in 2013 (with a HDI of 0.747). Official statistics show that today only 5.0% of the 9.5 million Azerbaijanis live below the national poverty line, significantly down from the estimated four million people who lived in poverty in 2004. Azerbaijan is very likely to achieve the UN's Millennium Development Goal (MDG) of eradicating extreme poverty and hunger in the country by 2015.Inequality in the country has also declined, with the Gini co-efficient falling by nearly 8% since 2001 to 33.7 in 2008.

 $^{^{1}}$ Growth in the rest of the economy also declined in the first half, to 7.0% from 10.9% a year earlier, partly because cuts in public investment slowed growth in construction.

² Source: World Bank Group Azerbaijan Partnership Program Snapshot, 2015

³ Source: World Bank Group Azerbaijan Partnership Program Snapshot, 2015

Agricultural context

10. Azerbaijan has 4.8 million hectares of agricultural land, of which nearly 40% is arable. Most of the country's cultivated lands are irrigated by more than 40,000 kilometers of canals and pipelines. Blessed with a diversity of climatic zones in combination with rich farmland, Azerbaijan produces a broad range of crops. Crop production accounts for around half of all agricultural production, with livestock farming making up the remaining half. Approximately 1 million hectares (~52% of arable land) is covered by cereal crops (wheat, grains and beans)⁴ and 170,000ha by fruits and vegetables. The major agricultural cash crops are grapes, cotton, tobacco, citrus fruits, and vegetables. Grapes, cotton and tobacco account for over half of all production, while fruits and vegetables accounts for about 30 percent⁵.

11. While the agricultural sector⁶ only accounts for 5.3% of GDP, it is a key source of jobs - employing over 37% of the active labour force of the country - and is a national priority in the context of food security.

12. Domestic production of the main food products still falls far short of meeting market demand. For example, in 2013 the country imported 1,451, 257 tonnes of wheat and 1,619,303 tonnes of grain and beans to meet domestic demand. In order to reduce the dependence of the domestic food market on imported products and to create reliable food reserves, the country has taken a number of measures to improve the business and investment climate in the agricultural sector by incentivising producers, providing subsidies, and improving the institutional and economic basis for further development. To this purpose, the *State Program on the Reliable Supply of Food Products to the Population for 2008-2015* was drafted and signed into law in 2007. The main objective of the program is the qualitative and quantitative increase in production of agricultural and food products to ensure the country's food security.

13. Traditionally the main destination, and the largest consumer of agricultural and food exports, has been the CIS market, but in recent years this market has expanded to include many other countries in Europe, Asia and the Americas. The main export products are fresh vegetables and fruits, vegetable oils, sugar products, tea, processed vegetables and fruits, beverages, tobacco products and cotton. Despite a setback in export demand during the financial crisis, the sector has grown at an annual average rate of 10% since 2000.

Agro-biodiversity context

14. Azerbaijan is considered to be part of Vavilov's Asia Minor Centre of origin⁷. The country is the primary focus of origin of a number of globally important food crops, including: wild rye; wheat; barley; millet; wild pears; cherry; and more than 200 varieties of grapes.

15. One hundred and twenty genera – represented by 454 species – of the family Poaceae are found in Azerbaijan, 25 of which are under cultivation. There are 16 species of wheat genera, including 43 species of Durum wheat and 87 species of bread wheat. Ten species of barley (with 500 varieties) are found in the country, 2 of which are under cultivation. Five species of rye are found, one of which is cultivated. Only one species of maize (with more than 80 local varieties) and one species of rice (including a number of traditional cultivars) are found. Triticale, sorghum and millet are also naturally widespread across the territory of Azerbaijan. Most of the native varieties are however now either extinct, or in danger of extinction.

16. Four hundred species of legumes (Family: Fabaceae) are under cultivation - typically for food or forage use - in Azerbaijan. Food crops include: chickpea (78 varieties); lentil; bean (68 varieties); fava bean (70 varieties); and groundnut. Cultivated and wild species of alfalfa, shamrock, sweet clover, trefoil, vetch (50 varieties) and sainfoin are widely used as forage crops and/or as a disease break in cereal cropping rotations.

⁴ Total cereal production in 2013 comprised 1,845,996 tonnes of wheat and 2,883,082 tonnes of grain and beans (excluding rice).

⁵ Livestock, dairy products, and wine and spirits are also important farm products.

⁶ Including forestry and fisheries.

⁷ See *The Phytogeographical Basis for Plant Breeding*, N.I. Vavilov, 1935.

17. Wild relatives of cereals and legumes are widely distributed in natural pastures and meadows. The main *ex situ* collections of cereals and leguminous crops are maintained at the Research Institute of Agriculture (2 490 accessions), the Genetic Resources Institute (2 272 accessions) and the Nakhchivan Bioresources Institute (843 accessions). These collections include: 1,862 wheat accessions; 297 barley accessions; 23 rye accessions; 549 maize accessions; 326 triticale accessions; 263 alfalfa accessions; 121 shamrock accessions; 17 trefoil accessions; and 29 sainfoin accessions.

18. In addition, there are a large number of vegetable species, including: tomato (5 varieties); aubergine (3 varieties); sweet pepper (3 varieties); bitter pepper (1 variety); watermelon (1 variety); and potato (3 varieties). The main ex-situ collections of vegetable crops available in the country (933 accessions) don't however fully cover the diversity of these crops in Azerbaijan.

19. The forests of the Greater and Lesser Caucasus Mountains and the Talish Mountains contain wild ancestors of apples, persimmons, walnuts, chestnuts, pistachios and many other species that have been widely domesticated into many different varieties and strains. Some of the wild plants that are extensively used as fruits and vegetables in Azerbaijan include: cherries; plums; cornel; hawthorn; forest strawberry; Russian cherry-plum; sea-buckthorn; apple; medlar; sour cherry; blackthorn; raspberry; and wild varieties of onion.

Institutional context

20. The <u>Ministry of Agriculture</u> (MoA) is responsible for the formulation, implementation, monitoring and evaluation of all national agricultural legislation and policies. The *Department of Production Enterprises* of the MoA maintains oversight over the production and processing of grain crops and the testing, registration and production of seeds. The *Department of Control on Land Use* of the MoA maintains oversight over the land use, water supply, soil conservation and agro-biodiversity conservation of agricultural lands. The *Plant Department* of the MoA maintains oversight over agricultural technical and scientific support services. The mandated duties and functions of the MoA and its departments are implemented through a number of different institutional structures (Services, Commissions, Centers, Inspectorates or Institutes), each subordinated to the relevant Department of the MoA.

21. The State Commission for Testing and Protection of Selection Achievements –comprising the State Service for Control of Seeds and Registration of Plant Varieties and the State Technical Control Inspectorate - under the MoA has the overall responsibility for selection, development, testing, registration and protection of all crop seed varieties. This includes a *State Seed Inspectorate* (each with a seeding laboratory) in each of the 55 Rayons across Azerbaijan, 16 Seed Testing Stations covering the different agricultural zones of the country and 9 regional Testing Stations.

22. The Agricultural Research Centre under the MoA includes 13 research institutes – notably the Research Institute of Farming, Research Institute of Forage, Meadows and Pastures, Research Institute of Horticulture and Subtropical Plants and the Research Institute of Vegetable Production – and the "Araz" Scientific-Production Union. The Research Institute of Farming is responsible for the selection, research and production of cereal-grain crops and the maintenance of gene banks for these cereal-grain crops. The Institute of Forage, Meadows and Pastures are responsible for the selection, research Institute of Forage, Meadows and Pastures are responsible for the selection, research and production fodder crops and the maintenance of gene banks for these fodder crops. The Institute of Horticulture and Subtropical Plants are responsible for the selection, research and production of the selection, research and production of fruit crops and the maintenance of gene banks for these found for the selection, research and production fodder crops. The Institute currently maintains 189 fodder specimens in its field gene bank. The Research Institute of Horticulture and Subtropical Plants are responsible for the selection, research and production of gene banks for these fruit crops and the maintenance of gene banks for these fruit crops and the maintenance of gene banks for these forms in its gene bank. The Research Institute of Vegetable Production is responsible for the selection, research and production of vegetable crops and the maintenance of gene banks for these vegetable crops. The Institute currently maintains 578 fruit specimens in its field gene bank.

23. The <u>Azerbaijan National Academy of Sciences</u> (ANAS) is the main state research institution in the country. Azerbaijan National Academy of Sciences is divided into five departments (*Earth Sciences; Biological and Medical Sciences; Agricultural Sciences; Physical, Mathematical and Technical Sciences*; and *Humanities and Social Sciences*). Altogether the five departments affiliate over 30 research and cultural institutions throughout the country. Of these, the *Genetic Resources Institute* contributes to the research, evaluation, inventorisation, certification, collection, introduction, restoration and reproduction of: (i) cultivated plants and their wild ancestors; (ii) valuable, rare, threatened and endangered genera, species, native varieties and forms; and (iii) local breeds of agricultural animals. The institute maintains about 10,000 accessions of endemic, relict forms (395 genera) and 1,110 species of rare and valuable varieties of traditional cereals, grain legumes, fruit, vegetables and melons, fodder and medicinal plants in the National Genebank of the Institute. The *Institute of Soil Science and Agrochemistry* also contributes to the research, evaluation, monitoring and mapping of agricultural soils (including qualification of impacts, productivity and chemistry).

24. The <u>State Committee for Standardization</u>, <u>Metrology and Patent</u> is responsible for implementing state policy and regulation in the fields of technical regulations, standardization, measurement, conformity, accreditation, quality management and protection of industrial copyright. It determines and regulates the standards for protection, registration and use of different agricultural crop varieties.

25. The <u>State Customs Committee</u> regulates the import and export of agricultural crop, genes, seeds, plants and plant materials.

26. <u>Azerbaijan universities</u> (such as Baku State University, Nasreddin Tusy Azerbaijan Pedagogical University, Nakhchivan State University, Lankaran University and Azerbaijan State Agrarian University) play an important role in agricultural education, extension, research, crop seed production and maintenance of field gene banks. For example, the Azerbaijan State Agrarian University in Ganja maintains a field gene bank comprising 304 specimens.

27. The <u>Ministry of Economy and Industry</u> supports the development of crop agriculture and facilitates fiscal incentives for the conservation of agro-biodiversity through the administration of state subsidies, disbursement of soft loans and funding special projects and inititiatives.

28. The <u>Ministry of Ecology and Natural Resources</u> (MENR) is the primary government agency responsible for biodiversity conservation and the sustainable use of natural resources (i.e. forestry, wildlife, and fish) in Azerbaijan. The key responsibilities of MENR cover six broad areas: (i) environmental policy development; (ii) environmental protection; (iii) water monitoring; (iv) protection of marine natural resources; (v) forest management; and (vi) protected areas.

29. There are a number of <u>state and private seed producers</u> who are registered (either as R1 seed producers or R2 seed producers) with the State Commission for Testing and Protection of Selection Achievements. There are currently 13 state-owned and 372 privately owned agricultural enterprises, 71 of which are included in the seed producers register in 2014. The most prolific private seed growing enterprises include *Garabagh takhil*, *Kran Co* and *Susanagro. Azertokhum LLC*, based in Yevlakh, is currently the only private company in the country that owns and operates a seed processing and cultivation plant.

30. The <u>National Mechanism</u> is a network of national institutions and experts engaged with the conservation and sustainable use of Plant Genetic Resources for Food and Agriculture (PGRFA) in Azerbaijan. Its main objectives are to: facilitate access to, and analysis of, PGRFA information; assist decision-making processes; and conserve the country's historical memory on PGRFA. The mechanism, serves as a monitoring tool for the implementation of the Global Plan of Action (GPA) on PGRFA in the country.

31. There are a limited number of <u>international agencies and bilateral/multilateral donors</u> involved in, and actively supporting, related agro-biodiversity initiatives in Azerbaijan. These include: *EU* (institutional and regulatory reforms in the seed sector; support to value chain development; market- oriented agricultural

policies); *World Bank* (facilitating access of agricultural producers to markets; enhancing selected value chains; and providing financial services to agri-business enterprises), USAID (improved productivity of select value chains; improved trade and regulatory environment for agricultural SMMEs) and the *FAO* (support to the development of the seed sector; improved coordination of value chains; development of disease-free potato seed; and development of organic agriculture).

32. Although there are more than 80 <u>national and international environmental non-governmental organizations</u> (NGOs) in Azerbaijan, only a handful focus their work on agro-biodiversity conservation. The major issue for all of the national NGOs is budgetary constraints. NGOs broadly involved in the agricultural sector include: *GABA*, *Agricultural Information Centre*, *Ruzgar Environmental Society*, *Green Movement*, *Ekoil Scientific-Environmental Union*, *Circle* and *Eco-Energy Academy*.

33. There are currently over 1,208 <u>agricultural producers</u> - including farmer holdings, family holdings, cooperatives, companies and societies. Around 97% of agricultural products are produced by farmer holdings. Small privately owned garden plots, constituting only a fraction of the total cultivated land, contribute as much as 20% of agricultural production (and more than half of livestock production) in Azerbaijan. Most of these private landholders do not however have ready access to agricultural inputs, services, and financing.

34. The institutional roles and responsibilities for the selection, testing, registration, storage and distribution of crop seeds in Azerbaijan is summarised in Figure 1 below:



Figure 1: Institutional flow diagram for the selection, testing, production and distribution of crop seeds in Azerbaijan

Legislative and policy context

35. The following major laws (and associated regulations and statutes) provide the overarching legal framework for the conservation and use of crop agro-biodiversity in Azerbaijan:

Legislation	Date	Description	
Law on Selection	1996	Provides the legal basis for the registration and legal protection (i.e.	
Achievements		copyright, patents and registration) of varieties of native plants and animal	
		breeds, including their hybrids, genotypes, crossings and clones.	
Law on Grain	1997	Describes the legal basis for grain production, procurement and market	
		arrangements, as well as the management of the quality of grain and grain	
		products.	
On the Fertility of Lands	1999	Establishes the legal basis for the improvement, restoration, increase and	
		protection of land fertility.	
Law on Phytosanitary Control	2006	Determines the legal basis for organizing and exercising phytosanitary	
		control, and regulates the relations between organisations acting in the	
		field of plant protection and plant quarantine.	
Law on Organic Agriculture	2008	Outlines the general principles governing organic agriculture and defines	
		the rules on the production, marking, certification, storage and marketing	
		of organic agricultural products. It also describes the requirements for	
		standardization and certification of organic products.	
Land Code	1999	Provides the legal basis for the distribution of land rights, and for the	
		protection and conservation of the land resources. The Code recognizes	
		diverse forms of land ownership (state, private and collective) and	
		identifies the entities that may be owners of land (state, individuals,	
		<i>kolkhozes</i> and the collectives of other agricultural cooperatives and joint	
		stock companies). It further classifies the land resources according to its	
		purpose (farming, settlements, utilities, conservation, forests, water	
		resources and national land reserve).	
Law on Specially Protected	2000	provides the legal framework for the classification, establishment and	
Nature Areas and Objects		expansion of 'Specially Protected Nature Areas' (SPNAs) in Azerbaijan.	
Law on Management of	2001	Regulates general rules of transfer of municipal land into ownership, land	
Municipal Lands		tenure and lease with the consideration of the particulars of its	
		management, and legal relations in the sphere of its tenure and	
		conservation.	
Law on Conservation and	2011	Provides the legal basis for the research, rational use and protection of	
Sustainable Use of Plant		genetic sources of cultivated plants, including their wild ancestors.	
Genetic Resources			

36. Government policies in Azerbaijan are set out in the form of programmes with set timeframes and objectives enacted on the basis of presidential decrees. The country does not use framework strategic documents which define the long term priorities, but rather focuses on medium-term programmes that tackle a variety of horizontal and vertical issues as well as emerging needs. The programmes are used as basis for establishment of institutions; state owned commercial entities as well as support programmes required for their implementation.

37. The government is currently providing support aimed towards development of the agricultural and rural areas through the development of socio-economic infrastructure of the regions, reforms in the agricultural sector and implementation of different programmes and projects to support improvement of the business environment. The current documents setting out the Government policies for agriculture, and associated rural development, include the following:

	Type of programme	Name of programme
Year ratified		
2008	State programme	<i>Poverty reduction and sustainable development in the Republic of Azerbaijan for 2008-2015</i>
2008	State programme	State Program on the reliable food supply of population in the Republic of Azerbaijan in 2008-2015
2012	National Development Plan	Azerbaijan 2020: Outlook for the future' Development Concept
2014	State programme	State Program on socio-economic development of the regions of the Republic of Azerbaijan in 2014-2018
2015	National Strategy and	Conservation and Sustainable Use of Biodiversity in the Republic of
(draft)	Action Plan	Azerbaijan

THREATS, ROOT CAUSES AND IMPACTS

38. There are various factors that threaten the country's plant genetic resources base. Some of the major factors negatively affecting the magnitude of genetic diversity - particularly of indigenous crops and their wild relatives - include: indiscriminate distribution of uniform exotic crop varieties that displace the genetic diversity of indigenous crops; degradation of agro-ecological systems; land fragmentation; and repeated drought in some areas of high crop diversification.

39. As reported in most countries, the primary cause of the genetic erosion of crops in Azerbaijan is the replacement of wild crop species and adapted local farmer varieties by monocultures of more productive, genetically-improved crop cultivars. Currently more than 80% of the crop areas under cultivation - especially of wheat, barley, corn and vegetables –are planted with genetically improved varieties⁸. An emerging concern across the country is an increase in the uncontrolled importation, cultivation and marketing of cheap genetically modified (i.e. GMOs) crops and products in Azerbaijan. This will further dilute the adoption of native crops by farmers.

40. Soil degradation occurs on a large portion of land suitable for agriculture due to erosion, salinity and chemical pollution. In Azerbaijan, 96% of human-induced degradation is due to agricultural activities. It is estimated that 3.7m ha (~42% of the territory of Azerbaijan) is subject to the damaging effects of erosion, while 0.6m ha (~7% of the territory of Azerbaijan) is adversely affected by salinization, to the extent that it is now no longer suitable for agriculture. The salinization and erosion of soils tend to be a result of poor irrigation and drainage systems, overstocking of livestock, unsustainable levels of ground water extraction and ongoing deforestation. Further degradation of soils has been caused by the uncontrolled imports of fertilizers, pesticides, and herbicides into the country and the inappropriate use of these chemicals by local farmers (for example, some farmers don't follow the recommended application rate).

41. Land degradation in the grasslands and semi-arid areas of Azerbaijan is increasing at a rapid rate, largely as a result of overgrazing. Livestock husbandry in Azerbaijan is very profitable, so there is continual pressure to increase the size of herds of livestock (mainly sheep, goats and cattle) well beyond the carrying capacity of the vegetation. Recent monitoring of livestock shows that the number of animals per hectare is 10-50 times higher than the grazing norm in some areas, and even more in others. This is resulting in the incremental increase in both the extent of the areas under grazing pressure, and the intensity of the grazing pressure. The intensive use of pastures in many areas, even where they are largely unsuitable for livestock - such as in the Absheron, Dahglig-Garabagh region and Gobustan areas – is also resulting in accelerated soil erosion, and the increasing desertification of land. Many winter grounds are now being utilized for livestock grazing throughout the year. Land degradation is being further exacerbated by the weak regulation of building and construction

⁸ The areal extent of use of a range of native crops (crop wild relatives and landraces) includes: 5 % wheat; 5% barley; 5-20% vegetable; 1-2% watermelon; 25-45% leguminous plants; 60% apricot; and 30-50% other fruit plants.

activities in Azerbaijan, as well as the limited capacity for effective controls on mitigating the environmental impacts of industrial developments.

42. Water availability remains a major problem for crop agriculture. In many regions, rainfall is both inadequate and unevenly distributed, as are water resources from the rivers. As a result of insufficient precipitation and uneven distribution over the year there is a heavy reliance on irrigation. Approximately 33% of agricultural land is irrigated, and it is this land that accounts for more than 80% of Azerbaijan's total agricultural output. Of the approximately 1 billion m³ of fresh water used each year, just under 350 million m³ is also being lost due to the poor state and management of the water distribution systems in Azerbaijan. Of the water used, 70% is sourced from neighbouring countries, and there is currently an annual water deficit in the country of ~400 million m³. The Kura river - an important source of water for Azerbaijan –suffers from a massive inflow of untreated municipal, industrial and agricultural wastes (much of which originates from neighboring countries), reducing its value for watering crops. Localised flooding affects 300 km², and every other year washes out up to 1 million m³ of soil and causes significant damage to crop lands.

43. The agricultural sector is particularly vulnerable to the effects of climate change. Although uncertainty remains regarding the degree of warming that will occur in Azerbaijan, over the next 50 years, the average increase in temperature will be about 2.4°C. Precipitation changes are more uncertain than temperature changes and – depending on the climate change scenario – may either modestly decline (medium and high impact) or increase (low impact) over the next 50 years. Climate impacts are anticipated to be greatest from August to October, a key period for agricultural production. It has been suggested in a recent World Bank study (2014) on the vulnerability of Azerbaijan's agriculture system to climate change, that the effect of climate change on crop yields in areas where irrigation water shortages are forecast will be substantial, further decreasing yields in the water-short regions. Increased demand for irrigation water, coupled with decreases in runoff in the April through November period, will lead to crop losses of over 60 percent for all irrigated agriculture in some southern regions and losses of over 20 percent for all crops in the Eastern Lower Kur basin.

LONG-TERM SOLUTION AND BARRIERS TO ACHIEVING THE SOLUTION

44. In order to increase the productivity of crops in Azerbaijan, plant breeders will need to continually seek new forms of pest and disease resistance, tolerance to heat, drought and other stresses, and ways to directly increase yields.

45. In general, the wild relatives of crops are genetically diverse, locally adapted and represent a potential source of genes and alleles for adapting crops to changing environmental conditions and human needs.

46. The <u>long-term solution</u> is thus characterised by: (i) the location, description, active management and monitoring of targeted populations of wild relatives of crops, and local landraces, within their natural habitats or where they have developed their distinctive characteristics; (ii) the conservation of the native varieties and wild species in plant genebanks, as a vital source of plant genetic resources for future plant breeding; and (iii) an increase in the rate of release, and intensification of use of, local crop varieties containing genes from the indigenous wild relatives of crops.

47. The key barriers to achieving this long-term solution are briefly outlined below:

<u>Barrier 1</u>: Sub-optimal conservation, production, distribution and agricultural use of crop wild relatives and landraces

48. The natural populations of many crop wild relatives in Azerbaijan are increasingly at risk and they are at present poorly conserved, for a range of reasons. There are, for example, technical problems involved in developing conservation plans for such a diverse range of species with different biological characteristics, ecological requirements, conservation status and uses. There are also political, administrative and infrastructural problems that limit effective *in situ* conservation actions. In many cases, collaboration between

different ministries, agencies or institutions is required where there not a tradition of collaboration, nor a history of inter-institutional cooperation.

49. Although Azerbaijan has a reasonably developed system of protected areas, none of these specifically target the conservation of wild crop relatives. While populations of many wild crop relatives may occur in existing protected areas, the lack of reliable inventories in these protected areas means that detailed information on their distribution is seldom available. The need to conserve viable populations of wild crop relatives, and their associated habitats, is not yet being adequately addressed in national or regional conservation planning intiatives. Outside formal protected area status, there are also few other formal or informal mechanisms in Azerbaijan to secure the long-term conservation status of core populations of crop wild relatives and landraces.

50. Precise information about the risk of disappearance for the most important crop wild relatives is generally lacking. Traditional knowledge of the location and value of different crop wild relatives is being lost, with information increasingly limited to a few experts and specialized research institutions. There is currently no coordinated approach to the monitoring of the natural populations of crop wild relatives (i.e. trends in population size, structure, and genetic composition) and the habitats in which they occur. There are also no long-term indicators and risk threshold levels which can be used to monitor crop wild relatives and which policymakers can use to help define interventions for the conservation and sustainable use of crop wild relatives and local landraces.

51. There is currently no research being undertaken in the country on the contribution of native crops to reducing or reversing the affects of soil erosion and salinity. The resistance of wild crop relatives and their landraces to drought events is also not well understood. Further, the potential contribution of increasing the diversity of, and area planted using, native crops in order to reduce the vulnerability of the agricultural system in Azerbaijan to the effects of climate change (notably increase in temperature) has not been rigorously assessed.

52. While valuable local varieties of agricultural crops have been developed by farmers in the past, many of these have now been replaced by modern varieties or are in danger of disappearing. The National Database has a record of 2,125 landraces in Azerbaijan, but the genebank collections of these landraces are currently incomplete. The gaps in these collections represent limitations on the options available to researchers and breeders to study and introduce new diversity into their programs. Although most of the research centres and institutions do maintain field gene banks (field collections contain 6,193 accessions) for cultivation, multiplication and conservation of vegetatively propagated plants, they are under-resourced, limiting their capacity to expand these field gene banks to include more crop wild relatives and landraces.

53. Over the last 10 years nearly 400 local landraces have been used by crop farmers, but this number is decreasing every year as farmers increasingly turn to more readily available imported seeds that are generally less well adapted to local climate conditions. Even though seeds and seedlings of local landraces and varieties are available in some regional State Sort and Test Points and government agricultural research centers and organizations, they are typically only available in very small quantities due to the limited capacities of the state agricultural institutions. There are currently no local, regional or national seed depositories for native crops. The primary source of seeds and plant materials for farmers are typically the large private seed producers, but these agricultural enterprises generally have no readily available stock of native crop seeds and seedlings.

54. While on-farm conservation and management of plant genetic resources is considered a priority issue for Azerbaijan, there are still too few private farms actively participating in the cultivation of native crop varieties and in the production, storage and distribution of their seeds and seedlings. Most farmers generally lack the resources, capacity, knowledge and skills to initiate the cycle of production and planting of native crops. There is a need for a more systematic approach to the establishment on-farm gene banks for native crops.

<u>Barrier 2</u>: Weak institutional capacities to support the adoption of, and limited farmer skills and knowledge to grow, native crops

55. During the Soviet era, the agricultural production system focused on maximizing the crop output using high-input monocultures (often comprising poorly adapted crops). Following land reforms, the former state-owned *kolkhoz* and *sovkhoz* farms were disbanded and the land was subsequently privatized. Yet, the majority of the new landowners (~870,000 households) who received their land shares – most of whom have never worked in the agricultural sector - had difficulties in coping with farming operations in a market-driven economy. Many of them initially reverted to using the same seeds that were used under the Soviet system, and later changed to buying cheap imported seeds, to the extent that - for example - imported seed now comprise 95% of all cereal crop used in production.

56. The general lack of farming knowledge and skills of many of these small farmers is resulting in low crop productivity levels on most farms. The high costs of agricultural machinery, fuel, chemicals, fertilizers and irrigation systems is further aggravating the tenuous socio-economic situation of the farmer holdings, many of whom struggle to access financial support for their farming operations. There is also limited capacity in the state institutions to provide agricultural extension services to these small farmers, leaving most of them unaware of the availability of local crop varieties and land races that may be better suited to, and more cost-effectively used in, their farming operations. There are currently few agricultural training and skills development courses targeting small crop farmers and the sharing of technical information between the agricultural state institutions and local farmers is still largely *ad hoc* and intermittent. The utiltarian approaches of farmers to harvesting, storing, transport and marketing of their produce typically results in lower prices received.

57. While the central institution for the development and administration of agricultural policy is the Ministry of Agriculture, it has no physical presence at the rayon level. Instead, agricultural policies are implemented by the local executive powers offices, most of the time without any meaningful coordination with the Ministry of Agriculture. A recent Decree on *Improvement of agricultural management and acceleration of institutional reforms* in 2014 envisaged the establishment of the Rayon Agriculture Centers (RAC) to address this shortcoming. However, to date, RACs have not yet been established, staffed, resourced or operationalized in any of the rayons. The capacities (staff, infrastructure, equipment, materials) of the seed testing points, seed control services and agricultural research institutes to select, develop, test, register and protect native crop varieties remains inadequate, with most of the limited state resources committed to the development of more commercially viable cultivars. Similarly, the enforcement capacity of the agricultural and environmental inspectorates in the MoA and MENR is insufficient to effectively regulate and control the importation of seeds and plant materials.

58. While there has been some use of the seeds of local crop varieties, this use has tended to be on a farmerby-farmer basis. There are few functional farmer networks in place to share information on the costeffectiveness of native crops and to broaden the adoption of local landraces by more farmers. This is further exacerbated by the ongoing disconnect between the state agricultural institutions and individual farmer holdings.

<u>Barrier 3</u>: Few incentives and mechanisms to grow native crops, and market the products derived from these native crops

59. There are currently no fiscal, or other, incentives for farmers to plant native crops. Seeds and seedlings of local landraces are also generally more expensive than imported seeds (due to high production costs and a lack of dedicated seed storage facilities), leading farmers to rather procure cheaper imported seeds. Seed producers in turn have little motivation to produce, store and distribute seeds of native crops due to low demand from farmers, high production costs and no state subsidy schemes to encourage the adoption of native crops.

60. Agricultural insurance schemes have not yet developed any fiscal incentives (e.g. reduced rates) to encourage and reward farmers that plant native crops that are better adapted to periods of extreme drought, high salinity levels or excessive flooding.

61. Access to unsecured financing, or to special grants, for farmers to convert their crops to native crops and/or to produce, store and distribute seeds and seedlings of crop wild relatives and landraces is difficult in the current socio-economic climate where traditional banking systems tend to be risk averse.

62. Agricultural produce from native crops tends to compete in the same general agricultural markets. There is no special branding or general awareness of products originated from indigenous cultivars and no state support for promoting environmentally-friendly branded agricultural products. Despite an increasing demand, there are still no local exhibitions or agricultural fairs that specifically market local products derived from native crops. The potential for access to a wider, global market for Azerbaijani organic products has not yet been fully explored.

STAKEHOLDER ANALYSIS

63. During the project preparation stage, a stakeholder analysis was undertaken in order to identify key stakeholders and assess their prospective roles and responsibilities in the context of the proposed project. The table below lists the key stakeholder organisations; provides a brief summary of the responsibilities of each of these stakeholder organisations (specifically as it applies to PGRFA); and broadly describes the anticipated role of each of the stakeholder organisations in supporting or facilitating the implementation of project activities:

Stakeholder	Roles and Responsibilities (as applicable to PGRFA)	Proposed involvement in the Project				
Nationa	National Government (Ministries, Departments and Agencies)					
Presidential Administration	Determines the state policy on PGRFA.	Will ensure the political support				
	Prepares and monitors the implementation of	for the project, and ensure				
Agrarian Policy Department	relevant action plans, state programmes,	conformance with national				
of the Presidential	strategies and political decisions on PGRFA.	policies, strategies and plans.				
Administration						
Cabinet of Ministers	Adopts legislation related to PGRFA.	Will coordinate the efforts of the				
		different affected Ministry's in the				
Agro-industry and	Prepares drafts of legislation for adoption by	implementation of the project.				
environmental departments of	the Cabinet of Ministers. Oversees the	Will be represented on the project				
the Cabinet of Ministers	implementation of relevant legislation.	Steering Committee.				
Ministry of Agriculture	Responsible for the agricultural sector,	The national implementing partner				
	including the protection and use of agro-	for the project. Will chair the				
	biodiversity.	project Steering Committee.				
State Commission for Testing	Responsible for the testing, registration and	Will directly support the				
and Protection of Selection	protection of of all crop seed varieties.	implementation of all project				
Achievements		activities.				
Agricultural Research Center	Responsible for the selection, research and	Will directly support - through the				
	production of cereal-grain crops and the	Research Institute of Farming;				
	maintenance of gene banks of cultivated	Research Institute of Forage,				
	plants and their wild relatives.	Meadows and Pastures; Research				
		Institute of Horticulture and				
		Subtropical Plants; and Research				
		the implementation of all are instant				
		- the implementation of all project				
		acuvines.				

Stakeholder	Roles and Responsibilities (as applicable to PGRFA)	Proposed involvement in the Project		
Azerbaijan National	The primary state scientific and technical			
Academy of Sciences	reesearch institution.			
Constin Descenter Institute	Deenersible for the manual such station	Will suggest and/an facilitate the		
Genetic Resources Institute	inventorisation certification collection	implementation of all project		
	introduction, restoration and reproduction of	activities. Are a key project partner		
	cultivated plants and their wild ancestors and	and will be represented on the		
	rare, threatened and endangered genera and	project Steering Committee.		
	species. It hosts the National Gene Bank and			
	is designated as the National Coordinator			
	Institute for POKFA.			
The Institute of Soil Science	Responsible for the research, evaluation,	Will support or directly undertake		
and Agro-Chemistry	monitoring and mapping of agricultural soils	research into the contribution of		
	(including qualification of impacts,	native crops to mitigating the		
	productivity and chemistry).	effects of land degradation.		
Ministry of Ecology and Natural Pasouroes	Responsible for environmental protection at the national level, including the planning and	Will provide technical and professional support in the		
Natural Resources	management of agro-biodiversity, natural	implementation of project		
	pastures, forests, specially protected natural	activities.		
	areas, soil conservation and pollution.	Will be represented on the project		
		Steering Committee.		
Biodiversity Protection and Development of Specially	Co-ordinates the development and	Will support the project in the		
Protected Natural Areas	plans Administers the national system of	establishment and management of		
Department	Specially Protected Natural Areas (SPNAs).	a network of protected areas for		
-		targeted crop wild relatives.		
National Monitoring	Oversees the implementation of all			
Department on Environment	environmental monitoring programmes in the	Will ensure that the monitoring of		
	geological biodiversity)	landraces are aligned with and		
	geological, blourversity).	integrated into, the national		
		environmental monitoring system.		
Ministry of Economy and	Supports the development of crop agriculture	Will facilitate access to agricultural		
Industry	through the administration of state subsidies,	subsidies, grants and loans for		
	funding	Will support the development and		
	Tununig.	administration of fiscal incentives		
		for farmers to plant native crops.		
		May be represented on the project		
		Steering Committee.		
State Committee of Standardization Methology	standards, massurements, accreditation	Will support the project in the		
and Patents	schemes, quality control management and	agricultural produce derived from		
	protection of copyright (including for	native crops.		
	different agricultural crop varieties).	-		
Local government				
District Executive	Responsible for delivering services (e.g.	Will facilitate and support the		
Authorities	education, health, culture, local	participation in, and direct		
Rural land officies of Head	services, cultural facilities and social	farmers in project activities		
of District Executive Power	assistance) within their territories that are	in project dettitles.		
· · · · · · · · · · · · · · · · · · ·	,			

Stakeholder	Roles and Responsibilities (as	Proposed involvement in the		
	applicable to PGRFA)	Project		
	outside the control of the relevant state	Representatives of the targeted		
	programs.	rayons may be respresented on the		
Municipalities	Management of land use, forests, pastures	project Steering Committee.		
	and cultivated areas (within the framework of			
Neighbourhood Committees	the powers granted by relevant legislation).			
(rural villages)				
	Crop farmers			
Private farmer and family	Farms the majority of agricultural crops in	The primary project beneficiaries.		
smallholdings	the country.	Will be represented on the project		
8		Steering Committee		
Nor	n-government and community-based organ	nisations		
Agro Information Center	NGO providing technical and professional	Will share, coordinate and		
(AIC)	advice and support to farmers and other	collaborate with the project as and		
	agricultural producers.	where relevant. May be contracted		
		to implement specific project		
		activities (e.g. capacity building,		
Carrie A arti Brazin and	A grigultural accordiation providing support to	training).		
Ganja Agri-Dusiness Association ($CABA$)	farmers and other agricultural producers	specific project activities (e.g.		
Association (OADA)	farmers and other agricultural producers	developing local farmer networks		
		training, skills development.		
		marketing, certification and		
		marketing of organic agricultural		
		products).		
Rüzgar Environmental	NGO addressing environmental issues	Will share, coordinate and		
Association	associated with unsustainable agricultural	collaborate with the project as and		
	practises (e.g. soil pollution, erosion,	where relevant.		
	salinisation).			
	Private sector	More north on with the project in		
Azerioknum LLC,	and cultivation plant.	increasing the production of seeds		
Large seed producers (e.g.	Privately owned seed growing enterprises.	of selected native crops.		
Garabagh takhil, Kran Co		*		
and Susanagro)				
Academic institutions				
Azerbaijan State Agrarian	Involved in agricultural education, extension,	May partner with the project to		
University (ASAU)	research, crop seed production and	provide specialised technical		
	maintenance of field gene banks.	support in the implementation of		
targeted project activities.				
	Development partners	lovelonment projects and initiation		
UIZ, EU, FAU, WORIA BANK,	in Azerbaijan will be important project pertures. They will share aportize and			
USAID	in Azerbaijan will be important project partners. They will share, coordinate and collaborate with the project as and where relevant. May be represented on the			
	project Steering Committee			
	project Steering Committee.			

BASELINE ANALYSIS

64. Without the GEF investment in the proposed project, the 'business-as-usual scenario' for the conservation and sustainable use of globally important agro-biodiversity in Azerbaijan is one in which: (i) knowledge of crop wild relatives and landraces remains incomplete; (ii) natural populations of crop wild relatives and landraces are continually being lost; (iii) valuable local varieties of agricultural crops are

progressively being replaced by modern imported varieties; (iv) the genebank collections of native crop species remains incomplete; (v) the capacities of the seed testing points, seed control services and agricultural research institutes to select, develop, test, register and protect native crop varieties is still inadequate; (vi) most farmers remain unaware of the availability of local crop varieties and land races that may be better suited to, and more cost-effectively used in, crop farming operations; (vii) the effects of soil erosion, drought and salinity continue to impact the productivity of crops derived from imported seeds and genetically modified crops; and (vii) the potential to brand and promote agricultural products derived from native crops is not fully realized.

65. While the Government of Azerbaijan will - with the support of a range of development partner agencies and the private sector - commit significant resources, capacity and financing to the conservation and sustainable use of agrobiodiversity in the country, these commitments will not be sufficient to fully address the threats the country's plant genetic resources base and remove the barriers to achieving the long-term solution (see <u>above</u>). The breakdown of the baseline commitment by the government, development partner agencies and private sector is briefly summarised below.

66. Agricultural support from state funding will focus on: broadening the distribution of agricultural markets; enhancing the production of crops; procuring equipment for the State Seed Inspectorate; farmer training; and purchase and distribution of crop seeds to small farmers.

67. Agricultural support under the State Programme on Poverty Reduction and Sustainable Development and the State Programme on socio-economic development of the regions of the Republic of Azerbaijan is focused on stimulating agricultural production through direct cash payments to farmers. This support includes subsidies for: cultivation of important crops (40 AZN ⁹per ha): fuel costs associated with important crop production (40 AZN per ha); cost of fertilizers (50% discount); and costs of buying seeds of important crops (50% discount). In 2014, the state funding allocation for agricultural support under these programs included: (i) subsidies for wheat and rice cultivation (US\$19 million); (ii) construction, maintenance and equipping of State Seed Inspectorates and agro-chemical laboratories (US\$230,000); and (iii) production and distribution of crop seeds to small farmers (US\$900,000). For the project's three target rayons - Goranboy, Sheki and Goychay (see below) - 7,552 small farmers were allocated state funding support of US\$1,620,000 for wheat farming. State funding was also allocated to support the construction of administrative buildings (Goychay and Goranboy), procurement of cold storage facilities (Goychay) and the maintenance and equipping of a State Sorting and Testing Centre (Goranboy) in the projects three target rayons in 2014. It is envisaged that the scale and extent of support to agricultural activities in the three target rayons under these state programmes will continue at a relatively constant level during the entire period of project implementation, equating to a total baseline investment of at least US\$10 million.

68. The state budget for the implementation of the *State Program on the reliable food supply of population in the Republic of Azerbaijan* is currently US\$177.5 million for 2015 (42% higher than 2014). Under the framework of this state program, funding allocations to support crop agriculture include *inter alia*: rehabilitation and restoration of crop land; water storage, supply and irrigation infrastructure; agricultural extension; seed production, storage and distribution; crop genebanks; financial and technical support to crop farmers; agricultural research; farmer training and skills development; phyto-sanitrary controls; and testing, branding and certification systems. It is estimated that the baseline support from the state program for providing an enabling environment for the conservation and sustainable use of CWRs and crop landraces will equate to a further US\$30 million (~US\$6 million per annum) over the period of project implementation.

69. In addition, US\$9.5 million of state funds have been committed by a special order of the President (*On additional measures to strengthen state support for agricultural development*) to establish a 'State Seed Fund'. This State Seed Fund will assist in the ongoing production, harvesting and storage of high-yield and drought-resistant seed varieties during the course of project implementation.

⁹ 40 AZN is equivalent to ~US\$38

70. A further US\$238,000 has been allocated from the state budget to support the project, *Creation of a sustainable system for the efficient use, conservation and identification of crop gene reserves* (2015-2019). The project will facilitate the ongoing collection, propagation and curation of native crops that are not yet curated in the national gene bank.

71. During the period of project implementation, the Government of Azerbaijan will also continue to subsidise the agricultural training (mainly at the Azerbaijan State Agrarian University) - at the level of a bachelor or master degree - of more than 230 local students, representing an annual baseline investment of at least US\$280,000/annum. It will further fund the education costs of at least 9 nationals at foreign agricultural educational institutions, representing an annual baseline investment of at least US\$300,000/annum.

72. The Agricultural Competitiveness Improvement Project (ACIP), is a US\$53 million project established and funded by the World Bank (through the International Bank for Reconstruction and Development, IBRD) and the Government of Azerbaijan. It is implemented by the State Agency on Agricultural Credits (SAAC) under the MoA and will run concurrently with this GEF project. The ACIP (approved in September, 2014) has three investment components – (A) Support for sanitary and phyto-sanitary services (US\$ 11.63m IRBD loan; US\$7.43m govt. counterpart funding); (B) Agri-business value chain development (US\$7.29m IRBD loan; US\$4.65m govt. funding); and (C) Financial services to agri-business - of which components B and C will directly complement efforts to increase the conservation and cost-effective production, use and marketing of native crop varieties. Under Component B, the ACIP will provide grants for funding of individual investments in selected value chains (including on-farm infrastructure, innovative technologies, technical assistance and supply chain infrastructure and technology). It will also seek to improve the seed development chain by supporting: (i) seed research, plant breeding, variety development and seed production and processing (including provision of analytical equipment, technical assistance and seed cleaning equipment) by the public sector; and (ii) state seed inspection services (training, equipment and facilities), seed testing commission (training, equipment and facilities), and private seed growers (technical capacity, equipment and facilities). Under Component C, the ACIP will: (i) expand availability of investment financing for agri-business/food processing enterprises through sub-loans and leasing; (ii) support the introduction of new financial products for agri-business; and (iii) implement capacity building programs for the participating financial institutions. It will also examine the feasibility of introducing agricultural insurance mechanisms, and capacity building of the local insurance sector in risk assessment and product development.

73. The Azerbaijan Rural Investment Project (AzRIP) is a project established and funded by the Government of Azerbaijan and the World Bank. It is implemented by the State Agency on Agricultural Credits (SAAC) under the MoA. The second phase of AzRIP (effective October, 2014) will run concurrently with this GEF project. AzRIP's development objective is to: improve access to and use of community-driven rural infrastructure; and expand economic activities in rural households, across five regions (Mughan-Salyan, Lower Shirvan, Nakhchivan, North and North West¹⁰). The second phase of AzRIP consists of two investment components: (i) demand-driven micro-projects in rural infrastructure; (ii) technical support to micro-project implementation and livelihood development. The AzRIP uses a community-driven development approach and provides block grant financing to rural communities to invest in public goods, based on their local investment priorities. Currently less than 5% of identified community-funded projects are however in the agricultural sector, most focused on irrigation infrastructure.

¹⁰ The second phase of AzRIP will expand its activities to an additional 2 new regions.

PART II: Strategy

PROJECT RATIONALE AND POLICY CONFORMITY

Fit with the GEF Focal Area Strategy and Strategic Programme

74. The project is consistent with the objectives of, and will contribute to the outcomes and outputs of, GEF's <u>Biodiversity</u> (BD) and <u>Land Degradation</u> (LD) Focal Area Strategies.

75. For the *Biodiversity Focal Area*, the project will contribute to the expected outcomes and indicators of Program 7 of BD-3 as follows:

GEF-6 Biodiversity Results Framework				
Objective	Program	Outcome	Indicator (and project contribution to indicator)	
BD-3 Sustainably use biodiversity	Program 7: Securing Agriculture's Future: Sustainable Use of Plant and Animal Genetic Resources	Outcome 7.1: Increased genetic diversity of globally significant cultivated plants and domesticated animals that are sustainably used within production systems	Indicator 7.1: Diversity status of target species. <u>Project contribution to</u> <u>indicator</u> : >450 native landraces and varieties	

76. For the *Land Degradation Focal Area*, the project will contribute to the expected outcomes and indicators of Program 1 of LD-1 as follows:

GEF-6 Land Degradation Results Framework				
Objective	Program	Outcome	Indicator (and project contribution to indicator)	
LD-1 Agriculture and Rangeland Systems: Maintain or improve flow of agro-ecosystem services to sustain food production and livelihoods	Program 1 : Agro- ecological Intensification	Outcome 1.2: Functionality and cover of agro- ecosystems maintained	Indicator 1.2: Land area under effective management in production systems with improved vegetative cover. <u>Project contribution to</u> <u>indicator</u> : 100,000 ha	

Rationale and summary of GEF Alternative

77. The *alternative scenario* seeks to: (i) improve the protection of viable populations of indigenous wild relatives of crops and local landraces in their natural habitats; (ii) augment the conservation of indigenous wild relatives of crops and local landraces in plant genebanks to ensure an adequate source of genetic resources for plant breeding; and (iii) increase the production, and extent of use, of local landraces in agricultural smalloldings and commercial farms.

78. The project will be implemented in three rayons – Sheki, Goranboy and Goychay (refer to maps in <u>Section IV, Part II</u>). The profile of the crop agricultural sector in these three rayons is briefly summarized in the table below:

		SHEKI RAYO	DN		GORANBOY RA	YON	GOYCHAY RA	YON
Location (highlighted in green)								
Overview of agricultural context	Situated in northern Azerbaijan, on the southern part of the Greater Caucasus mountain range. It is the largest grain-growing rayon in the country, producing 14% of the countries wheat harvest. Vegetables, melons, grapes and tobacco are grown in the lower- lying irrigated areas.		2 1 1 1 1 1 2 2 2 1 1 1 1 1 1 1 1 1 1 1	Situated in the north-ease of Azerbaijan, and inclu- mountainous areas and for of the Greater Caucasus range. Winters are relative severe, while summers a not. Fodder (for livestoc cereals are the most exter grown crops, while the re- conomically productive fruits, vegetables and co	stern part ding the foothills mountain vely are mild to existely most e are otton.	Located in the central p Azerbaijan on the footh Greater Caucasus moun The crop agriculture sec primarily based on grain vegetables and fruit. Th famous for its pomegran growing industry and is developing wine region	art of ills of the atain range. ctor is n, fodder, ne Rayon is nate- a	
Main crop types under cultivation (in ha) 2013		Cereals and legumes Maize Tobacco Sugar-beet Fodder crops Sunflower Potato Vegetable Melon Fruit and berry Grape Hazelnuts	82,505 1,082 626 127 6,755 26 799 944 283 2,103 283 372		Cereals and legumes Cotton Sugar-beet Sunflower for grains Potato Vegetable Melon Fruit and berry Fodder crops Grape	24,090 928 114 1,727 351 1,257 248 2,682 13,975 80	Cereals and legumes Maize Potato Vegetable Melon Fruit and berry Fodder crops	15,209 80 149 1,139 67 5,364 5,568

Socio-economic profile (agricultural sector)	The permanent population of the rayon is 180,925, of whom 37% are urban (i.e. living in towns and cities) and 63% rural (i.e. living in villages). Approximately 85,000 people are employed, of which 47,000 (~55%) work in the agricultural sector. Some 291 formal farming enterprises are involved in cultivation in the Rayon, with the remaining crop farmers comprising family smallholdings. Some 23 farmers are involved in seed- farming.	The permanent population of the rayon is 94,244, of whom 21% are urban and 79% rural. It is estimated that 74% of employed people work in the agricultural and forestry sector. Agriculture accounts for more than 50% of all goods and services produced in the rayon. There are 27,638 crop farms in the Rayon, of which only 28 are formal farming enterprises. "Azertokhum" LLC Sales Centre operates in Chalabertli village of the rayon.	The permanent population of the rayon is 115,593, of whom 32% are urban and 68% rural. Agriculture accounts for approximately 38% of all goods and services produced in the rayon. Family smallholdings represent the predominant form of farm ownership in the rayon. There are also 39 formal farming enterprises. "Azertokhum" LLC Sales Centers operate in Uashli and Inja villages of the rayon. There is also one farmer involved in seed production
Key state agricultural institutions located in rayon	Sheki Regional Agrarian Scientific and Information Consulting Center; Sheki Reference Station of Scientific-Research Farming Institute; Sheki Scientific-Research Base of NASA Genetic Resources Institute; Sheki Territorial Crop Office; Plan Protection Center; Plant Quarantine Office; and Sheki Plant Protection Center of the State Phytosanitary Control Service.	Goranboy Plant Protection Center of State Phytosanitary Control Service; Goranboy representative of State Seed Inspection department; Goranboy rayon department of Ministry of Agriculture; and Regional Agricultural laboratory.	Species Testing Office of Goychay Subtropic Plants; Goychay Plant Protection Center of State Phytosanitary Control Service; and Ujar Territorial Agriculture Office.

79. Within these three rayons, the project will focus on the following crop wild relatives (CWR), cultivated native species and cultivated landraces:

Crop	Genus	Species (wild relatives)	Cultivated species	Cultivated landraces
	Aegilops	A. tauschii; A. cylindrical; A. biuncialis; A. triuncialis; A. neglecta; and A. umbellulata		
Wheat			<i>T.durum</i> (Durum wheat)	Ag bugda; Sari bugda Qirmizi bugda; Qara bugda; Qaraqilchiq; Qara sunbul; Zogal bugda
wneat	Triticum	<i>T.urartu; T. boeoticum;</i> and <i>T. araraticum</i>	<i>T.aestivum</i> (Bread wheat)	Gurgana; Xirda bugda Zarli bugda; Axta bugda Kosa bugda; Altiagaj Davadishi; Ag parinj; and Qirmizi parinj
			<i>T. dicoccum; T. turgidum; T. turanicum; T. polonicum; T. cartlicum; T. aestivum; and T. Compactum</i>	
Barley	Hordeum	H. spontaneum; and H. bulbosum		Ag arpa Gara Arpa
Bean	Phaseolus	P. vulgaris]	Galibiyyet yerli
Tomato	Solanum	S. lycopersicum		Elim; İlkin; Vatan; Zarraby; and İlyas

Crop	Genus	Species (wild relatives)	Cultivated species	Cultivated landraces
Aubergine		S. melongena		Zahra; Ganja; and Byllur
Potato		S. tuberosum	-	Sevinch; Ag chicek; and Emiry
Sweet pepper	Canaiaum	C. annuum var. grossum		Murad; Yadigar; and Zumrud
Bitter pepper	Capsicum	Capsicum annuum ssp. acerium		
Cucumber Cucum		C. sativus		Kirovabadskiy mestnıy; and Azeri
Watermelon	Citrullus	C. vulgaris		Marcan

80. The project strategy is to address the key barriers to achieving the long-term solution (see <u>barriers</u> <u>analysis</u> above) in the three rayons, and for the targeted native crops in these rayons, through a complementary suite of outputs organised into three components.

81. The <u>first component</u> will seek to expand the state of knowledge of agro-biodiversity, enhance the conservation of this agro-biodiversity and increase the intensity and extent of use of this agro-biodiversity in the agricultural sector. Work under this component will be focused around four key areas of project support across the three rayons (focused on the targeted crop species) as follows: (i) Improve the knowledge base of crop wild relatives (CWR) and local crop landraces (<u>Output 1.1</u>); (ii) Establish and manage a network of conserved areas for CWRs (<u>Output 1.2</u>); (iii) Establish and maintain field gene banks for crop landraces (<u>Output 1.3</u>); and (iv) Increase the production, storage and distribution of native crop seeds (<u>Output 1.4</u>).

82. The <u>second component</u> will seek to build the capacities of, and improve the collaboration and cooperation between, agricultural institutions and small farmers in order to improve agricultural productivity and reduce land degradation using native crops (i.e. the targeted crop species) in the three project rayons. Work under this component will be focused around three key areas of project support: (i) Build the capacity of agricultural institutions (<u>Output 2.1</u>); (ii) Support the development of local farmer organisations (<u>Output 2.2</u>); and (iii) Improve the knowledge and skills of local farmers (<u>Output 2.3</u>).

83. The <u>third component</u> will seek to strengthen incentives that encourage the planting of, and improve access to commercial markets for agricultural products derived from, the targeted native crop species across the three rayons. Work under this component will be focused around two key areas of project support: (i) Strengthen the agricultural incentives toolbox for farmers (<u>Output 3.1</u>); and (ii) Improve access to markets for local farmers (<u>Output 3.2</u>).

84. The total cost of investment in the project is estimated at US\$23,860,502 of which US\$4,160,502 constitutes grant funding from GEF, US\$ 20,500,000 comprises co-financing from national government, and US\$ 200,000 UNDP.

85. The incremental value of the alternative scenario is summarized in the table below:

Business-as-usual	GEF alternative	Benefits		
In situ conservation and use of agricultural crop wild relatives and landraces				
- Gaps in the knowledge of natural	- Implement farmer interviews, field	- At least 5 (>80ha) CWR agro-		
populations of crop wild relatives	surveys, collection of <i>in situ</i> plant	biodiversity hotspots are under		
and landraces, and the habitats in	material and mapping of selected	some form of conservation tenure		
which they occur;	crop wild relatives and landraces;	and management;		
- Continued loss of natural	- Identify and prioritize agro-	- The number of known landraces		
populations of crop wild relatives	biodiversity 'hotspots' for	and varieties under productive		
and landraces;	conservation;	crop cultivation in Azerbaijan		

Business-as-usual	GEF alternative	Benefits
 Limited knowledge on the potential of native crops to reduce the vulnerability of the country's agricultural system to the effects of climate change; Under-resourcing of field gene banks limits the extent of genebank collections of native crop species; Valuable local varieties of agricultural crops progressively replaced by modern varieties; and Native crop seeds and seedlings remain difficult to source. 	 Establish and manage a local network of conservation areas in the high priority agro-biodiversity 'hotspot' areas; Assess the role of selected native crops in mitigating the effects of land degradation and adapting to the impacts of climate change; Establish and manage field genebanks for native wheat, vegetables and forage crops; Establish and administer a small grant programme to incentivise registered seed producers to increase production of native wheat and barley crop seed; and Provide technical and financial support to local farmers to establish new seed production fields for high- value, high-demand native vegetable and forage crops. 	 increases from a baseline of <400 to >450; More than 8 vegetable, 10 wheat/barley, and 2 forage native crop varieties are being actively maintained in field gene banks; By the end of the project, at least 0.5, 80 and 30 tons/annum of vegetable, wheat/barley and forage native crop seed are available to seed producers in the project rayons for commercial production; and 5 new vegetable and 2 new forage native crop seed-producing farmers are registered in the project rayons.
Capacity of agricultural institutions and	farmers to conserve and use crop wild re	latives and landraces
 The extent of degraded areas that are no longer suitable for agriculture is increasing as a result of overstocking of livestock poor irrigation and drainage systems, unsustainable levels of ground water extraction, deforestation and excessive use of fertilizers, pesticides, and herbicides; The capacities of the seed testing points, seed control services and agricultural research institutes to select, develop, test, register and protect native crop varieties remains inadequate; Most small farmers (>90%) remain unaware of the availability of local crop varieties and land races that may be better suited to, and more cost-effectively used in, their farming operations; Sharing of technical information between the agricultural state institutions and local farmers on the cultivation of local crop varieties remains largely <i>ad hoc</i> and intermittent; Limited agricultural training and skills development available for existing farmers; and 	 Recruit, train and equip a corps of agricultural extension and advisory officers in the regional Agrarian Scientific Centres; Design and develop accredited academic modules/short-courses; Develop and implement a capacity development programme for scientific and technical staff in state agricultural institutions; Maintain a database of wheat, forage and vegetable crop farmers; Assist in the establishment and administration of a regional <i>Wheat Farmers Association</i>; Facilitate and support the establishment and development of <i>local farmer-to-farmer networks</i> for vegetable and fodder farmers; Develop and implement a 4-year training programme for native crop farmers; and Develop informational, educational and communication materials for distribution to native crop farmers. 	 More sustainable crop agricultural practices are being implemented in 100,000ha of croplands across the three rayons; At least 1,000ha of degraded agricultural land is restored to productive use through the planting of native crops; The state funding allocation to the conservation and use of agrobiodiversity in Azerbaijan increases from a baseline of US\$30 million/annum to >US\$50 million/annum; More than 20 full-time extension officers across the project rayons support local farmers in sustainable crop agricultural practices; At least 30 state agricultural staff (professional, scientific and technical) participate in specialised agro-biodiversity training and skills development programmes At least 6 farmer-farmer networks are established and functioning across the project rayons; A regional Wheat Farmers Association is constituted, operational and has a membership

Business-as-usual	GEF alternative	Benefits
 Few functional farmer networks are in place to share information on the cost-effectiveness of native crops. 		of at least 50 wheat/barley farmers; - At least 280 vegetable, forage and wheat/barley farmers participate in information-sharing, training and skills development programmes in sustainable crop agricultural practices.
Incentives to plant native crops and man	rket local products derived from native cro	pps
 Native crop seeds continue to be more expensive than imported seeds; No fiscal incentives in place to encourage seed producers to produce, store and distribute seeds of native crops; No preferential access to unsecured loans or state subsidies for farmers wanting to cultivate native crops; Limited support from the agricultural insurance sector to incentivize the adoption of native crops that are better adapted to extreme climatic conditions; and Branding and promotion of environmentally-friendly agricultural products not linked to planting of native crops. 	 Assess the feasibility of, and requirements for, improving the current agricultural incentives framework; Support the iterative improvement of the agricultural incentives framework for sustainable crop production; Establish and manage a small grant programme for farmers planting and harvesting native crops; Assess the economic and social viability of developing agro-tourism facilities, products and services linked to native crops; Conduct a value chain analysis for the native fruit, vegetable, wheat and barley crops; Establish and manage a small grant programme for processors and retailers who are producing high-value niche products derived from native crops; Assist local farmers to enter into supply agreements with processors and retailers of niche high-value products derived from native crops; and Assist local farmers to meet the quality standards required by these processors and retailers of niche high-value products derived from native crops; and 	 The proportion of native vegetable, forage and wheat crops in the three project rayons increases from a baseline of 0.5%, 0.5% and <2% of the total crop area to >2%, >2% and >6% of the total crop area; At least 400 small farmers in the project rayons benefit from grant funding support (US\$500-\$1,500/farmer or household) to native crop agriculture; At least 10 small farmers conclude supply agreements with processors/ retailers of niche high-value products derived from native crops; At least 5 processors and retailers benefit from grant funding in niche high value products derived from native crops; The valuation of trade in the native vegetable, forage and wheat barley crops in the project rayons increases from US\$(TBD) to US\$(TBD); and The fiscal incentives framework for the adoption of native crop varieties is improved.

PROJECT GOAL, OBJECTIVE, OUTCOMES AND OUTPUTS/ACTIVITIES

86. The project **objective** is to: *Ensure the conservation and sustainable use of globally threatened crop varieties important for biodiversity, food security and sustainable land management.*

87. In order to achieve the project objective, and address the barriers (see <u>Section 1, Part I</u>), the project's intervention has been organised into three **components**:

<u>Component 1</u>: In situ and ex situ conservation of agro-biodiversity

<u>Component 2</u>: Capacity to improve agricultural productivity and reduce land degradation using native crops

<u>Component 3</u>: Incentives and markets to improve the uptake and commercial viability of native crops

88. The outputs and activities under each of the three components are described in more detail below.

COMPONENT 1: In situ and ex situ conservation of agro-biodiversity

89. The proposed suite of activities, and broad implementation arrangements, for each of the four outputs under component 1 are described in more detail below.

Output 1.1: Improve the knowledge base of crop wild relatives (CWR) and crop landraces

90. Work under this output will focus on enhancing the current state of knowledge of agro-biodiversity in the three project rayons.

91. The specific activities to be implemented under this output will include the following:

- (i) Undertake field-based surveys and mapping of the distribution of wild populations of the targeted CWRs (in the wild) and landraces (at the farm level)¹¹; re-assess the distribution of targeted landraces at the end of the project to identify progress in their uptake by local farmers in the 4 targeted districts and confirm success in genetic diversification of targeted crops;
- (ii) Collate traditional knowledge– through targeted interviews with local farmers and villages of the targeted CWRs and landraces;
- (iii) For each of the targeted CWRs and landraces assess the nature and extent of threats to wild populations;
- (iv) Identify areas containing important wild populations of the targeted CWRs and landraces (i.e. the 'hotspots of agro-biodiversity') and prioritise those (based on the threats analysis above) requiring critical conservation interventions to secure their long-term survival;
- (v) For each of the targeted CWRs and landraces undertake field-based and experimental research¹² to assess their actual/potential role in mitigating the effects of land degradation (notably the effects of salinization, erosion and drought) and/or in adapting to the projected impacts of climate change (notably increase in temperature and reduction in precipitation).
- (vi) Update the information on the targeted CWRs and landraces currently contained in the national database (hosted by the Genetic Resources Institute);
- (vii) As required, ensure that plant materials collected during the field surveys (see activity i) above) are properly prepared, stored, documented and included into the National Genebank (hosted by the Genetic Resource Institute); and

¹¹ The list of targeted CWRs and landraces is provided in the 'Rationale and summary of GEF Alternative' above.

¹² This may include the establishment and monitoring of experimental plots in the target rayons.

(viii) Support the development of a web-based information portal that will allow users to search for information (e.g. identity, status, distribution and potential use) on crop wild relatives and landraces¹³.

92. The Project Management Unit (PMU) will negotiate a Memorandum of Understanding (MoU) with the Genetic Resources Institute (GRI) to implement this output. The MoU will then define the roles and responsibilities of the GRI in the implementation of the respective activities under this output. The GRI may, within the legal framework of the MoU, procure the necessary equipment and infrastructure and contract additional technical and professional support to assist in the implementation of activities under this output.

Output 1.2: Establish and manage a network of conserved areas for crop wild relatives

93. Work under this output will support: (i) the design of a network of *in situ* conservation areas (i.e. 'genetic reserves') for the 'hotspots' of wild populations of CWRs; and (ii) within the framework of this network design, facilitate the establishment, planning and management of a number of actively managed conservation areas in selected priority 'hotspot' areas located within the three project rayons (Sheki, Goranboy and Goychay)¹⁴.

94. The implementation of activities under this output will be technically guided by two key reports: *Crop Wild Relatives: A manual of in situ conservation* (Hunter and Heywood, 2011); and the *National Level Conservation of Crop Wild Relatives – draft technical guidelines* (FAO PGRFA, 2015).

- 95. The specific ativities to be undertaken in this output will include the following:
 - (i) Using existing spatial and attribute data for CWRs, <u>design and map</u> a coherent national system of conservation areas that will be required ensure the long-term protection of CWR diversity in the country;
 - Using the prioritisation of the hotspots identified in Output 1 (see activity iv above), <u>select</u> a number of sites¹⁵ (~3-5) within the three project rayons that are suitable¹⁶ for designation as conservation areas for the targeted CWRs. This sub-selection of sites will then constitute a pilot for the future roll-out of the national network of CWR conservation sites;
 - (iii) For each selected site <u>evaluate</u> the efficacy of the different legal mechanisms¹⁷ required to secure the conservation status and long-term security of the conserved populations of CWRs, and <u>identify</u> the most appropriate legal mechanism;
 - (iv) For each selected site <u>evaluate</u> the most cost-effective management arrangements to ensure their ongoing operational management;
 - (v) For each selected site <u>develop</u> an area-specific management programme that identifies key management interventions for the site, and how the CWRs are to be actively monitored;
 - (vi) For each selected site <u>secure</u> the conservation status of the site and <u>negotiate</u> a management arrangement with the responsible authority/owner of the site; and
 - (vii) For each selected site provide technical support (i.e. boundary demarcation, signage, information brochures, community awareness and establishing monitoring baselines) to the responsible management authority in the implementation of the management programme.

¹³ The design process for the web-based portal will also address key issues of ownership, custodianship, access, use, exploitation and intellectual property.

¹⁴ The targeted project rayons are further described in the '<u>Rationale and summary of GEF Alternative</u>' above.

¹⁵ In many instances, these sites may be <5ha in size, as significant numbers of CWRs are found concentrated in very small areas in the Caucasus ecoregion.

¹⁶ Suitability criteria may include: ownership; land use classification; existing conservation status; and extent of community and landowner support.

¹⁷ Mechanisms may include designation as Specially Protected Nature Area (SPNA), land use guidelines linked to zonation in territorial plans, negotiation of conservation easements, acquisition of development use rights, offsets in lieu of development use rights, registration of usufruct, etc.

96. The PMU will - in close collaboration with the MoA, GRI and the Department of Biodiversity Protection and Development of Specially Protected Natural Areas in the MENR - coordinate the implementation of activities under this output. The PMU will contract a national agricultural research institute or academic institution to: collate and map the national distributional and attribute data for CWRs; collect critical CWR distributional and attribute data for CWRs to fill knowledge gaps; objectively identify the minimum number of sites required to effectively conserve CWRs; design a national network of conservation areas for CWRs; and select a sub-set of sites located within the project rayons that could be piloted as CWR conservation areas. The PMU will then contract a national and international, agro-biodiversity conservation consultant to jointly review and identify the optimal conservation areas. Project management staff will, with the support of a contracted legal firm, then assist in securing the conservation status of, and concluding management agreements for, the pilot conservation areas. Once established, each responsible management authority area will collaborate with the PMU in clarifying the technical assistance that the project will provide to the management authority in support of the operational management of the respective CWR conservation areas.

Output 1.3 Establish and maintain field gene banks for crop landraces

97. Work under this output will support the establishment and management of field genebanks¹⁸ for the targeted landraces of wheat, vegetables and forage crops.

98. A field gene bank for local landraces and varieties of the targeted wheat and barley species will be established in the Sheki Experimental Station of the Research Institute of Farming¹⁹.

99. A field genebank for local landraces and varieties of the targeted vegetable species will be established at the Research Institute of Vegetable Production in the Absheron rayon²⁰.

100. A field genebank for local landraces and varieties of forage crops will be established at the Research Institute of Forage, Meadows and Pastures in the Absheron rayon (in Ashagi Guzdek village)²¹.

101. The establishment of each field genebank will include the following basic steps:

- (i) Conclude a management agreement with each agricultural institution to designate, establish and manage the field gene bank;
- (ii) Prepare nursery layouts for the field gene bank, using Randomized Complete Block Design (RCBD);
- (iii) Collect landrace seed and plant material for planting (including field-based collections and sourcing seeds from the National Gene Bank);
- (iv) Prepare planting materials (i.e. germination and propagation) for the field gene bank;
- (v) Implement a field planting and maintenance program in each field gene bank;
- (vi) Characterize, evaluate and document the efficacy of the planted materials;
- (vii) Collect seeds, buds and cuttings for further culturing, breeding and improvement programmes (using molecular marker technology).
- (viii) Collect and distribute seeds of the cultivated native crops to seed producers for commercial production; and
- (ix) Host demonstration field days for commercial seed producers and local farmers (see Output 2.3).

¹⁸ A field genebank It is an *ex situ* method where genetic variation is maintained away from its original location and samples of a species, subspecies or variety are transferred and conserved as living collections.
¹⁹ Each landrace will be planted in two replicate 1m² plots, with a sowing rate of 20 cm between rows and a 5 cm distance between

¹⁹ Each landrace will be planted in two replicate $1m^2$ plots, with a sowing rate of 20 cm between rows and a 5 cm distance between individual plants.

²⁰ Each landrace will be planted in two replicate 1m² plots.

 $^{^{21}}$ Each landrace will be planted in two replicate 2.5m² plots, with 5 rows per plot and a 50 cm distance between rows. A 7 cm distance will be maintained between individual plants.

102. The PMU will, in close collaboration with the three host institutions - Sheki Experimental Station, Research Institute of Vegetable Production and Research Institute of Forage, Meadows and Pastures - identify the specific location of, and targeted crop landraces for, each field genebank. The PMU will negotiate and conclude a formal management agreement with each of the host institutions. Each management agreement will explicitly identify the level of support (including for equipment, contract staff, infrastructure and running costs) to be provided by the project in the establishment, development and maintenance of each field gene bank. To ensure consistency with international standards for field gene banks, an international and counterpart national agro-biodiversity specialist will be contracted by the PMU to support the host institutions in *inter alia*: developing norms and standards for field gene banks; designing the nursery layouts for each field gene bank; monitoring the implementation of the planting and maintenance of the field gene banks; and administering the ongoing culturing, breeding and improvement programmes.

Output 1.4 Increase the production, storage and distribution of native crop seeds

103. Work under this output will focus on increasing the production of certified and registered seeds of cultivated crop landraces in the project rayons. This will ensure that grain, forage and vegetable crop producers in these rayons will have a continuous supply of affordable high quality, clean seed stocks of native crop varieties. The project will do this by: (a) establishing and administering a small grant programme for <u>existing</u> registered *wheat and barley* seed producers; and (b) providing technical and financial support to selected local farmers to establish <u>new</u> seed production fields for high-value, high-demand native *vegetable and forage* crops.

104. The specific activities to be undertaken in this output will include the following:

- (i) Establish (e.g. administration processes and procedures) and manage (e.g. application, selection, disbursement, monitoring, etc.) a small grant programme for *registered wheat and barley seed producers* in the three rayons in order to incentivise (e.g by reducing seed production, storage and distribution costs <u>and/or</u> improving access to niche markets) the production and sale of high quality seeds of commercially viable native varieties of wheat and barley crops;
- (ii) Identify and select local farmers in the three project rayons to participate in the establishment and maintenance of seed production fields for selected *vegetable and forage crops*;
- (iii) For each participating local farmer support (labour, equipment, running costs) the establishment of a seed production field for the selected native crop/s;
- (iv) For each seed production field support (procurement, transport) the purchase of clean seed ready for planting;
- (v) For each seed production field support (labour, equipment, running costs) the planting of seed on ground that is completely clear of weeds and previously planted crops;
- (vi) For each seed production field support (labour, laboratory costs, running costs, irrigation, equipment) the maintenance and monitoring of the field for varietal purity, isolation, freedom from noxious weeds and seed-borne disease, and any other factor that can adversely affect seed quality.
- (vii) For each seed production field support (labour, transport, storage facilities, equipment) the harvesting, transporting and storage of the seed (seed from each certified field will be stored in a separate bin identified by kind, variety, year produced and field location) with clean equipment;
- (viii) For all stored seed support (labour, certification costs) the removal of unwanted inert material, weed seed, other crop seed, and small, less vigorous crop seed and the testing of a representative sample of the conditioned seed for certification (i.e. purity and germination analysis);
- (ix) For all stored and certified seeds support (materials, equipment, transport) the packaging, labelling, transport and sale of the seed;
- (x) For each participating local farmer support (administration) the process of formal registration as a commercial seed producer; and

(xi) Evaluate the lessons learnt, and assess the cost-effectiveness of the suite of activities under this output.

105. The PMU will, in close collaboration with the MoA, coordinate the implementation of this output. The PMU will establish and administer a small grant programme²² for registered wheat and barley seed producers. The PMU will contract an auditor to, on a quarterly basis, independently monitor, review and evaluate the cost-effectiveness of the small grants support service. The PMU will liaise directly with village-based municipalities to identify prospective local farmers and will, in consultation with the MoA and in discussion with the targeted farmers, finalise the list of those who will participate in this output. The PMU will then contract two commercial seed production companies and/or local agricultural NGOs (one for native forage crop seeds and one for native vegetable crop seeds) to directly assist the participating seed production farmers in the establishment and management of the seed production fields. The PMU will further assist in the procurement of the necessary labour, services, equipment, materials and infrastructure for the participating farmers, as may be required. The regional State Sort and Test Points, Genetic Resources Institute, Research Institute of Forage, Meadows and Pastures, and the Research Institute of Vegetable Production will provide the participating farmers with a regular supply of clean seed and will deliver technical and scientific support services, as required.

COMPONENT 2: Capacity to improve agricultural productivity and reduce land degradation using native crops

106. The proposed suite of activities, and broad implementation arrangements, for each of the three outputs under Component 2 are described in more detail below.

Output 2.1: Build the capacity of agricultural institutions

107. Work under this output will seek to strengthen the capacities (i.e. staff, skills, decision-support systems, infrastructure and equipment) of the different state agricultural institutions working in the three project rayons, particularly in respect of their ability to support the sustainable use of agricultural lands - through the increased use of native crops - in these rayons.

108. The specific activities to be undertaken in this output will include the following:

- (i) Support the design and development of accredited undergraduate-level modules/short-courses in 'agricultural extension and advisory services', land degradation management, and 'agro-biodiversity conservation' for the Azerbaijan State Agrarian University;
- (ii) Facilitate the recruitment of an additional 10 agricultural extension and advisory officers²³ to be located in the Sheki (covering the Sheki rayon) and Ganja (covering both Goranboy and Goychay rayons) regional Agrarian Scientific Centres;
- (iii) Design and implement an in-service training programme for all agricultural extension and advisory officers (including induction training, annual refresher training and intermittent specialist skills development training) that are located in the Sheki and Ganja regional Agrarian Scientific Centres;
- (iv) Support the procurement of key equipment (i.e. vehicles, protective clothing, computer hardware, computer networking services, portable laboratories, GPS, communications equipment, office equipment) for the corps of agricultural extension and advisory officers working in the project rayons;

²² To be administered in conformance with the UNDP Guidance on Micro Capital Grants (2015).

²³ The functions of these agricultural extension and advisory officers will specifically include: providing information and technical support to seed producers and local farmers producing and planting native crops within the project rayons; and assisting farmers and seed producers in the project rayons to grow native crops as a means of preventing or reversing the effects of land degradation.

- (v) Assist in the specialist training of, and participation in international collaborative initiatives for, at least 15-20 selected scientific and technical staff (i.e. only those directly involved in the conservation and sustainable use of agro-biodiversity) from the Genetic Resources Institute, Research Institute of Farming, Research Institute of Forage, Meadows and Pastures, Research Institute of Horticulture and Subtropical Plants and Research Institute of Vegetable Production;
- (vi) Facilitate the development of a technical manual incorporating best practice guidelines and case studies developed during the project implementation phase – on the 'conservation and sustainable use of native crop species in Azerbaijan'; and
- (vii) Host an annual meeting of scientists, technicians and managers involved in the conservation and sustainable use of agro-biodiversity in Azerbaijan to share lessons learnt and best practices.

109. The PMU will, in close collaboration with the MoA, coordinate the implementation of this output. The PMU will contract an agricultural training service provider or agricultural NGO to: develop undergraduate curricula; design and implement the in-service training programme for agricultural extension and advisory officers; liaise with agricultural institutions to identify prospective specialist training courses and collaborative initiatives for scientific and technical staff to participate in; and facilitate the annual meetings of the staff involved in agrobiodiversity conservation and use. The PMU will liaise with the regional Agrarian Science Centres in Sheki and Ganja to identify the administrative, training and procurement needs for their agricultural extension and advisory staff. The PMU will, during the last year of project implementation, contract an agricultural service provider to develop and publish the technical manual.

Output 2.2: Support the development of farmer organisations

110. Work under this output will seek to: (a) improve the cooperation between wheat farmers in order to improve their bargaining power in the marketplace, reduce costs by pooling capital and resources, and make expensive services that are unavailable to individual wheat farmers (e.g. marketing) more accessible; and (b) strengthen the exchange of information between small forage and vegetable farmers in order to pool ideas, exchange perspectives, and learn from each other.

111. The specific activities to be undertaken in this output will include the following:

- (i) Support the rayons, municipalities and Sheki and Ganja regional Agrarian Scientific Centres in updating and maintaining a reliable database (comprising both spatial and attribute data) of all wheat, forage and vegetable farmers in the three project rayons;
- (ii) Assist in the establishment (including: preparing constitution; legal registration; hosting inception meeting; and appointment of office bearers) and ongoing administration (including: recruitment of members; hosting association meetings; office set-up; office management; technical support to members; and branding and marketing) of a regional (including the area covered by the 3 project rayons) *Wheat Farmers Association*²⁴; and
- (iii) Facilitate and support the establishment (including: identifying targeted area/ crops/ farmers; initial planning meeting; selection of core group; determining objectives) and ongoing development (including: recruitment of members; communications; hosting of meetings; maintaining rosters; hosting joint events and activities; sourcing funding) of informal *local farmer-to-farmer networks*²⁵ for vegetable and fodder farmers in the project rayons²⁶; and
- (iv) Evaluate the lessons learnt, assess the efficacy of farmer associations and farmer-to-farmer networks and identify potential opportunities for replication.

²⁴ It is envisaged that the 'Association' may function as an 'agricultural cooperative'.

²⁵ Initially farmer-to-farmer networks will be established at the village level, but the spatial focus may later change in response to farmer needs.

²⁶ See also 'Creating Farmer Networks: A Toolkit for Promoting Vibrant Farm Communities' (Matthewson et. al. 2013)

112. The PMU, in close collaboration with the MoA, will coordinate all the activities under this output. The PMU will supplement the capacity (including contracted field data staff, travel costs, data management, IT software and hardware) of the affected Rayon Executive Committees and municipalities, along with the Sheki and Ganja regional Agrarian Scientific Centres, in the collation of information on wheat, forage and vegetable farmers in the three project rayons. The PMU will also contract agricultural extension support service providers and/or NGOs (one for the Association and one for the local networks) to: provide legal, administrative, logistical and technical assistance to the Wheat Farmers Association/ local farmer-to-farmer networks; document lessons learnt; and assess the efficacy of the different organisational structures.

Output 2.3: Improve the knowledge and skills of local farmers

113. This output will focus on supporting local crop farmers to become more productive, environmentally sustainable, financially viable and independent. Support to local farmers will include training and development of technical skills, financial management capacities, administrative competency, environmental awareness, personal development, literacy and business ethics. The focus of GEF support will be on farmers farming with the targeted native crop species in the project rayons, but could later expand – with co-financing support - to other native crops and regions, as the programme matures.

114. The specific activities to be undertaken in this output will include the following:

- (i) In consultation with the MoA, local farmers and prospective agricultural training service providers, develop a comprehensive calendar-based programme (including date, venue, topic, max. number of participants, duration and potential training supplier/s) of training opportunities for local farmers (segmented into general training and specialist training for vegetable, forage or wheat farmers) for the entire duration of the project, comprising a series of short-courses, field days, field demonstrations, product demonstrations, workshops, short seminars, study tours, etc.;
- (ii) Contract a number of training service providers (including individual trainers, private institutions, academic institutions, research institutions and/or state agencies) to develop materials and present selected training courses within the overarching framework of the farmer training programme;
- (iii) Develop and maintain a suite of informational, educational and communication materials (i.e. brochures, leaflets, manuals, booklets, technical reports, webinars, radio/television insets, e-learning modules, case studies, etc.) in electronic, web-based and/or hard copy format for dissemination to crop farmers by agricultural extension and advisory officers (see Output 2.1 above); and
- (iv) Host a series of 'open days' on private farms and at state agricultural institutions to demonstrate and share practical examples of best practice, innovative technologies and cost-effective management approaches developed by the project in the farming of native crops.

115. The PMU, in close collaboration with the MoA, will coordinate all the activities under this output. The PMU will contract an international agricultural training consultant to develop a comprehensive farmer training programme (in the form of a calendar of training opportunities) for the project. The PMU will conclude – on a needs basis - service agreements with a range of national training service providers to deliver the different training and skills development courses identified in the overraching farmer training programme. The PMU will provide the logistical and administrative support (i.e. advertising, invitations, venue hire, catering, farmer transport, etc.) in the implementation of the farmer training programme and in hosting a series of 'open days' for farmers. The PMU will contract an agricultural communications company to develop the complementary informational, educational and communication materials, while the rayon-based agricultural extension and advisory officers will ensure the judicious disribution of this material to local farmers.

COMPONENT 3: Incentives and markets to improve the uptake and commercial viability of native crops

116. The proposed suite of activities, and broad implementation arrangements, for each of the two outputs under Component 3 are described in more detail below.

Output 3.1: Strengthen the agricultural incentives toolbox for farmers

117. Work under this output will support broadening the access to existing, and the further development of new, agricultural incentives that promote more sustainable crop production practices in the project rayons.

- 118. The specific activities to be undertaken in this output will include the following:
 - Profile (type, value, beneficiaries, application requirements, etc.) the current suite of agricultural incentives available to crop farmers in the project rayons including discounted prices on agricultural equipment and materials; state subsidies; low interest loans; free training; tax offsets; irrigation infrastructure; technical support; etc. and identify the barriers of access to these existing incentives for farmers planting and harvesting native crops;
 - (ii) Assess the feasibility of, and requirements for, improving the current national agricultural incentives framework in order to encourage the adoption of more sustainable crop production practices and the increased use of native crop varieties;
 - (iii) Support the MoA in the iterative improvement of the national agricultural incentives framework for sustainable crop production and use of native crop varieties;
 - (iv) Establish (e.g. administration, procedures) and manage (e.g. application, selection, disbursement, monitoring) a small grant programme for farmers planting and harvesting native crops in the project rayons; and
 - (v) Assess the economic and social viability of developing agro-tourism facilities, products and services on targeted farms in the project rayons.

119. The PMU, in close collaboration with the MoA, will coordinate all the activities under this output. The PMU will contract an international and counterpart national agricultural economist to: prepare a comprehensive review of the current agricultural incentives framework for crop farmers; identify barriers to access to agricultural incentives; propose interventions that could help remove these barriers; assess the opportunities to improve the agricultural incentives framework in order to promote more sustainable crop production; provide technical backstopping support to the MoA in the ongoing improvements to the agricultural incentives framework; and assess the feasibility of agro-tourism development as a complementary livelihood development opportunity on small crop farms. The PMU will establish and administer the small grant programme²⁷ for farmers planting and harvesting native crops in the project rayons. The PMU will also contract an auditor and agricultural ecologist to, on a quarterly basis, independently monitor, review and evaluate the cost-effectiveness of the small grants support service.

Output 3.2: Improve access to markets for local farmers

120. This output will assist local farmers across the project rayons in understanding and building relationships with buyers of native crops, finding markets for their crops, meeting quality standards in the branding of products derived from native crops, and achieving the best prices for their crops.

²⁷ To be administered by a Project Grants Manager (see Project Implementation Arrangements) in conformance with the UNDP Guidance on Micro Capital Grants (2015).

121. The specific activities to be undertaken in this output will include the following:

- (i) Conduct a value chain²⁸ analysis for the targeted native fruit, vegetable, wheat and barley crops in the project rayons in order to assess the efficiency of value-added operations/services along the supply chain in increasing production, trade and income-generating potential of farmers and other actors (i.e. traders, processors, wholesalers, retail chains and end consumer);
- (ii) Identify the major constraints and opportunities faced by farmers and businesses in accessing the domestic and international markets for products derived from native crops;
- (iii) Establish (e.g. administration, procedures) and manage (e.g. application, selection, disbursement, monitoring) a small grant programme for processors and retailers²⁹ within the project rayons who are producing high-value niche products derived from native crops;
- (iv) Assist local farmers to enter into supply agreements with processors and retailers of niche high-value products derived from native crops;
- (v) Assist local farmers to meet the quality standards required by these processors and retailers of niche high-value products derived from native crops;
- (vi) Support farmers, producers, processors and traders to participate in the national farm product fairs organised by the MoA; and
- (vii) Based on lessons learnt in the implementation of the full project, prepare a marketing strategy for high-value niche products derived from selected native crops.

122. The PMU will, in cooperation with the Azerbaijan Export and Investment Promotion Foundation, coordinate all the activities under this output. The PMU will contract an agricultural economics firm to: conduct a value chain analysis for the targeted native crops in the project rayons; and identify the major constraints and opportunities. The PMU will establish and administer the small grant programme³⁰ for processors and retailers within the project rayons who are producing high-value niche products derived from native crops. The PMU will also contract an auditor and agricultural ecologist to, on a quarterly basis, independently monitor, review and evaluate the cost-effectiveness of the small grants support service. Assistance to local farmers in negotiating supply agreements and meeting quality standards of processors and retailers will be supported by the small grants programme for farmers (see Output 3.1 above). Finally, the PMU will contract an agricultural marketing firm to prepare a marketing strategy for high-value niche products derived from selected native crops.

INDICATORS AND RISKS

123. The project indicators are detailed in the <u>Strategic Results Framework</u> in Section II of this Project Document.

RISK	Імраст	LIKELIHOOD	RISK ASSESSMENT	MITIGATION MEASURES
Farmers in the project rayons are reluctant to switch to planting and growing native crop varieties	HIGH	MODERATELY LIKELY	HIGH	A strong focus of the project outputs and activities is on improving the enabling conditions for the use of native crops. It is envisaged that improvements in the value chain for native crops will act as sufficient

124. Project risks and risk mitigation measures are described below.

²⁸ A value chain describes the full range of activities required to bring a product or service from conception through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final customers, and final disposal after use.

²⁹ This may include financial support for *inter alia*: product processing infrastructure and equipment; product packaging; product labelling; meeting certification standards for product; product transport to market; product exhibition costs; etc.

³⁰ To be administered by a Project Grants Manager (see Project Implementation Arrangements) in conformance with the UNDP Guidance on Micro Capital Grants (2015).
RISK	Імраст	LIKELIHOOD	RISK ASSESSMENT	MITIGATION MEASURES
				incentive for farmers to consider including native crop varieties in wheat, vegetable and forage crop fields. The enabling activities that will be supported by the project include <i>inter alia</i> : (i) improving the knowledge and awareness of the cost- benefits of planting and harvesting native crops; (ii) demonstrating the direct relationship between farming with native crops and the mitigation of the effects of land degradation; (iii) strengthening the technical skills of farmers to plant and harvest native crops; (iv) providing financial grants, technical support, equipment and infrastructure to farmers involved in planting and harvesting native crop varieties; (v) ensuring the supply of high quality seed stocks of native crops to farmers; (vi) assisting farmers to access markets and increase the income from products derived from native crops; and (vii) support the collaboration and cooperation between farmers in order to achieve economies of scale.
State agricultural institutions working in the project rayons are unable to provide adequate technical and extension support services to the increasing number of farmers farming with native crops.	MODERATE	MODERATELY LIKELY	MEDIUM	The project will contribute to significantly strengthening and expanding the current capabilities of the key responsible agricultural institutions within the MoA and the ANAS – notably the Genetic Resources Institute, regional Agrarian Scientific Centres, Research Institute of Farming, Research Institute of Forage, Meadows and Pastures, Research Institute of Horticulture and Subtropical Plants and Research Institute of Vegetable Production. The project will specifically help to develop and build a professional corps of well-trained and properly equipped agricultural extension and advisory officers who are capacitated to support farmers in the project rayons. It will also assist in establishing and maintaining field gene banks for commercially viable native crops within the responsible research institutes. Further it will also improve the state of knowledge of, and enhance the access to, information on CWRs and native crop varieties. Finally it will host specialist training courses for state scientific and technical staff, and actively support collaborative research projects in agro-biodiversity conservation and use.

RISK	IMPACT	LIKELIHOOD	RISK	MITIGATION MEASURES
	miner	LIKELIHOOD	ASSESSMENT	
				The PMU and MoA will, during the
				course of project implementation,
				iteratively develop an institutional
				sustainability plan to ensure that the
				different project investments in building
				the capacity of the agricultural institutions
				are maintained (and scaled-up, if feasible)
				beyond the term of the project.
				Finally, the project will also seek to
				develop the awareness of, and build the
				capacity of the MENR to effectively
				conserve, natural populations of CWRs.
				While the project will seek to encourage
				the adoption of drought-tolerant native
				crops as an adaptation measure to the
				increased incidence of water shortages, it
				will also assist farmers to implement more
				sustainable agricultural practices. To this
				end, the project will specifically assist
				farmers (i.e. infrastructure, equipment and
An increase in demand				technical support) to implement more
for irrigation water in the				efficient water capture, tillage, fertilisation
An increase in demand for irrigation water in the project rayons, coupled with decreased water				and irrigation measures, including: drip
with decreased water	HIGH	MODERATELY	MEDIUM	irrigation; rainwater tanks; irrigation
availability and higher		LIKELY		scheduling; composting and mulching;
temperatures, leads to				and conservation tillage.
substantial native crop				The project will further invest in
An increase in demand for irrigation water in the project rayons, coupled with decreased water availability and higher temperatures, leads to substantial native crop losses.				improving the understanding of the role of
				native crops in mitigating the effects of
				land degradation, particularly erosion and
				salinization.
				The project will also support research on,
				and the testing and development of new
				(in the field genebanks) drought-resistant
				varieties of, native forage, wheat and
				vegetable crops.

COST-EFFECTIVENESS

125. The project seeks to address a number of critical bottlenecks that hamper the growth of the traditional wheat, vegetable and forage sectors in three adjacent rayons in northern Azerbaijan. The project adopts a value chain approach which involves addressing the major constraints and opportunities faced by traditional crop farmers and businesses at multiple levels of the value chain through a wide range of activities such as ensuring access to the full range of necessary inputs, facilitating access to cheaper or better inputs, strengthening the delivery of business and financial services or increasing access to higher-value markets or value-added products.

126. Costs incurred in project implementation will focus on those additional actions required to provide key incremental assistance to the government, farmers and local businesses in undertaking strategic interventions to improve the conservation and increase the production, and extent of use, of traditional crops in Azerbaijan.

127. To accomplish this, the project will seek to complement and build upon the current baseline activities already underway in the sector, such as: reforms to the agricultural legislative, regulatory and policy

framework; maintenance of field gene banks; agricultural research and plant breeding programs; production, storage and distribution of seeds to seed producers and farmers; development of infrastructure for farmers; agricultural subsidies, fiscal incentives and low interest loans; and production and marketing of traditional crop products. Project resources will thus primarily be used to improve current efforts by the state to conserve CWRs and landraces, produce native crop seeds, and plant traditional crops and market niche products derived from traditional crops, rather than incur the high costs of establishing new facilities and services.

128. Where new value-adding activities are being supported by the project (e.g. conservation areas for crop wild relative) these will be conceptually designed at the national level, and piloted at the rayon level, in order to realise economies of scale.

129. Additional co-financing support for the introduction, scaling up and/or replication of viable financial mechanisms will continue to be targeted by the project during the project implementation phase.

130. Wherever possible, the project will use the competencies and technical skills within the mandated institutions of the MoA (e.g. regional Agrarian Scientific Centres, Research Institute of Farming, Research Institute of Forage, Meadows and Pastures, Research Institute of Horticulture and Subtropical Plants, Research Institute of Vegetable Production and regional State Seed and Sort Testing Centres) and other state agencies (e.g. Genetic Resources Institute, Azerabaijan State Agricultural University and the Biodiversity Protection and Development of Specially Protected Natural Areas Department in the MENR) to implement project activities.

131. The project strategy was selected following a review of alternative project scenarios that could have generated equivalent global environmental benefits for the same scale of investment. These scenarios included: (i) strengthening one part of the value chain – such as seed production - for commercially viable native crops across the country; (ii) enhancing the in situ and ex situ conservation of indigenous wild relatives of crops and local landraces across the country to ensure an adequate source of genetic resources for plant breeding; (iii) building the full value chain at the local, national and international level for just one native crop species that is important to national food security (such as wheat or barley); and (iv) developing the institutional and individual capacities of the local, regional and national organisations responsible for promoting the production and use of local landraces in agricultural smallholdings and commercial farms. While each of these options has considerable merit, the government indicated a need to address all of these elements (i.e. strengthening the value chain for commercially important native crops, conservation of crop wild relatives and building the capacities of individual farmers and agricultural organisations), hence the bundling of all these elements into a project that contains the spatial focus to three agriculturally important rayons and focuses on the entire value chain for a range of commercially viable native crop species within these rayons. The government has, in turn, committed to supporting the scaling-up, or replication, of good practises in other rayons and/or for other native crops.

COUNTRY OWNERSHIP: COUNTRY ELIGIBILITY AND COUNTRY DRIVENNESS

132. The Government of Azerbaijan ratified the *United Nations Convention on Biological Diversity* (CBD) on the 3rd of October, 2000. As a party to the CBD, Azerbaijan is committed to the implementation of the *Strategic Plan for Biodiversity 2011-2020*. The project will specifically contribute to meeting the following *Aichi Targets* of the CBD Strategic Plan: Target 3 (positive incentives for the conservation and sustainable use of [agro-] biodiversity); Target 7 (agricultural areas are managed sustainably, ensuring conservation of [agro-] biodiversity); and Target 11 (areas of particular importance for [agro-] biodiversity are effectively conserved); Target 13 (the genetic diversity of cultivated plants and wild relatives is safeguarded); and Target 19 (the knowledge of [agro-] biodiversity is improved and shared).

133. The country's *Fifth National Report to the Convention on Biological Diversity* (2014) was prepared in accordance with Article 26 of the Convention and COP decision X/10 of the Convention. The report highlights the importance of using traditional agricultural crops that are noted for resistance to negative impacts of climate change and are considered to be important for country's long-term food security and can partially address the problem of land degradation/desertification.

134. The country has, in conformance with COP decision X/2 of the Convention, revised its *National Strategy and Action Plan of Republic of Azerbaijan on Conservation and Sustainable Use of Biodiversity* (NBSAP). The revised NBSAP, covering the period 2015-2020, identifies a suite of activities (under Strategic Objective 3, Operational Objective 3) that are to be implemented in order to increase the use of native crop varieties. The NBSAP envisages that more extensive use of native crops will contribute to mitigating the effects of land degradation, improve the adaptation capacity of crops to the impacts of climate change and improve the state of national food security.

135. The Government of Azerbaijan ratified the *United Nations Convention on Combatting Desertification* (UNCCD) on August 10, 1998. As a party to the UNCCD, Azerbaijan is committed to the implementation of the *Ten-year Strategic plan and Framework to Enhance the Implementation of the Convention* (2008–2018). The project will specifically contribute to the indicators for Strategic Objectives 1, 2 and 3 (enhancing productivity and reducing vulnerability to climate change, climate vulnerability and drought) of the UNCCD Strategic Plan by increasing the extent of areas under sustainable crop agriculture.

136. The country has prepared a *National Action Plan to Combat Desertification* (NAPCD, 2014), which serves as the national action plan to implement the UNCCD. The project will specifically contribute to the implementation of Action 2.8 (use of native crops and adoption of environmentally-friendly crop production methods and technologies) of the NAPCD.

PROJECT CONSISTENCY WITH NATIONAL PRIORITIES/PLANS

137. The National Development Plan - Azerbaijan Development Concept 2020 (NDC 2020): Outlook for the future - provides the overarching framework for mainstreaming agro-biodiversity into the strategic development priorities of the country. The project will specifically contribute to addressing priority 4.2 of the NDC (*The improvement of the economic structure and the development of the non-oil sector*) by: (i) supporting the 'production of eco-friendly agricultural and food products in the country'; (ii) implementing measures to 'protect genetic reserves and biodiversity'; and (iii) improving 'scientific support and staff training in the agrarian sector'.

138. A recent Presidential Decree outlined some key reforms to be undertaken in the agricultural sector. In response to this Decree, a new *National Strategy on Agricultural Development* (2015–2020) is currently being finalised. The project is consistent with the following priority areas of this draft national strategy: (i) implementing measures to ensure sustainable use of natural resources for agricultural policy; (ii) enhancing extension services provided to farmers; and (iii) supporting independent small farmers to develop economically viable crop production (including the establishment of farmer networks and cooperatives. The project will specifically support 'the research on cultivation and selection of diverse species of traditional plants', the use of which 'is in decline', according to the National Strategy.

139. The project supports the achievement of Aichi Targets of the UNCBD as follows: Target 7 (By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity); and Target 13 (By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity).

140. Indicators to track progress could include: Target 7: More sustainable crop agricultural practices are being implemented in 100,000ha of croplands across the three rayons; and Target 13: At least 5 (>80ha) CWR agro-biodiversity hotspots are under some form of conservation tenure and management + The number of known landraces and varieties under productive crop cultivation in Azerbaijan increases from a baseline of <400 to >450 + More than 8 vegetable, 10 wheat/barley, and 2 forage native crop varieties are being actively maintained in field gene banks

SUSTAINABILITY AND REPLICABILITY

141. Project **sustainability** will ultimately depend on ensuring the full ownership of the project outputs and activities by the responsible mandated public institutions and securing their long-term commitment (regulatory, policy, funding and resources) to scale-up and replicate best practices in agro-biodiversity conservation and productive use beyond project completion.

142. Environmental sustainability will be enhanced in the project by promoting the adoption of native crops as a means of improving agricultural productivity and reducing land degradation. More specifically, the project will: (i) improve the understanding of the role of native crops in mitigating the effects of land degradation, particularly erosion and salinization; (ii) establish and manage a network of conservation areas that will more effectively conserve viable populations of wild crop relatives in their natural habitats; (iii) conserve native varieties and wild species in plant gene banks, as a vital source of plant genetic resources for future plant breeding; and (iv) assist farmers to implement more efficient water capture, tillage, fertilization and irrigation measures; and (v) increase the rate of release, and intensification of use of, genetically diverse native crops that are better adapted to changing environmental conditions and human needs.

143. <u>Institutional sustainability</u> will be promoted in the project by strengthening and expanding the capacities (i.e. staff, skills, decision-support systems, infrastructure and equipment) of the state agricultural institutions working in the project rayons (including the Genetic Resources Institute, regional Agrarian Scientific Centres, Research Institute of Farming, Research Institute of Forage, Meadows and Pastures, Research Institute of Horticulture and Subtropical Plants and Research Institute of Vegetable Production). More specifically, the project will: (i) help to develop and build a professional corps of well-trained and properly equipped agricultural extension and advisory officers who are capacitated to support farmers in the project rayons; (ii) assist in establishing and maintaining field gene banks for commercially viable native crops within the responsible research institutes; (iii) host specialist training courses for state scientific and technical staff, and actively support collaborative research projects in agro-biodiversity conservation and use; and (iv) improve the skills and resource of the MENR to more effectively conserve, natural populations of CWRs. The PMU and MoA will, during the course of project implementation, iteratively develop an institutional sustainability plan to ensure that the different project investments in building the capacity of the agricultural institutions are maintained (and scaled-up, if feasible) beyond the term of the project.

144. <u>Socio-economic sustainability</u> will be enhanced in the project by improving the value chain for native crops. More specifically, the project will: (i) improve the knowledge and awareness of the cost-benefits of planting and harvesting native crops; (ii) demonstrate the direct relationship between farming with native crops and the mitigation of the effects of land degradation; (iii) strengthen the technical skills of farmers to plant and harvest native crops; (iv) provide financial grants, technical support, equipment and infrastructure to farmers involved in planting and harvesting native crop varieties; (v) ensure the supply of high quality seed stocks of native crops to farmers; (vi) assist farmers to access markets and increase the income from products derived from native crops; and (vii) support the collaboration and cooperation between farmers in order to achieve economies of scale It is envisaged that the incremental improvements to the value chain for native crops will act as sufficient financial incentive for farmers to consider including native crop varieties in their wheat, vegetable and forage crop fields beyond the term of the project.

145. Each project output will include the documentation of lessons learnt from implementation of activities under the output, and a collation of the tools and templates (and any other materials) developed during implementation. The Project Coordinator will ensure the collation of all the project experiences and information. This knowledge database will then be made accessible to different stakeholder groups in order to support better future decision-making processes in agro-biodiversity conservation and more consistent adoption of best practice.

146. **Replication** of good practices developed by the project will be achieved through the direct replication of selected project elements and practices and methods, as well as the scaling up of experiences. The following activities have preliminarily been identified as suitable for replication and/or scaling up: (i) expansion of the network of conservation areas in agro-biodiversity 'hotspot' areas; (ii) establishment of further field gene banks for native crop varieties; (iii) additional research, testing and development of new drought-resistant varieties of, native crops; (iv) administration of state-funded subsidies for native crop seed producers, farmers and retailers; (v) establishment and resourcing of a corps of agricultural extension and advisory officers in other rayons; (vi) increase in the productive use of native crops to mitigate the effects of land degradation; (vii) increase in the volume and proportion of native seed crops maintained in the national seed bank; (viii) further expansion of the reach of informal farmer-to-farmer networks and formal agricultural associations; and (ix) growth in the variety and value of niche products derived from native crops.

COORDINATION WITH OTHER RELATED INITIATIVES

147. This project is complementary to, and will ensure close coordination with, the GEF project *Sustainable Land and Forest Management in the Greater Caucasus landscape*. It will use, and build on, the significant foundation of community awareness and political buy-in already developed during the planning and implementation of the sustainable land and forest management project. More specifically, the lessons learnt and tools developed (e.g. legal registration procedures, association constitution, association regulations, membership application forms, etc.) during the process of establishing rayon-based pasture and forest user associations will be used to guide the establishment of the wheat farmers association and the local farmer-to-farmer networks in this project.

148. This project will maintain a close working relationship with the Project Management Unit of the World Bank-funded *Agricultural Competitiveness Improvement Project* (ACIP) to ensure complementarity of activities, notably in the following areas: (i) development of the agri-business value chain; (ii) seed research, plant breeding, variety development and seed production and processing; (iii) strengthening the capacities of the state seed inspection services, seed testing commission and private seed growers; and (iv) expanding the availability of financing for agri-business/food processing enterprises.

149. The project will, wherever practicable, align its support to local farmers in the three project rayons with the second phase of the *Azerbaijan Rural Investment Project* (AzRIP), particularly in respect of grant funding to rural farmers for investment in agricultural infrastructure (notably for irrigation purposes).

150. The project will meet on a regular basis with the project management staff of the State Agency on Agricultural Credits (SAAC) – the implementing agent for both AzRIP and ACIP – in order to identify opportunities for ongoing collaboration. To further strengthen the cooperative relationship between these projects, it is also envisaged that the SAAC will be represented on the Project Steering Committee (SC).

151. This project will be fully integrated with the *State Seed Fund* to ensure that it will contribute to the primary objective of the fund of producing, harvesting and storing high-yield and drought-resistant seed varieties.

152. Certain kinds of local crops supported by this project are used as fodder for sheep. It is planned that these local crops will be provided to pastoralists targeted under different projects of UNDP under the Climate

Change window (CC) to delay their migration to summer pastures and thereby reduce pressure of livestock on land thus retain the organic carbon in soil. Several other kinds of local crops that are targeted by the agrobiodiversity project prevent erosion and help restore the fertile layer of soil and hence promote the carbon storage capacity of lands. The CC projects have developed legal framework for pasture and forest users that will be used as a sample/reference for the establishment/functioning of farmers association in the agrobiodiversity projects

PART III: Management Arrangements

PROJECT IMPLEMENTATION ARRANGEMENT

153. The project will be implemented over a period of five years.

154. The UNDP will monitor the implementation of the project, review progress in the realisation of the project outputs, and ensure the proper use of UNDP/GEF funds. Working in close cooperation with the Ministry of Agriculture (MoA), the UNDP CO will provide support services to the project - including procurement, contracting of service providers, human resources management and financial services - in accordance with the Letter of Agreement for the provision of support services (LOA, dated 15 February, 2010) between the Government of the Republic of Azerbaijan and the United Nations Development Program. Costs of the support services will be covered by TRAC funds. The UNDP CO will also ensure conformance with UNDP Programme and Operational Policies and Procedures and UNDP Results-Based Management (RBM) guidelines.

155. The MoA, as the Implementing Partner (IP), will be responsible for the following functions: (i) coordinating activities to ensure the delivery of agreed outcomes; (ii) facilitating organization of project events, missions of international consultants and project trips; (iii) facilitating access to data and information required for the project implementation; (iv) providing inputs into the project annual work-plans and reports; (v) coordinating interventions financed by GEF/UNDP with other parallel interventions; (v); and (vi) coordinating and liaising with central and local authorities involved in the project implementation. It will also be directly responsible for creating the enabling conditions for implementation of all project activities. The MoA will work in close cooperation with the Ministry of Ecology and Natural Resoures (MENR). The MoA will coordinate all project activities at the local level, in close collaboration with the Executive Authorities in each of the targeted rayons. The MoA will designate a senior staff member to act as a <u>Project Director</u> (PD). The PD will provide the strategic oversight and guidance to project implementation and will chair the meetings of the Steering Committee³¹.

156. The day-to-day management of the project will be carried out by a full-time Project Coordinator (PC), with the administrative and financial support of a Project Financial Assistant (PFA). The development and implementation of the small grants programmes³² under the project will be controlled by a Project Grants Manager (PGM), while professional and technical support to the project will be provided by an Agricultural Scientist (AS). Collectively the PC, PFA, PGM and AS will comprise the Project Management Unit (PMU).

157. The PC has the authority to administer the project on a day-to-day basis on behalf of the MoA and UNDP, within the constraints lain down by the Steering Committee (SC). The PC's prime responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost. The PC will liaise and work closely with all partner institutions to link the project with complementary national programs and initiatives. The PC is accountable

³¹ The PD will not be paid from the project funds, but will represent a Government in-kind contribution to the Project.

³² For: (a) wheat and barley seed producers under output 1.4; (b) farmers planting and harvesting native crops under output 3.1; and (c) processors and retailers producing high-value niche products derived from native crops.

to the PD and UNDP for the quality, timeliness and effectiveness of the activities carried out, as well as for the use of funds. The PA, PFA, PGM and AS will report to the PC and will provide professional, technical and administrative support to the PC, as required. The terms of reference for the PC, PFA, PGM and AS are detailed in <u>Section IV</u>, <u>Part I</u>.

158. The PC will be technically supported by contracted national and international consultants, NGOs and companies. Recruitment of specialist support services and procurement of any equipment and materials for the project will be done by the PC, in consultation with the PD and in accordance with relevant UNDP recruitment and procurement rules and procedures. The terms of reference of the key national and international consultants to be contracted by the project are detailed in <u>Section IV</u>, <u>Part I</u>.

159. The Genetic Resources Institute, regional Agrarian Scientific Centres, regional State Sort and Test Points, Research Institute of Forage, Meadows and Pastures, the Research Institute of Vegetable Production and the Department of Biodiversity Protection and Development of Specially Protected Natural Areas may also, in accordance with the AWP, directly implement some project activities under the direct supervision of the PC and PD.

160. A project Steering Committee (SC) will be constituted to serve as the executive decision making body for the project. While the final composition of the SC will be determined at the Project Inception Workshop (see Section I, Part IV), it may include representation from the MoA, UNDP, MENR, MEI, ANAS, SAAC, District Executive Authorities and individual farmers. The SC will ensure that the project remains on course to deliver the desired outcomes of the required quality. The SC will meet at least twice per annum (more often where required). The SC provides overall guidance and policy direction to the implementation of the project, and provides advice on appropriate strategies for project sustainability. The SC will play a critical role in project monitoring and evaluation by quality-assuring the project processes and products. It will arbitrate on any conflicts within the project, or negotiate a solution to any problems with external bodies. It will also approve the appointment and responsibilities of the Project Coordinator and any delegation of its project assurance responsibilities.

161. The PC will produce an Annual Work Plan (AWP) to be approved by the SC at the beginning of each year. These plans will provide the basis for allocating resources to planned project activities. Once the SC approves the AWP, this will be sent to the UNDP Regional Technical Advisor (RTA) at the GEF Regional Service Centre (RSC) in Istanbul for clearance. Once the AWP is cleared by the RSC, it will be sent to the UNDP-GEF Unit in New York for final approval and release of the funding. The PC will further produce quarterly operational reports, Annual Progress Reports (APR) and the Project Implementation Review (PIR) report for review by the SC, or any other reports at the request of the SC. These reports will summarize the progress made by the project versus the expected results, explain any significant variances, detail the necessary adjustments and be the main reporting mechanism for monitoring project activities.



Other Partners: MENR

FINANCIAL AND OTHER PROCEDURES

162. The financial arrangements and procedures for the project are governed by the UNDP rules and regulations for National Implementation Modality (NIM) with UNDP support services. All procurement and financial transactions will be governed by applicable UNDP regulations.

AUDIT CLAUSE

163. The Project audits will be conducted according to UNDP Financial Regulations and Rules and applicable Audit policies.

PART IV: Monitoring Framework and Evaluation

MONITORING AND REPORTING

164. The project will be monitored through the following Monitoring and Evaluation (M&E) activities.

Project start-up:

165. A Project Inception Workshop will be held <u>within the first 4 months</u> of project start with those with assigned roles in the project organization structure, the UNDP Country Office (CO) and, where appropriate/feasible, regional technical policy and programme advisors as well as other stakeholders. The Inception Workshop is crucial to building ownership for the project results and to plan the first year annual work plan.

166. The Inception Workshop should address a number of key issues including:

- a) Assist all partners to fully understand and take ownership of the project. Detail the roles, support services and complementary responsibilities of UNDP CO, NBBC and the UNDP-GEF Regional Service Centre (RSC) vis-à-vis the project team. Discuss the roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for project staff will be discussed again, as needed.
- b) Based on the Project Results Framework and the relevant GEF Tracking Tool, if appropriate, finalize the first Annual Work Plan (AWP). Review and agree on the indicators, targets and their means of verification, and re-check assumptions and risks.
- c) Provide a detailed overview of reporting, monitoring and evaluation requirements. The Monitoring and Evaluation (M&E) work plan and budget should be agreed and scheduled.
- d) Discuss financial reporting procedures and obligations, and arrangements for annual audit.
- e) Plan and schedule project Steering Committee (SC) meetings. Roles and responsibilities of all project organization structures should be clarified and meetings planned. The first SC meeting should be held within the first 6 months following the inception workshop.

167. An <u>Inception Workshop</u> report is a key reference document and must be prepared and shared with participants to formalize various agreements and plans decided during the meeting.

Quarterly:

- Progress made shall be monitored in the UNDP Enhanced Results Based Management Platform.
- Based on the initial risk analysis submitted, the risk log shall be regularly updated in ATLAS. Risks become critical when the impact and probability are high.
- Based on the information recorded in ATLAS, a Project Progress Report (PPR) can be generated in the Executive Snapshot.
- Other ATLAS logs can be used to monitor issues, lessons learned etc.

Annually:

168. <u>Annual Project Review/Project Implementation Reports (APR/PIR</u>): This key report is prepared to monitor progress made since project start and in particular for the previous reporting period. The APR/PIR combines both UNDP and GEF reporting requirements.

169. The APR/PIR includes, but is not limited to, reporting on the following:

- Progress made toward project objective and project outcomes each with indicators, baseline data and end-of-project targets (cumulative)
- Project outputs delivered per project outcome (annual)
- Lesson learned/good practice
- AWP and other expenditure reports
- Risk and adaptive management
- ATLAS Quarterly Progress Reports (QPR)
- Portfolio level indicators (i.e. GEF focal area tracking tools) are used by most focal areas on an annual basis as well.

Periodic Monitoring through site visits:

170. UNDP CO and the UNDP-GEF RSC will conduct visits to project sites based on the agreed schedule in the project's Inception Report/Annual Work Plan to assess first hand project progress. Other members of the Steering Committee may also join these visits. A Field Visit Report/BTOR will be prepared by the UNDP CO and UNDP-GEF RSC and will be circulated no less than one month after the visit to the project team and Steering Committee members.

Mid-term of project cycle:

171. The project will undergo an independent <u>Mid-Term Evaluation</u> (MTE) at the mid-point of project implementation. The MTE will determine progress being made toward the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the MTE will be decided after consultation between the parties to the project document. The Terms of Reference for this MTE will be prepared by the UNDP CO, based on guidance from the UNDP-GEF RSC. The management response and the evaluation will be uploaded to UNDP corporate systems, in particular the UNDP Evaluation Resource Center (ERC).

172. The relevant GEF Focal Area Tracking Tools will also be completed during the mid-term evaluation cycle.

End of Project:

173. An independent <u>Final Evaluation</u> will take place three months prior to the final Steering Committee meeting and will be undertaken in accordance with UNDP and GEF guidance. The final evaluation will focus on the delivery of the project's results as initially planned (and as corrected after the MTE, if any such correction took place). The final evaluation will look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental benefits/goals. The Terms of Reference for this evaluation will be prepared by the UNDP CO, based on guidance from the UNDP-GEF RSC.

174. The final evaluation should also provide recommendations for follow-up activities and requires a management response which should be uploaded to PIMS and to the UNDP ERC.

175. The relevant GEF Focal Area Tracking Tools will also be completed during the final evaluation.

176. During the last three months, the project team will prepare the <u>Project Terminal Report</u>. This comprehensive report will summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems met and areas where results may not have been achieved. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the project's results.

Learning and knowledge sharing:

177. Results from the project will be disseminated within and beyond the project through existing information sharing networks and forums.

178. The project will identify and participate - as relevant and appropriate - in scientific, policy-based and/or any other networks, which may be of benefit to project implementation though lessons learned. The project will identify, analyse, and share lessons learned that might be beneficial in the design and implementation of similar future projects.

179. Finally, there will be a two-way flow of information between this project and other projects of a similar focus.

Communications and visibility requirements

180. Full compliance is required with UNDP's Branding Guidelines. These can be accessed at http://intra.undp.org/coa/branding.shtml, and specific guidelines on UNDP logo use can be accessed at: http://intra.undp.org/coa/branding/useOfLogo.html. Amongst other things, these guidelines describe when and how the UNDP logo needs to be used, as well as how the logos of donors to UNDP projects needs to be used. For the avoidance of any doubt, when logo use is required, the UNDP logo needs to be used alongside the GEF logo. The GEF logo can be accessed at: http://www.thegef.org/gef/GEF logo. The UNDP logo can be accessed at http://www.thegef.org/gef/GEF logo. The UNDP logo can be accessed at http://www.thegef.org/gef/GEF logo. The UNDP logo can be accessed at http://www.thegef.org/gef/GEF logo. The UNDP logo can be accessed at http://www.thegef.org/gef/GEF logo. The UNDP logo can be accessed at http://www.thegef.org/gef/GEF logo. The UNDP logo can be accessed at http://www.thegef.org/gef/GEF logo. The UNDP logo can be accessed at http://www.thegef.org/gef/GEF logo. The UNDP logo can be accessed at http://www.thegef.org/gef/GEF logo. The UNDP logo can be accessed at http://www.thegef.org/gef/GEF logo. The UNDP logo can be accessed at http://www.thegef.org/gef/GEF logo. The UNDP logo can be accessed at http://www.thegef.org/gef/GEF logo. The UNDP logo can be accessed at <a href="http://www.

181. Full compliance is required with the GEF's Communication and Visibility Guidelines (the "GEF Guidelines"). The GEF Guidelines can be accessed at: <u>http://www.thegef.org/gef/sites/thegef.org/files/</u> <u>documents/C.40.08 Branding the GEF% 20final 0.pdf</u>. Amongst other things, the GEF Guidelines describe when and how the GEF logo needs to be used in project publications, vehicles, supplies and other project equipment. The GEF Guidelines also describe other GEF promotional requirements regarding press releases, press conferences, press visits, visits by Government officials, productions and other promotional items.

Type of M&E activity	Responsible Parties	Budget US\$ Excluding project team staff time	Time frame
Inception Workshop and Report	PCUNDP COUNDP-GEF RSC	Indicative cost: 6,000	Within first two months of project start up
Measurement of Means of Verification of project results.	 PC will, with support from the UNDP-GEF RSC, oversee the hiring of specific studies and institutions, and delegate responsibilities to relevant team members. 	To be finalized in Inception Phase and Workshop.	Start, mid and end of project (during evaluation cycle) and annually when required.
Measurement of Means of Verification for Project Progress on <i>output and</i> <i>implementation</i>	PCField monitors	Indicative cost: 142,000	Annually prior to ARR/PIR and to the definition of annual work plans
ARR/PIR	 PC UNDP CO UNDP RTA UNDP ERC 	None	Annually
Periodic status/ progress reports	• PC	None	Quarterly

M&E work plan and budget

Type of M&E activity	Responsible Parties	Budget US\$ Excluding project team staff time	Time frame
Mid-term Evaluation	 PC UNDP CO UNDP RSC External Consultants (i.e. evaluation team) 	Indicative cost: 37,500	At the mid-point of project implementation.
Final Evaluation	 PC UNDP CO UNDP RSC External Consultants (i.e. evaluation team) 	Indicative cost: 37,500	At least three months before the end of project implementation
Project Terminal Report	PCUNDP COlocal consultant	0	At least three months before the end of the project
Audit	UNDP COProject manager and team	0 ³³	Yearly
Visits to field sites	 UNDP CO UNDP RSC (as appropriate) Government representatives 	For GEF-supported projects, paid from IA fees and operational budget	Yearly
TOTAL indicative COST Excluding project staff time expenses	and UNDP staff and travel	US\$ 223,000	

*Note: Costs included in this table are part and parcel of the UNDP Total Budget and Work Plan (TBW) in the PRODOC, and not additional to it.

³³ The project will be audited by internal UNDP audit.

PART V: Legal Context

182. This Project Document shall - together with the United Nations Development Assistance Framework (UNDAF) for Azerbaijan (2011-2015) and the UNDP *Country Programme* (CP) for Azerbaijan (2011-2015) - be the instrument referred to as such in Article I of the *Standard Basic Assistance Agreement* (signed on the 6th of January, 2001) between the Government of Azerbaijan and the United Nations Development Program.

183. Consistent with the Article III of the Standard Basic Assistance Agreement, the responsibility for the safety and security of the implementing partner and its personnel and property, and of UNDP's property in the implementing partner's custody, rests with the implementing partner.

184. To this end, the implementing partner shall:

- a. Put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried out; and
- b. Assume all risks and liabilities related to the implementing partner's security, and the full implementation of the security plan.

185. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner's obligations under this Project Document.

186. The implementing partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.

187. The UNDP authorized official can effect in writing the following types of revision to this Project Document, provided that he/she has verified the agreement thereto by the UNDP-GEF RSC and is assured that the other signatories to the Project Document have no objection to the proposed changes:

- a. Revision of, or addition to, any of the annexes to the Project Document;
- b. Revisions which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation;
- c. Mandatory annual revisions which re-phrase the delivery of agreed project inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility; and
- d. Inclusion of additional annexes and attachments only as set out here in this Project Document.

SECTION II: STRATEGIC RESULTS FRAMEWORK (SRF)

	Indicator	Baseline (2015)	Target/s (End of Project)	Source of verification	Risks and Assumptions
Project Objective: Ensure the conservation and	Proportion (%) of agricultural crop area of project rayons under native crops	Wheat/barley: <2% Vegetable: <0.5% Forage: <0.5%	Wheat/barley: >6% Vegetable: >2% Forage: >2%	Rayon-based agricultural crops database; State Statistics Committee agricultural database ³⁴	Assumptions: - The Ministry of Agriculture, rayon executive committees and village municipalities will continue to promote and support the expansion of agricultural areas under native
	Estimated value (US\$/annum) of the state funding allocation to the conservation and use of agro- biodiversity in Azerbaijan	<us\$30 annum<="" million="" td=""><td>>US\$50 million/annum</td><td>Audited financial reports of the MoA</td><td> crop production; Wheat, barley, vegetable and forage crop farming remain economically viable agricultural crops in the project rayons; </td></us\$30>	>US\$50 million/annum	Audited financial reports of the MoA	 crop production; Wheat, barley, vegetable and forage crop farming remain economically viable agricultural crops in the project rayons;
sustainable use of globally threatened crop varieties important for biodiversity, food security and	Number of known landraces and varieties under productive crop cultivation in Azerbaijan	<400	>450	GRI - National Database	 Crop landraces and their traditional varieties can compete with imported crop varieties as economically viable alternative crops.
security and sustainable land management	Extent (ha) of crop area in the project rayons under more sustainable crop agricultural practices	<10,000ha	>100,000	State Statistics Committee agricultural database Project monitoring reports	 Risks: Farmers in the project rayons are reluctant to switch to planting and growing native crop varieties; State agricultural institutions working in the project rayons are unable to provide adequate technical and extension support services to farmers; and
	Extent (ha) of degraded agricultural land in the project rayons restored to productive use through the planting of native crops	N/A	>1000ha	Project monitoring reports; State Statistics Committee agricultural database	

³⁴ See: <u>http://www.stat.gov.az/source/agriculture/indexen.php</u>

	Indicator	Baseline (2015)	Target/s (End of Project)	Source of verification	Risks and Assumptions					
				agricultural database ³⁵	 An increase in demand for irrigation water in the project rayons, coupled with decreased water availability and higher temperatures, leads to substantial native 					
	Number of households (and number of women) directly involved in the farming of native crops.	Vegetables: 5 (1) Wheat/barley: 2 (0) Forage: 1 (0)	Vegetables: 25 (10) Wheat/barley: 17 (5) Forage: 12 (2)	Rayon-based agricultural crops database; Project monitoring reports	crop losses.					
	LD-PMAT tracking tool score (average score across 4 criteria under LD-1)	LD 1: <1.5	LD 1: >3	Project reporting on LD-PMAT Scorecard						
	Outputs: 1.1 Improve the knowledge 1.2 Establish and manage a 1.3 Establish and maintain f 1.4 Increase the production,	Outputs: 1.1 Improve the knowledge base of crop wild relatives (CWR) and local crop landraces 1.2 Establish and manage a network of conserved areas for CWRs 1.3 Establish and maintain field gene banks for crop landraces 1.4 Increase the production, storage and distribution of native crop seeds								
Outcome 1: In situ and ex situ conservation of agro- biodiversity	Number and extent (ha) of CWR agro-biodiversity hotspots in the project rayons under some form of conservation tenure	0 0 ha	>5 >50 ha	Project monitoring reports; GRI - National Database	Assumptions: - The state agricultural and environmental partner institutions (GRI, research institutes, MENR) have the in- house technical expertise to implement project activities.					
	Number of the targeted native crop varieties being actively maintained in field genebanks	Vegetables: 0 Wheat/barley: 0 Forage: 0	Vegetables: >8 Wheat/barley: >10 Forage: >2	Project monitoring reports Annual reports of MoA	 The rayon executive committees will actively support the conservation of the designated CWR 'hotspots'; and The MoA will support the formal registration of the new 					

³⁵ See: <u>http://www.stat.gov.az/source/environment/indexen.php</u>

Indicator	Baseline (2015)	Target/s (End of Project)	Source of verification	Risks and Assumptions
Area under each traditional crop variety (hectares) in the four targeted districts	Ag bugda; Sari bugdaQirmizi bugda; Qara bugda; Qara bugda; Qara sunbul; Zogal bugda Gurgana; Xirda bugda Zarli bugda; Axta bugda Zarli bugda; Axta bugda Kosa bugda; 	Increase in area for wheat/barley varieties by app. 4% Increase in area for vegetable crops by 1.5% Increase in area for forage crops by 1.5%	Field measurements	forage and vegetable seed farmers supported by the project. Risks: - Farmers in the project rayons are reluctant to switch to planting and growing native crop varieties; and - State agricultural institutions working in the project rayons are unable to provide adequate technical and extension support services to farmers

	Indicator	Baseline (2015)	Target/s (End of Project)	Source of verification	Risks and Assumptions
	Volume of the targeted native crop seed (tons/annum) made available to seed producers in the project rayons for commercial production	Vegetables: 0.1 t/yr Wheat/barley: 80 t/yr Forage: 10 t/yr	Vegetables: 0.5 t/yr Wheat/barley: 80 t/yr Forage: 30 t/yr	Project monitoring reports Annual reports of MoA	
	Number of new, registered native crop seed producing farmers in the project rayons	N/A	Vegetables: 5 Forage: 2	Project monitoring reports MoA registry of seed producers	
Outcome 2: Capacity to improve agricultural productivity and reduce land degradation using native crops	Outputs: 2.1 Build the capacity of agri 2.2 Support the development 2.3 Improve the knowledge a	cultural institutions of local farmer organisation nd skills of local farmers	18		
	Number of capacitated extension and advisory service officers deployed in the project rayons	5	>20	Project monitoring reports Annual reports of MoA	Assumptions: - The MoA will ensure the ongoing employment of a corps of agricultural extension staff in the project rayons;
	Number of state agricultural staff (professional, scientific and technical) participating in project-funded training and skills development programmes	N/A	>30	Project training reports	 Farmers understand the inherent value of farmer-farmer cooperation and information- sharing; and Vegetable, forage and wheat farmers will voluntarily participate in project-funded information training and skills
	Number of active farmer- farmer networks established in project rayons	0	>6	Project monitoring reports	 development programmes. Risks: Farmers in the project rayons
	Number of registered members of the regional (i.e.	0	>50	Membership forms;	are reluctant to switch to

	Indicator	Baseline (2015)	Target/s (End of Project)	Source of verification	Risks and Assumptions				
	including the project rayons) Wheat Farmers Association			Annual report of Wheat Farmers Association	planting and growing nativecrop varieties;State agricultural institutions				
	Number of local farmers participating in project- funded information-sharing, training and skills development programmes	N/A	N/A Vegetable: >150 Forage: >30 Wheat: >100		 working in the project rayons are unable to provide adequate technical and extension support services to farmers; and An increase in demand for irrigation water in the project rayons, coupled with decreased water availability and higher temperatures, leads to substantial native crop losses. 				
	Outputs: 3.1 Strengthen the agricultural incentives toolbox for farmers 3.2 Improve access to markets for local farmers								
Outcome 3: Incentives and markets to improve the uptake and commercial viability	Numbers of local farmers benefiting from small grants and average (US\$) value of grant/farmer	N/A N/A	>400 US\$500-US\$1500	Project monitoring reports and audited financial statements	 Assumptions: There is considerable potential for growth in the production and sale of high value products derived from native crops; The MoA will support the marketing of organic and traditional products derived 				
<i>oj nume crops</i>	Number of new supply agreements concluded between farmers in the project rayons and processors/retailers of niche high-value products derived from native crops	0	>10	Signed supply agreements; Project monitoring reports	 from native crops; and Specialist traders and retailers of niche high value producst recognise the value of project support in improving their effectiveness and profitability. Risks: 				

Indicator	Baseline (2015)	Target/s (End of Project)	Source of verification	Risks and Assumptions
Number of processors and retailers trading in niche high value products derived from native crops, and those benefiting from project grant funding support in the project rayons	<5 0	>10 >5	Project monitoring reports and audited financial statements	 Farmers in the project rayons are reluctant to switch to planting and growing native crop varieties; State agricultural institutions working in the project rayons are unable to provide adequate
Estimated valuation (US\$) of trade in the targeted native crops in the project rayons	TBD ³⁶	TBD	Value chain analysis reports (at project inception, mid-term and EOP)	 technical and extension support services to farmers; and An increase in demand for irrigation water in the project rayons, coupled with decreased water availability and higher temperatures, leads to substantial native crop losses.

³⁶ This amount will be estimated during the value chain analysis to be conducted under Output 3.2.

SECTION III: TOTAL BUDGET AND WORKPLAN

Award ID:	00085294	Project ID(s):	00092996						
Award Title:	Azerbaijan - Conservation and sustainable use o	zerbaijan - Conservation and sustainable use of globally important agro-biodiversity							
Business Unit:	AZE10	AZE10							
Project Title:	Azerbaijan - Conservation and sustainable use o	f globally important ag	pro-biodiversity						
PIMS no.	5482								
Implementing Partner									
(Executing Agency)	Ministry of Agriculture								

GEF	Respons.	Fund	Donor	ATLA	ATLAS Budget Description	Amoun	Amount	Amount	Amount	Amount		
Outcome/	Party/	ID	Name	S		t	YEAR 2	YEAR 3	YEAR 4	YEAR 5		
Atlas Activity	Implement			Budget		YEAR	(USD)	(USD)	(USD)	(USD)	TOTAL	#
	. Agent			Code		1						
				71200		(05D)	25.000	20.000	0.000	15,000	110.000	1
				71200	International Consultants	42 000	25 000	20 000	8 000	15 000	110 000	1
				71300	Local Consultants	18 000	14 000	8 000	2 000	6 000	48 000	2
				71400	Contractual Services - Individuals	40 000	48 000	51 000	40 000	36 000	215 000	3
Component 1 In situ and ex				71600	Travel	10 000	10 000	11 000	10 000	8 000	49 000	4
				72100	Contractual Services - Companies	143 000	213 000	213 000	188 000	108 000	865 000	5
				72200	Equipment and furniture	35 000	65 000	45 000	30 000	13 500	188 500	6
situ			CEE	72300	Materials and goods	0	32 000	34 000	14 000	5 000	85 000	7
conservation of	NIM	62000	10003	72400	Communic & Audio Vis. Equip.	1 000	1 000	1 000	1 000	1 000	5 000	8
agro-				72500	Supplies	400	400	400	400	400	2 000	9
biodiversity				72600	Grants	20 000	50 000	60 000	40 000	10 000	180 000	10
				72800	Information Tech. equipment	8 000	2 500	2 000	1 500	1 000	15 000	11
				73100	Rental and maint premises	1 000	1 000	1 000	1 000	1 000	5 000	12
				74100	Professional Services	3 500	3 000	2 500	2 500	1 500	13 000	13
				74500	Miscellaneous expenses	150	150	150	150	150	750	14
				75700	Training, Workshops and Confer	3 500	1 500	1 000	0	0	6 000	15
					TOTAL COMPONENT 1 (GEF)	325 550	466 550	450 050	338 550	206 550	1 787 250	
			CEE	71200	International Consultants	16 000	20 000	10 000	0	10 000	56 000	16
	NIM	62000	GEF- 10003	71300	Local Consultants	4 000	4 000	8 000	2 000	5 000	23 000	17
			10003	71400	Contractual Services - Individuals	60 000	64 000	68 000	56 000	46 000	294 000	18

				71600	Travel	10 000	12 000	14 000	12 000	8 000	56 000	19
Component 2				72100	Contractual Services - Companies	87 000	102 000	126 000	92 000	63 502	470 502	20
Capacity to				72200	Equipment and furniture	28 500	72 000	28 000	20 000	0	148 500	21
agricultural				72400	Communic & Audio Vis. Equip.	500	500	500	500	500	2 500	22
productivity				72500	Supplies	350	350	350	350	350	1 750	23
and reduce land				72800	Information Tech equip.	15 000	9 000	0	0	0	24 000	24
degradation				73100	Rental and maint premises	4 000	4 000	4 000	4 000	4 000	20 000	25
using native				74100	Professional Services	1 000	1 000	1 000	1 000	1 000	5 000	26
crops				74200	Audio visual & print production	15 000	20 000	15 000	10 000	5 000	65 000	27
				74500	Miscellaneous	150	150	150	150	150	750	28
				75700	Training, Workshops and Confer	12 000	10 000	9 000	8 000	6 000	45 000	29
					TOTAL COMPONENT 2 (GEF)	253 500	319 000	284 000	206 000	149 502	1 212 002	Ι.
				71200	International Consultants	0	0	60 000	22 000	10 000	92 000	30
				71300	Local Consultants	0	0	22 000	9 000	2 000	33 000	31
				71400	Contractual Services - Individuals	30 000	30 000	30 000	30 000	30 000	150 000	32
Component 3				71600	Travel	9 000	10 000	10 000	10 000	9 000	48 000	33
Incentives and				72100	Contractual Services - Companies	25 000	40 000	0	0	0	65 000	34
markets to				72200	Equipment and furniture	15 000	13 500	0	0	0	28 500	35
improve the			GFF-	72400	Communic & Audio Vis Equip	500	500	500	500	500	2 500	36
uptake and	NIM	6200	10003	72500	Supplies	350	350	350	350	350	1 750	37
viability of				72600	Grants	25 000	105 000	145 000	175 000	50 000	500 000	38
native crops				72800	Information Technology equipment	12 000	3 000	0	0	0	15 000	39
				73100	Rental and maint premises	1 000	1 000	1 000	1 000	1 000	5 000	40
				74100	Professional Services	4 000	4 000	5 000	5 000	3 000	21 000	41
				74500	Miscellaneous expenses	100	100	100	100	100	500	42
				75700	Training, Workshops and Confer	1 000	0	0	0	0	1 000	43
					TOTAL COMPONENT 3 (GEF)	122 950	207 450	273 950	252 950	105 950	963 250	
	NIM	62000	GEF- 10003	71400	Contractual Services - Individuals	39 600	39 600	39 600	39 600	39 600	198 000	44
	SUB-TOT	CAL PRO	JECT MA	NAGEMI	ENT (GEF)	39 600	39 600	39 600	39 600	39 600	198 000	
				64300	Direct Project Costing	14 000	14 000	14 000	14 000	14 000	70 000	45
	NIN	04000	UNDP-	71400	Contractual Services - Individuals	24 000	24 000	23 000	23 000	23 000	117 000	46
	INIIVI	04000	TRAC	74100	Professional Services	0	0	0	0	10 000	10 000	47

Project	74500 Miscellaneous expenses					600	600	600	600	600	3 000	48
Management	SUB-TOTAL PROJECT MANAGEMENT (UNDP)				38,600	38,600	37,600	37,600	47,600	200,000		
	TOTAL PROJECT MANAGEMENT				78,200	78,200	77,200	77,200	87,200	398,000		
					TOTAL PROJECT	780,200	1,071,200	1,085,200	874,700	549,202	4,360,502	

Summary of Funds:	Year 1	Year 2	Year 3	Year 4	Year 5	TOTAL
GEF	741,600	1,032,600	1,047,600	837,100	501,602	4,160,502
UNDP-TRAC	38,600	38,600	37,600	37,600	47,600	200,000
TOTAL	780,200	1,071,200	1,085,200	874,700	549,202	4,360,502

Budget #	Budget notes
1	Contractual appointment of an international agro-biodiversity conservation consultant (10 weeks @ 3000/wk) to review and identify the optimal conservation tenure arrangements, and develop area-specific management programmes, for the pilot CWR conservation areas (Output 1.2). Contractual appointment of an international agro-biodiversity specialist (20 weeks@3000/wk) to support the research institutions in inter alia: developing norms and standards for field gene banks; designing the nursery layouts for each field gene bank; monitoring the implementation of the planting and maintenance of the field gene banks; and administering the ongoing culturing, breeding and improvement programmes (Output 1.3). <i>Pro rata</i> (33%) costs of contracting the services of an international mid-term evaluation consultant (10 weeks @US3000/wk) (M&E). Pro rata (33%) costs of contracting the services of an international final evaluation consultant (10 weeks @US3000/wk) (M&E).
2	Contractual appointment of a national agro-biodiversity conservation (15 weeks@1000/wk) consultant to review and identify the optimal conservation tenure arrangements, and develop area-specific management programmes, for the pilot CWR conservation areas (Output 1.2). Contractual appointment of a national agro-biodiversity specialist (30 weeks@1000/wk) to support the research institutions in inter alia: developing norms and standards for field gene banks; designing the nursery layouts for each field gene bank; monitoring the implementation of the planting and maintenance of the field gene banks; and administering the ongoing culturing, breeding and improvement programmes (Output 1.3). <i>Pro rata</i> (33%) costs of contracting the services of a local midterm evaluation consultant (5 weeks @US900/wk) (M&E). Pro rata (33%) costs of contracting the services of a local final evaluation consultant (5 weeks @US900/wk) (M&E).
3	Appointment of local short-term technical and labour contract personnel to support the implementation of the management plan of each CWR conservation area (Output 1.2). Appointment of contract labour for small farmers to establish new forage and vegetable seed production farms (Output 1.4). <i>Pro rata</i> costs of the appointment of 3 field monitors (one for each project rayon) to monitor and report on progress in the in situ implementation of outputs and activities across the project rayons (Component 1). <i>Pro rata</i> (33%) costs of contractual appointment of a Agricultural Scientist (@\$850/wk for 190 wks) (Component 1). Pro rata (33%) costs of contractual appointment of a Project Grants Manager (@\$850/wk for 190 wks) (Component 1).
4	<i>Pro rata</i> (33%) costs of travel and DSA for inception meeting (M&E). <i>Pro rata</i> (33%) of local travel costs and DSA of M&E consultants (M&E). Travel costs (DSA, car hire, car subsidy, fuel, etc.) of the Project Coordinator, Agricultural Scientist and Project Grants Manager to support implementation of Component 1.

5	Contractual appointment of the GRI to implement Output 1.1 (field-based surveys and mapping ; collate traditional knowledge; assess the nature and extent of threats to wild populations; identify 'hotspots of agro-biodiversity'; assess the role of native crops in mitigating the effects of land degradation and/or in adapting to the projected impacts of climate change; update the national database and national genebank; and develop web-based information portal). Contractual appointment of a national agricultural research institute or academic institution to: collate and map the national distributional and attribute data for CWRs; collect critical CWR distributional and attribute data for CWRs; design a national network of conservation areas for CWRs; and select a sub-set of sites that could be piloted as CWR conservation areas (Output 1.2). Costs of professional survey and legal support services in the survey, designation and demarcation of new CWR conservation areas (Output 1.2). Contractual appointment of the Sheki Experimental Station to establish and maintain a field gene bank for local landraces and varieties of targeted wheat and barley species (Output 1.3). Contractual appointment of the Research Institute of Vegetable Production to establish and maintain a field gene bank for local landraces and varieties of targeted forage species (Output 1.3). Contractual appointment of two commercial seed production companies and/or local agricultural NGOs (one for native forage crop seeds and one for native vegetable crop seeds) to directly assist the participating seed production farmers in the establishment and management of the seed production fields (Output 1.4).
6	Procurement of equipment (e.g. ploughing, irrigation, seed cleaning, seed storage, etc.) for small farmers to establish new forage and vegetable seed production farms (Output 1.4). <i>Pro rata</i> costs of the procurement of office furniture, vehicle and equipment for the PMU.
7	Procurement of materials (e.g. fencing materials, signage, tanolith poles, chainsaws) to support the implementation of the management plan of each CWR conservation area (Output 1.2). Procurement of materials and goods (e.g. seeds, packaging, fertilizer, etc.) for small farmers to establish new forage and vegetable seed production farms (Output 1.4).
8	Cell phone contracts and call costs of the Agricultural Scientist and Project Grants Manager in supporting implementation of outputs under Component 1.
9	Pro rata (33%) costs of procuring office supplies @US\$1100/annum.
10	Establish and administer a small grant programme for existing, registered wheat and barley seed producers (Output 1.4).
11	<i>Pro rata</i> (33%) costs of procuring laptops, software licenses, portable hard drive, router, printers, 3G cards, data projector and ISP contract for the Project Coordinator, Agricultural Scientist and Project Grant Manager (Component 1).
12	Pro rata (33%) rental costs for space for project events (workshops, seminars, working meetings) (@US\$7000/annum).
13	Contractual appointment of an independent auditor (8 weeks@1000/wk) to monitor, review and evaluate the cost-effectiveness of the small grants programme for wheat and barley seed producers (Output 1.4). <i>Pro rata</i> cost of ad hoc legal support services to the project (Component 1).
14	Pro rata (25%) costs of miscellaneous project expenses, incl. bank charges.
15	Meeting costs (venue, meals, drinks, etc.) associated with stakeholder consultations in the establishment of the CWR conservation areas (Output 1.2). <i>Pro rata</i> (33%) costs of translation and meeting costs for inception meeting (M&E).
16	Contractual appointment of an international agricultural training consultant (12 weeks @3000/wk) to develop an overarching farmer training programme (in the form of a calendar of training opportunities) for the project (Output 2.3). <i>Pro rata</i> (33%) costs of contracting the services of an international mid-term evaluation consultant (10 weeks @US3000/wk) (M&E). <i>Pro rata</i> (33%) costs of contracting the services of an international final evaluation consultant (10 weeks @US3000/wk) (M&E).
17	Appointment of field data staff to collect and collate information on wheat, forage and vegetable farmers in the three project rayons (Output 2.2). <i>Pro rata</i> (33%) costs of contracting the services of a local mid-term evaluation consultant (5 weeks @US900/wk) (M&E). <i>Pro rata</i> (33%) costs of contracting the services of a local final evaluation consultant (5 weeks @US900/wk) (M&E).
18	Recruitment and appointment of 10 agricultural extension and advisory officers (@US\$2400 cost-to-company/annum/staff member for 3 years on a cost sharing agreement with the MoA) for the Sheki, Goranboy and Goychay rayons (Output 2.1). <i>Pro rata</i> costs of the appointment of 3 field monitors (one for each project rayon) to monitor and report on progress in the in situ implementation of outputs and activities across the project rayons (Component 2). <i>Pro</i>

	rata (33%) costs of contractual appointment of an Agricultural Scientist (@\$850/wk for 190 wks) (Component 2). Pro rata (33%) costs of contractual
	appointment of a Project Grants Manager (@\$850/wk for 190 wks) (Component 2).
	Travel costs (reimbursement of costs of use of own vehicle or car hire costs) of field data staff in the collection of information on wheat, forage and
19	vegetable farmers in the three project rayons (Output 2.2). <i>Pro rata</i> (33%) costs of travel and DSA for inception meeting (M&E). Pro rata (33%) of local
	travel costs and DSA of M&E consultants (M&E). Travel costs (DSA, car nire, car subsidy, ruel, etc.) of the Project Coordinator, Agricultural Scientist and Project Create Management implementation of Component 2
	Project Grants Manager to support implementation of Component 2.
	service training programme for agricultural extension and advisory officers: liaise with agricultural institutions to identify prospective specialist training
	courses and collaborative initiatives for scientific and technical staff : and facilitate the annual meetings of the staff involved in agrobiodiversity
	conservation and use (Output 2.1). Costs of specialist training, skills development and mentoring support for at least 15-20 selected scientific and technical
20	staff in state agricultural institutions (Output 2.1). Contract an agricultural company to design, develop and publish a technical manual on the 'conservation
20	and sustainable use of native crop species in Azerbaijan' (Output 2.1). Contractual appointment of an agricultural extension support service provider or
	NGO to provide legal, administrative, logistical and technical assistance to the Wheat Farmers Association (Output 2.2). Contractual appointment of an
	agricultural extension support service provider or NGO to provide legal, administrative, logistical and technical assistance to the local farmer-to-farmer
	training and skills development courses identified in the overraching farmer training programme (Output 2.3)
	Procurement of key equipment (i.e. vehicles - two nickup-type vehicles (@USD35-40k, protective clothing, computer hardware, computer networking
21	services, portable laboratories, GPS, communications equipment, office equipment) for the corps of agricultural extension and advisory officers working in
	the project rayons (Output 2.1). Pro rata costs of the procurement of office furniture and equipment for the PMU.
22	Cell phone contracts and call costs of the Agricultural Scientist and Project Grants Manager in supporting implementation of outputs under Component 2.
23	Pro rata (33%) costs of procuring office supplies @US\$1100/annum.
	Procurement of IT hardware and software required to host information on wheat, forage and vegetable farmers in the three project rayons (Output 2.2). Pro
24	rata (33%) costs of procuring laptops, software licenses, portable hard drive, router, printers, 3G cards, data projector and ISP contract for the Project
	Coordinator, Agricultural Scientist and Project Grant Manager (Component 2).
25	<i>Pro rata (33%)</i> rental costs for space for project events (workshops, seminars, working meetings) (@US\$7000/annum).
26	<i>Pro rata</i> cost of <i>ad hoc</i> legal support services to the project (Component 2).
27	Contractual appointment of an agricultural communications company to develop complementary informational, educational and communication materials
28	Di distribution to local farmers (Output 2.5).
20	Costs of hosting (vanue, catering, agginment hire, facilitator, informational materials, DSA, etc.) four annual meetings of scientists, technicians and
	managers involved in the conservation and sustainable use of agro-biodiversity (Output 2.1) Meeting costs (venue, meals, drinks, etc.) associated with the
29	development, inception and management of local farmer-to-farmer networks for vegetable and fodder farmers in the project rayons (Output 2.2). Costs
	associated with the hosting of a series of 'open days' for farmers (transport, catering, information brochures, etc.) (Output 2.3). Pro rata (33%) costs of
	translation and meeting costs for inception meeting (M&E).
	Contractual appointment of an international agricultural economist (24 weeks @3000/wk) to improve the agricultural incentives framework and assess the
30	feasibility of agro-tourism development (Output 3.1). <i>Pro rata</i> (33%) costs of contracting the services of an international mid-term evaluation consultant
	(10 weeks @US3000/wk) (M&E). Pro rata (33%) costs of contracting the services of an international final evaluation consultant (10 weeks @US3000/wk)
	(M&E).

31	Contractual appointment of a counterpart national agricultural economist (30 weeks @1000/wk) to improve the agricultural incentives framework and assess the feasibility of agro-tourism development (Output 3.1). <i>Pro rata</i> (33%) costs of contracting the services of a local mid-term evaluation consultant (5 weeks @US900/wk) (M&E). <i>Pro rata</i> (33%) costs of contracting the services of a local final evaluation consultant (5 weeks @US900/wk) (M&E).
32	<i>Pro rata</i> costs of the appointment of 3 field monitors (one for each project rayon) to monitor and report on progress in the in situ implementation of outputs and activities across the project rayons (Component 3). <i>Pro rata</i> (33%) costs of contractual appointment of an Agricultural Scientist (@\$850/wk for 190 wks) (Component 3). <i>Pro rata</i> (33%) costs of contractual appointment of a Project Grants Manager (@\$850/wk for 190 wks) (Component 3).
33	<i>Pro rata</i> (33%) costs of travel and DSA for inception meeting (M&E). Pro rata (33%) of local travel costs and DSA of M&E consultants (M&E). Travel costs (DSA, car hire, car subsidy, fuel, etc.) of the Project Coordinator, Agricultural Scientist and Project Grants Manager to support implementation of Component 3.
34	Contractual appointment of an agricultural economics business to conduct a value chain analysis for the targeted native crops in the project rayons (Output 3.2).
35	Pro rata costs of the procurement of office furniture and equipment for the PMU.
36	Cell phone contracts and call costs of the Agricultural Scientist and Project Grants Manager in supporting implementation of outputs under Component 3.
37	Pro rata (33%) costs of procuring office supplies @US\$1100/annum.
38	Establish and administer a small grant programme for farmers planting and harvesting native wheat, vegetable and forage crops in the project rayons (Output 3.1). Establish and administer a small grant programme for processors and retailers within the project rayons who are producing high-value niche products derived from native crops (Output 3.2).
39	<i>Pro rata</i> (33%) costs of procuring laptops, software licenses, portable hard drive, router, printers, 3G cards, data projector and ISP contract for the Project Coordinator, Agricultural Scientist and Project Grant Manager (Component 3).
40	Pro rata (33%) rental costs for space for project events (workshops, seminars, working meetings) (@US\$7000/annum).
41	Contractual appointment of an independent auditor (8 weeks@1000/wk) to monitor, review and evaluate the cost-effectiveness of the small grants programme for small wheat, vegetable and forage farmers (Output 3.1). <i>Pro rata</i> cost of ad hoc legal support services to the project (Component 1).
42	Pro rata (25%) costs of miscellaneous project expenses, incl. bank charges.
43	Pro rata (33%) costs of translation and meeting costs for inception meeting (M&E).
44	Pro rata (~60%) costs of contractual appointment of Project Coordinator (@US\$ 4000 per month) and Project Finance Assistant (@US\$ 1500 per month) as per UN Salary Scale for Service contract holders
45	Costs of UNDP financial, procurement and human resources management support to project (@ US\$14 000 /annum)
46	Pro rata (~40%) costs of contractual appointment of Project Coordinator (@US\$ 4000 per month) and Project Finance Assistant (@US\$ 1500 per month) as per UN Salary Scale for Service contract holders
47	Cost of project audit
48	Pro rata (25%) costs of miscellaneous project expenses, incl. bank charges.

SECTION IV: ADDITIONAL INFORMATION

PART I: Terms of Reference for project staff

PROJECT COORDINATOR

Background

The Project Coordinator will be locally recruited, based on an open competitive process. He/she will be responsible for the overall management of the project, including the mobilization of all project inputs, supervision over project staff, consultants and sub-contractors. The Project Coordinator will report to the UNDP Project Support Office (PSO) for all the projects financial and administrative issues, and to the PD for all of the project's substantive operational issues. From the strategic point of view of the project, the Project Coordinator will report on a periodic basis to the Steering Committee (SC). Generally he/she will be responsible for meeting government obligations under the project, under the national implementation modality (NIM). The incumbent will perform a liaison role with the Government, UNDP, implementing partners, NGOs and other stakeholders, and maintain close collaboration with any donor agencies supporting project activities.

Duties and Responsibilities

- Supervise and coordinate the production of project outputs, as per the project document;
- Mobilize all project inputs in accordance with procedures for nationally implemented projects;
- Coordinate the recruitment and selection of project personnel;
- Supervise and coordinate the work of all project staff, consultants and sub-contractors;
- Prepare and revise project work and financial plans;
- Liaise with UNDP, relevant government agencies, and all project partners, including donor organizations and NGOs for effective coordination of all project activities;
- Oversee and ensure timely submission of the Inception Report, Combined Project Implementation Review/Annual Project Report (PIR/APR), Technical reports, quarterly financial reports, and other reports as may be required by UNDP, GEF, TFS and other oversight agencies;
- Disseminate project reports and respond to queries from concerned stakeholders;
- Report progress of project to the SC, and ensure the fulfilment of SC directives;
- Oversee the exchange and sharing of experiences and lessons learned;
- Ensure the timely and effective implementation of all components of the project;
- Assist relevant government agencies and project partners including donor organizations and NGOs with development of essential skills through training workshops and on the job training thereby upgrading their institutional capabilities;
- Coordinate and assist the MoA (including reguional agricultural centres, sort and test points, institutes, etc.) and ANAS (including the GRI) with the initiation and implementation of project activities; and
- Carry out regular, announced and unannounced inspections of all sites and project-funded activities.

Qualifications and experience

- A post-graduate university degree in agriculture (or equivalent), agricultural economics or similar;
- At least 5 years of practical experience in agricultural planning, management and economics;
- At least 5 years of project management experience;

- Working experience in similar development partner funded projects and/or with international agricultural organisations, is highly desirable;
- Working experience with the project stakeholder institutions and agencies is desired;
- Ability to effectively coordinate a large, multi-stakeholder project;
- Ability to administer budgets, train and work effectively with counterpart staff at all levels and with all groups involved in the project;
- Strong writing, presentation and reporting skills;
- Strong computer skills;
- Excellent written communication skills; and
- A good working knowledge of Azerbaijani and English is a requirement.

AGRICULTURAL SCIENTIST

Background

The Agircultural Scientist will be locally recruited, based on an open competitive process. He/she will be responsible for coordinating the direct implementation of all field-based project activities in the targeted rayons, including the supervision over any field-based project staff, contracted consultants/service providers and sub-contractors. The Agricultural Scientist will report to the Project Coordinator for all of the project's substantive and administrative issues. Generally he/she will be responsible for assisting the state agricultural partner institutions in meeting their field-based obligations under the project. The incumbent will perform an important liaison role with the farmers, agricultural NGOs, research institutions, academic institutions and all other key stakeholders, and maintain close collaboration with any complementary local initiatives and programs. The Agricultural Scientist will assist the Project Coordinator in reporting, on a periodic basis, to the Steering Committee (SC).

Duties and Responsibilities

- Supervise and coordinate the work of all field-based project staff, consultants and sub-contractors;
- Prepare and revise project work and financial plans;
- Liaise with all relevant field-based government agencies, and all project partners, including donor organizations and NGOs for effective coordination of all project activities;
- Facilitate technical backstopping to field-based subcontractors and training activities supported by the Project;
- Provide inputs into the Combined Project Implementation Review/Annual Project Report (PIR/APR), Technical reports, quarterly financial reports, and other reports as may be required by the PC;
- Report progress of project to the PC;
- Document all field-based experiences and lessons learned;
- Ensure the timely and cost-effective implementation of all components of the project;
- Assist relevant government agencies and project partners including donor organizations and NGOs with the development of essential skills through training workshops and on the job training thereby upgrading their institutional capabilities;
- Coordinate and assist research, scientific and academic institutions with the initiation and implementation of any field studies and monitoring components of the project; and
- Carry out regular, announced and unannounced inspections of all project sites.

Qualifications

- A post-graduate university degree in agricultural science, or similar;
- At least 5 years of experience in crop agricultural management;
- Working experience with the project local stakeholder institutions and agencies is highly desired;
- Ability to effectively coordinate a diverse range of local stakeholders;
- Demonstrable ability to maintain effective communications with different stakeholders, and arrange stakeholder meetings and/or workshops;
- Ability to administer budgets, train and work effectively with counterpart staff at all levels and with all local groups involved in the project;
- Strong drafting, presentation and reporting skills;
- Strong computer skills, in particular mastery of all applications of the MS Office package and knowledge of GIS software;
- Excellent written and oral communication skills; and
- A good working knowledge of Azerbaijan is a requirement, while knowledge of English will be an advantage.

PROJECT GRANTS MANAGER

Background

The Project Grants Manager will be locally recruited based on an open competitive process. He/she will be responsible for the administration, management and monitoring of the small grants programme (under three outputs) within the project. The Project Administrator will report to the Project Coordinator. Generally, the Project Grants Manager will be responsible for supporting the Project Coordinator in meeting government obligations under the project, under the national implementation modality (NIM).

Duties and Responsibilities

- Develop administrative and financial guidelines, procedures and templates for the small grants programme;
- Prepare informational material for farmers, seed producers and food processors/retailers seeking financial and technical support under the small grants programme;
- Work with farmers, seed producers and food processors/retailers to ensure that individual applications for support align with the project objective and outcomes;
- Evaluate and review applications for small grants, authorise grants, draft grant agreements with selected grantees and monitor grant compliance;
- Review financial and performance reports of grants;
- Maintain a detailed record of grant agreements issued and disbursements to grantees;
- Maintain proper auditable documentation with adequate detail about the processed grants; and
- Work with external auditors to prepare grant audit.

Qualifications

- An undergraduate degree in agricultural economics, agricultural business science or similar;
- At least 5 years of experience in the administration of agricultural grants and subsidies;
- Working experience in similar development partner funded projects and/or with international agricultural organisations, is highly desirable;
- Working experience with the key project local stakeholder institutions and agencies;
- Ability to effectively coordinate a diverse range of local stakeholders;

- Demonstrable ability to maintain effective communications with different stakeholders groups;
- Ability to administer budgets and work effectively with counterpart staff at all levels and with all local groups involved in the project;
- Strong drafting, presentation and reporting skills;
- Strong computer skills, in particular mastery of all applications of the MS Office package;
- Excellent written and oral communication skills; and
- A good working knowledge of Azerbaijan is a requirement, while knowledge of English will be an advantage.

PROJECT FINANCIAL ASSISTANT

Background

The Project Financial Assistant will be locally recruited based on an open competitive process. He/she will be responsible for the overall financial management of the project. The Project Financial Assistant will report to the Project Coordinator. Generally, the Project Financial Assistant will be responsible for supporting the Project Coordinator in meeting government obligations under the project, under the national implementation modality (NIM).

Duties and Responsibilities

- Monitor project budgets and financial expenditures;
- Assist in all procurement and recruitment processes;
- Assist in the financial management of the projects small grants programme;
- Advise all project counterparts on applicable financial procedures and ensures their proper implementation;
- Contribute to the preparation and implementation of progress and financial reports;
- Support the preparation of project work-plans and budgets;
- Assist in the preparation of payments requests for operational expenses, salaries, insurance, etc. against project budgets and work plans;
- Follow-up on timely disbursements by UNDP CO;
- Maintain data on co-financing commitments to the project;
- Coordinate the annual financial audit of the project; and
- Perform other duties as required.

Qualifications and experience

- A post-school qualification (diploma, or equivalent), preferably in business administration (or equivalent);
- At least 5 years of relevant bookkeeping experience;
- Work experience in international projects or within international organisations is highly desirable;
- Demonstrable ability to administer project budgets, and track financial expenditure;
- Excellent computer skills, in particular mastery of all applications of the MS Office package;
- Excellent written communication skills; and
- A good working knowledge of Azerbaijani is a requirement, while knowledge of English will be an advantage.

OTHER CONSULTANTS

Position Titles	Indicative \$/person/ week	Estimated person weeks	Tasks to be performed
Local			
Agro-biodiversity conservation consultant	1000	15	Review and identify the optimal conservation tenure arrangements, and develop area-specific management programmes, for the pilot CWR conservation areas (Output 1.2)
Agro-biodiversity specialist	1000	30	Develop norms and standards for field gene banks; design the nursery layouts for each field gene bank; monitor the implementation of the planting and maintenance of the field gene banks; and administer the ongoing culturing, breeding and improvement programmes (Output 1.3)
Field data worker (5)	200	100 (20/ worker)	Assist the Agrarian Science Centres to collect and collate information on individual wheat, forage and vegetable farmers in the three project rayons (Output 2.2)
Project grants auditor	1000	24	Monitor, review and evaluate the cost-effectiveness of: (i) the small grants programme for wheat and barley seed producers (Output 1.4); (ii) the small grants programme for small wheat, vegetable and forage farmers (Output 3.1); and (iii) the small grants programme for small wheat, vegetable and forage farmers (Output 3.1)
Agricultural economist	1000	30	Assist the MoA to improve the agricultural incentives framework and assess the feasibility of agro-tourism development (Output 3.1)
Evaluation experts for mid-term (1) and final (1) evaluation	900	10 (5+5)	M&E The standard UNDP/GEF project evaluation TOR will be used. This will include: supporting the mid-term and the final evaluations; assisting the international evaluation consultant in order to assess the project progress, achievement of results and impacts; supporting the drafting of the evaluation report and discussing it with the project team, government and UNDP; and as necessary, participating in discussions to extract lessons for UNDP and GEF.
International			
Agro-biodiversity conservation consultant	3000	10	Review and identify the optimal conservation tenure arrangements, and develop area-specific management programmes, for the pilot CWR conservation areas (Output 1.2)
Agro-biodiversity specialist	3000	20	Develop norms and standards for field gene banks; design the nursery layouts for each field gene bank; monitor the implementation of the planting and maintenance of the field gene banks; and administer the ongoing culturing, breeding and improvement programmes (Output 1.3)
Agricultural training consultant	3000	12	Develop an overarching farmer training programme (in the form of a calendar of training opportunities) for the project (Output 2.3)
Agricultural economist	3000	24	Assist the MoA to improve the agricultural incentives framework and assess the feasibility of agro-tourism development (Output 3.1)
Evaluation experts for mid-term (1) and final (1) evaluation	3000	20 (10+10)	M&E The standard UNDP/GEF project evaluation TOR will be used. This will include: leading the mid-term and the final evaluations; working with the local evaluation consultant in order to assess the project progress, achievement of results and impacts; developing the draft evaluation report and discussing it with the project team, government and UNDP; and as necessary, participating in discussions to extract lessons for UNDP and GEF.

Complete and more thorough ToRs for these positions will be developed by the Project Coordinator, once recruited.

PART II: Project maps



Maps of the three project rayons (Sheki, Goranboy and Goychay)

PART III: Stakeholder Involvement Plan and Coordination with other Related Initiatives

Stakeholder Involvement Plan and Coordination with other Related Initiatives

1. Stakeholder identification

In PPG stage, a stakeholder analysis was undertaken in order to identify key stakeholders, assess their interests in the project and defines their roles and responsibilities in project implementation. The table below describes the major categories of stakeholders identified, and the level of involvement envisaged in the project.

Stakeholder	Roles and Responsibilities (as applicable to	Proposed involvement in the
N. 4	PGRFA)	Project
Nano Drazidantial Administration	Data Government (Ministries, Departments and	Will ansure the political support for
Presidential Administration	Determines the state policy of PORFA.	the project and ensure
A anguing Raling Dangaturant	relevant action plans, state programmes	and ensure
Agrarian Policy Department	relevant action plans, state programmes,	conformance with national policies,
of the Presidential	strategies and political decisions on PGRFA.	strategies and plans.
Administration		
Cabinet of Ministers	Adopts legislation related to PGRFA.	Will coordinate the efforts of the
		different affected Ministry's in the
Agro-industry and	Prepares drafts of legislation for adoption by	implementation of the project.
environmental departments of	the Cabinet of Ministers. Oversees the	Will be represented on the project
the Cabinet of Ministers	implementation of relevant legislation.	Steering Committee.
Ministry of Agriculture	Responsible for the agricultural sector,	The national implementing partner
	including the protection and use of agro-	for the project. Will chair the
	biodiversity.	project Steering Committee.
State Commission for Testing	Responsible for the testing, registration and	Will directly support the
and Protection of Selection	protection of of all crop seed varieties.	implementation of all project
Achievements		activities.
Agricultural Research Center	Responsible for the selection, research and	Will directly support - through the
	production of cereal-grain crops and the	Research Institute of Farming;
	maintenance of gene banks of cultivated	Research Institute of Feed,
	plants and their wild relatives.	Meadows and Pastures; Research
		Institute of Horticulture and
		Subtropical Plants; and Research
		Institute of Vegetable Production
		- the implementation of all project
		activities.
Azerbaijan National	The primary state scientific and technical	
Academy of Sciences	reesearch institution.	
Genetic Resources Institute	Responsible for the research, evaluation,	Will support and/or facilitate the
	inventorisation, certification, collection,	implementation of all project
	introduction, restoration and reproduction of	activities. Are a key project partner
	cultivated plants and their wild ancestors and	and will be represented on the
	rare, threatened and endangered genera and	project Steering Committee.
	species. It hosts the National Gene Bank and	
	is designated as the National Coordinator	
	Institute for PGRFA.	
The Institute of Soil Science	Responsible for the research, evaluation,	Will support or directly undertake
and Agro-Chemistry	monitoring and mapping of agricultural soils	research into the contribution of

Stakeholder	Roles and Responsibilities (as applicable to PGRFA)	Proposed involvement in the Project
	(including qualification of impacts,	native crops to mitigating the
	productivity and chemistry).	effects of land degradation.
Ministry of Ecology and	Responsible for environmental protection at	Will provide technical and
Natural Resources	the national level, including the planning and	professional support in the
	management of agro-biodiversity, natural	implementation of project
	pastures, forests, specially protected natural	activities.
	areas, soil conservation and pollution.	Will be represented on the project
		Steering Committee.
Biodiversity Protection and	Co-ordinates the development and	
Development of Specially	implementation of biodiversity conservation	Will support the project in the
Protected Natural Areas	plans. Administers the national system of	establishment and management of a
Department	Specially Protected Natural Areas (SPNAs).	network of protected areas for
		targeted crop wild relatives.
National Monitoring	Oversees the implementation of all	
Department on Environment	environmental monitoring programmes in the	Will ensure that the monitoring of
	country (atmospheric air, soil, water,	the state of crop wild relatives and
	geological, biodiversity).	landraces are aligned with, and
		integrated into, the national
		environmental monitoring system.
Ministry of Economy and	Supports the development of crop agriculture	Will facilitate access to agricultural
Industry	through the administration of state subsidies,	subsidies, grants and loans for
	disbursement of soft loans and special	project-targeted crop farmers.
	runding.	will support the development and
		administration of fiscal incentives
		for farmers to plant native crops.
		May be represented on the project
State Committee of	Deerensikle for moreleting to shring!	Will support the ansist in the
State Committee of	Responsible for regulating technical	will support the project in the
Standardization, Metrology	standards, measurements, accreditation	branding and certification of
ana Falenis	schemes, quanty control management and	agricultural produce derived from
	agricultural grop variatios)	native crops.
	L acal government	
District Executive Authorities	Pasponsible for delivering services (e.g.	Will facilitate and support the
District Executive Authornies	education health culture local	participation in and direct
Rural land officies of Head of	infrastructure and roads communication	involvement of targeted local
District Executive Power	services cultural facilities and social	farmers in project activities
District Executive 1 ower	assistance) within their territories that are	Representatives of the targeted
	outside the control of the relevant state	rayons may be respresented on the
	programs	project Steering Committee
Municipalities	Management of land use forests pastures and	project steering committee.
manneipannes	cultivated areas (within the framework of the	
Neighbourhood Committees	powers granted by relevant legislation).	
(rural villages)		
(14141 (114865)		
	Crop farmers	
Private farmer and family	Farms the majority of agricultural crops in the	The primary project beneficiaries.
smallholdings	country.	Will be represented on the project
		Steering Committee
1	Non-government and community-based organis	sations
Agro Information Center	NGO providing technical and professional	Will share, coordinate and
(AIC)	advice and support to farmers and other	collaborate with the project as and
	agricultural producers.	where relevant. May be contracted
		to implement specific project

Stakeholder	Roles and Responsibilities (as applicable to	Proposed involvement in the				
	PGKFA)	Project				
		training)				
Rüzgar Environmental	NGO addressing environmental issues	Will share, coordinate and				
Association	associated with unsustainable agricultural	collaborate with the project as and				
	practises (e.g. soil pollution, erosion,	where relevant.				
	salinisation).					
	Private sector	•				
Azertokhum LLC,	Private company operating a seed processing	May partner with the project in				
	and cultivation plant.	increasing the production of seeds				
Large seed producers (e.g.	Privately owned seed growing enterprises.	of selected native crops.				
Garabagh takhil, Kran Co						
and Susanagro)						
Ganja Agri-Business	Agricultural association providing	May be contracted to implement				
Association (GABA)	consultancy support to farmers and other	specific project activities (e.g.				
	agricultural producers	developing local farmer networks,				
		marketing certification and				
		marketing of organic agricultural				
		products)				
	Academic institutions					
Azerbaijan State Agrarian	Involved in agricultural education, extension,	May partner with the project to				
University (ASAU)	research, crop seed production and	provide specialised technical				
	maintenance of field gene banks.	support in the implementation of				
	_	targeted project activities.				
	Development partners					
GIZ, EU, FAO, World Bank,	Development partners supporting agricultural de	evelopment projects and initiatives in				
USAID	Azerbaijan will be important project partners. They will share, coordinate and					
	collaborate with the project as and where releva	nt. May be represented on the project				
	Steering Committee.					

The Ministry of Agriculture (MoA) will be the main institution responsible for different aspects of project implementation. It will work in close cooperation with all other affected institutions.

2. Information dissemination, consultation, and similar activities that took place during the PPG

During the PPG development phase, very close contact was maintained with stakeholders at the national and local levels. All affected national and local government institutions were directly involved in project development, as were key donor agencies. Numerous consultations, meetings and workshops occurred with some of the above stakeholders to discuss different aspects of project design like proposed output and activities.

These consultations included the following:

- At the national level, consultations were held in MoA, MENR and the UNDP CO. These meetings were designed to seek clarification as well as confirmation of government commitments, particularly related to co-financing of the project.
- A series of consultative visits to, and meetings with, rayon-based stakeholders like deputies of Rayon ExCom on agricultural fields, seed farmers, relevant institutions (advice centers, farming, vegetable and fodder research institutions) of the Ministry of Agriculture, vegetable farmer groups, potential landraces traders, regional branches of the Ministry of Ecology and Natural Resources. These meetings sought to collect evidence-based data, driven by the reality on the ground.
- Consultative meetings were conducted with representatives of all key local and international NGOs (local GABA, AIM, Ruzgar, RECC and internationals: GIZ, EU, WB, FAO etc) currently implementing
activities in support to local varieties with different approaches in order to understand the scope of their projects and explore possibilities for synergy, including co-financing.

- A consolidated stakeholder workshop was convened, where project activities were presented for approval and endorsement by all stakeholders. This workshop included representatives from key government Ministries (Ministry of Agriculture and their relevant department and institutions, Genetic research institute of Azerbaijan National academy of science etc), NGOs and university representatives; and
- Finally, after the draft documentation was prepared, it was then circulated for final review and comments and inputs.

3. Approach to stakeholder participation

The projects approach to stakeholder involvement and participation during project implementation is premised on the principles outlined in the table below.

Principle	Stakeholder participation will:		
Value Adding	be an essential means of adding value to the project		
Inclusivity	include all relevant stakeholders		
Accessibility and Access	be accessible and promote access to the process		
Transparency	be based on transparency and fair access to information; main provisions of the		
	project's plans and results will be published in local mass-media		
Fairness	ensure that all stakeholders are treated in a fair and unbiased way		
Accountability	be based on a commitment to accountability by all stakeholders		
Constructive	Seek to manage conflict and promote the public interest		
Redressing	Seek to redress inequity and injustice		
Capacitating	Seek to develop the capacity of all stakeholders		
Needs Based	be based on the needs of all stakeholders		
Flexible	be flexibly designed and implemented		
Rational and Coordinated	be rationally planned and coordinated, and not be ad hoc		
Excellence	be subject to ongoing reflection and improvement		

4. Stakeholder involvement plan

The project's design incorporates several features to ensure ongoing and effective stakeholder participation in the project's implementation. The mechanisms to facilitate involvement and active participation of different stakeholder in project implementation will comprise a number of different elements:

(i) Project inception workshop to enable stakeholder awareness of the start of project implementation

The project will be launched by a multi-stakeholder workshop. This workshop will provide an opportunity to provide all stakeholders with the most updated information on the project and the project work plan. It will also establish a basis for further consultation as the project's implementation commences.

The inception workshop will address a number of key issues, including: assisting all partners to fully understand and take ownership of the project; detail the roles, support services and complementary responsibilities of the PMU and relevant parters staff vis à vis the adjacent communities; and discuss the roles, functions, and responsibilities within the project structure, including reporting and communication lines, and conflict resolution mechanisms.

The Workshop will also be a forum to: finalize the first annual work plan as well as review and agree on the indicators, targets and their means of verification, and recheck assumptions and risks; provide a detailed overview of reporting, monitoring and evaluation (M&E) requirements; and plan and schedule project meetings for the Project Steering Committee.

(ii) Constitution of Project Steering Committee to ensure representation of stakeholder interests in project

A Project Steering Committee (PSC) will be constituted to ensure broad representation of all key interests throughout the project's implementation. The representation, and broad terms of reference, of the PSC are further described in <u>Section I, Part III</u> (Management Arrangements) of the Project Document.

(iii) Establishment of a Project Management Unit (PMU) to oversee stakeholder engagement processes during project

The Project Management Unit (PMU) - comprising a Project Coordinator (PC), Project Financial Assistant (PFA). Project Grants Manager (PGM) and Agricultural Scientist (AS) - will take direct operational and administrative responsibility for facilitating stakeholder involvement and ensuring increased local ownership of the project and its results. The Project Coordinator will ensure close coordination among key stakeholder organizations at the national level during the project period.

(iv) Project communications to facilitate ongoing awareness of project

The project will develop, implement and maintain a communications strategy to ensure that all stakeholders are informed on an ongoing basis about: the project's objectives; the projects activities; overall project progress; and the opportunities for involvement in various aspects of the project's implementation. This strategy will ensure the use of communication techniques and approaches that appropriate to the local contexts such as appropriate languages and other skills that enhance communication effectiveness. The project will support the development and maintainenance of a web-based platform for sharing and disseminating information on agro-biodiversity conservation and use.

(v) Stakeholder consultation and participation in project implementation

A participatory approach will be adopted to facilitate the continued involvement of all local stakeholders (including vulnerable and marginalized members of the community, NGOs and CSOs) in the implementation of the project activities within the targeted rayons.

(vi) Formal and informal structures to facilitate stakeholder involvement in project activities

The project will also actively seek to establish formalized structures to ensure the ongoing participation of local and institutional stakeholders in project activities. More specifically it will support: (a) the establishment of a regional Wheat Farmers Association as an institutional mechanism to improve the communication, collaboration and cooperation between wheat farmers in the 3 project rayons; and (b) the establishment and ongoing development of informal local farmer-to-farmer networks for vegetable and fodder farmers in the project rayons.

(vii) Capacity building

All project activities are strategically focused on building the capacity - at the systemic, institutional and individual level - in order to ensure sustainability of initial project investments. Significant GEF resources are directed at: (a) building the capacities of the different state agricultural institutions working in the three project rayons, particularly in respect of their ability to support the sustainable use of agricultural lands - through the increased use of native crops - in these rayons; and (b) supporting local crop farmers to become more productive, environmentally sustainable, financially viable and independent. Support to local farmers will include training and development of technical skills, strenghening financial management capacities,

building administrative competency, enhancing environmental awareness, enhancing personal development, improving literacy levels and developing business ethics.

The project will, wherever possible, use the services and facilities of existing local training and skills development institutions.

The focus of GEF support will be on farmers farming with the targeted native crop species in the project rayons, but could later expand - with co-financing support - to other native crops and regions, as the programme matures.

(viii) Coordination

This project is complementary to, and will ensure close coordination with, the GEF project Sustainable Land and Forest Management in the Greater Caucasus landscape. It will use, and build on, the significant foundation of community awareness and political buy-in already developed during the planning and implementation of the sustainable land and forest management project. More specifically, the lessons learnt and tools developed (e.g. legal registration procedures, association constitution, association regulations, membership application forms, etc.) during the process of establishing rayon-based pasture and forest user associations will be used to guide the establishment of the wheat farmers association and the local farmerto-farmer networks in this project.

This project will maintain a close working relationship with the Project Management Unit of the World Bankfunded Agricultural Competitiveness Improvement Project (ACIP) to ensure complementarity of activities, notably in the following areas: (i) development of the agri-business value chain; (ii) seed research, plant breeding, variety development and seed production and processing; (iii) strengthening the capacities of the state seed inspection services, seed testing commission and private seed growers; and (iv) expanding the availability of financing for agri-business/food processing enterprises.

The project will, wherever practicable, align its support to local farmers in the three project rayons with the second phase of the Azerbaijan Rural Investment Project (AzRIP), particularly in respect of grant funding to rural farmers for investment in agricultural infrastructure (notably for irrigation purposes).

The project will meet on a regular basis with the project management staff of the State Agency on Agricultural Credits (SAAC) – the implementing agent for both AzRIP and ACIP – in order to identify opportunities for ongoing collaboration. To further strengthen the cooperative relationship between these projects, it is also envisaged that the SAAC will be represented on the Project Steering Committee (SC).

This project will be fully integrated with the State Seed Fund to ensure that it will contribute to the primary objective

PART IV: Letters of co-financing commitment

[Refer to separate files for individual letters]

Name of Co-financier	Date	Amounts mentioned in letters	Amounts considered as project co- financing (in USD)
Ministry of Agriculture of the Azerbaijan Republic	21 December, 2015	Twenty million, five hundred thousand USD*	20,500,000
UNDP Azerbaijan	Not dated	Two hundred thousand USD	200,000
Total	20,700,000		

<u>Notes:</u> Of which one million USD constitutes in-kind co-financing and nineteen million, five hundred thousand USD constitutes ('parallel') cash financing.

PART V: GEF-UNDP Scorecards

[Refer to separate files for individual scorecards]

Scorecard

1. Land Degradation Focal Area - Portfolio Monitoring and Tracking Tool (PMAT)

2. Biodiversity Focal Area – BD Tracking Tool for Programs 3,4,5,6,7,8,9 and 10

SIGNATURE PAGE

Country: Azerbaijan

(To be completed after GEF CEO Endorsement)