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

Regional workshop on Component 4 «*Capacity building*»

24 - 26 May 2011
Tashkent, Uzbekistan

CONTENT

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

Regional workshop on
Component 4 «Capacity building»

24-26 May 2011
Tashkent, Uzbekistan

Brief summary

Regional workshop on Capacity building component of the project, organized within Bioversity International/UNEP-GEF Project «*In situ*/On Farm conservation and use of agrobiodiversity (fruit crops and wild fruit species) in Central Asia», took place on 24-26 May 2011 in Tashkent, Uzbekistan. 13 representatives of Research institutes, Heads of National and Regional training center, and consultants on training from Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan participated the workshop. Dr. Per Rudebjer, scientist of education and capacity building unit of Bioversity International and M.K. Turdieva, regional coordinator of the project, attended the workshop as instructors.

Day 1, 24 May 2011

Opening session

M.K. Turdieva, Regional project coordinator welcomed all workshop participants. In her speech, she mentioned that this project covers wide range of activities on capacity building, which include organization of trainings, development of training materials, establishing and equipping training centers, etc. In spite of considerable achievements in this aspect of project implementation, there are some delays in implementation of activities in the domain of capacity building. Considering that this year is the final year of project implementation, this workshop will be devoted to review of the achievements and imperfections in this direction of the project implementation. As well, the meeting participants will discuss suggestions and develop recommendations to improve regional partnership and activities on capacity bruilding.

Then M.K. Turdieva introduced the workshop participants and thanked them for participation. The list of participants is given in Annex 1.

Per Rudebjer, also welcomed all workshop participants and mentioned that this workshop is the third one, organized on the component Capacity Building within the project. In the previous workshops, a lot of time was spent on planning training materials and other activities of this component, discussion and development of recommendations for improving process of development of training materials, etc. This time more attention will be paid to analysis of the achievements and to learned lessons in the project implementation process. This workshop will mainly address two main directions: further functioning of the regional and national training centers, organized within the project and improving the quality of training materials.

Then Per Rudebjer introduced the workshop agenda to the participants and demonstrated a presentation with the information on strategies and objective of the project in this direction. In his presentation, he provided information about issues, discussed in previous workshops and enumerated main issues, to be discussed in this workshop. The workshop agenda and the presentation of Per Rudebjer were provided in Annexes 2 and 3, respectively.

Next, K.T. Turgunbaev, Regional consultant of the project on training, presented a presentation with the updated information and suggestions on Component 4 "Capacity building". K.T. Turgunbaev mentioned that one of the key objectives of this project is to increase potential on realisation of all aspects of conservation of genetic diversity of fruit crops at local, National and Regional levels. For achieving these results, following activities were implemented within the project: regional and national training centers were organized; a range of training materials, modules, and guidelines on conservation of priority fruit crops were developed; training workshop were organized for researchers, professors of Universities, forestry staff and farmers; opportunities for ensuring further activities of training centers were discussed with national project partners. At present, five regional and eight national training centers are functioning in countries and these training centers were equipped with modern equipments, needed for conducting trainings. K.T. Turgunbaev also reported on results of activities of capacity building and mentioned that all regional and national training centers should improve quality of training courses for ensuring competitiveness of training centers and ensuring sustainability of their further activities. Presentation of K.T. Turgunbaev is provided in Annex 4.

Session 1. Analysis of training materials

Per Rudebjer presented a presentation on "Triple A" framework to ensure "Availability, Access and Applicability" of training materials and results of research works. He informed the workshop participants about application of "Triple A" framework to activities of centers of CGIAR, including Bioversity International. According to this framework, the research outputs of CGIAR centers are considered as international public goods and should be available to use at international level and serve to international development. For this reason, the structure of "Triple A" framework was developed to ensure Availability, Accessibility and Applicability of uorputs of research works of CGIAR centers. After application of this framework, 53% research outputs of CGIAR centers became available for public use. Per Rudebjer also discussed applicability of this approach for effective distribution of results of this UNEP-GEF project. For this, the workshop participants should answer following questions: a) Are the training materials produced in the project available? Where? Can you find the citations easily?; б) Are the materials easy to find and access by the different users? In what format? Can they be downloaded in full ?; в) Are they easy to adapt, transform, apply and re-use by others? At the end of the presentation, Per Rudebjer discussed with the meeting participants main issues and propositions to ensure availability, accessibility and applicability of training materials. Full text of the presentation of Per Rudebjer about "Triple A" framework is given in Annex 5.

Next, Dilmurad Razikov, regional project consultant on ICT, presented web portal of the project, where electronic versions of publications were uploaded. In his presentation, D. Razikov informed about stages and process of web portal development, about structure of web site and uploaded resources. After the presentation, the workshop participants stated their propositions related to the demonstrated web site and about facilitating access to the prepared

training materials. Per Rudebjer and I.Y. Abdurakhmanov proposed suggestions concerning improving of the interface of the web site, navigation and access to resources of web portal. Presentation of D. Razikov is provided in Annex 6.

Then the workshop participants divided into several groups and filled the database on training materials of each country. During this process, the participants also identified publications, recommended to publication at regional level. Then the groups presented the results of their work. In their presentations, representatives of each country presented several publications, which are important at regional level and presented some recommendations for improving exchange of training materials among project partners.

T.N. Nurmuratuly informed that since the beginning of the project, national project implementation unit in Kazakhstan published more than 20 publications. During the workshop T.N. Nurmuratuly presented 8 publications, and 5 ones out of which recommended at regional level. R.A. Sultanov wanted to know, why all publications, published in Kazakhstan, are in Russian language and not in National, Kazakh language. T.N. Nurmuratuly explained that Russain language is the most popular language in Kazakhstan. In order to ensure that all interested people could read and use these publications, they are published in Russian language.

Next, K.T. Shalpykov reported that national project partners in Kyrgyzstan developed eighteen publications. And eight of them are published and distributed during several training courses and expeditions. These publications are prepared in Russian and Kyrgyz languages. K.T. Shalpykov mentioned that some of the prepared publications have importance at regional level and these publications are recommended to publish and distribute at regional level. For instance, recommendations on "Selection of the best forms and cultivation of planting materials of walnut", brochure "Factors decreasing sustainability of nut bearing forests" and recommendations on "Maintenance of currants on farms" are considered useful for interested parties at regional level.

S.B. Shamuradova also presented publications, developed within the project in Tajikistan. On By example of eighteen publications, she demonstrated the filled tables on training materials, developed in Tajikistan and stated that these publications include mainly practical guidelines, recommendations, books, calendars and video films, intended for farmers, land tenants and horticulturists. These materials are published in Tajik and Russian languages.

Next, R.A. Sultanov presented the completed database with 15 publications, prepared by project partners in Uzbekistan. He mentioned that the publications, developed and published in Uzbekistan are distributed through Ministry of Agriculture and Water Resources of the Republic of Uzbekistan. The recommendations and brochures are in Uzbek and Russian languages.

At the end of the presentations the workshop participants discussed the presented materials. Per Rudebjer asked the representatives of each country to make a list of publication materials, to be published at regional level. Thus, the workshop participants were trained in filling the database of training materials. The completed database on training materials is given in Annex 7.

Day 2, 25 May 2011

The second day of the workshop, the workshop participants from each country presented the priority publications, to publish and distribute at regional level. For instance, T.N. Nurmuratuly

proposed 5 recommendations and booklets, developed by project partners in Kazakhstan for using at regional level. Representatives of Uzbekistan proposed 4 training materials for distribution at the region. They also suggested several recommendations for effective use of these materials. The workshop participants from Kyrgyzstan presented 6 recommendations and participants from Tajikistan presented 3 recommendations, to publish at regional level. The presentations with the recommendations are given in Annex 8.

At the end of the presentations, the participants discussed the proposed training materials and identified following objectives for improving publication, distribution and use of training materials at regional level: a) During the discussions, it was observed that the specialists of several partner countries are working on the same species of fruit crops. And in these countries different recommendations were developed on technologies of cultivation and distribution of these species. The implemented activities at regional level could be improved through learning and completing with similar works, done in other countries. Only after completing and improving of these training materials could be published at regional level. b) It is necessary to collect information about mechanisms and distribution channels of training materials and out of this, to decide how to distribute at regional level. c) It is necessary to develop the best incentives for use of the distributed materials.

Session 2. Ensuring sustainable functioning of national/regional training centers.

Presentation about role of regional and national training centers in implementation of Component 4 – "Capacity building" was presented by M.K. Turdieva. In her presentation, M.K. Turdieva introduced the target groups of component on Capacity Building and main achievements of the project in this domain. She also informed about Regional and National training centers, developed within the project and main goals of these centers. The presentation of M.K. Turdieva was presented in Annex 9.

Then, National project coordinator in Kazakhstan, T.N. Nurmuratuly made a presentation on activities of the Regional training center on Socio-economic issues, established at the Kazakh Research institute of economy of agricultural complex and development of rural territories, and National training center on Priority fruit crops, established at Kazakh research institute of horticulture and viticulture. T.N. Nurmuratuly informed about training workshops, organized in 2010, and presented schedule of training courses, to be organized in 2011. In his speech he also informed about further activities of these training centers after completion of the project and stated that further functioning of regional training on socio-economic aspects is not decided yet and it depends on policy of Kazakh research institute of Economics. National coordinator also explained that the staff of regional and national training centers also participate actively in development of training materials. The presentation of T.N. Nurmuratuly is presented in Annex 10.

M.K. Rajapbaev, the representative of Regional training center on walnut (Kyrgyzstan) made a presentation on activities of this training center. According to his presentation, Regional training center on walnut was established in 2008 at Research institute of Forestry of National Academy of Sciences of Kyrgyz Republic. This training center is equipped with modern facilities, needed for organizing quality training. There is also a library, including all publications on walnut and nut bearing forests of Kyrgyzstan. M.K. Rajapbaev also reported about organized training workshops at the training centers and about planned activities for ensuring sustainable functioning of training

center. These activities include: installation of internet communication at the training center, encouragement of the work of training center personnel, distribution of information about the training center and organized training courses, completing/updating collection of varieties and forms of walnut and negotiating with Kyrgyz National Agrarian University on organizing training courses at the centre, etc. Presentation of M.K. Rajapbaev is given in Annex 11.

Curator of national training center on priority fruit crops in Kyrgyzstan, I.S. Sodombekov, reported on activities of this training center. In 2010 National training center was organized at Kyrgyz National Agrarian University named after K.I. Skryabin. This training center is equipped with all necessary facilities for organizing quality training courses and text books, guidelines and modules on priority fruit crops were developed. Currently, the training courses are organized for researchers, professors of Universities, farmers and population of mountainous regions of Kyrgyzstan. Presentation of I.S. Sodombekov is given in Annex 12.

Representative of Tajikistan, S.B. Shomuradova informed on activities of one Regional and two National training centers, functioning within the project. She informed that at National training centre on priority fruit crops, 7 planned training courses were organized for decision makers, researchers, farmers, land tenants and children environmental association "Zumrad". At the Regional training centre three regional and two national training workshops were organized. The specialists of the training centers organized six mobile training courses and five round tables. S.B. Shamuradova also drew attention on issues, related to activities of regional training center on apricot. For instance, there are issues, related to electricity cuts and absence of internet communication at the training centre. The presentation of S.B. Shomuradova is given in Annex 13.

E.V. Khegay, National consultant on capacity building in Uzbekistan, provided a brief presentation on activities of Regional and National training centers organized within the project in Uzbekistan She informed about organized events by training centers. According to provided information, in 2010 about 100 farmers and 21 researchers were trained in National training centers. 24 researchers improved their knowledge at regional training center on molecular markers. At the end of the presentation, M.K. Turdieva asked to inform about issues, constraints and gaps in activities of training centers in Uzbekistan. R.A. Sultanov, the head of National training center on fruit crops clarified that there are some issues related to lack of time of decision-makers and very often the courses with their participation are delayed. He also stated that the future activity of each training center is already identified. For this purpose thematic work plans are elaborated for 2012-2014, the training materials will be completed and training courses will be organized on target fruit crops. The presentation of representatives of Uzbekistan is provided in Annex 14.

Then Per Rudebjer summarized presentations of national partners and notes some points of the provided information:
a) Several training centers established contacts with official Educational institutions, Universities. This may contribute to ensuring sustainable functioning of training centers. On the other side, an informal connection between students and researchers and this is very useful for existence of the centers.
b) Some training centers are also working on institutionalization of trainingcenters through getting permits and certifications for organizing training courses.
c) The training centers are organizing not only training course, but also round tables, conferences and other events.
d) There are issues related to access to internet and electricity.

e) Nearly all training centers are focused on a specific crop or crops. At the same time, these center can work in cross cutting directions, too. For example, use of participatory methods for management of biodiversity, issues, related to production chain for fruit crops, access to genetic resources, etc. In other words, there are a range of directions, on what the training centers should pay attention for ensuring sustainable functioning of training centers.

Further, K.T. Turgunbaev presented a table with information on status of organization of regional training workshops in 2010 and stated that regional workshops, planned to organize in Kazakhstan on Socio-economics, in Kyrgyzstan on walnut and in Turkmenistan on pomegranate was not organized due to various reasons. The representatives of Kazakhstan and Kyrgyzstan promised to complete these gaps in 2011. The table with information on organized training courses is given in Annex 15.

Day 3, 26 May 2011

Session 3. Recommendations for ensuring sustainability of project activities in Capacity building

On the third day, the participants joined in several groups and discussed options for ensuring sustainable functioning of Regional and National training centers. After plenary discussion, the participants developed recommendations and plan of actions on ensuring sustainable functioning of regional and national training centers. Then the members of each groups presented some recommendations.

T.N. Nurmuratuly, national project coordinator in Kazakhstan presented eight propositions to ensure sustainable functioning of training centers, which include organization of training courses on new achievement of science and best practices for enhancing innovative activities of farmers – horticulturists; introduction advocacy in research organizations, where organized training centers to catalyzing introduction of new technologies into horticulture and viticulture; providing constant assistance to leading researchers in organizing training courses at modern level; providing access to database of institutions for farmers to address with issues related to further development of horticulture and viticulture; review of training materials and increasing the capacity of conservation and rational use of genetic resources of fruit crops and grapes; preparation of instructors among researchers of research institutions, graduate students; development of training programmes, putting all data and booklets on web site of the institute and obtaining certification from concerned authorities. The PPT slides with recommendations of the team from Kazakhstan are given in Annex 16.

Group of participants from Kyrgyztan proposed nine recommendations on further functioning of training centers in the region: 1) Developing of mechanisms of incentives to encourage activities of responsible persons of training centers and instructors; 2) Establishing sustainable communication with other training centers for exchange of experiences, training materials, modules (if necessary involving instructors); 3) Use of new information technologies; 4) Developing schedule of future training courses; 5) Distributing information on training centers, on possible courses and instructors; 6) Developing mechanisms of commercialization of training centers; 7) Reviewing issues related to certification of training centers; 8) Improving qualification of instructors (with involvement of young specialists of this domain); 9) Complete collection (stands, graphic

materials) of varieties and forms of fruit crops. Recommendations of representatives of Kyrgyzstan are given in Annex 17.

The representatives of Tajikistan also proposed following recommendations: 1) Maintaining training centers at the expense of rental fee from other organizations, organizing their courses at the centre. 2) Allocation of some funds by Tajik Academy of Agricultural Sciences for purchase of stationery and maintenance of equipments at the centers. 3) Organization of mobile training courses at places and covering organization expenses by research institutes. 4) To invite to training courses at the centres the farmers-land tenants, living around. 5) Providing consultancy to farmers, who have computers, through e-mails or farmer's associations. The propositions of Tajikistan concerning sustainable functioning of training centers are provided in Annex 18.

The participants from Uzbekistan also presented following suggestions for sustainable functioning of training centers at national and regional levels: 1) Certification of training centers through concerning authorities. 2) Including the training center in government investment project. 3) Commercialization of training centers to ensure their sustainable functioning. 4) Participation at innovative technologies fair with proposition of services to popularize and make agreements (participation at various exhibitions with training materials, developed by training centers). 5) Develop and enhance mechanism of coordination and management of training centers on Uzbekistan. 6) Constantly improving qualifications of instructors through participation at International projects and programmes «Keep yourself advanced». 7) Updating training materials considering new achievements of sciences. 8) Including training – components in International, investment projects. 9) Organizing virtual forums between countries. 10) Organization of one common regional center to coordinate activities of training centers of the region (after completion of the project). 11) Develop and strengthen regional mechanism of coordination and management of activities of training centers. The recommendations of Uzbekistan are given in Annex 19.

On the basis of suggested propositions, a summary table was elaborated with work plan for ensuring sustainability of training centers, including national and regional cooperation. The table also identifies mechanisms of realization of activities, responsible organizations and deadlines. This table is provided in Annex 20.

As well, workplan for preparation for International conference on conservation of agrobiodiversity and on strengthening cooperation between Universities.

Annex 1

Bioversity International/UNEP-GEF Project
"*In situ*/On farm Conservation & Use of Agricultural Biodiversity (Fruit Crops & Wild Fruit Species) in Central Asia"
Regional Workshop on
Reviewing Component 4 - Capacity Building

24-26 May 2011
Tashkent, Uzbekistan

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Annex 2

Bioversity International /UNEP-GEF project "*In Situ*/On Farm Conservation and Use of Agrobiodiversity in Central Asia"

3rd Regional Workshop on reviewing Component 4 - Capacity Building 24-26 May, in Tashkent, Uzbekistan

Background

One of the key objectives of the International Bioversity/UNEP-GEF project "In Situ/On Farm Conservation and Use of Agrobiodiversity in Central Asia" is ***to strengthen the capacity to implement all aspects of fruit species genetic diversity conservation at local, national and regional levels***.

The project's capacity development agenda is being implemented by national and regional **Centres for Training,** with the support of national and regional consultants for training, and by the project's coordination unit.

Regional dialogue, knowledge sharing and monitoring are important aspects of the Component 4 - Capacity Building. For this reason, two regional workshops have been held, in 2009 and 2010, respectively, targeting staff and partners who implement this project component:

1. **Workshop to review Component 4 - Capacity building,** 23-25 March, 2009, in Tashkent. This workshop had the following objectives:
   - To review the Operational Plan at the regional and national levels for the capacity building component for the two remaining years 2009-2010
   - To review the guidelines for implementing national-level training
   - To agree on documentation and reporting of training, and the sharing resources among the five countries
   - To agree on monitoring and evaluation of training.

2. **Workshop on Monitoring and Planning Quality Training 2010,** 13-14 April, 2010 in Tashkent, Uzbekistan. The workshop addressed three objectives:
   - To prepare for successful implementation of regional courses in 2010
   - To put in place a quality management system for training
   - To plan for sharing the results when the project ends

Additionally, the **Regional Consultant for Training** has been monitoring the Capacity Building Component and supported its implementation. In his final report for 2010, he made a set of recommendations that will need to be jointly considered by implementing partners and the UNEP-GEF project's coordination. We therefore propose that a 3rd

regional workshop on Capacity Building is held on 24-26 May, 2011 in Taskhent, Uzbekistan.

The 3rd Regional Workshop on Capacity Building

The no-cost extension of the project in 2011 allows a successfully conclusion of the Capacity Building Component and a final analysis of lessons learned. It is a good opportunity to analyse how the human and institutional capacity developed can continue to support the conservation of fruit species genetic diversity in Central Asia. The **Regional and National Centres for Training** will play a key role in this process, as indicated in the project's logframe.

Secondly, the range of **training materials** that have been developed for different target groups are valuable and useful also after the project ends. This requires that the materials are not only available, but also accessible to the intended users in a format that is applicable to their specific situation.

This 3rd and final workshop of the Capacity Building team will therefore focus on:

- the sustainability of Centres for Training
- how to update and share training materials produced in the project.

Objectives

The ***general objective*** is to make recommendations how National and Regional Centers for Training can continue to develop capacity of different target groups, for *in situ*/on-farm conservation and use of fruit species genetic resources in Central Asia.

The objectives of the workshop are:

1. To review the status of training materials and recommend needs for updating and regional sharing.
2. To share experiences and good practices of the regional and national centers for training
3. To make recommendations on sustaining the operations of regional/national centers for training.

Expected Results

- Training materials for different target groups analysed and needs for updating and sharing materials identified
- Experiences and good practices in Centers for Training documented and shared.
- Recommendations for sustaining operations of regional/national centers for training made.

Participants

Workshop participants will include:

- National and regional consultants for training

- National project coordinators/consultants for training
- Leaders/staff of National and Regional Centres for Training
- Regional project coordination staff
- Capacity Development Unit, Bioversity International, Rome.

Workshop Agenda

Time	24 May
9.00 - 10.30	**Opening Session** ▪ Opening address - (Muhabbat Turdieva) ▪ Opening address - (Per Rudebjer) ▪ Overview of workshop objective and program - (Per Rudebjer) ▪ Update on Project Component 4. Capacity Building and review of recommendations from regional consultancy - (Kubanichbek Turgunbaev)
10.30-10.45	Coffee-break
10.45-12.30	**Session 1. Analysis of training materials** *(Facilitators: Per Rudebjer and Turgunbaev K.T.)* ▪ Presentation on 'Triple A -approach' to improve Availability, Access to and Applicability of training materials (Per Rudebjer) ▪ Demonstration of the Website for training materials (Dilmurad Razikov) ▪ Exhibition of all training materials produced by each country
12.30-13.30	Lunch
13.30-15.30	▪ Group work in national groups to update database on training materials in each country (NOTE: see excel sheet)
15.30-15.45	Coffee-break
15.45-17.00	▪ Presentation of group work on training materials ▪ Discussion of results

Time	25 May
9.00 - 10.30	▪ Setting regional priorities, and making recommendations for updating and sharing training materials.
10.30-10.45	
10.45-12.30	**Session 2. Sustaining the operations of national & regional centres for training** ▪ Overview of the role of national and regional centers for training in the UNEP/GEF project (Muhabbat Turdieva) ▪ Experiences from regional and national centers of training in each country (one presentation/country 15 m in each) NOTE: see guide questions
12.30-13.30	
13.30-15.30	▪ Experiences from regional and national centers of training in each country (one presentation/country 15 m in each) (continuation) ▪ Summary data on training conducted, using information from the training database (Kubanichbek Turgunbaev)

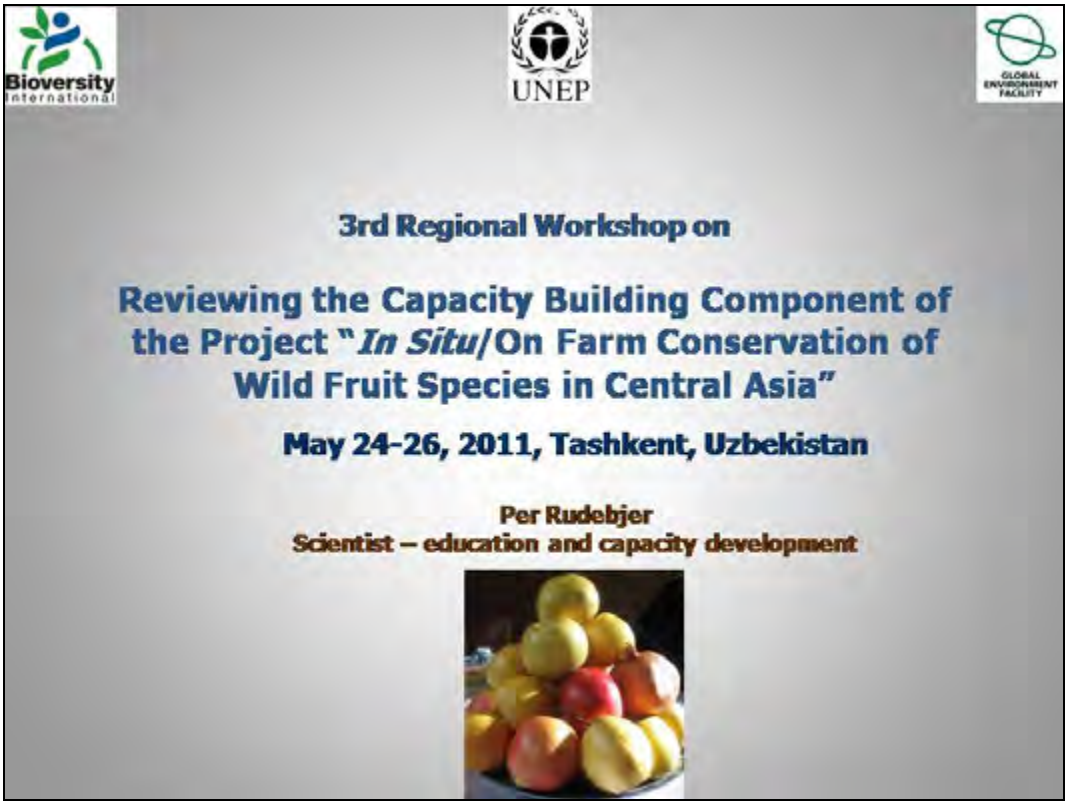
15.30-15.45	
15.45-17.00	▪ Group work on sustaining the operations of Regional and National Centers for Training

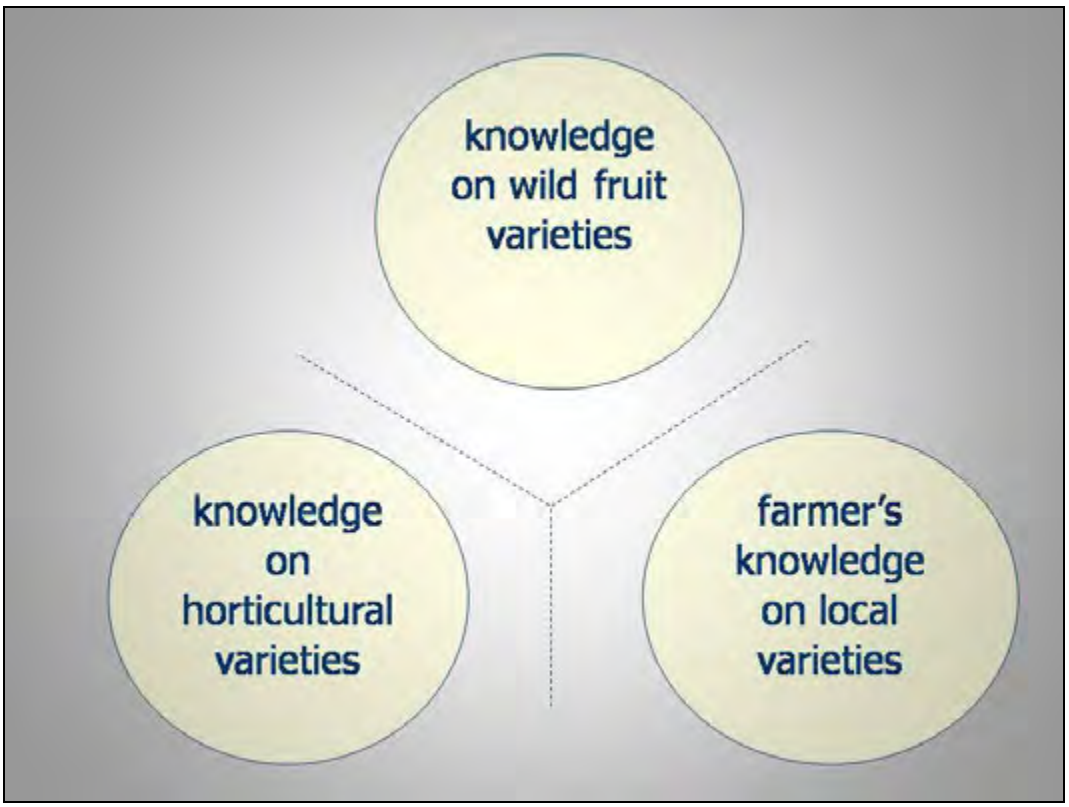
Time	26 May
9.00 - 10.30	▪ Presentation of group work on Centers for Training.
10.30-10.45	
10.45-12.30	**Session 3. Recommendations for sustaining the project's capacity building** ▪ Introduction (Muhabbat Turdieva, Kubanichbek Turgunbaev) ▪ Group on recommendations
12.30-13.30	
13.30-15.30	▪ Presentation of group work ▪ Plenary discussion on recommendations to sustain the projects capacity building approach.
15.30-15.45	
15.45-17.00	▪ Closing session
19.00	Farewell Dinner

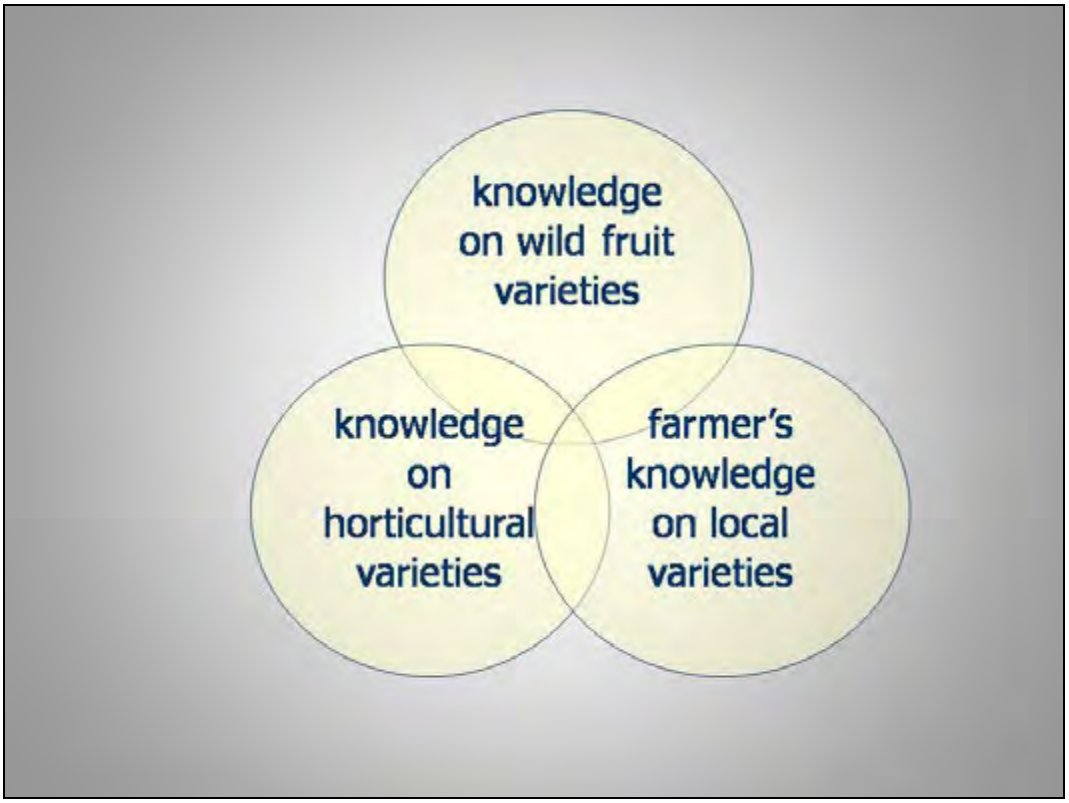
Annex 3

Reviewing the Capacity Building Component of the Project "*In situ*/On farm Conservation of Wild Fruit Species in Central Asia

Per Rudebjer,
Education and Capacity Development Unit, Bioversity International




knowledge on wild fruit varieties
knowledge on horticultural varieties
farmer's knowledge on local varieties


knowledge on wild fruit varieties
knowledge on horticultural varieties
farmer's knowledge on local varieties

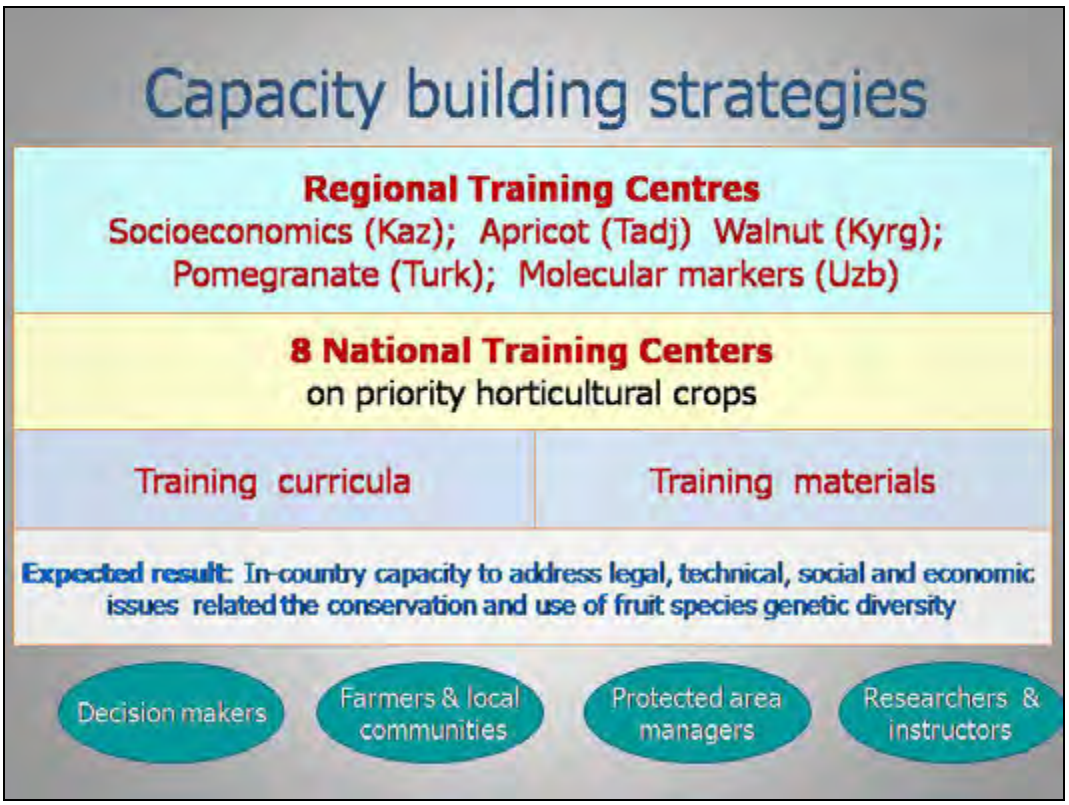
UNEP-GEF Central Asia Fruit Tree project: Components

- Provide options to policy-makers for strengthening legal and policy frameworks;
- Assess, document, and manage local varieties of horticultural crops and wild fruit species in a sustainable way
- Promote broad stakeholder participation, representative decision making, and strong partnerships

- Strengthen the capacity to implement all aspects of fruit species genetic diversity conservation at local, national and regional levels

Capacity building strategies

- Regional and National Training Centers
- Training courses
- Training materials



2009 workshop

- Status of capacity building component: are we on track to deliver project results to target groups?
- Good practices for managing the training cycle
- Knowledge sharing among project components
- How to manage a large number of courses efficiently

2010 workshop

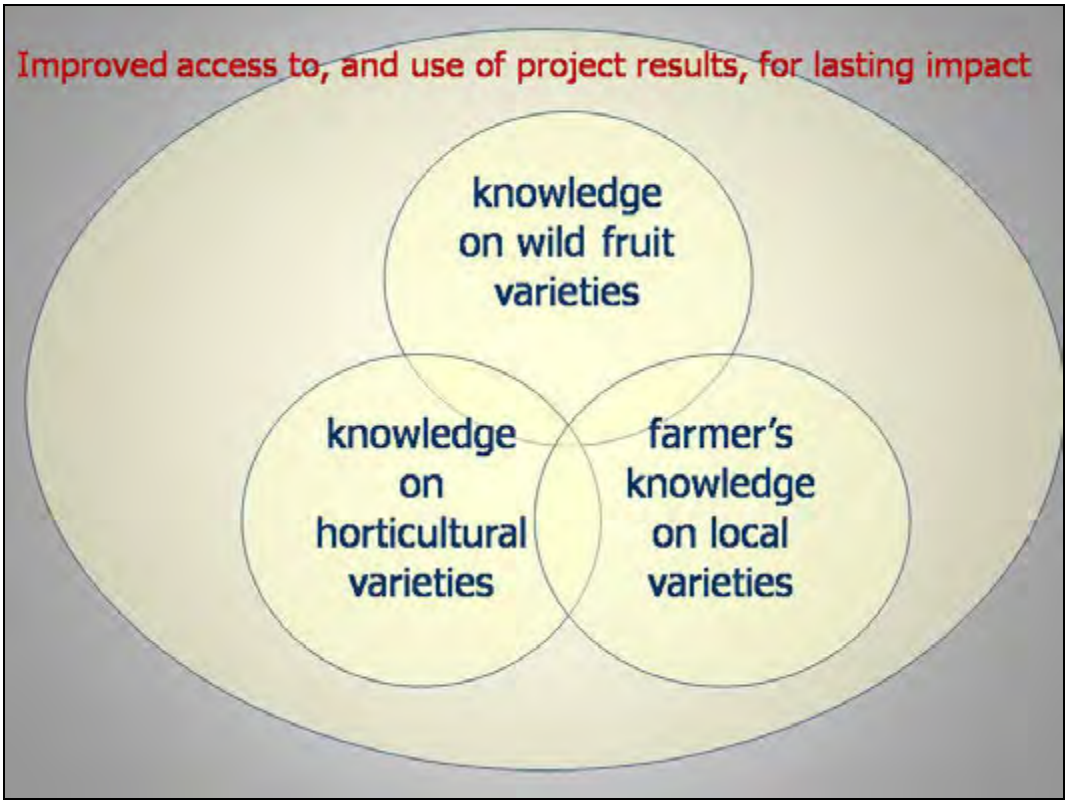
- Prepared for successful implementation of regional courses in 2010
- Reviewed a quality management system for training
  - Training database
  - Guidelines for training materials development
  - Guidelines for review and approval
- Planed for sharing the results when the project ends

2011 Workshop - Objectives

- To review the status of training materials and recommend needs for updating and regional sharing
- To share experiences and good practices of the regional and national centers for training
- To make recommendations on sustaining the operations of regional/national centers for training

Expected results

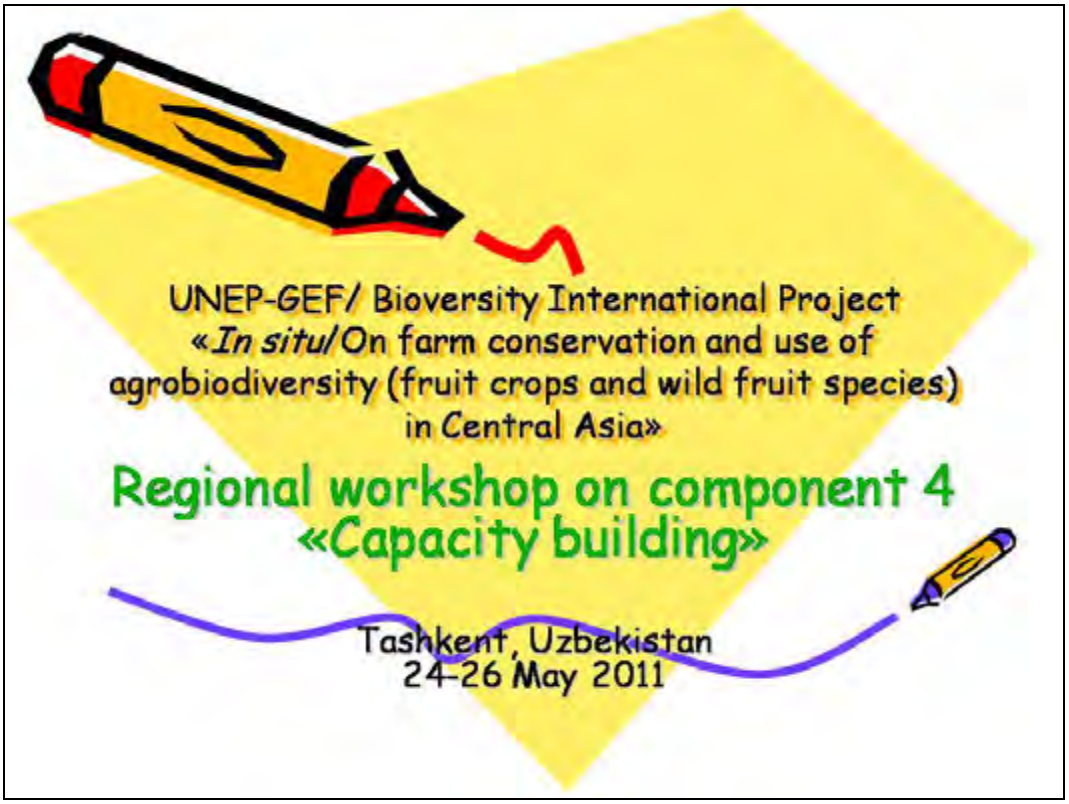
- Database on training materials, with recommendations for updating and sharing
- Experiences and good practices in Centers for Training presented and analysed
- Advice on how to sustain the operations of regional/national centers for training
- Workshop report in Russian, with summary in English



Annex 4

Updates on Project Component 4 - Capacity Building and review of recommendations from regional consultancy

Kubanichbek Turgunbaev,
Regional Consultant on Training



Capacity building

In the frame of the project in five countries of Central Asia, various events were organized on capacity building of all interested parties:

- In partner countries Regional and National traiing centers were organized;
- Developed different training programmes, modules, guidelines on priority fruit crops of each country;
- Trainings were organized at Regional and National levels for researchers, University teachers, forestry staff and farmers;
- Interested groups increased knowledge and skills, which is necessary to implement conservation of genetic diversity of fruit crops at local, National and Regional level.

Capacity building

During the meeting, organized within the project, following aspects were discussed to further improvement of training process:

- ✓ Review of trainings, organized in 2009, analyze issues and constraints, encountered in organization;
- ✓ Updating/review of Regional and national work plans on organizing trainings and development of training materials in 2010, taking into account all suggestions and comments of interested parties;
- ✓ Develop "Guidelines for development of training materials" to ensure quality of realization of this component of the project;
- ✓ Discussion of further functioning of National and Regional training center, established within the project

Capacity building

- In 5 countries functioning 5 Regional and 7 National training centers
- At training centers there are all conditions for organizing training courses
- The centers are equipped with all necessary facilities for organizing quality treainings
- In 2010 within the project, more than 36 courses were organized (in Turkmenistan 15, In Uzbekistan 6 National and 1 Regional courses, in Kazakhstan 5, in Kyrgyzstan 2 and in Tajikistan 8 national and 1 Regional courses).

Capacity building

- The training centers expressed their readiness to organize training courses for students, postgraduate students and specialists from other regions
- The subject area of training courses covered mainly farmers and local population on issues related to management of biodiversity (technologies of multiplication and cultivation; methods of contribution to natural regeneration, processing, storage and marketing of fruit products)

Capacity building

- Regional training programme for 2010 developed and planned 5 trainings.
- To increase public awareness about services provided by Training centers proposed to develop booklets, create databases on trainings and to put information on project web site
- On the basis of results of discussions of implementation of trainings work plan in 2009, National training programmes are updated for 2010 in each country

Capacity building

- The updated trainings workplan for 2010 propose a wide range of training courses
- These are – short term courses for decision makers, mobile courses for farmers and forestry staff, high profile trainings for researchers.
- Instructions are elaborated and the responsible persons are trained on updating database on trainings
- The guidelines indicates succession procedures of entering the data and responsibilities of staff for timeliness and exactitude of the entered information

Regional training courses

1. «Assessment of distribution and diversity level of walnut» (Kyrgyzstan, November 2009).
2. «Capacity building» (Tashkent, Uzbekistan, April 2010)
3. Cultivation of seedlings, establishing and maintenance of apricot orchards» (Khudjand, Tajikistan, 11-13 May 2010).
4. «Linking information from Focus Group Discussion (FGD), Household Surveys, and Farm and Forest Assessment for Cultivated and Wild Fruit Tree Diversity in Central Asia» . (Tashkent, Uzbekistan. 22-25 February 2010)

Regional training courses

5. Regional workshop on legislative framework (Tashkent, Uzbekistan, 23-25 March 2010)
6. «Application of molecular markers technologies in studies of PGR». (Tashkent, Uzbekistan, 13-17 August 2010)

National training courses work plan for 2010

- In Kazakhstan 9 training courses are planned;
- In Kyrgyzstan 8 training courses are planned;
- In Tajikistan 16 training courses are planned;
- In Turkmenistan 13 training courses are planned;
- In Uzbekistan 10 training courses are planned

Development of training materials for different target groups

- On the basis of consultations with national project partners, the work plan for development of training materials was updated
- In partner countries authors' committees are organized for development of training materials
- The group of authors includes key project partners: responsible persons for training centers, scientists, representatives of research institutions and Universities.
- The authors prepare the training materials according to instructions and requirements of «Guidelines for development of training materials».

The work plan for publishing training materials (recommendations, brochures, booklets, text books) for 2010

In 2010, it is planned to prepare and publish:

- in Kazakhstan - 8;
- in Kyrgyzstan -11 ;
- in Tajikistan -15;
- in Turkmenistan -10;
- in Uzbekistan 11 training materials.

The work plan for publishing training materials (recommendations, brochures, booklets, text books) for 2010

- in Kazakhstan published 5 training materials,
- in Tajikistan – 9,
- in Uzbekistan – 8,
- in Kyrgyzstan - 4,
- in Turkmenistan - 3

Instructors

The list of national instructors is updated for conducting workshops and training courses. In each country there are qualified instructors to conduct training courses:

- in Kazakhstan 11,
- in Kyrgyzstan 12,
- in Tajikistan 14,
- in Turkmenistan 12,
- in Uzbekistan 11.
- Qualification of instructors are improved through participation in Regional workshops on capacity building.
- As well, through providing necessary materials and consultations from Regional office of the project.

Monitoring and assessment of training process

- National instructors and heads of regional and national training centers were trained on conducting assessment of training workshops and courses
- During the training process the assessment is conducted through filling in special assessment from, developed by Bioversity International.
- The established feedback with trainees permits organizers to consider existing imperfections and take steps for correction

Recommendations for Regional Project Implementation Unit

- Discuss main aspects of implementation of component 4 with National project coordinators in Kyrgyzstan and Turkmenistan
- Clarify in 2011 the trainings work plan, by category will strengthen control for successful organization of Regional courses (Kyrgyzstan)
- Negotiate at the level of government organization of Regional training courses (Turkmenistan)
- Oblige National project coordinators on responsibility of conducting Regional and National training courses

Recommendations to National project implementation units/National consultants on training

- Strengthen communication with national and regional training centers for ensuring effective planning and conducting quality training courses
- Follow instructions on review and approval of prepared training materials within the project for further publication of materials
- Seek for options for conducting training courses jointly with other partner organizations and international programmes in rural development for improving communication among different initiatives and projects.

Recommendations for curators of Regional and National training centers

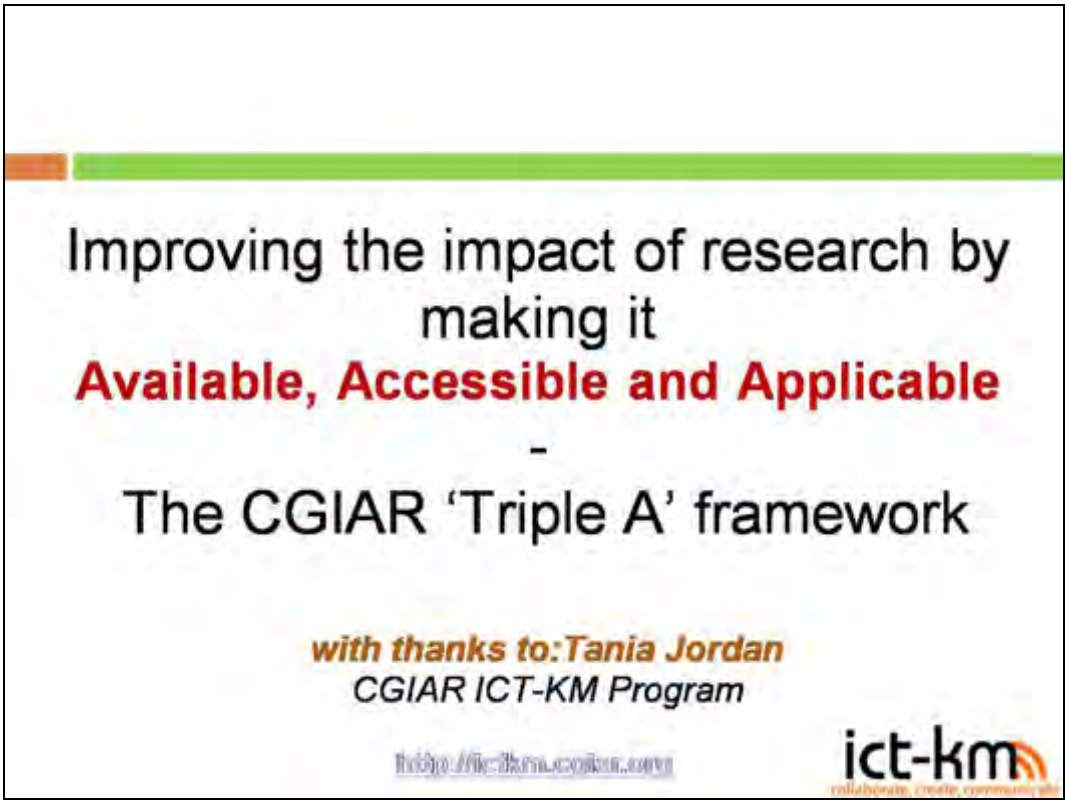
- Identify the strength and weaknesses of training process and submit reports on them to Regional and National project implementation units for improving training quality
- Develop booklets on services, provided by training centers, develop a database on trainings and publish regularly information on webpages of project and research institutes
- Organize training courses at national level, where trainees of Regional workshops serve as instructors and train other participants to acquired skills and knowledge
- Discuss integration of courses on agrobiodiversity into Universities curriculum

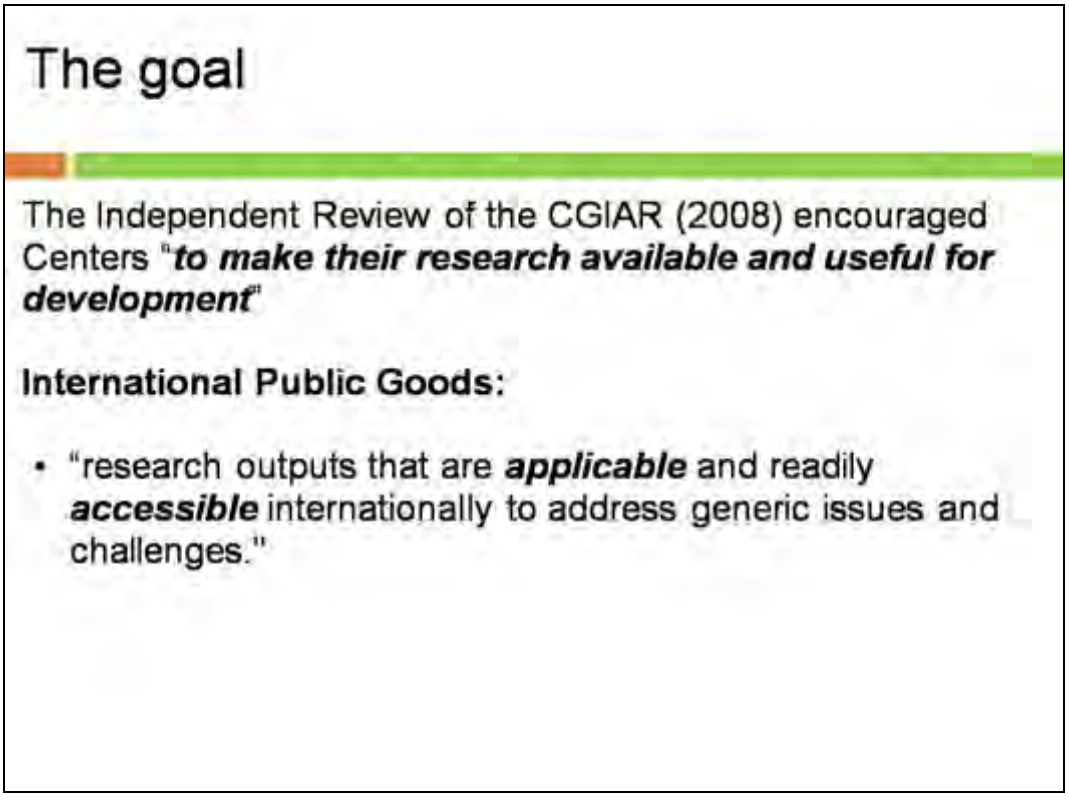
Thanks for your attention!

Annex 5

"Triple A –approach" to improve Availability, Access and Applicability of training materials

Per Rudebjer,
Education and Capacity Development Unit, Bioversity International





The need for impact

Research organizations cannot be satisfied just knowing they have produced high quality science.

It is essential that outputs of the research are ***communicated and put to use*** in the village, in the lab, in training and education institutions, or across the negotiating table...

...but how can we put them into use if we cannot find them or use them?

What is the Triple-A Framework?

Availability: "Can I find it?"

- are research outputs stored in open digital formats and described using public metadata standards so they can be found through structured search and access systems?

Accessibility: "Can I put my hands on it?"

- are research outputs publicly available online so they can be queried, viewed and obtained in full?

Applicability: "Can I make it travel?"

- are the outputs easy to adapt, transform, apply and re-use by others?

www.ictkm.cgiar.org

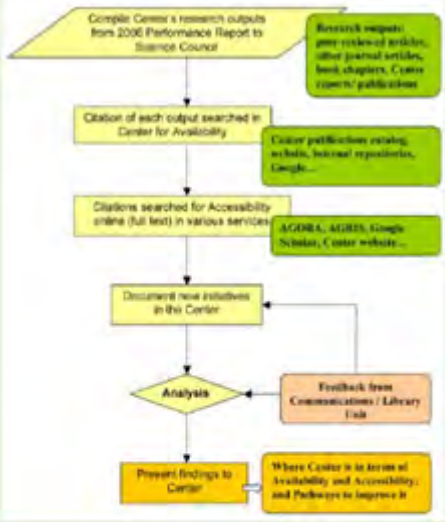
Case study: 6 CGIAR centers

Reviewing where we are and where we want to be

- **ICT-KM program developed a framework to:**
  - 'Benchmark' how research outputs measure up according to their availability, accessibility and applicability
  - Help scientists and Centers/Programs and partners improve access to and use of results

Why be accessible?

- Research outputs -- knowledge and technologies -- have benefits beyond the project sites & partners.
- To have high impact the knowledge products need to be:
  - Described and stored for posterity
  - Easily found and accessed
  - Easily shared and re-used
  - Available, accessible and applicable without restrictions

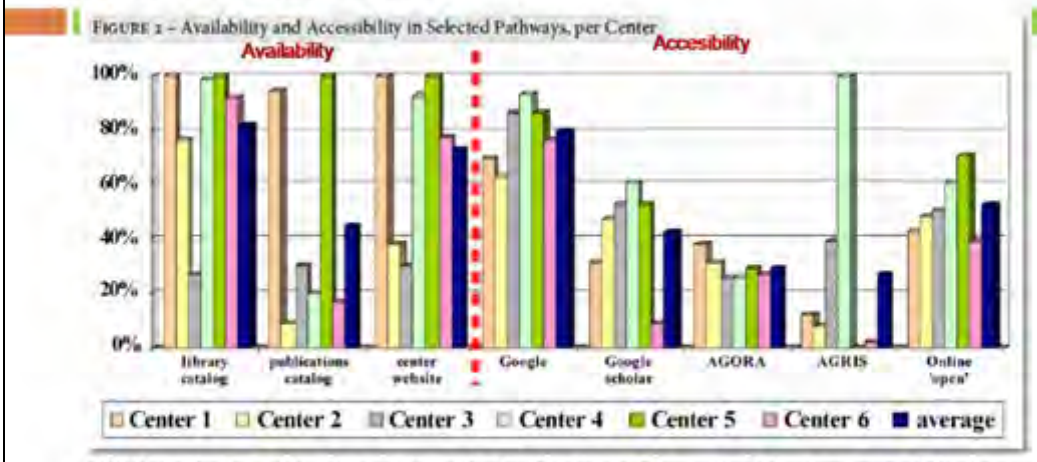


Triple A exercise for the CGIAR centers - what did we do?

Study Methodology to determine:

- Availability (citation/presence)
- Accessibility (full text online)

Results of the Triple A exercise for the CGIAR centers



AGORA: setup by FAO with major journal publishers to enable access to these journal articles from developing countries at no cost
AGRIS : global public domain Database with 2.6 million structured bibliographical records on agricultural science and technology

Average = **53%** of CGIAR Outputs are *Available* and *Accessible*.

Results of the Triple A exercise for the CGIAR centers

- Not all of a Center's outputs are internally available in full.
- What is available, often cannot be made public
- Many products are available online, but most, especially those not published by a Center, are not immediately open (i.e. accessible full text).
- Copyright policies vary, often not encouraging outputs to travel...

Lessons learned…

- In some cases, research outputs are not captured
- They are locked up behind password
- They are kept inside intranets
- They are not on the Internet, or in digital format
- Their addresses are not permanent
- They are not easy to find
- Licenses do not encourage re-use
- They can't travel as far as they should

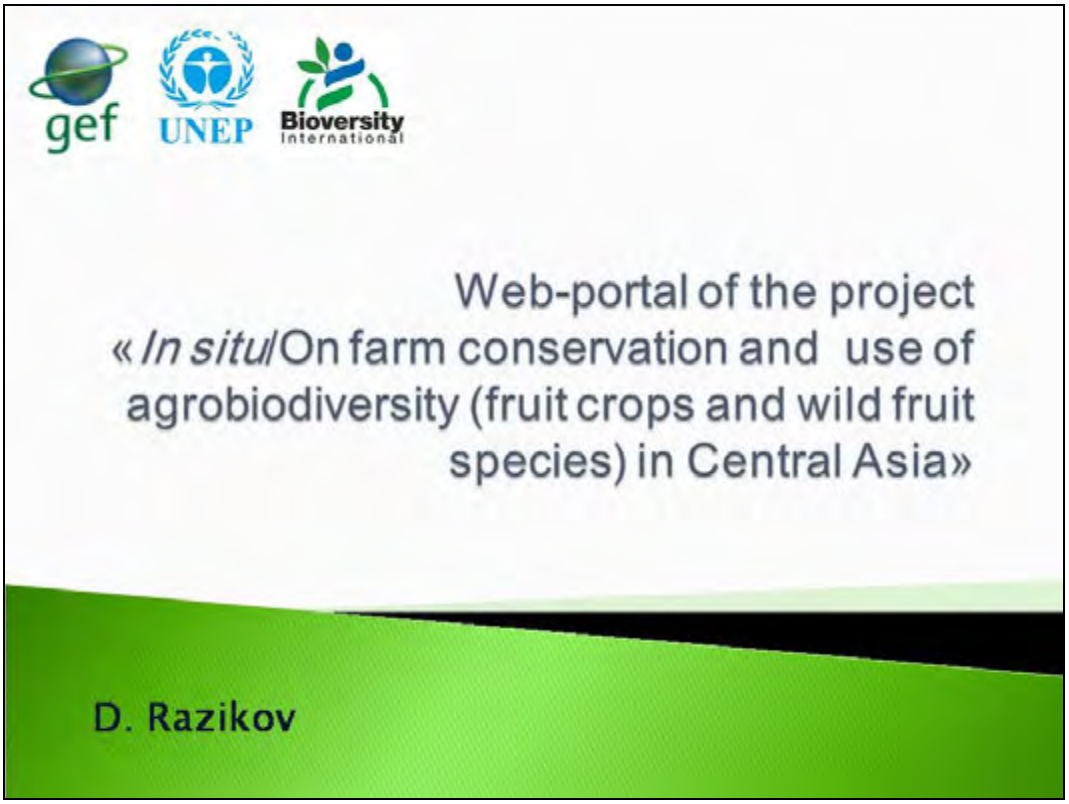
How to best communication research findings from the UNEP-GEF project

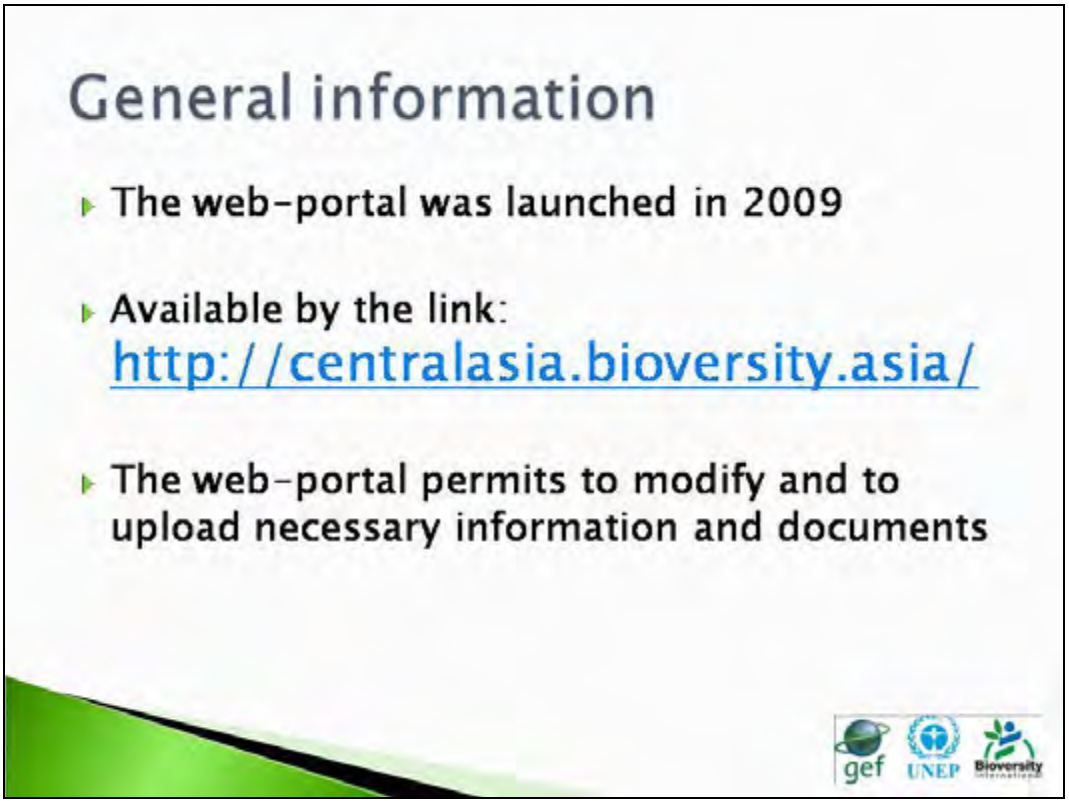
Questions to explore in this workshop

- Are the training materials produced in the project available? Where? Can you find the citations easily?
- Are the materials easy to find and access by the different users? In what format? Can they be downloaded in full?
- Are they easy to adapt, transform, apply and re-use by others?

Annex 6

Web portal of project
Dilmurad Razikov,
Bioversity International

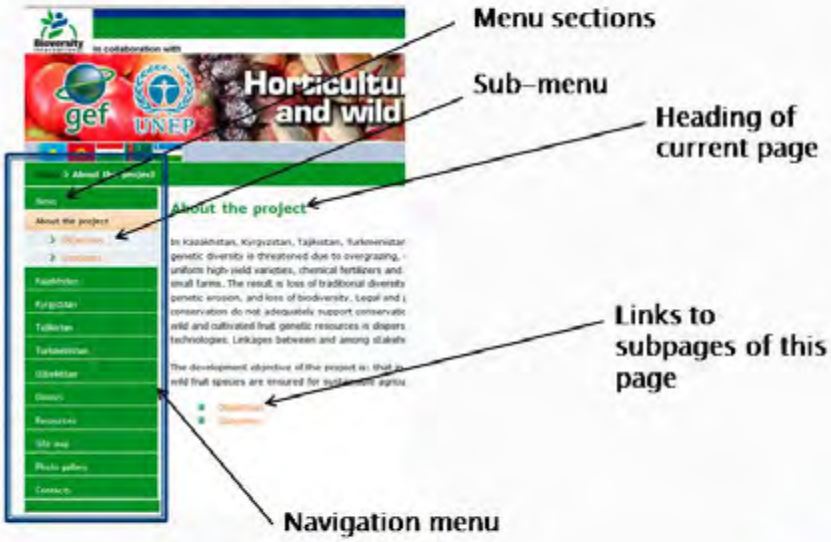




Main page

Localization of web-portal

Navigation



Web–portal sections

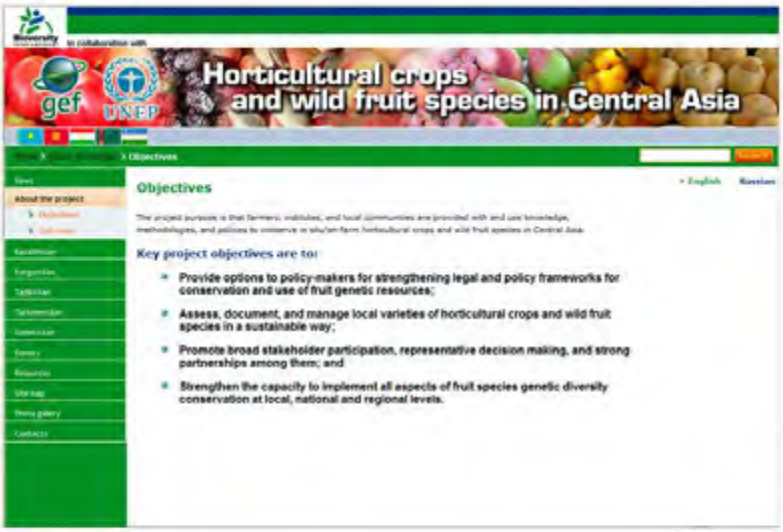
News

Web-portal sections

About the project

Web-portal sections

Objectives



Web-portal sections

Outcomes

Web-portal sections

About countries

Web-portal sections

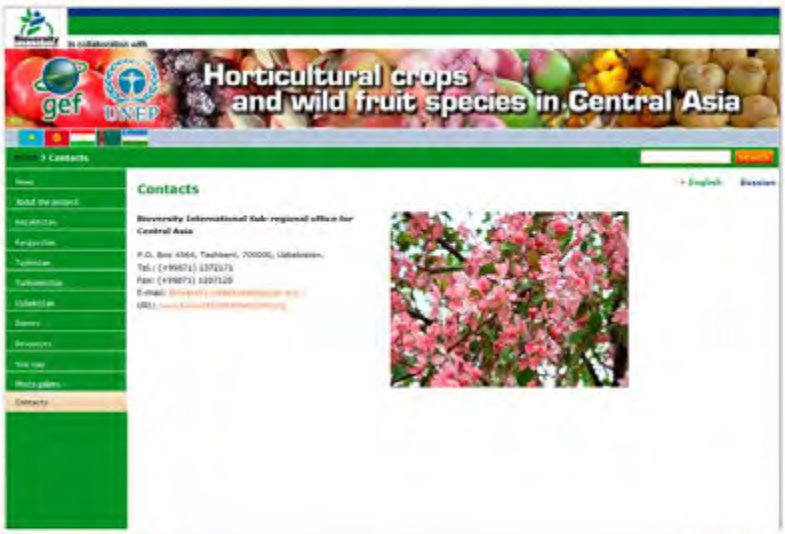
Resources

Web-portal sections

Repository

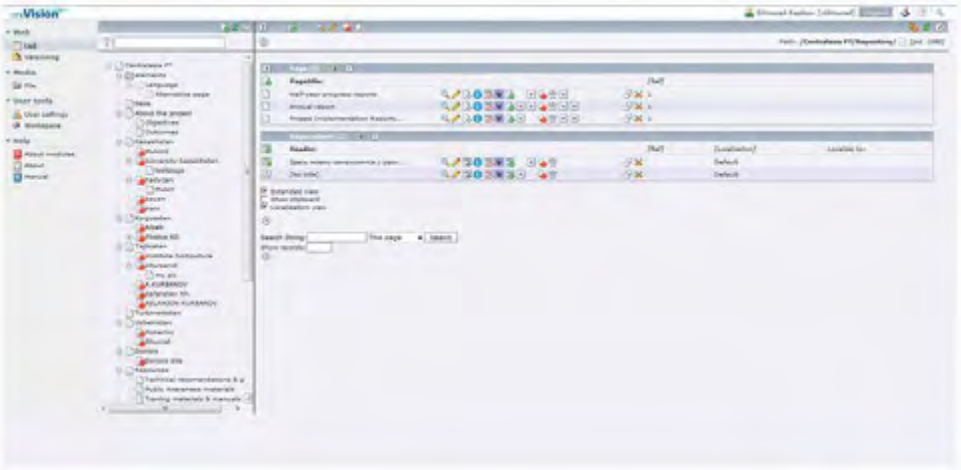
Web-portal sections

Contacts



Editing the web-portal

Backend



Editing the web-portal

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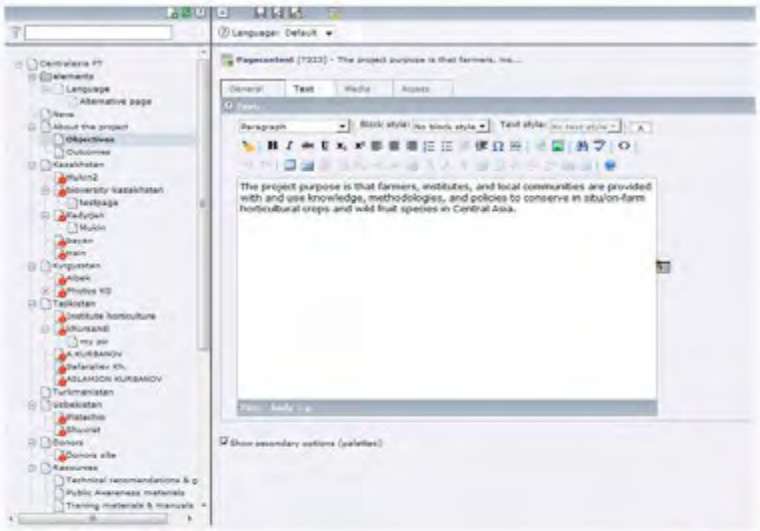
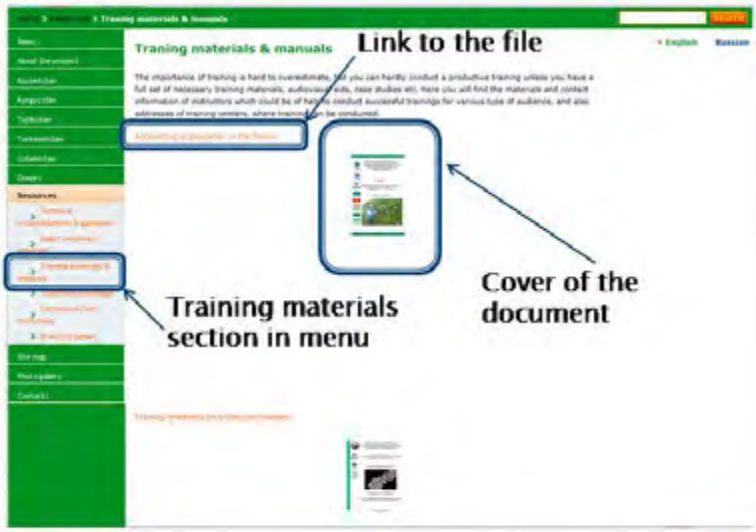


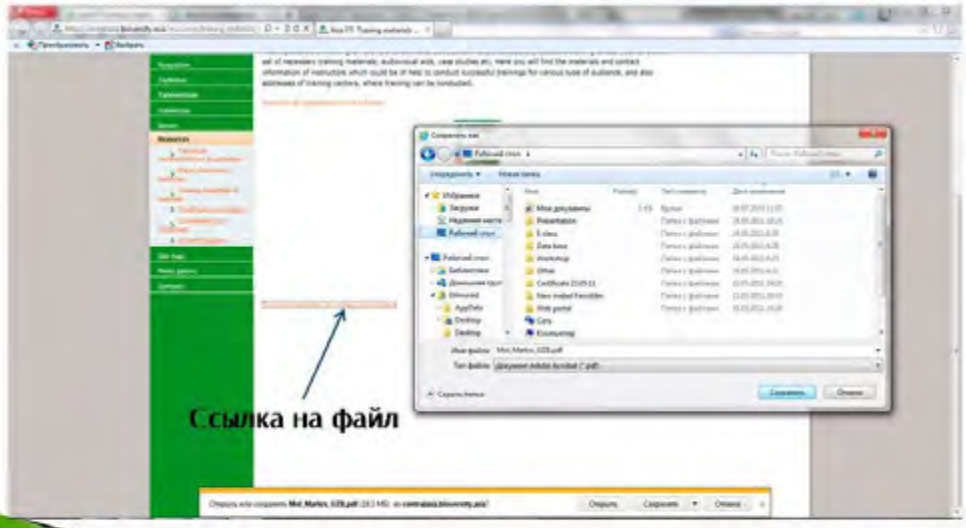
Web-portal sections

Training materials



Training materials

Uploading



Training materials

Uploading


Thanks for your attention!
gef
UNEP
Bioversity

Annex 7

Database on training materials

		DESCRIPTION				TARGET GROUP (indicate one or more)				DISTRIBUTION and USE					EVALUATION				RECOMMENDATIONS
	Title	**Prepared by**	**Country**	**Status: 1=under preparation; 2=final draft but not printed; 3=printed and distributed**	**Language**	**Target group: Decision makers**	**Target group: Farmers, local communities, forest dwellers**	**Target group: Protected area managers**	**Target group: Researchers & instructors**	**Type of material: e.g. Book, Journal paper, Fact Sheet/Brief, Technical guideline, Video, etc.**	**Number of pages**	**Number of copies printed**	**Describe how the materials was distributed.**	**Who is using the material? How is it used?**	**Current access: 1=National ; 2= Regional**	**Relevance: 1=National ; 2= Regional**	**Quality of content -- on a scale 1-5 (1= Very poor; 5=Excellent)**	**Quality of layout & presentation -- on a scale 1-5 (1= Very poor; 5=Excellent)**	**Recommendations for updating, distribution, use, etc.**
1.	National methodology of assessment of distribution, diversity level, status and conservation of fruit crops forests in mountainous areas of Kazakhstan	S.V. Chekalin, T.N. Nurmuratuli	Kazakhstan		Russian														
2.	Use of adaptive and economically valuable traits of fruit crops and grapes in selective programs	V.Z. Gabrelyan	Kazakhstan		Russian														
3.	Provisional Regulations on production and realization of planting materials of fruit crops and grape in Almaty Province (recommendation)	D.S. Izbasarov, E.D. Madenov. and al.	Kazakhstan		Russian														

4.	“About experience of farm “Aydarbaev” in cultivation of local varieties of fruit crops” (booklet)	V.Z. Gabrelyan	Kazakhstan		Russian														
5.	Calendar poster, desk calendar		Kazakhstan		Russian														
1.	Cultivation of planting materials of walnut	S. Djumabaeva	Kyrgyzstan		Russian														
2.	Момо жемиштердин жана жангактын зыянкечтери (Pests and diseases of fruit crops and walnut)	K.S. Ashimov	Kyrgyzstan		Russian														
3.	Technologies of pistachio cultivation	S. Kenjebaev	Kyrgyzstan		Russian														
4.	Кыргызстанда тушумдуу бактарды тузууго сунуштар (Recommendations on establishment of high-yield orchards in Kyrgyzstan)	K.T. Turgunbaev	Kyrgyzstan		Russian														
5.	Basics of horticulture	K.T. Turgunbaev	Kyrgyzstan		Russian														
6.	Данектуу момо-жемиш осумдукторун кесуу жана агротехникалык жумуштар (Pruning of pip-fruit trees and agro technical activities in orchard	I.B. Soldatov	Kyrgyzstan		Russian														
7.	Guide on priority crops descriptors	I.B. Soldatov	Kyrgyzstan		Russian														

8.	Gardens establishment on farms	I.B. Soldatov	Kyrgyzstan		Russian														
9.	Guide for organization of mini-plant for fruit crops processing	E.B. Kaparova.	Kyrgyzstan		Russian														
10.	Cultivation technologies of young plants of grapevine	K.T. Turgunbaev	Kyrgyzstan		Russian														
11.	Grapevine cultivation technologies	T.K. Tillebaev	Kyrgyzstan		Russian														
1.	Album “Apricots of Tajikistan”. in Russian	T.A. Akhmedov, N. Kamolov, Kh. Nazirov, Z. Imamkulova, A. Soliboev, T. Bulbulshoev, T.B. Boboev, R.E. Shukurov, O. Aknazarov	Tajikistan		Russian														
2.	Тавкими ангурпарвар бо маълумоти мухтасар (Grapes calendar with brief information). In Tajik language	K. Radjabov	Tajikistan		Tajik														
3.	Химояи токзор аз хашароти зарраҷасон ва касалихо (Protection of vine from pests and diseases). In Tajik language	Z.A. Imamkulova, R. Kalandarov	Tajikistan		Tajik														
4.	Усулхои парвариши яксолаи нихолхои дарахтони донакдор (One year-cycle cultivation methods of young plants of pip fruit crops). In Tajik language	S.G. Shamuradova, N. Kamolov, Kh. Nazirov	Tajikistan		Tajik														

5.	Парвариши нихолхои дарахтони мева бо решаи пушида (Cultivation of young plants of fruit crops species with closed root system). In Tajik language	Kh. Kholov, S. Makhmadaminov, N. Kamalov	Tajikistan		Tajik														
6.	Дастури методи оиди ангурпарвари дар хочагихои дехкони (Methodological recommendations on viticulture for farms). In Tajik language	T. A. Akhmedov, Z.A. Imamkulova, R. Kalandarov	Tajikistan		Tajik														
7.	Тависянома оиди коркарди агротехникии бог (Recommendations on orchard agrotechnics). In Tajik language	Kh. Nazirov,N. Kamolov,S. Makhmadaminov	Tajikistan		Tajik														
8.	Зараррасонхо ва касалихои дарахтони мевадиханда дар води Рашт (Diseases and pests of fruit crops of Rasht valley). In Tajik language	N. Kamolov, Z.A. Imamkulova, S.B. Shamuradova	Tajikistan		Tajik														
9.	Local varieties of grapes of Tajikistan	K. Radjabov, R. Kalandarov, Z.A. Imamkulova, Kh. Makhmadkulov	Tajikistan		Russian														
10.	Local varieties and forms of fruit crops, growing on mountainous areas of the Republic of Tajikistan. In Russian and Tajik languages	T.A. Akhmedov, R.E. Shukurov, N. Kamolov, Kh. Nazirov, S.B. Shamuradova, T.B. Boboev, M. Ergasheva, T.	Tajikistan		Tajik														

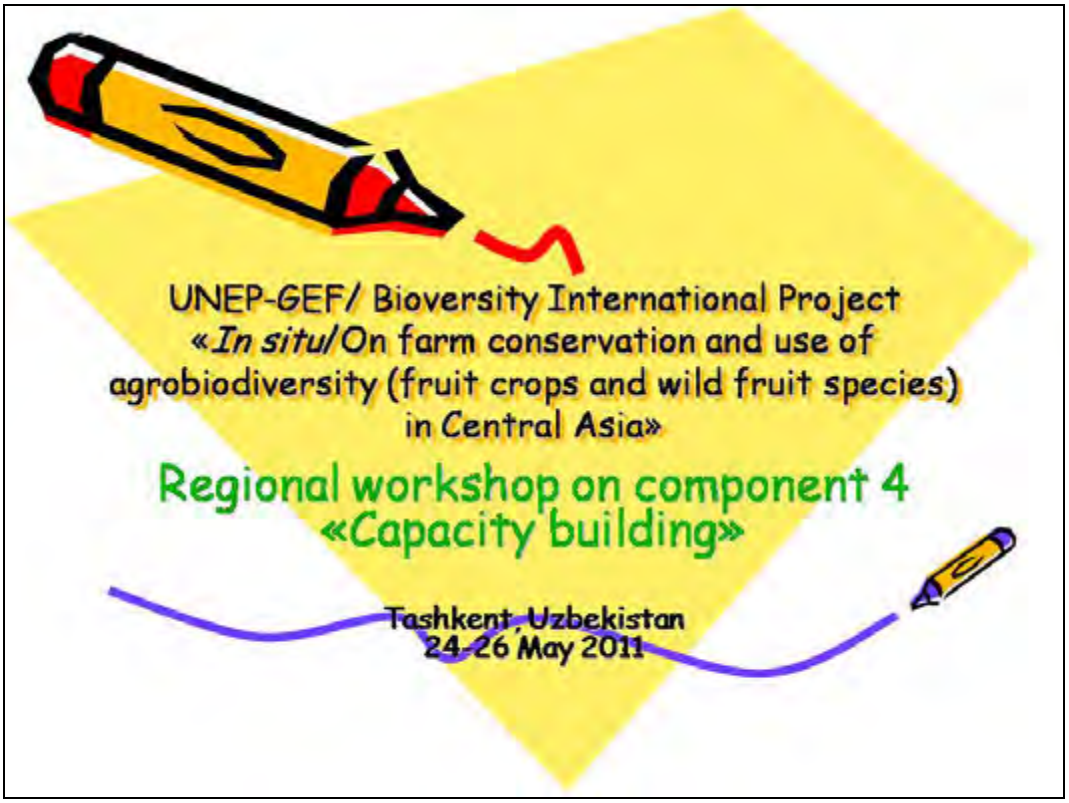
		Bulbulshoev, O. Aknazarov																	
1.	The agricultural technician of creation of pistachio plantations	N.E.Zverev, U.S. Kerimova	Turkmenistan		Russian														
2.	Cultivation of fruit crops. *Practical recommendations*	N.E.Zverev, A. Niyazov	Turkmenistan		Russian														
3.	Educational film on an inoculation of fruit crops (on almonds example);	N.E.Zverev.	Turkmenistan		Russian														
4.	Methods of improvement of natural renewal and artificial restoration of wild-growing kinds of fruit crops (pistachio)	N.E.Zverev	Turkmenistan		Russian														
5.	Marketing researches	G.L. Kamahina	Turkmenistan		Russian														
6.	Documenting of Traditional knowledge of fruit crops and wild-growing fruit kinds and to their analysis according to an agrobiodiversity	G.L. Kamahina	Turkmenistan		Russian														
7.	Methods of processing and production storage	N.E.Zverev, A. Niyazov	Turkmenistan		Russian														
7.	Inoculation of fruit crops (a pistachio, almonds, an apple-tree a pear, an apricot, plum).	N.E.Zverev, U.S. Kerimova	Turkmenistan		Russian														
9	Technology of creation of nurseries**. I** - a part for pistachio, almonds, apple-trees, pear, apricot, plum. **II** - a part for grapes, pomegranate, fig.	**I** part - N.E.Zverev., U.S. Kerimova., G. Atahanov **II** part – M. Pashikov, A..	Turkmenistan		Russian														

		Niyazov																	
10	Methods of preservation of wild-growing relatives of fruit crops and selection for creation of the best forms of wild-growing relatives of fruit crops	N.E.Zverev, A. Niyazov	Turkmenistan		Russian														
1.	Analysis of national politics, related to farmers rights and coordination of further activities	N.K. Skripnikov	Uzbekistan		Russian														
2.	Recommendations on pistachio cultivation on variety basis	G.M. Chernova	Uzbekistan		Russian														
3.	Methods of conservation and multiplication of wild fruit species and facilitating their conservation in natural environment	E.A. Butkov	Uzbekistan		Russian														
4.	Marketing of fruit crops products	G. Davidov	Uzbekistan		Russian														
5.	Marketing of wild fruit crops products	G. Davidov	Uzbekistan		Russian														
6.	Recommendations on cultivation of local varieties and forms of apple and pear	Yu.M. Djavakyants	Uzbekistan		Russian														
7.	Recommendations on cultivations of local varieties of grapevine in Uzbekistan	Yu.M. Djavakyants	Uzbekistan		Russian														
8.	Recommendations on cultivations of local apple varieties in Uzbekistan	F.U. Khasanov, E.A. Shrederov, K. Tadjibaev	Uzbekistan		Russian														
9.	Processing and conservation of local varieties and forms of fruit crops	M.Yu. Djavakyants, M.M. Mirzaev	Uzbekistan		Russian														

10.	Analysis of legislation, related to issues in agrobiodiversity conservation	N.K. Skripnikov	Uzbekistan		Russian														
11.	Basics of accounting and economic analysis of farm management	R.D. Dustmuradov	Uzbekistan		Russian														

Annex 8

Priority publications, to be published and distributed at Regional level



Publications, recommended to use at regional level

4. Provisional Regulations on production and realization of planting materials of fruit crops and grape in Almaty Province (recommendation).

   Nursery keeping is the basis for further development of horticulture. Distribute among nursery keepers for production of high quality planting materials

5. "About experience of farm "Aydarbaev" in cultivation of local varieties of fruit crops" (booklet)

   Distribute among farmers – fruit growers for extending territories of intensive orchards and conservation of old local varieties of apples, pear and peach.

Thank you for attention!

List of training materials (Kyrgyzstan)

Name	Status: 1=under preparation; 2=final draft but not printed; 3=printed and distributed	Language	Type of material: e.g. Book, Journal paper, Fact Sheet/Brief, Technical guideline, Video, etc.	Currently available at: 1=National level; 2= Regional level	Relevance: 1=National; 2=Regional
1 Recommendations on selection of best forms and cultivation of planting materials of walnut	3	Russian, Kyrgyz	Guidelines	2	2
2 Factors, decreasing ecological sustainability of nut and fruit forests	3	Russian, Kyrgyz	Guidelines	2	2
3 Forming and pruning of fruit threes		Russian, Kyrgyz	Guidelines	2	2
4 Recommendations on establishing fruit orchards on farms	3	Russian, Kyrgyz	Guidelines	2	2
5 Recommendations on storage of fruits	3	Russian, Kyrgyz	Guidelines	2	2
6 Recommendations on description of local varieties of priority fruit crops and wild species	2	Russian	Guidelines	2	2

Recommendations to be updated and distributed

Name	Recommendations for updating and distributing
1 Recommendations on selection of best forms and cultivation of planting materials of walnut	1. Wide distribution of materials in region (positive forms from Uzbekistan, Tajikistan, Kazakhstan, Turkmenistan) 2. Multiply and distribute among interested parties (including local and national libraries)
2 Factors, decreasing ecological sustainability of nut and fruit forests	1. Multiply and distribute among interested parties (including local and national libraries)
3 Forming and pruning of fruit threes	1. Multiply and distribute among interested parties (including local and national libraries)
4 Recommendations on establishing fruit orchards on farms	1. Multiply and distribute among interested parties through NPIUs (including local and national libraries)
5 Recommendations on storage of fruits	1. Complete with materials on another fruit crops (in this booklet apple); 2. Multiply and distribute among interested parties through NPIUs (including local and national libraries)
6 Recommendations on description of local varieties of priority fruit crops and wild species	1. Multiply and distribute among interested parties through NPIUs (including local and national libraries)

Reccomendations

Component Tajikistan

Apricot cultivation technologies

- Re-publishing the training materials in 6-8 years after editing, completing and amending
- Distribute among farmers, students, non-professional horticulturists
- For extension of territories and conservation of local diversity

Cultivation of grapevine planting materials

- Put on Web site
- Distribute among farmers and land tenants
- Cultivation of young plants of grapevine with closed root system with preliminary processing with growth sumulator

Technology of seedlings cultivation

- Involve partners for cooperation and distribution of training materials
- Distribute among nursery keepers

Recommendations for publishing at Regional level

Uzbekistan

Recommendations on cultivation of almond plantations in Uzbekistan

Recommendations:

- No need to update
- Planned to distribute among target groups during training courses

Recommendations on cultivation of walnut plantations in Uzbekistan

Recommendations:

- Recommendations are intended for use of forestry staff, farmers and land tenants as practical guidelines on mountainous land development and establishing walnut plantations
- No need to update. Planned to distribute among target groups during training courses

Training materials on use of molecular markers in PGR diversity assessment

Recommendations:

- Intended for instructors, researchers, students in biological and agricultural specializations as the training materials in application of molecular markers in researches of PGR biodiversity
- No need to update. Planned to distribute among target groups during training courses

Recommendations on cultivation of pistachio plantations on varietal basis

Recommendations:

- Farmers and land tenants. To use as practical guidelines for forestry staff, farmers, and land tenants for development of mountainous lands to establish pistachio plantations
- Recommendations can be updated with use of new technologies of planting materials with closed root system of seedlings

Propositions for effective use of training materials:

- to place on project web site
- wide participation and strong partnership
- to continue training courses and workshops

Annex 9

Review of roles of training centers, established within the project

Muhabbat Turdieva,
Regional project coordinator

Bioversity/UNEP-GEF Project
«*In Situ*/On Farm conservation and use of agrobiodiversity in Central Asia»

REVIEW OF ROLES OF TRAINING CENTERS, ESTABLISHED WITHIN THE PROJECT

24-26 May, 2011
Tashkent, Uzbekistan



PROJECT SUCCESS INDICATORS

1. Not less than 4 methodologies on *in situ*/on-farm conservation of priority fruit crops and wild fruit species developed, assessed and available for use for interested parties in five countries;
2. The sustainable managed land area, where grow wild fruit species and local varieties of fruit crops, increased for 20% (333 555 ha)

PROJECT SUCCESS INDICATORS

3. More than two proposals on legislation, supporting and strengthening farmers' activities in conservation of local varieties of fruit crops and wild fruit species, developed and submitted to decision makers in each country. At least in one country, the proposals are being implemented
4. Not less than 20% farmers and forestry staff (which makes 540 person) on project sites use new methods of conservation and use of fruit crops;

PROJECT SUCCESS INDICATORS

5. Not less than two farmers' associations, supporting local varieties of fruit crops, were established in each country
6. Not less than two farmers or representatives of farmers' associations participate in national programs or committees on conservation of plant genetic resources in each country

CAPACITY BUILDING

GOAL:

Improving skills of interested persons in implementing their functions

TARGET GROUPS:

- Decision makers at state and local levels
- Instructors and teachers of research institutions and Universities,
- Farmers and local community,
- Specialist of Natural reserves and forestries

CAPACITY BUILDING

National training centers and National trainings (workshops, roundtables, mobile training courses)

Regional training centers and Regional workshops and courses

OBJECTIVES OF TRAINING CENTERS

At Regional level:

- Prepare instructors in their countries.
- During the period of project implementation about 100 persons will be trained at Regional level

TRAINING CENTERS

Regional (5):

- Kazakhstan – on **Socio-economic issues**
- Kyrgyzstan – on **Walnut**
- Tajikistan – on **Apricot**
- Turkmenistan – on **Pomegranate**
- Uzbekistan – on **Molecular markers**

OBJECTIVES OF TRAINING CENTERS

At National level:

- Complete regional training centers
- There established:
- where regional training courses on priority fruit crops will not be organized, or
- where there is limited access to training centers for large number of stakeholder (Pamirs in Tajikistan).
- During the whole project implementation period, about 870 persons will be trained at National level

TRAINING CENTERS

National:

- **Kazakhstan (1) – on target fruit crops (Research and production center on processing and food industry)**
- **Kyrgyzstan (1) - on target fruit crops (Kyrgyz National Agrarian University),**
- **Tajikistan (2) - on target fruit crops (Research and production center "Bogparvar" and Pamirs Biological institute)**
- **Turkmenistan (2) – on target fruit crops (National institute of deserts, flora and fauna (pistachio and almond) and research institute of land management (fruit crops));**
- **Uzbekistan - on target fruit crops (Uzbek research institute of Forestry (nut bearing crops) and Uzbek research institute of horticulture, viticulture and vine making named after R.R. Shreder (fruit crops))**

Annex 10

Role of Regional and National training centres, established in Kazakhstan

Tleu Nurmuratuly,
National Project Coordinator in Kazakhstan

- National training centre on priority fruit crops was established at Kazakh RI of horticilture and viticulture
- Priority fruit crops include apple, pear, apricot and grapes

Every year training courses and round tables are organized

The established training centers are functioning

It is necessary to strengthen communication among them and exchange of information

Training courses, organized in 2010

Date	Name of training course	Venue	Target groups
18 February	On communication skills with farmers	Almaty	Researchers and instructors, farmers
23 June	On use of DIVA-GIS	Almaty, RI of horticulture and viticulture	Researchers and instructors
31 August	Workshop with members of Multidisciplinary and Coordination Committees of Almaty province	Almaty	Members of Multidisciplinary and coordination committees
16 September	Meeting on catalyzing activities of Local Multidisciplinary Committee and Coordination Committee of South Kazakhstan province	Tassay village	Members of Multidisciplinary and coordination committees
12 November	Workshop at the level of province on improving cultivation technologies of orchards and planting materials (more than 60 participants)	Akbular resort, Talgar district, Almaty province	Farmers, head of local administration and researchers

Improving lives through biodiversity research

Bioversity International

GEF

A round table was organized on 17 November 2010

- On discussion of draft of «Agreements on access to information, traditional knowledge, planting materials and germplasm».

Improving lives through biodiversity research

Work plan for organization of workshops, round tables, scientific practical conferences in 2011

№		
1	Workshop for decision makers	June-July
2	Workshop for special protected territories and forestry	June-July
3	Workshop on processing methods and conservation of fruit products	July
4	On documentation and assessment of traditional knowledge on local varieties of apple, pear, apricot and grapes	31 May
5	Training Workshop on "Properly pruning of fruit trees increases productivity of fruit crops and grapes" - prunig of fruit trees in South Kazakhstan province - apple and pear orchards in Almaty province - pruning of grapes and apricot trees in Almaty province	 14 February 12 March
6	Round table: «Methods of conservation and rational use of agrobiodiversity of fruit crops and grapes»: - for farmers of mountain territories of Zayliy Alatay region - for farmers of Eskeldin, Koksu and Srkand districts of Almaty province - For farmers of South Kazakhstan province	August, July
7	Republican Scientific practical conference	October - November

Published booklets and recommendations for 2010

Type of publication	Name	Authors
Brochure	National methodology of assessment and conservation of agrobiodiversity of mountain fruit forests of Kazakhstan	S.B. Chekalin, T.N. Numuratuly
Recommendation	Use of adaptive and economically valuable traits of fruit crops and grapes in breeding programs	V.Z. Gabrelyan, T.N. Numuratuly
Recommendation	Recommendations on procedures of production and realization of planting materials of fruit crops and grapes in Almaty province	D.S. Izbasarov, E.D. Madenov
Recommendation	"Technological process of cultivation of grapes with the methods of shelter and bend culture"	E.D. Madenov, L.D. Beresneva, G.N. Kairova
Recommendation	"Cultivation of intensive orchards on clonal rootstock in the South and South-east of Kazakhstan"	D.S. Izbasarov, E.D. Madenov
Booklet	«Experience of farm "Aydarbaev" in cultivation of local varieties of fruit crops in Enbekshikazakh district of Almaty province»	NPIU Kazakhstan
Calendars	Poster-calendar, desk calendar for 2010	NPIU Kazakhstan

Prepared and submitted for review:

Handbook of farmer-horticulturist

Video films "Apricot – source of health"and "Pear – healing decert" were completed

An agrotheatre «Біз бау-бақшаны қорғаймыз» was organized

Three exhibitions were organized:

- Agricultural achievements fair of Kazakhstan «Қараөткел жәрмеңкесі-2010» in Astana (31 July – 1 August 2010)
- "Apple Fest" in Almaty (19 September 2010)
- Fruit crops and grapes products fair was organized in "Akbulak" resort, Talgar district, Almaty Province (12 November 2010)

Fruit crops products fair on 12 November 2010 at "Akbulak" resort

Training workshop on pruning, 12 March 2011, Bayseyt village

Improving lives through biodiversity research

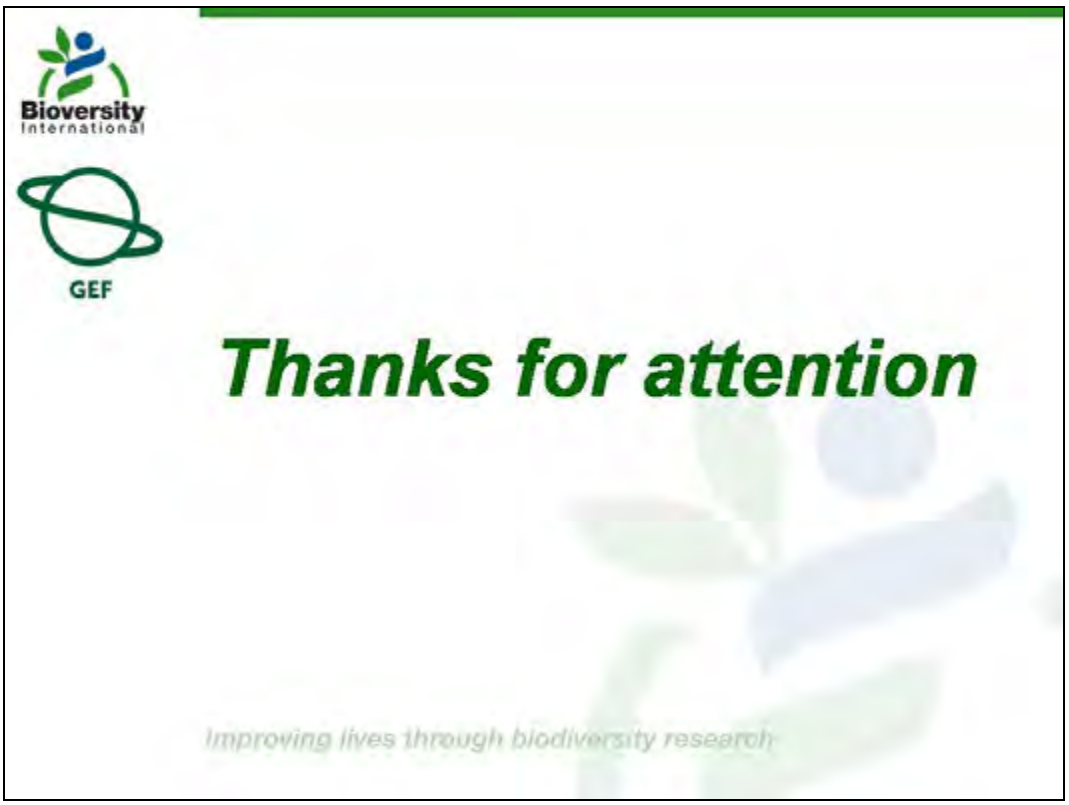
- Training courses were organized on ICT (8 participants) and English language courses (7 participants) Bayseyt village, Enbekshkazakh district, Almaty province

Farmers' associations

- 8 December 2010, the Association of farms was established in Chunge village, Almaty province. This association joins 51 farmers.

Six Local Multidisciplinary Committees are functioning:

- In Almaty province: in Eskeldin, Uygur, Enbekshikazakh and Talgar districts
- In Jambyl province - in Merken district,
- South-Kazakhstan province: Sayram, Saryagash, Tulkubass districts


Bioversity
International
GEF
Thanks for attention
Improving lives through biodiversity research

Annex 11

Regional training centre on Walnut

Muslim Rajapbaev,
Research institute of Forestry of National Academy of Sciences of Kyrgyz Republic

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

Regional Training Center on Walnut
Research Institute of Forestry named after P.A. Gan
National Academy of Sciences of Kyrgyz Republic

Bishkek

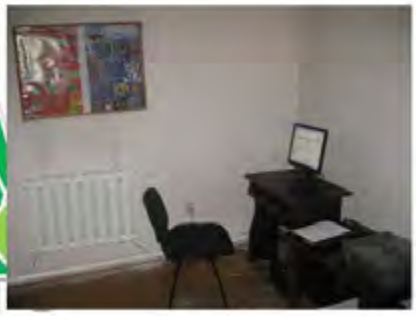
Brief information about the Research institute: In 1966, a common research institution on forest issues was organized to strengthen Forestry Science in Kyrgyzstan. Kyrgyz forestry experimental station, the South – Kyrgyz forestry station, Teploklyuchin and Naukat experimental farms were given to Academy of Sciences and joined into one Forestry Department of Institute of Biology. In 1992 году, on the basis of this department, established Research Institute of Forestry and Nut crops of Academy of Sciences of Kyrgyz Republic. In 1996 the Research Institute was named after P.A. Gan. In 2009, the Institute is named Forestry insitute named after P.A. Gan.
The Forestry institute named after.P.A. Gan is one of the leading scientific organizations of Kyrgyz Republic and conducts fundamental and applied researches in Forestry and Forest development

Nut-fruit bearing forests consists of two large areas: Arslanbobo-Kugart and Khodja-Ata regions, which stretch from the East to the West and cover 630.9 thous. ha. The information about the area of only nut bearing forests differs because of different methods of study, which was used. According to data of the State Agency of environment and forestry, the area of nut bearing forests in 2004 made 40.5 thous. ha.

Regional Training Center on Walnut
was established in 2008 at the Institute of Forestry of Academy of Sciences of Kyrgyz Republic

Address: 720015, 15, Karagachevaya rosha, Bishkek, Kyrgyz Republic
Forestry Institute named after P.A. Gan
Tel.: +996 312 679082, +996 312 678056
Fax: +996 312 679082
E-mail: institute@lesic.elcat.kg

Equipments:
Computers (5 pcs.)
Multimedia projector
Digital photo camera
Digital video camera
TV set
Scanner
Printer
Voice recorder
Copy machine
All computers are connected to local network



At the forestry institute there is a library containing nearly all literature on walnut and nut-bearing forests of Kyrgyzstan, published in Kyrgyzstan and used since Soviet period.
In arboretum of the institute, more than 180 varieties of bush-tree crops are planted and being tested on 10 ha territory, which include both local and introduced varieties (for instance, walnut, black nut, etc.)

10-14 November 2009 at Regional Training center on Walnut, Regional training workshop on Distribution and diversity level assessment of Walnut (*Juglans regia)* was organized

At the workshop 26 researchers and 6 farmers participated from five countries of Central Asia

Workshop Agenda

Lecture 1. Current status of nut-bearing forests of Kyrgyzstan	E.T. Turdikulov, member-correspondent., Director of institute of Forestry of National Academy of Science of Kyrgyz Republic
Lecture 2. Monitoring of changes of status of nut bearing forests at the result of anthropogenic impact	T. Junusov, senior scientist, Sary Chelek natural reserve
Lecture 3. Distribution and biological characteristics of walnut	B.I. Venglovskiy, Consultant of Programme Kyrles
Lecture 4. Varieties and forms of walnut. Methods of selection of best forms of walnut	D.K. Mamadjanov, PhD, Senior scientist, Forestry Institute Kyrgyz Republic
Lecture 5. Biological methods of disease and pest management in nut bearing forests	B.A. Toktoraliev, PhD in Biology, member-corres. of National Academy of Science of Kyrgyz Republic
Lecture 6. Diseases and pest management of walnut	K.S. Ashimov, Head of Forestry Ddepartment, Kyrgyz Agrarian University
Lecture 7. Organization of nurseries for cultivation of seedlings of walnut. Maintenance of soil. Vegetative multiplication of walnut. Selection of rootstock. Grafting practices for vegetative multiplication of walnut. Grafting methods.	D.K. Mamadjanov, PhD, Senior scientist, Forestry Institute Kyrgyz Republic
Lecture 8. Contribution to natural regeneration of walnut in nut bearing forests of Kyrgyz Republic.	B.I. Venglovskiy, Consultant of Programme Kyrles

Visit to nut-fruit forest and nursery of walnut in Kara –Alma Forestry, Urunbash village

Village of nut-fruit forest and nursery of walnut in Arslanbab Forestry, Yarodar village

For assessment of topics, covered in workshops and quality of organization by trainees, an assessment form was distributed. The workshop participants assessed the workshop organization as satisfactory.

At the end of the training workshop all trainees were provided with certificates of participation

Training courses on use of office equipments, multimedia, equipments, on use of anti-virus and some Office software applications among personnel of Forestry Institute and PhD students

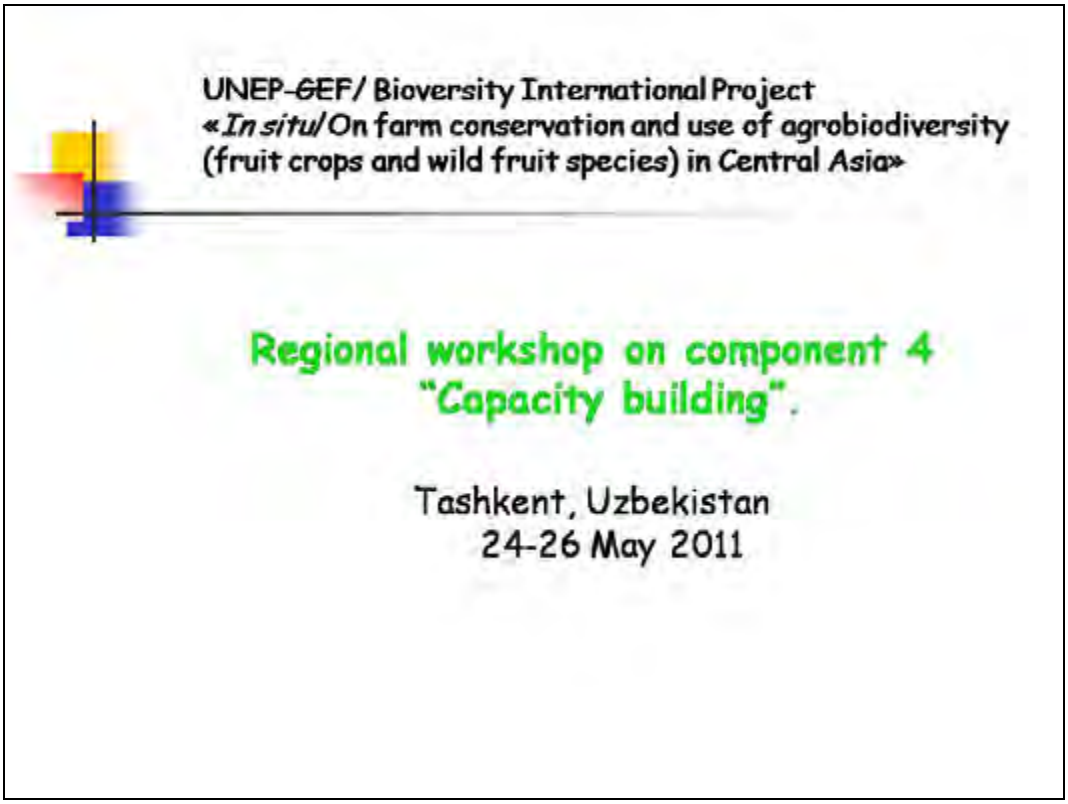
Planned activities

1. **Connection to Internet;**
2. **Encourage works of responsible for training center and instructors;**
3. **Distribution of information about training centre, possible training courses (maybe not only on walnut, but on all issues of forest development) and instructors;**
4. **Complete (update) collection (stand) of varieties and forms of walnut;**
5. **Negotiating with KNAU on organization of courses in training centre**

Annex 12

National training center on priority fruit crops

Ishenbay Sodombekov,
Curator of training center, Kyrgyz National Agrarian University named after K.I. Skryabin



In 2010 the National training center on priority fruit crops was established at the base of Kyrgyz National Agrarian University named after K.I. Skryabin,

Visit of Minister of State Agency on Environment Protection and Forestry

- National training center is provided with all facilities for organizing training courses
- The Training centre is equipped with modern equipments, needed for organization of training courses

- Different training programmes, modules, training guidelines for conservation of priority fruit crops were developed at the training centre
- The instructors, trained at Regional courses, conducted training workshops on use of DIVA-GIS application at National level for researchers, professors of Universities
- A training course on cultivation of fruit crops was organized for population of mountainous regions by the request of University of Central Asia

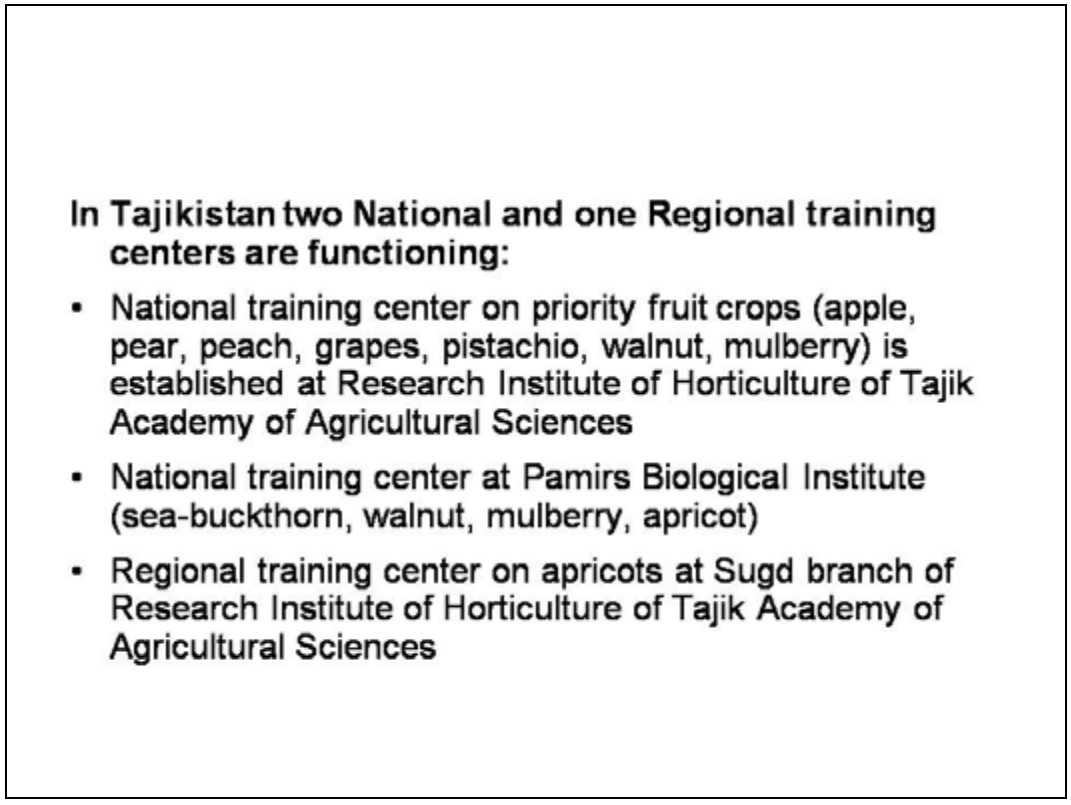
- For increasing public awareness on services, offered by the Training centre, it was proposed to develop booklets and put the information on project web site
- At the results of organized training courses among professors, teachers and students of the Agrarian sector, following courses were integrated into curriculum of the University:
- Agrobiodiversity conservation;
- Private fruit growing;
- Walnut growing

- In perspective of further functioning of the training centre, it is planned the training of students, PhD students, researchers, as well as, farmers and specialists of agrarian sector on skills of multiplication and cultivation of fruit crops.
- To obtain certification for organizing training courses.


Thanks for your attention!

Regional and National training centres in Tajikistan

Svetlana Shamuradova,
Research Institute of Forestry, Tajikistan



National Training Center at Research Institute of Horticulture of Tajik Academy of Agricultural Sciences

Regional training center on Apricot at Sugd branch of Research Institute of Horticulture of Tajik Academy of Agricultural Sciences

- 

Results

- At NTC (Dushanbe) were organized 7 planned training workshops for:
- decision - makers;
- researchers;
- farmers, land tenants;
- Children ecological association “Zumrad”

At Regional training center on Apricot

3 Regional training workshops were organized with participants from Uzbekistan, Kyrgyzstan, Kazakhstan, and Turkmenistan

- At National level organized:
- 2 training workshops;
- 5 round tables;
- 6 mobile workshops.

- Following issues were encountered at Regional training centre on Apricot:
- interruptions in electricity provision;
- there is no internet at the centre.

Opportunities

- In future RTC and NTC can continue their activities with organizing training courses, round tables, etc.

Thank you for attention!

Annex 14

Regional and National training centers, organized within the project in Uzbekistan

Evgeniya Khegay,
Information Analysis Department of Institute of Genetics and Plant Experimental Biology of Academy of Sciences of the Republic of Uzbekistan

National Training Center on nut crops

- **National training centre on nut crops at Republican Scientific Production Centre of Ornamental Gardening and Forestry**
- (Decree № 87. dated 24 October 2007)
- Head – PhD, R.A. Sultanov

Target groups:

- Specialists of forestries, land tenants and farmers
- Scientists and specialsts in horticulture and forestry

Main directions:

1.In situ conservation of biodiversity of fruit crops and wild fruit crops.

2. Basics of Management of forestry.

National training centre on stone, pip fruits and subtropical fruit crops and grapes

National training center on stone fruit, pip fruit, subtropical fruit crops and grapes is located at Uzbek Research Institute of horticulture, viticulture, and wine making named after R.R, Shreder

- (Decree #14–H, dated 13 August 2007)
- Curator – PhD, Mikhail Yurevich Djavakyants.
- **Target groups:**

- Farmers
- Scentists and specialists in horticulture
- **Main directions:**

1. *On farm* conservation biodiversity of fruit crops and wild fruit crops.
2. Basics of management and marketing on farms.
3. Basics of accounting on farms.
4. Methods of drying and processing fruits and grapes
5. Methods of research

Regional training centre on molecular markers

- **Regional training centre on molecular markers at the Centre of Genomic Technologies of Research Institute of Genetics and Experimental Biology of Academy of Science of Republic of Uzbekistan**
- (Decree № 32, 22 November 2007).
- Curator – PhD, I.Y. Abdurakhmanov
- **Target groups**:
- – scientists
- **Main directions**:

1. Studying genetic resources of plants with molecular markers and other modern methods of molecular genetics

Results on training courses at NTC on nut crops

NTC on nut-bearing crops contributed to organizing the training workshop for farmers and forestry workers on ***"Establishing pistachio plantations including local varieties and forms on leased fruit-forest sites"*** in Gallaaral (field collection of pistachio of Mirzachul support station, Gallaaral district, Djizak Province)

Republican Research and Production Center of Ornamental Gardening and Forestry has field collection of pistachio and walnut, and also research support stations, where training courses can be organized for target groups

Results of training courses at NTC on Nut Crops and at NTC on Target Fruit Crops

Training courses were organized on drying fruits and grapes, on basics of accounting and marketing of fruit cops products, on GIS technologies, etc.

The training center is equipped with PC technologies.

Research Institute of Fruit Growing, Viticulture and Winemaking named after R.R. Shreder has a range of research stations, where successful training courses can be organized for target groups











Results of training courses at RTC on molecular markers

Training courses are organized on application of molecular markers technologies in researches on PGR.

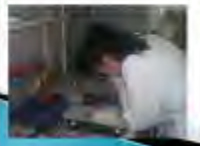
Centre of Genomic Technologies of Institute of Genetics and Plant Experimental Biology of Academy of Sciences of the Republic of Uzbekistan has modern equipments and high qualified staff, instructors in leading world Universities and trained in the best laboratories abroad.











Quantity of participants at National training courses in 2010

Name of training course	Number of participants
11–12 March, 2010 Training workshop "Marketing of fruit and nut crops products", Tashkent	8 instructors, researchers, 4 farmers
24–25 June, 2010 Training workshop on "Access and benefit sharing", Tashkent	13 instructors, researchers
29–30 September, 2010 Training workshop "Organization of accounting of farms", Tashkent	12 farmers
2–3 December, 2010 Training workshop "Drying and conservation of fruit and grapes products" Samarkand district, Samarkand Province	18 farmers
25–26 March, 2010 Mobile workshop "Particularities of cultivation of local varieties of fruit crops in Fergana Province". Kuva abd Rishtan districts, Fergana Province	28 farmers
20–21 July, 2010 Mobile workshop "Conservation and reforestation of nut bearing forests and marketing of nut crops products", Burchmulla forestry, Tashkent Province	17 farmers
21 November, 2010 Mobile workshop "Particularities of cultivation of local varieties of fruit crops and grapes on farms of Surkhandarya and Kashkadarya Provinces". The South-Uzbek plant breeding station of Uzbek RI of horticulture, viticulture and wine making named after R.R. Shreder	21 farmers
Total	**21 instructors and researchers and 100 farmers**

Number of participants from Uzbekistan at Regional training courses in 2010

Name of Training course	Number of participants
22–25 February, 2010 Regional training workshop "Linking information from Focus Group Discussion, Household Surveys, and Farm and Forest Assessment for Cultivated and Wild Fruit Tree Diversity in Central Asia» . Tashkent, Uzbekistan	6 instructors, researchers
23–25 March, 2010 Regional training workshop on "Legislative framework" Tashkent, Uzbekistan	3 instructors, researchers
6–8 April, 2010 Regional training workshop "Establishing and maintenance of apricots orchards and nurseries", Khodjand, Tajikistan	1 instructors, researchers
13–14 April, 2010 Regional training workshop on "Capacity building" Tashkent, Uzbekistan	3 instructors, researchers
13–17 August, 2010 Regional training workshop on "Application of molecular markers technologies in studies of PGR" Tashkent, Uzbekistan	3 instructors, researchers
1–5 November, 2010 Regional training workshop on "Cleaning, analyzing and compiling cultivated and wild temperate fruit tree diversity and diversity management data from Central Asia in preparation for peer reviewed publications", Tashkent, Uzbekistan	5 instructors, researchers
24 – 26 November, 2010 Regional training workshop on "Access and Benefit Sharing", Tashkent, Uzbekistan	3 instructors, researchers
Total	**24 instructors, researchers**

Comparative table of organized events in Uzbekistan

Type of events	2009	2010
Training workshops	1	4
Mobile training courses	4	3
Lectures at the Universities	1	1
Training workshops	1	–
Total events:	**8**	**8**

Comparative table of number of participants

Number of participants at National workshops	2009	2010
Farmers	163	100
Instructors, researchers	14	21

Number of participants at Regional workshops	2009	2010
Farmers	2	–
Instructors, researchers	7	24

Planned events for 2011:

- ***Mobile training course*** «Particularities of cultivation of local varieties of fruit crops and grapes on farms of Fergana province", Fergana (31 May –1 June 2011)
- ***Mobile training course*** «Particularities of cultivation of local varieties of fruit crops and grapes on farms of Bukhara and Khorezm provinces», Bukhara (June)
- ***National training course*** «Organization of accounting on farms», Tashkent (September)
- ***Regional training workshop*** «Application of molecular markers technologies in studies of PGR». (13–17 July 2011)

Training materials:

№	Name of training materials	Responsible	Deadline	Target group
	Recommendations on cultivation of pistachio plantations in Uzbekistan	G.M. Chernova	March 2010	Farmers and forestry staff
	Recommendations on cultivation of walnut plantations in Uzbekistan	E.A. Botkov	March 2010	Farmers and forestry staff
	Marketing of fruit crops products	G. Davydov	March 2011	Researchers and instructors
	Technologies of cultivation and multiplication of local varieties and forms of apple and pear in Uzbekistan	Y.M. Djevakyants	February 2011	Farmers and local population
	The best varieties of grapes and cultivation technologies in Uzbekistan	Y.M. Djevakyants	May 2010	Farmers and local population
	Recommendations on cultivation of local varieties of almond in Uzbekistan	A.A. Abdurasulov	March 2010	Farmers and forestry staff
	Recommendations on cultivation of local varieties of apple in Tashkent Province	E.A. Shreider, F.U. Khasanov, K.T. Tojiboev, G.M. Chernova	May 2010	Farmers and local population
	Recommendations on establishing pistachio (Pistacia vera L.) for erosion preventive and water protection purposes in Uzbekistan	G.M. Chernova	May 2010	Farmers and forestry staff
	Application of molecular markers in studies of PGR diversity	I.Y. Abdurakhmanov	June 2010	Researchers and instructors
	Basics of accounting and economic analysis of farming	R.D. Dustmuradov	February 2011	Farmers
	Recommendations on drying of grapes on farms (in Russian)	M.M. Mirzaev, R.M. Rizaev	February 2011	Farmers
	Recommendations on conservation of grapes and fruits on farms (in Russian)	M.M. Mirzaev, R.M. Rizaev	February 2011	Farmers

12 training materials developed. 8 out of them were published, 3 of them is in publishing house and 1 is submitted to donor for review

Round tables in 2010

- Five round tables were organized with farmers, land tenants, and forestry staff in the regions, where established nurseries and project demonstrative plots
- 06.07.2010 with farmers of Kuva district of Fergana province with collaboration of Local Multidisciplinary Committee (Chairman M. Abdurakhmanov). 20 farmers participated. The Round table agenda is provided in Annex 24.
- 07.07.2010 with farmers of Ramitan district of Bukhara province with support of Local Multidisciplinary Committee (Chairman S.B. Fatkhullaev) and local administratin of Agriculture and water resources of Romitan district (Haed R.Kh. Norov). 24 persons participated
- 08.07.2010 with farmers of Parkent district of Tashkent province with support of Local Multidisciplinary Committee (Chairman R. Abdiev). 20 farmers participated. Round table agenda is provided in Annex 23.
- 14.07.2010 with farmers of Baysun district of Surkhandarya province. 26 farmers participated. Round table agenda is provided in Annex 22
- 13.10.2010 with land tenants and forestry staff of Babatag forestry, Surkhandarya province, with support of Babatag Forestry. 20 persons participated, including, land tenants and forestry staff
- In total 110 persons attended round tables, inclusing farmers, land tenants and forestry staff, with support of Local Multidisciplinary Committees

Round tables in 2011

- In first half of 2011, 5 expedition groups were sent to 11 provinces of Uzbekistan.
- 10 Round tables were planned with farmers and land tenants, as well as forestry staff on "Role of conservation of local varieties of fruit crops and wild fruit species"


Thank you for attention!

Annex 15

Status and results of Regional training courses, organized within the project in 2010

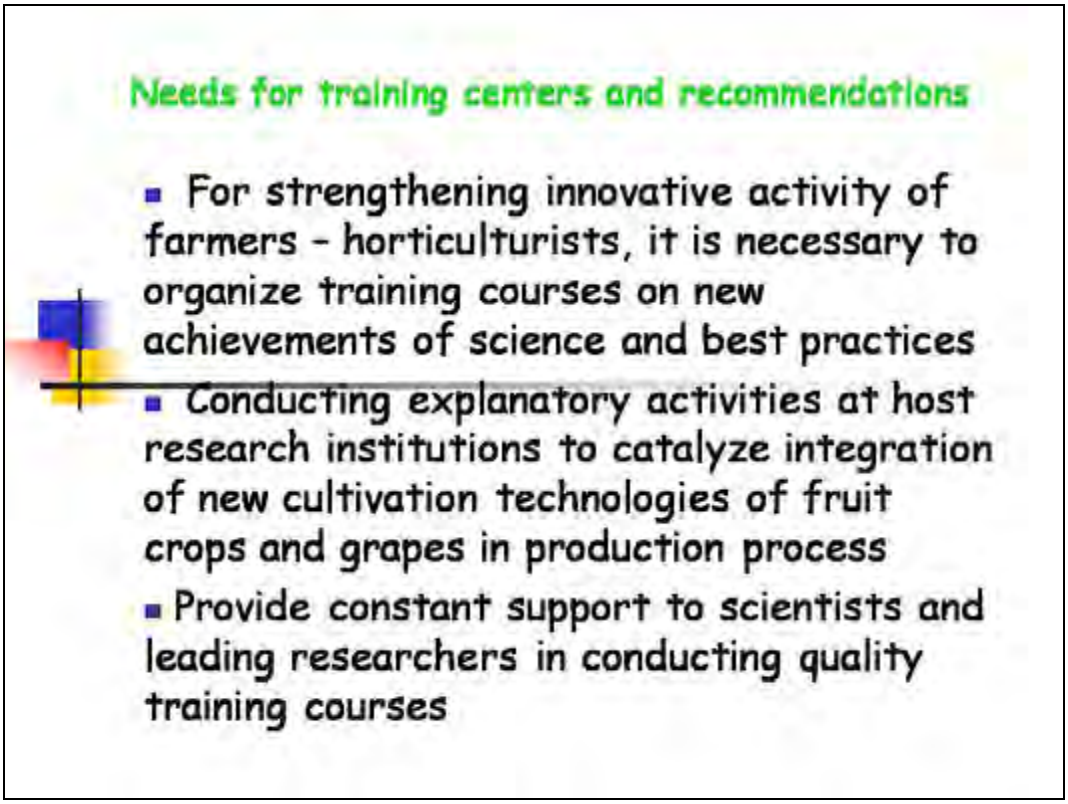
##	Venue	Name of training course	Type	Date	Notes
1.	Regional training centre on Apricot, Khodjand, Tajikistan	Выращивание саженцев, закладка и содержание абрикосового сада	Regional workshop	24-27 March, 2010	Conducted
2.	Regional training centre on molecular markers, Tashkent, Uzbekistan	Regional training course on use of molecular markers technologies in assessment of fruit crops diversity	Regional workshop	2-7 August, 2010	Conducted
3.	Regional training center on walnut, Bishkek, Kyrgyzstan	Methods on improving natural regeneration and pruning of wild species of fruit crops	Regional workshop	20-24 July, 2010	to be organized
4.	Regional training center on socio-economics, Almaty Kazakhstan	Regional workshop on new socio-economic methods of management and conservation of biodiversity of fruit crops	Regional workshop	27-31 July, 2010	Not organized
5.	Regional training centre on pomegranate, Makhtumkuly village, Turkmenistan	Traditional methods of conservation and processing of pomegranate	Regional workshop	21-25 September, 2010	Not organized
6.	Regional project office, Tashkent, Uzbekistan	Capacity building	Regional workshop	April 2010	Conducted
7.	Regional project office, Tashkent, Uzbekistan	"Linking information from Focus Group Discussion, Household Surveys, and Farm and Forest Assessment for Cultivated and Wild Fruit Tree Diversity in Central Asia"	Regional workshop	22-25 February 2010	Conducted
8.	Regional project office, Tashkent, Uzbekistan	Региональный семинар по законодательной базе.	Regional workshop	23-25 March 2010	Conducted

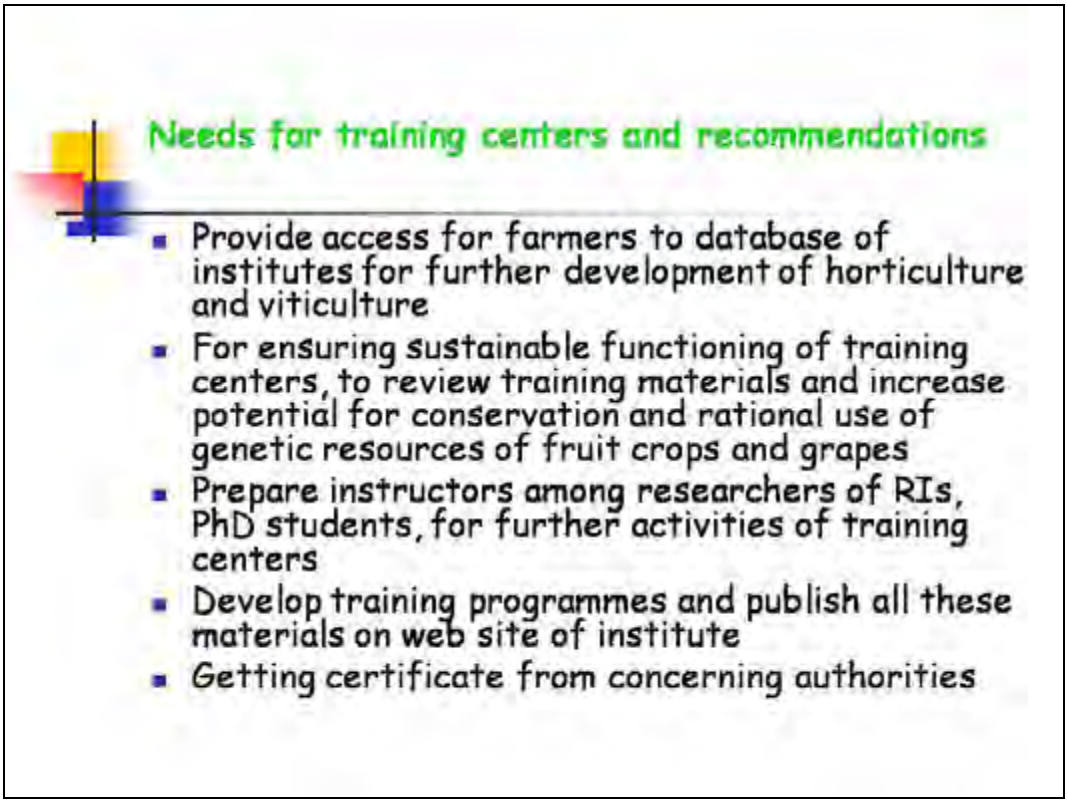
##	Venue	Name of training course	Type	Date	Notes
9.	Regional project office, Tashkent, Uzbekistan	Application of molecular markers technologies in studies of PGR	Regional workshop	13-17 August 2010	Conducted
10.	**In total, more than 7 Regional training courses were organized by Regional office of project implementation for researchers and instructors**				

Annex 16

Recommendations and plan of actions for ensuring sustainable functioning of regional and national training centers

Kazakhstan

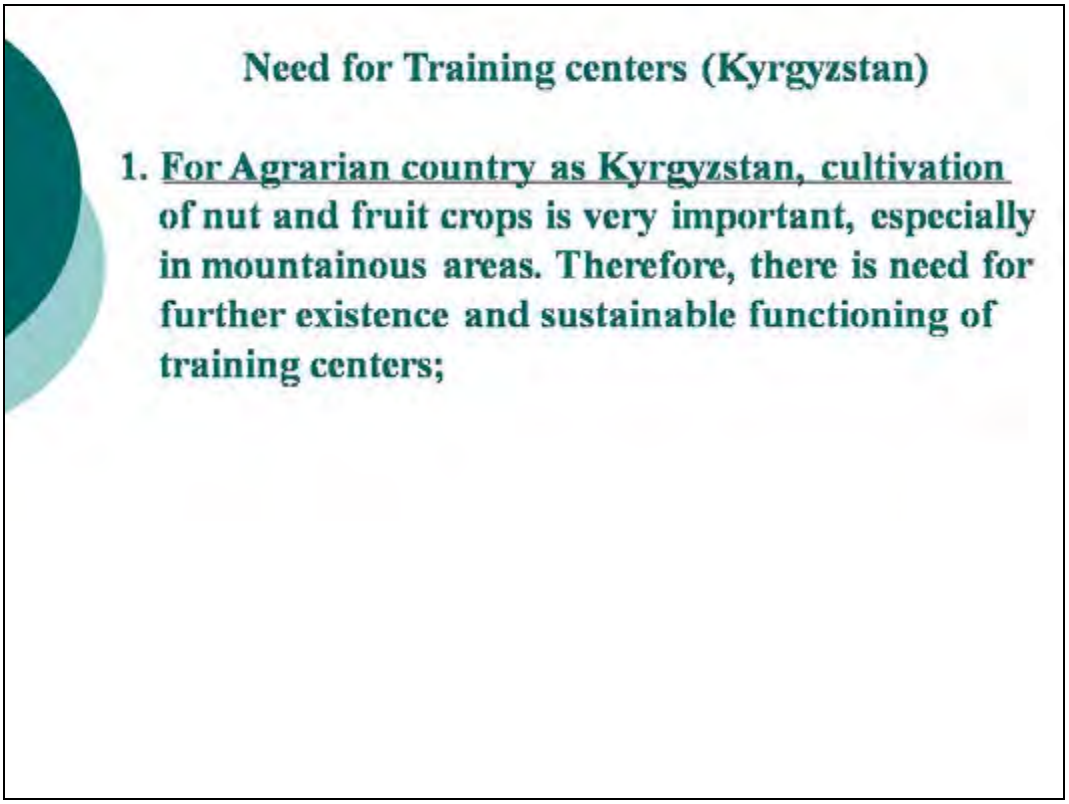


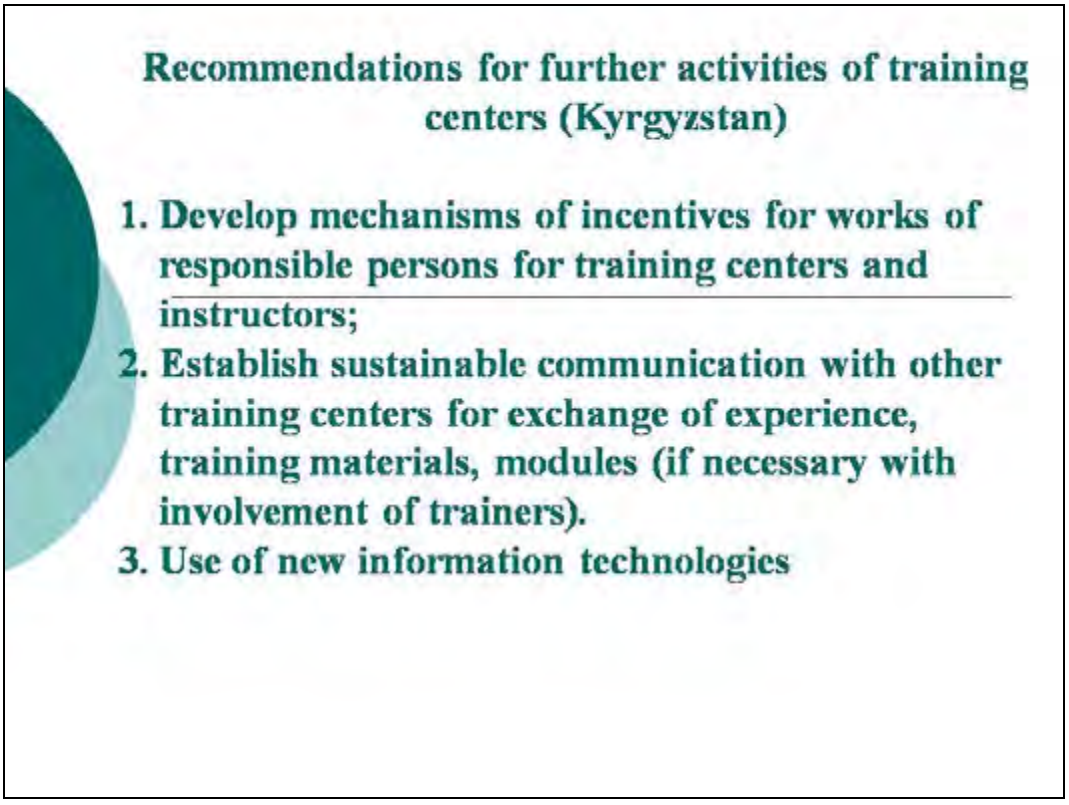


Annex 17

Recommendations and plan of actions for ensuring sustainable functioning of regional and national training centers

Kyrgyzstan



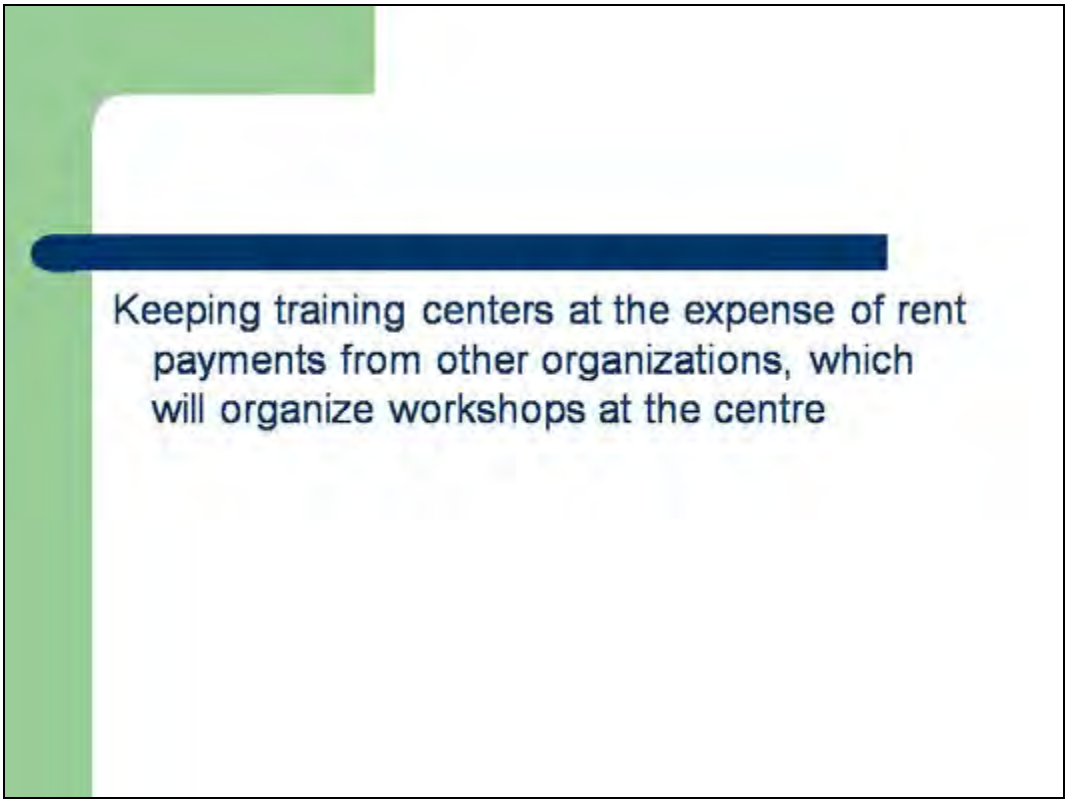


4. Develop work plan of future trainings;
5. Distribute information on training centers, about possible courses and trainers;
6. Develop mechanisms of commercialization of training centers (to ensure sustainable functioning of TC);
7. Work on certification issues of TC;
8. Improving qualification of trainers (with involving young specialists in the domain);
9. Complete (update) collection (stands, visual materials) of varieties, and forms of fruit crops;

Annex 18

Recommendations and plan of actions for ensuring sustainable functioning of regional and national training centers

Tajikistan



- Allocation of minimal amount of funds by Tajik Academy of Agricultural Sciences for purchase of stationeries and maintenance of equipments at training centers

- Organize mobile training courses at places and host institution covers the expenses of training courses

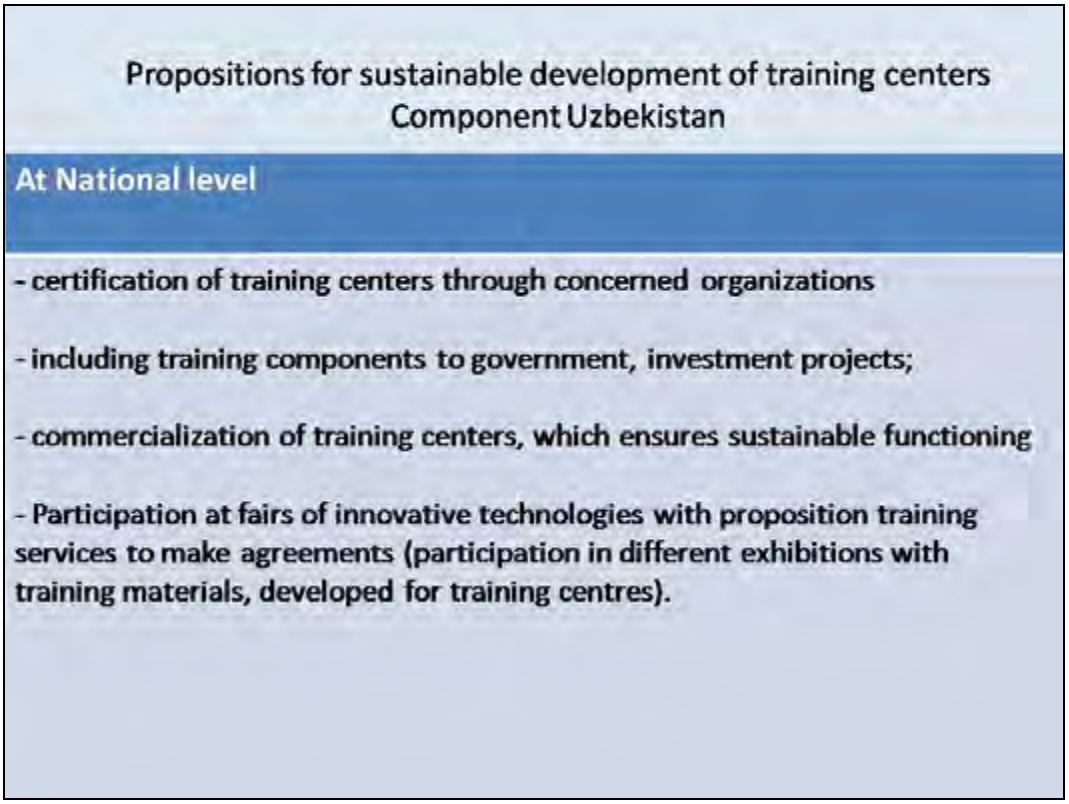
- Invite farmers, land tenants, living in neighborhood, to training courses at the centre

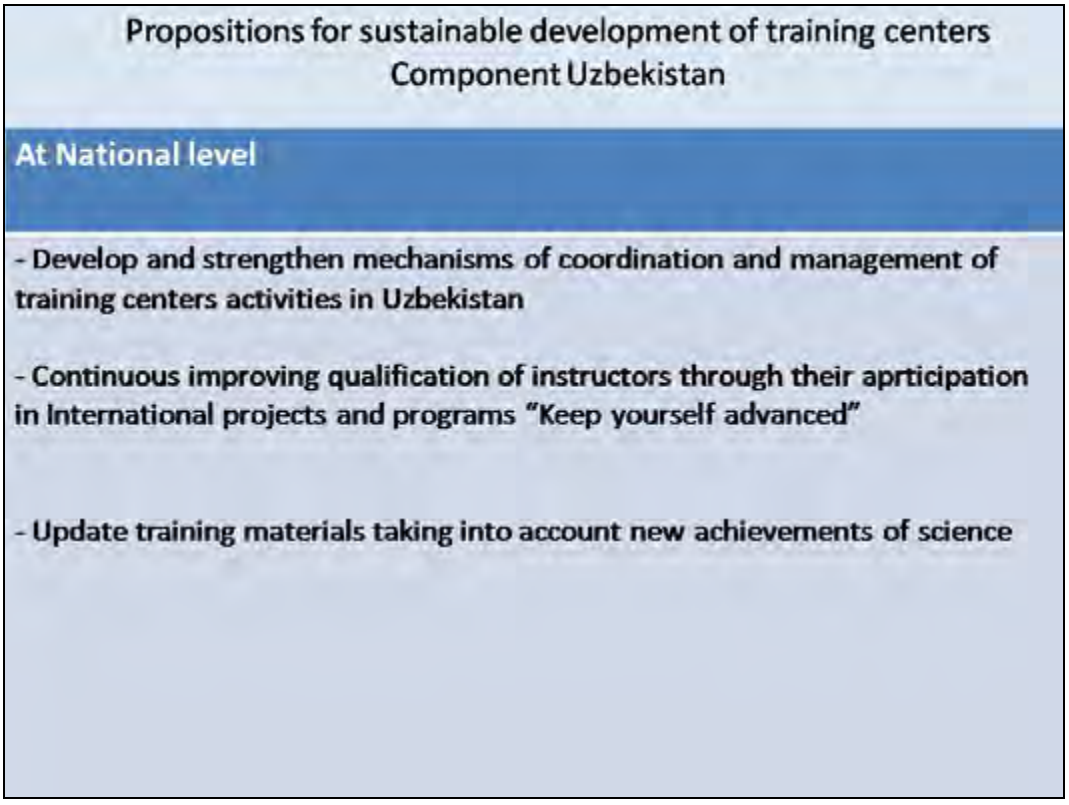
- Provide consultation to farmers through e-mails or through farmers' association

Annex 19

Recommendations and plan of actions for ensuring sustainable functioning of regional and national training centers

Uzbekistan





Propositions for sustainable development of training centers
Component Uzbekistan

At Regional level

- including training components to international, investment projects;

- organizing virtual forums between countries

- commercialization of training centers, which ensures sustainable functioning

- organization of common Regional centre, to organize training courses in countries of the region (after completion of the project)

Propositions for sustainable development of training centers
Component Uzbekistan

At Regional level

- Develop and strengthen regional mechanism of coordination and management of activities of training centers

- Continuous improving qualification of instructors through participation in international projects and programmes "Keep yourself advanced"

Annex 20

Recommendations and action plan

Sustainability of training centers, including national and regional cooperation

Recommendations	Mechanism of implementation	Responsible organization	Deadline
Certification of training centers through relevant authorities	Preparing documents, registration and obtaining certificate	Host institutions, where the training centers established	2011 - 2012
Inclusion of training components to international and investment projects	During project development process	Host institutions, where the training centers established	Continuous
Commercialization of training centers, to ensure their sustainable functioning	• Advertising the offered services (booklets, web site, etc.) • Make agreements with interested organizations • Strengthening qualification of instructors through participation in international projects and prograammes "Keep yourself advanced"	Host institutions, where the training centers established	Continuous
Develop and strengthen mechanism of regional coordination of training centers activities	Establishing a common Regional center, which will organize regional trainings and workshops for exchange of experience, maintain trainings database, and virtual forum for exchange of opinions between countries	Regional consultant on training (K.T. Turgunbaev)	Continuous
Update training materials taking into account new achievements in science and well practices and strengthen capacity for conservation and rational use of genetic resources of fruit crops and grapes	• Putting information about scientific achievements and best practices on project web site • Use of new information technologies (remote learning) Complete (renew) training materials (stands, visual materials, etc.)	All partners and responsible persons for training centers	Continuous
Allow access for farmers to database of training centers	Develop training programs, enter all data, training materials, recommendations and video materials to web site of the institute	Curators of training centers	Continuous

Training materials, which is important at regional level – update, access and use

Training materials	How to update after project completion?	How to improve access within the project?	Responsible organization	Participants	Deadlines
National methodology of assessment of distribution, diversity level, status and conservation of fruit crops forests in mountainous areas of Kazakhstan	Update, depending on appearance of new scientific data	• Distribute among libraries of Universities and RI • Through web portal, internet Distribute among forestry, natural reserves and national parks	RI Botany and Phyto-introduction of Academy of Agricultural Sciences of Kazakhstan	Committee of forestry and hunting association	-
Cultivation of intensive apple orchards on clonal root stocks in the South and South-east of Kazakhstan	Improve technologies of cultivation of orchards in different regions of the Republic	Distribute among farmers and administration of Almaty, Djambyl and South Kazakhstan provinces	• Kazakh RI of Horticulture and Viticulture • South-West RI of Livestock and Ңoro-Plant industry	Farmers' association, members of Multidisciplinary and corrdination committees, NPIU	2011
Use of adaptive and economically valuable traits of fruit crops and grapes in selective programs	Synthesize with similar publications in Kyrgyzstan	Distribute among libraries of Universities and RI Through web portal of the project	Kazakh RI of Horticulture and Viticulture, Botanical Garden of National Academy of Sciences of Kyrgyz Republic	Farmers' association, Members of multidisciplinary and coordination committees, NPIU, KNAU named after K.I. Skryabin	2011
Recommendations on selection of best forms and cultivation of	Complete with materials from the region (recommended forms in	Distribute among libraries of Universities and RI,	Forestry institute of National Academy of Sciences of Kyrgyz	RI of Nut and Fruit Crops of National Academy of Sciences of	2011-2012

planting materials of walnut	Uzbekistan, Tajikistan and Turkmenistan)	through web portal of the project and local administration	Republic, Republican Scientific and Production Center of Ornamental Gardening and Forestry, Tajik RI of Horticulture	Kyrgyz Republic	
Factors, decreasing ecological sustainability of nut and fruit forests (pest and diseases)	Complete with materials on pests and diseases in Uzbekistan	Distribute among libraries of Universities and RI, through web portal of the project and local administration лесные управления и через учреждения лесного хозяйства	Forestry Department of KNAU, Republican Scientific and Production Center of Ornamental Gardening and Forestry, Tajik RI of Horticulture (Uzbekistan)	RI of Nut and Fruit Crops of National Academy of Sciences of Kyrgyz Republic	2011
Forming and pruning of fruit threes	Synthesize with recommendations on planting of fruit crops orchards on farms and recommendations on conservation of fruits	Distribute among libraries of Universities and RI, through web portal of the project and local administration	Botanical Garden of National Academy of Sciences of Kyrgyz Republic	KNAU, RI of Nut and Fruit Crops	2011-2012
Recommendations on description of local varieties of priority fruit crops and wild species	Update, depending on appearance of new scientific data	Distribute among libraries of Universities and RI, through web portal of the project and local administration	Botanical Garden of National Academy of Sciences of Kyrgyz Republic	KNAU, RI of Nut and Fruit Crops	2011-2012
Apricot cultivation and processing technologies	Combine two recommendations	Distribute among libraries of Universities and RI, through web portal of the project and among farmers	Sugd branch of RI of Horticulture of Tajik Academy of Agricultural Sciences	Pamirs Biological Institute, Uzbek RI of Plant Industry and Uzbek RI of horticulture, viticulture and winemaking	2011

				named after R.R. Shreder	
Cultivation of grapevine planting materials	Combine with recommendations on grapes, developed in Uzbekistan and Kyrgyzstan	Distribute among libraries of Universities and RI, through web portal of the project and among farmers, land tenants	Uzbek RI of Horticulture, Viticulture and Winemaking named after R.R. Shreder	RI of Horticulture of Tajik Academy of Agricultural Sciences, Kyrgyz RI of farming, KNAU	2011
Cultivation technologies of peach seedlings in one year with dense planting methods	Update regularly	Distribute among libraries of Universities and RI, through web portal of the project and among farmers, land tenants	RI of Horticulture of Tajik Academy of Agricultural Sciences		2011
Cultivation of pistachio in orchards in Tajikistan	Combine with recommendations on pistachio, developed in Uzbekistan, Kyrgyzstan and Turkmenistan	Distribute among farmers, land tenants, forestry staff	RI of Horticulture of Tajik Academy of Agricultural Sciences, RI of Forestry, Republican Scientific and Production Center of Ornamental Gardening and Forestry, Tajik RI of Horticulture, Turkmen RI of Deserts, Flora and Fauna, RI of Nut and Fruit Crops		2011
Recommendations on cultivation of almond plantations in Uzbekistan	Update, depending on appearance of new scientific data	Distribute among libraries of Universities and RI, through web portal of the project	Uzbek RI of Horticulture, Viticulture and Winemaking named after R.R. Shreder		2012
Training materials on	Update every two years	Distribute among	RI of Genetics and	RI of biology and	Every 2 years

use of molecular markers in PGR diversity assessment	depending on new scientific achievements in technologies of molecular markers	libraries of Universities and RI, through web portal of the project	Experimental Biology of Plants of Academy of Sciences of Uzbekistan	biotechnology of plants	
Pomegranate	?				