



**Bioversity International/UNEP-GEF Project**  
***"In situ/On farm conservation and use of agrobiodiversity***  
**(horticultural crops and wild fruit species) in Central Asia"**



**REGIONAL WORKSHOP**  
**on Socio-economic aspects of agrobiodiversity**  
**conservation**

**13 - 15 April, 2011**  
**Tashkent, Uzbekistan**

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**Bioversity/UNEP-GEF Project “In situ/on farm conservation and use of agrobiodiversity (horticultural crops and their wild relatives) in Central Asia”**

**REGIONAL WORKSHOP**

**ПО СОЦИАЛЬНО-ЭКОНОМИЧЕСКИМ АСПЕКТАМ СОХРАНЕНИЯ  
АГРОБИОРАЗНООБРАЗИЯ ПЛОДОВЫХ КУЛЬТУР**

**Tashkent, Uzbekistan**

**13-15 April 2011**

**Summary**

Regional Workshop on Socio-economic aspects of agrobiodiversity conservation was organized within Bioversity International/UNEP-GEF Project “In situ/on farm conservation and use of agrobiodiversity (horticultural crops and fruit crops) in Central Asia” in 13-15 April 2011 in Tashkent, Uzbekistan. The representatives of project partners from Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan participated in the workshop. Mauricio Bellon, Director of Diversity for Livelihoods Programme, Bioversity International, participated in the workshop as the instructor. The list of participants is attached in Annex 1.

**Day 1. Wednesday. 13 April, 2011**

Muhabbat Turdieva, Regional Project Coordinator, opened the workshop and welcomed all participants. In her welcome speech, she emphasized the importance of socio-economic aspects of conservation of biodiversity of fruit crops and wild fruit species. She mentioned that these aspects have the most important role at this stage of project implementation. The main priority is completion of gathering of all data, related to socio-economic issues. M.K. Turdieva said that the goal of this workshop is to discuss the issues, encountered during the initial survey process, to review the results of analysis on farms, to develop a brief survey form for the analysis. The project partners have completed considerable activities on training of farmers, decision makers, researchers, etc. This huge potential should be used for conservation and sustainable use of agrobiodiversity of fruit crops after completion of the project. M.K. Turdieva expressed her gratitude to the meeting participants for their enthusiasm and the completed work, as well as, for participation at the workshop. The workshop agenda is given in Annex 2.

Dr. Mauricio Bellon, Director of the programme “Diversity for Livelihoods”, Bioversity International, welcomed all workshop participants and mentioned that he is very pleased to work with them again. He noted that in 2008, the previous workshop on socio-economic aspects was organized, there he attended with his colleague Elisabeth Gotor. He believes that the project is being implemented successful and especially in documentation, which is important in all stages of project implementation. Within the project, it was completed huge volume of research work on collection of socio-economic

data. During this a 3-day workshop, the participants will discuss the data, on which there could be questions and comments. The most important goal of this workshop is to develop a new survey questionnaire, which includes new questions. At the same time, some questions will be excluded, which is not actual and useful for data analysis on socio-economic aspects. When this questionnaire will be completed, we will have two types of data – the data collected with the previous questionnaire and the data from new questionnaire.

Then, Dr. Mauricio Bellon presented to workshop participants the preliminary results of analysis of the collected during the initial survey. In his presentation, he mentioned the role of impact, which is, in turn, a positive change through intervention or complex of activities. The main directions of the project cover the aspects, as conservation and management of diversity of local varieties of target crops in orchards and natural forests, improving of livelihoods of farmers and population of forest regions, who support and manage these varieties and forms through use of these varieties. At the result of project implementation more than 50% target farmers and forest regions population improved their lives (including, wellbeing) to 10%, thanks to effective management and use of genetic resources of fruit crops, diversity level of local varieties of fruit crops and wild fruit species at the experimental (project) plots. During the speech of Dr. Bellon, the participants discussed the question about 10% increase of wellbeing of population, as it is not clear what improved and how improved. The participants noted that the revenue and consumption can be increased, but not the wellbeing. Yuriy Serdyukov, participant from Kazakhstan, said his opinion about stability of revenue in agriculture, as the crop yield can vary considerably every year. He also mentioned that in Kazakhstan the average age of the heads of farm households is older than those in other countries of Central Asia. The reason for this situation is the current youth doesn't want to work in Agriculture.

The main instrument of assessment of project impact is the questionnaires on diversity level of fruit crops and on socio-economic aspects. The questionnaire on socio-economic aspects includes following data on the surveyed households: the general information on households, demographic information, indicators of wellbeing, land management, maintaining target fruit crops and their use, livelihoods strategy for households, the role of target crops for livelihoods of farmers.

The preliminary results of the initial survey were prepared at the basis of the collected at the basis of analysis of the collected data from 4 countries, including Kazakhstan, Tajikistan, Turkmenistan and Uzbekistan. In the mentioned counties, 377 households were surveyed in 136 villages, 55 districts and 23 provinces. According to the initial survey, 43% surveyed households in Uzbekistan cultivate apricot, 40% - grapevine, and 48% apple; in Tajikistan 91% the surveyed households cultivate apricot, 55% - grapevine, and 94% households cultivate apple trees. In Kazakhstan, 14% of the surveyed households cultivate apricot, 19% - cultivate grapevine, 48% - farmers

cultivate apples; in Turkmenistan, 32% population grow apricot, 34% - grapevine and 44% - apples.

The detailed reports of the initial survey results of each country were presented to the workshop participants for review. These reports were developed by the scientist of Bioversity International. Out of review of these reports, it was identified that there is need for indicating the unit of measurement (especially the national currency), as well as the gross revenue should be indicated as a weighted average value.

### **Day 2. Thursday, 14 April, 2011**

Mauricio Bellon presented the agenda of the present day and the results of the previous day. He also discussed along with the participants the gaps of base survey. Considering those gaps, it was mentioned that it is necessary to re-consider the size of sampling population, the value of gross revenue, cost of production and profit, related to target fruit crops, and develop the final version the questionnaire, which includes similar output data of the surveyed households.

Using the data of Uzbekistan, Dr. Mauricio Bellon demonstrated to the workshop participants the preliminary analysis of data. In his analysis, he changed the format of reports, received from questionnaires 1 as "Yes" and 2 as "No". In the previous data analysis, it was indicated 1 as "Yes" and 2 as "No". Dr. Bellon also demonstrated the method of statistical analysis, which permits to create datagroup and analysis of main components. From the collected data two groups were identified: a) small households (mainly household orchards), б) big households (mainly farms).

During the analysis, Yuri Serdyukov mentioned that it is necessary to consider climatic conditions of countries. For example, during 10 years in Kazakhstan there were not good harvest of peach and farmers, cultivating this crop haven't had benefit from this activity.

### **Day 3. Friday. 15 April, 2011.**

On the third day of the workshop, the meeting participants were proposed to review, discuss and agree on the latest amendments in the questionnaire. Then the participants developed questionnaire for gathering the data for assessment of the project impact. All comments and suggestions by the meeting participants were taken into account and incorporated into the design of a new questionnaire. For example, it was mentioned that nearly all farmers have a TV set and refrigerator.

During the discussion of the draft of the questionnaire, following sections were completed with new amendments: indicators of well being, strategies of livelihoods, and role of target fruit crops, etc. It was also mentioned that many questions on indicators of wellbeing level don't show difference in wellbeing of farmers households.

Muhabbat Turdieva closed the workshop and thanked all meeting participants for their fruitful work and participation at the workshop.

**REGIONAL WORKSHOP**  
**"Socio-economic aspects of agrobiodiversity conservation"**

**13-15 April 2011**  
**Tashkent, Uzbekistan**

**LIST OF PARTICIPANTS**

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**REGIONAL WORKSHOP**  
**“SOCIO-ECONOMIC ASPECTS OF FRUIT CROPS CONSERVATION”**


**April 13-15, 2011**  
**Tashkent, Uzbekistan**

**PROGRAMME**

	Wednesday 13 April		Thursday 14 April		Friday 15 April	
9.30 -10.30	I	Welcome statement Muhabbat Turdieva, Mauricio Bellon and Rustam Usmanov	V	Questionnaire structure Mauricio Bellon and Muhabbat Turdieva	IX	Questionnaire Finalization (maximum 3 pages) Mauricio Bellon, Muhabbat Turdieva and Countries
10.30-10.00	<b>Coffee and group photo</b>		<b>Coffee/Tea</b>		<b>Coffee/Tea</b>	
10.00-11.00	II	Introduction and objectives of socio-economic impact assessment Muhabbat Turdieva, Mauricio Bellon				
11.00-12.30	III	Results of preliminary analysis of socio-economic baseline from each country and Gaps in the collected baseline data Mauricio Bellon	VI	Development of Questionnaire (maximum 3 pages) Mauricio Bellon, Muhabbat Turdieva and Countries	X	Questionnaire Finalization (maximum 3 pages) Mauricio Bellon, Muhabbat Turdieva and Countries
12.30-14.00	<b>Lunch</b>		<b>Lunch</b>		<b>Lunch</b>	

	Wednesday 13 April		Thursday 14 April		Friday 15 April				
14.00-15.30	IV	Constrains faced during the survey. Presentation from each country	Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan	VII	Discussion Draft Questionnaire presentation (maximum 3 pages)	Mauricio Bellon, Muhabbat Turdieva and Countries	XI	Sampling in Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan	Mauricio Bellon, Muhabbat Turdieva and Countries
15.30-16.00	<b>Coffee/Tea</b>		<b>Coffee/Tea</b>		<b>Coffee/Tea</b>				
16.00-17.30	IV	Constrains faced during the survey. Presentation from each country (continued)	Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan	VIII	Introduction to the agenda of next day	Mauricio Bellon and Muhabbat Turdieva	XII	Conclusion	Mauricio Bellon, Muhabbat Turdieva

Baseline survey: preliminary results  
*Mauricio Bellon,*  
*Director programme, Bioversity International*



# Baseline Survey: Preliminary Results

Mauricio Bellon  
Director, Diversity for Livelihoods Programme  
Regional Workshop on Socio-Economic Aspects & Agrobiodiversity  
Conservation within Conservation & Use of Agriculture Biodiversity in  
Central Asia April 2011

*Improving lives through biodiversity research*



## Impact and its Assessment

- What is Impact?
  - The degree to which we are able to make a significant positive change in a problem situation that we have set ourselves to tackle, resolve or remove
- Impact is about making a positive difference through an intervention or set of interventions (project)
- For a project it is not enough to make an impact, it is necessary to document and measure it
  - hence the need for impact assessment
- Documenting and measuring the positive difference that a project has contributed to

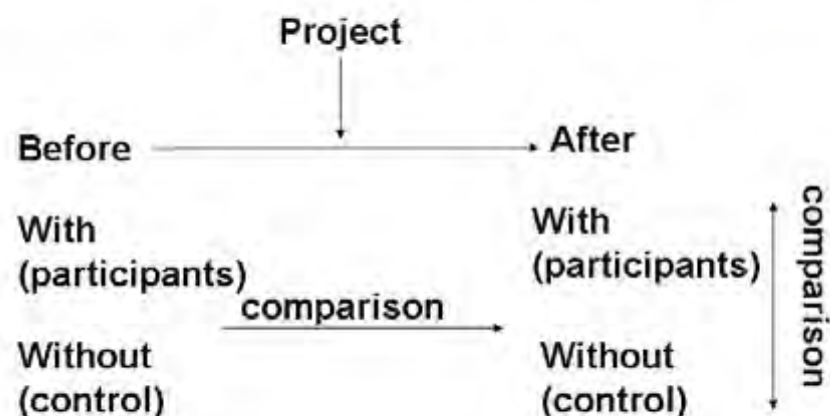


## How do we know our project made a difference?

- We need to show that there is a difference in the situation once the project has been implemented
- This difference did not happen due to other factors or changes that occur independently of our project
  - For example, income increased not because of our project, but simply because of economic growth in the region
- We can show that the observed difference happened at least in part because of the implementation of our project



## Basic design to assess the differences







## What are the differences that our project seeks to achieve?

- Diversity of local varieties of target species has to be maintained or enhanced in orchards, home gardens and natural forests (in the case of wild fruit trees)
- The well-being of farmer and forest dwellers who maintain and manage those species and varieties has to increase due to their use of them
- Corollary: this creates a virtuous cycle where use contributes to conserve local fruit diversity because use contributes to the “users” well-being



## Key performance indicator: Development objective

- Sustainably maintained materials in areas covered by horticultural crop varieties and wild fruit species of the target crops in pilot sites increased by 20% (333,555 hectares)
- At least 50% of target farmers and forest dwellers improve their livelihood by 10% through better management and use of their fruit genetic resources

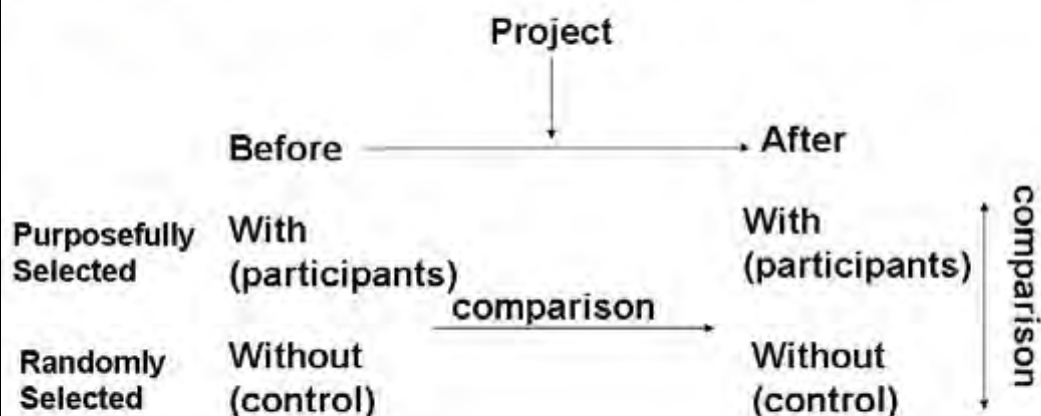


## What do we need to measure?

- The diversity of target species, including the area covered, in pilot sites
- The use of the diversity of target species by those who maintain them in pilot sites
- The well-being of the “users” in pilot sites



## Basic design to assess the differences







## Instruments used to assess differences

- Sampling framework (treatment and control)
- Diversity questionnaire
- Socioeconomic questionnaire
  - Demographic information
  - Wealth indicators
  - Land holdings
  - Holdings of target fruit species and yields
  - Household livelihood strategies (agricultural and non agricultural activities)
  - Roles of target species in livelihoods
    - Including % sales, % self-consumption, prices, and expenditures
  - Participation in organizations



## General Information of the Households

- Among the 4 countries selected, 136 villages were surveyed within the 55 districts in 23 provinces making a total of 377 households
- The principal ethnic is the specific of each country. Kazakhstan reported the greatest diversity of ethnicities
- In each country the language that predominates is particularly from each region. Only in Kazakhstan several groups of languages are use, being the Kazakh the first of them.



## Description of the Head of the Household

### Age

- Average age for the headed householders: 54 years old
- Oldest heads is Kazakhstan
- youngest heads in Turkmenistan
- Range age between 20 and 88 years.

### Education

- Kazakhstan is where the highest education level
- All countries have mostly the same level of education
- grammar preparation and onwards.



## General demographic description

- The population of Uzbekistan, Turkmenistan and Tajikistan is concentrated among the groups of ages from 16 to 50 yrs
- In Kazakhstan the age is within the group from 25 to over 50 yrs.
- The highest dependency ratio was reported for Tajikistan and Kazakhstan
- In general, the age pyramid has begun to invert



## Wealth Indicators

- Usually families in all countries are owners and have a formal dwelling.
- Turkmenistan is the only place where a few number of families have different dwelling tenure, as governmental for example.
- Uzbekistan has a very small percentage of households that have livestock.
- Turkmenistan is where less labour outside the household is hired. Tajikistan is where fewer households have assets.



## Farm size and area under fruit trees

- Usually families in all countries are owners and have a formal dwelling.
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## Fruit Crop Diversity

- The most popular fruit trees are apricot, grape and apple; after these also pomegranate and pear are frequently in their farms.
- Almond, Quince and Walnut are the crops that have less number of average trees
- Grape has the largest total quantity of cropping average area and majorly the greatest average yield in the last year.



## Household Livelihood Strategies

- The principal crops are potato and tomato.
- In percentage, the crops more cultivated are the less sold, while the crops less grown are more likely to be marketed.
- Household generally do not grow crops only for marketing purposes.



## Livelihoods strategies (number of households)

	Number of sources of income	Number of crops grown	Number of crops sold	Number of crops consumed	Number of animal species
<b>Uzbekistan</b>	7	23	16	23	6
<b>Kazakhstan</b>	6	29	25	26	6
<b>Turkmenistan</b>	16	32	25	31	69



## Sources of income Top 3 (number of households)

	Income from selling agricultural products	Pension, social allowances	Work in State organisation	Work outside the country	Income providing services
<b>Uzbekistan</b>	168	45	37		
<b>Tajikistan</b>	31		26	15	
<b>Kazakhstan</b>	64	18			14
<b>Turkmenistan</b>	96	20	68		

## Fruit crop diversity

fruit	Uzbekistan			Kazakhstan		Tajikistan			Turkmenistan		
	% farmers	Number of trees	Area (ha)	% farmers	Area (ha)	% farmers	Number of trees	Area (ha)	% farmers	Number of trees	Area (ha)
Apricot	43%	97	0.5	14%	5.8	91%	22.05	0.16	32%	140.68	1.43
grape	40%	339	1	19%	32.4	55%	204.15	2.23	94%	997.85	1.61
Pear	24%	28	0	22%	4.4	62%	21.52	0.01	24%	91.00	0.77
Apple	48%	119	1	69%	9.7	94%	39.95	0.09	44%	6629.07	1.33

## Role of target species

fruit	Uzbekistan		Tajikistan		Turkmenista	
	% sell	Self consumption (%)	% sell	Self consumption (%)	% sell	Self consumption (%)
Apple	74	26	41	55	76	16
Apricot	63	37	30	67	70	28
Grape	83	17	25	75	62	32
Pear	66	34	20	75	72	22
Walnut	79	21	35	62	81	19
Alycha	80	20	10	86	58	32

## Target fruit indicators

fruit	Uzbekistan				Tajikistan				Kazakhstan				Turkmenistan			
	n.	Gross returns	expenditure	Income	n.	Gross returns	expenditure	Income	n.	Gross returns	expenditure	Income	n.	Gross returns	expenditure	Income
Apple	5	56000	20000	36000	15	1051	452	599	36	64597	1877010	4229651	35	18142	11568260	18207777
Apricot	8	65000	43500	66667	5	1290	316.25	436.75	6	69667	702333	1936583	27	10537	2529231	50198071
Grape	26	259231	286000	1230435	0	0	63	1665	10	59903	804200	1526273	17	13217	2275333	11428226

## Issues

- Did the sample include farmers that were not targeted by the project (control group)?
- Need to review the sample size used
- Need to review the meaning of gross income, production costs and profits associated with target species
- Need to link to diversity survey
- Final questionnaire:
  - Similar information as baseline
  - Include a section on participation and adoption
  - To be applied to the same households as in the baseline





## Sampling framework

Country	Participants	Treatment Group	Population Sampled	Control Group
Uzbekistan	276	194	168	
Kazakhstan	88	86	64	
Tajikistan			47	
Turkmenistan			98	
Total			377	





## Draft of baseline questionnaire for gathering socio-economic data

**STRICTLY CONFIDENTIAL**

ID number :

Country:

## Questionnaire for socio-economic data

**General information:**

1. Interview date: (day/month/year)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2. Surname and name of interviewer :	<input type="radio"/> 1. <input type="radio"/> 2. <input type="radio"/> 3.					
3. Interview language:	<input type="radio"/> 1. Kazakh <input type="radio"/> 2. Kyrgyz <input type="radio"/> 3. Tajik <input type="radio"/> 4. Turkmen <input type="radio"/> 5. Uzbek <input type="radio"/> 6. Russian <input type="radio"/> 7. Other (indicate) <hr/>					
4. Data entering date: (day/month/year)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
5. Surname, name of head of household	<input type="text"/>					
6 Sex	<input type="radio"/> 1. M <input type="radio"/> 2. F					
7. Name of respondent (if different from head of household)	<input type="text"/>					
8. Ethnic group/nationality	<input type="radio"/> 1. Kazakh <input type="radio"/> 2. Kyrgyz <input type="radio"/> 3. Tajik <input type="radio"/> 4. Turkmen <input type="radio"/> 5. Uzbek <input type="radio"/> 6. Russian <input type="radio"/> 7. Other (indicate) <hr/>					
9. Communication language in household	<input type="radio"/> 1. Kazakh <input type="radio"/> 2. Kyrgyz <input type="radio"/> 3. Tajik <input type="radio"/> 4. Turkmen <input type="radio"/> 5. Uzbek					

	<ul style="list-style-type: none"><li>○ 6. Russian</li><li>○ 7. Other (indicate)</li></ul> <hr/>
10. Notes (if any)	

## Demographic information

For gathering complete information about members of the household, ask following questions:

- First, enumerate names of all family members, who lives and eats with you?
- Now, enumerate names of other persons, who is not your family member, but eats with you?
- Do you have some family members, who usually lives and eats with you, but currently is not here (ex., studies or works in city or abroad)?
- Name of persons, who is currently not here, but usually lives and eats with you (ex., lodgers, hired employees, others, who is not your family member)? Family members are all individuals, who lives in this house for more than 9 month. The guests, who lives here for more than 3 month are considered as family members; however, the hired employee, who has his own family in somewhere else is not family member. Person, who lives in the house for less than 9 month, is considered a family member, if only he is the head of family, or new born baby, or new spouse, or the family member, living out of the house, but under charge of the family (ex. students)
- Local name of household in Kazakhstan – «Domashnoe khozyaystvo», «Lichnoe podsobnoe khozyaystvo»
- Local name of household in Tajikistan - “Hovli”, “Maydon”, or “Zamin”.
- Local name of household in Turkmenistan – «Oy khodjalyk», «Mellek»

ID CODE	Name	1. Sex 1. M 2. F	2. Familial relationship with head of family: 1. Head 2. Spouse 3. Son/daughter 4. Spouse of son/daughter 5. Grandson 6. Father/ Mother 7. Brother/ Sister 8. Father in law – Mother in law 9. Brother in law/ Sister in law 10. Hired worker/ other	3. Age If less than 1 year, indicate '0'	4. Уровень образования 1. Illiterate 2. Literate, but not formal 3. Less than primary 4. Primary 5. Less than middle 6. Middle grammar school 7. Professional school 8. Middle technical school 9. Matriculate 10. University 11. BSc 12. Masters 11. PhD	5. Duration of attending of school (years)	6. Marital status 1. Marrie 2. Not married 3. Widower/widow 4. Divorced	7. Duration of living in the house within last 12 month (months)  Indicate '12', if living all the year or absent less than 1 month	8. According to above mentioned criterion, is he/she family member?  1. Yes 2. No
01									
02									

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03									
04									
05									
06									
07									
08									

## Indicators of Wellbeing

1. What type of the house, where do you live?	<input type="radio"/> 1. Ordinary house <input type="radio"/> 2. Apartment <input type="radio"/> 3. Part of a house <input type="radio"/> 4. Temporary construction <input type="radio"/> 5. Other (indicate):
2. What form of property?	<input type="radio"/> 1. Private <input type="radio"/> 2. State owned <input type="radio"/> 3. Rent <input type="radio"/> 3. Other (indicate) _____ <input type="radio"/>
3. What form of property, where your house is located?	<input type="radio"/> 1. Private <input type="radio"/> 2. State owned <input type="radio"/> 3. Rent <input type="radio"/> 3. Other (indicate) _____ <input type="radio"/>
4. Do you have private vehicle?	<input type="radio"/> 1. Yes <input type="radio"/> 2. No
5. Do you have household appliances?	<input type="radio"/> 1. Yes <input type="radio"/> 2. No <input type="radio"/> 3. TV set <input type="radio"/> 4. Video player <input type="radio"/> 5. DVD player <input type="radio"/> 6. Computer <input type="radio"/> 7. Satellite TV <input type="radio"/> 8. Other (indicate) _____ <input type="radio"/>
6. Do you have refrigerator?	<input type="radio"/> 1. Yes <input type="radio"/> 2. No
7. Do you have domestic animals?	<input type="radio"/> 1. No <input type="radio"/> 2. Yes <input type="radio"/> 3. Cow <input type="radio"/> 4. Sheep <input type="radio"/> 5. Goat <input type="radio"/> 6. Horse <input type="radio"/> 7. Camel <input type="radio"/> 8. Donkey <input type="radio"/> 9. Domestic birds <input type="radio"/> 10. Rabbit <input type="radio"/> 11. Dog <input type="radio"/> 12. Other (indicate) _____ <input type="radio"/>
8. Do you have a tractor and farming machine?	<input type="radio"/> 1. Yes <input type="radio"/> 2. No
9. Привлечение рабочей силы	<input type="radio"/> 1. Yes <input type="radio"/> 2. No
	<input type="radio"/>
	<input type="radio"/>

## Land owning

	Household orchard	Farm
What size of your farm land? (ha)	Total: including: <input type="radio"/> 1. Private <input type="radio"/> 2. State owned <input type="radio"/> 3. Other (indicate)	Total: including: <input type="radio"/> 1. Private <input type="radio"/> 2. State owned <input type="radio"/> 3. Leased <input type="radio"/> 4. Other (indicate)
What is the form of your farm?	<input type="radio"/> 1. Household orchard <input type="radio"/> 2. Private farm <input type="radio"/> 3. Other (indicate) _____	<input type="radio"/> 1. Daykhan farm <input type="radio"/> 2. Peasant farm <input type="radio"/> 3. Farm <input type="radio"/> 4. Daykhan association, <input type="radio"/> 5. Collective farm, <input type="radio"/> 6. Shirkats, <input type="radio"/> 7. Production cooperative <input type="radio"/> 8. Partnership with limited liability <input type="radio"/> 9. Joint Stock Company <input type="radio"/> 10. Association <input type="radio"/> 11. Communal management of forestry (leasing forest territories of forestry) <input type="radio"/> 12. Agricultural cooperatives – associations of small farms <input type="radio"/> 13. United peasant farms <input type="radio"/> 14. Private farm <input type="radio"/> 15. Land tenant <input type="radio"/> 16. Other (indicate) _____
What form of ownership is applicable to your farmland?	<input type="radio"/> 1. Private <input type="radio"/> 2. State owned <input type="radio"/> 3. Other (indicate) _____	<input type="radio"/> 1. Private owned <input type="radio"/> 2. State owned <input type="radio"/> 3. Collective <input type="radio"/> 4. Rented <input type="radio"/> 5. Other (indicate) _____
What is the territory of fruit orchards/trees and vineyard? (ha)		
Expenditures, which you spent last year for production of garden products (sum)		

Name of fruit crop	How many trees do you have in your orchard?		Harvest volume? (tons)	
	quantity	ha	the year before last year	last year
Apricots				
Alycha				
Grapes				
Pomegranate				
Pear				
Fig				
Almond				

	How many trees do you have in your orchard?		Harvest volume? (tons)	
Pistachio				
Apples				
<b>Other crops (indicate name)</b>				

**Livelihoods strategy of farm (for last 5 years)**

Revenue from agricultural activity	Tick <input checked="" type="checkbox"/>						Revenue for last year (sum)
	Yes	No	For market	For own consumption	For market and own consumption	Other (indicate)	
Melons and gourds							
Cabbage							
Pea							
Greens							
Potatoes							
Maize							
Sesame							
Flax							
Onion							
Lucerne							
Carrot							
Chick-pea							
Cucumber							
Pepper							
Sunflower							
Tomatoes							
Wheat							
Rice							
Safflower							
Sugar beet							
Sorghum							
Sudan grass							
Pumpkin							
Haricot							
Cauliflower							
Garlic							
Lentil							
Barley							
Beekeeping							
KPC							
Domestic birds							
MPC							
Horse							
Pig							
<b>Other crops (indicate below)</b>							



Revenue from agricultural activity	Tick <input type="checkbox"/>						Revenue for last year (sum)
	Yes	No	For market	For own consumption	For market and own consumption	Other (indicate)	

### Source of revenue of farm household (for last 5 years)

Main sources of revenue	Tick <input type="checkbox"/>			
	Yes	No	Main source of revenue	Complementary source of revenue
Work abroad				
Work at government organizations				
Work at private organizations				
Revenue from selling of agricultural products (plant industry, livestock, bird keeping, beekeeping)				
Revenue from services (reselling at the market, repair of vehicles, renovation of houses, commercial shop, hotel, etc.)				
Revenue from handcrafting activities (folk craft)				
Pension, allowances				
Revenue from leasing land and machines				
Revenue from gathering and selling wild fruit pharmaceutical plants				
Revenue of selling of firewood				
Casual revenues				
Other (indicate below)				

### ROLE OF TARGET FRUIT CROPS

ID	3. Name of fruit crop	List of possible usage	For market (% out of total harvest)	For own consumption (% out of total harvest)	Other (indicate)	Price on the basis of part of the yield (sum/tons)	Expenses of last year (sum/ha)	Revenue (sum) (if available)
1		o 1. Fresh fruits						
		o 2. Dried						

ID	3. Name of fruit crop	List of possible usage	For market (% out of total harvest)	For own consumption (% out of total harvest)	Other (indicate)	Price on the basis of part of the yield (sum/tons)	Expenses of last year (sum/ha)	Revenue (sum) (if available)
		fruits						
		○ 3. Processed to juice, jam, vine, etc.						
		○ 4. Fire woods						
		○ 5. Constructi on woods						
		○ 6. Collection of seeds for cultivation rootstocks						
		○ 7. Planting materials						
2		○ 1. Fresh fruits						
		○ 2. Dried fruits						
		○ 3. Processed to juice, jam, vine, etc.						
		○ 4. Fire woods						
		○ 5. Constructi on woods						
		○ 6. Collection of seeds for cultivation rootstocks						
		○ 7. Planting materials						
3		○ 1. Fresh fruits						
		○ 2. Dried fruits						
		○ 3. Processed to juice,						

<b>ID</b>	<b>3. Name of fruit crop</b>	<b>List of possible usage</b>	<b>For market (% out of total harvest)</b>	<b>For own consumption (% out of total harvest)</b>	<b>Other (indicate)</b>	<b>Price on the basis of part of the yield (sum/tons)</b>	<b>Expenses of last year (sum/ha)</b>	<b>Revenue (sum) (if available)</b>
		jam, vine, etc.						
		○ 4. Fire woods						
		○ 5. Constructi on woods						
		○ 6. Collection of seeds for cultivation rootstocks						
		○ 7. Planting materials						
4		○ 1. Fresh fruits						
		○ 2. Dried fruits						
		○ 3. Processed to juice, jam, vine, etc.						
		○ 4. Fire woods						
		○ 5. Constructi on woods						
		○ 6. Collection of seeds for cultivation rootstocks						
		○ 7. Planting materials						
5		○ 1. Fresh fruits						
		○ 2. Dried fruits						
		○ 3. Processed to juice, jam, vine, etc.						
		○ 4. Fire woods						

ID	3. Name of fruit crop	List of possible usage	For market (% out of total harvest)	For own consumption (% out of total harvest)	Other (indicate)	Price on the basis of part of the yield (sum/tons)	Expenses of last year (sum/ha)	Revenue (sum) (if available)
		○ 5. Construction woods						
		○ 6. Collection of seeds for cultivation rootstocks						
6		○ 1. Fresh fruits						
		○ 2. Dried fruits						
		○ 3. Processed to juice, jam, vine, etc.						
		○ 4. Fire woods						
		○ 5. Construction woods						
		○ 6. Collection of seeds for cultivation rootstocks						
		○ 7. Planting materials						

**Social activity (for last 5 years)**

1. Are you or any member of your family a member of public organizations/community?	<input type="radio"/> 1. Yes <input type="radio"/> 2. No
2. Why you are not the member of a public organization?	<input type="radio"/> 1. No need <input type="radio"/> 2. Such organizations are not available <input type="radio"/> 3. I don't trust them <input type="radio"/> 4. Other ( <i>indicate</i> ):

ID	3. Name of organization	4. Type of organization 1. Local organization 2. Local community	5. In what activity of the organization do you participate?	7. Quantity of meetings per year	8. Year of entering into the organization	9. Year of leaving the organization

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1.	Jamoat (local public organizations)					
2.	Council of elders					
3.	Mahallya committees					
4.	Council of citizens					
5.	Group of mutual aid					
6.	Council of women					
7.	Labor unions					
8.	Youth union of the country					
9.	Gengesh (local administration)					
10.	Association of farmers					
11.	Association of gardeners					
12.	Community management of forests					
13.	Association of water users					