

# Darwin Initiative – Final Report

(To be completed with reference to the Reporting Guidance Notes for Project Leaders  
(<http://darwin.defra.gov.uk/resources/reporting/>) -

it is expected that this report will be a **maximum** of 20 pages in length, excluding annexes)

## Darwin project information

|                                     |  |
|-------------------------------------|--|
| Project Reference                   | EIDPO11  |
| Project Title                       | Biodiversity Education and Teacher Training (BETT)   |
| Host country(ies)                   | Kyrgyzstan   |
| UK Contract Holder Institution      | Field Studies Council  |
| UK Partner Institution(s)           | Field Studies Council  |
| Host Country Partner Institution(s) | Ecological Movement “BIOM”   |
| Darwin Grant Value                  | £ 91750  |
| Start/End dates of Project          | May 2006 – May 2008  |
| Project Leader Name                 | James Hindson until 30/09/2007<br>Richard Dawson from 01/10/2007   |
| Project Website                     | Project pages are laced on <a href="http://www.biom.org.kg">www.biom.org.kg</a> -<br><a href="http://www.biom.org.kg/ecoeducation/?pid=2">http://www.biom.org.kg/ecoeducation/?pid=2</a> |
| Report Author(s) and date           | Postnova Evgenia, Richard Dawson, 26/10/2008   |

## 1 Project Background

The project is located in 4 regions of Kyrgyzstan, where project partners are implementing their activities – Osh region in the south of Kyrgyzstan (Osh State University), Naryn region (Naryn State University), Issyk-Kul region (Issyk-Kul State University) and Bishkek city ( BIOM and Kyrgyz National University).

The purpose of this post-project initiative is ‘to improve the quality of biodiversity education in universities and schools so that young people are better equipped to make decisions that enhance rather than reduce biodiversity in Kyrgyzstan.’

The main objectives of the project are:

- To build the capacity of teacher trainers in Kyrgyzstan to deliver high quality biodiversity education to initial teacher training students.
- To create a system of biodiversity education that will be delivered to students training to be teachers.
- To provide a support framework for teacher trainers delivering biodiversity education.

The goal of the original Darwin project was to ‘raise awareness and understanding of school students and communities in Kyrgyzstan of the unique value of biodiversity and the importance of protecting this as their country seeks to develop.’ We consider that we successfully achieved this and this new project neatly grew out of and built on some of the most significant achievements in the original project through a focus on biodiversity education at initial teacher training (ITT) level within University courses. Our original project focused on in service training and at school level. The resources and lessons learnt in our original project were used to enhance biodiversity education at ITT level. In service training and development is important but training at ITT level will result in the continuous training of teachers in biodiversity education, and over time give all new teachers the capacity to integrate biodiversity education into their subjects.

## 2 Project support to the Convention on Biological Diversity (CBD)

Our project assisted Kyrgyzstan in the implementation of the following articles of the CBD.

Article 13. Public Education and Awareness (75%) – Our project trained academic staff in all three institutions, developed a Biodiversity Education module and integrated this in the ITT programmes and produced supporting resources. This helped to achieve (a) “promote and encourage understanding the importance of, and the measures required for, the conservation of biological diversity...and the inclusion of these topics in educational programmes” and (b) “cooperate, as appropriate, with other State and international organisations in developing educational...programmes, with respect to conservation and sustainable use of biological diversity”.

Article 9. Ex Situ Conservation (10%) – Our project created four micro reserves in each of the partner Universities. This supports section (a) “Adopt measures for the ex situ conservation of components of biological diversity”.

Article 10. Sustainable Use of the Components of Biological Diversity (10%) – The Biodiversity Education module we developed focuses not just on the practical ecological aspects of biodiversity but will also have a significant component on the importance of biodiversity within the context of sustainable development. This will be an overall conceptual approach and will help to deliver different aspects of article 10.

Article 17. Exchange of Information – (5%) – Information exchange largely focused on training methodologies and helped support the delivery of “exchange of information on...training programmes”.

BIOM have been in regular contact with the CBD National Focal Point in the Ministry of Environment who are aware of the project.

Our project has linked with the CBD focal point from Governmental Agency on environmental protection and forestry. Their specialists - especially from Department of Ecological Education - provide permanent information, expert and political support to our project.

## 3 Project Partnerships

The collaboration between BIOM and FSC during project period brought many positive and valuable outcomes to both organizations. BIOM and the FSC have developed a strong common approach to project management, identified fields of common interests and priorities that has strengthened the partnership.

FSC has significantly contributed to the substantial growth of BIOM team and their understanding of biodiversity education and education for sustainable development principles. In July 2006 FSC helped BIOM to take part in an international educational seminar on biodiversity conservation, which was held in Belarus under support of Earthwatch Institute (Europe) and FSC. Participation in these events allowed BIOM members to get training on using field study research methods to support Darwin project.

In 2008 year FSC trained the BIOM team in the sphere of sustainable development, climate change and their links with biodiversity issues. We worked fruitfully on improving trainer skills of BIOM and raised capacity of the team to apply student oriented approach. This year the FSC also developed BIOM's skills in the area of promotion through a focus on branding.

Another strong part of partnership is cooperation between BIOM and project universities: Kyrgyz State National University and 3 big regional universities in Naryn, Karakul and Osh cities. Close cooperation of BIOM with universities through project coordinators, representatives of administration (rectors, vice-rectors, etc.) and teachers helped in achieving the project goals and also to start non-project joint initiatives (UNESCO, British Council, etc. – see below) and permanent work with each other - providing, expertise, information and materials exchange, invitation to the events, etc.

The partnership between the core partners of FSC, BIOM and four universities was based on the positive results of the previous Darwin School Green Land project that demonstrated the need for ITT to include biodiversity education.

One more important step within the project was our work with “School Green Land” network. In September 2007 we renewed contacts with school coordinators, involved new schools in the network, distributed educational materials (posters and water identification keys), announced a new school competition on best school micro reserve. And in September 2008 we are going to make a decision on this competition and give awards for schools.

In April 2007 we organized three strategic meetings and capacity building workshops for “School Green Land” project schools in Bishkek, Osh and Cholpon Ata cities in cooperation with Norwegian energy-saving project “SPARE”. More than 50 schools were involved and more than 100 teachers took part in these meetings. The Network meetings allowed us to develop a common Strategy of BIOM's Eco-school network for 2008-2009 school year, disseminate experience on creation of wild nature micro reserves among SPARE schools, pass on knowledge and methods on biodiversity education and delivery of outdoor lessons. (See pictures in Appendix 8) As it was mentioned above we also involved SGL schools into such activities, as:

The network of Schools was also involved into Information campaign in cooperation with French Embassy in Kyrgyzstan and UNDP & European Commission project on Emergency Situations described below.

#### **Other Collaboration:**

Our project collaborated with a great number of other projects, currently working in Kyrgyzstan in the field of environmental protection and biodiversity conservation including -

- ***The project “Communities of Kyrgyzstan for biodiversity conservation”*** supported by the Japanese “Keidanren” Nature Conservation Fund has the purpose of capacity building of local communities of Kyrgyzstan in biodiversity conservation through direct actions on the protection of wild nature and an information campaign about role of biodiversity. The materials were provided to all universities, as well as partner links between Issyk-Kul state University, school from “School Green Land” (educated in previous Darwin project) and 2 villages, involved in Keidanren project, were established. All of them and BIOM will become partners on realization of information campaign on protection of wild ecosystem of sea-buckthorn bushes around Issyk-kul lake.
- ***The project “Sun energy – for Kyrgyzstan”*** under support of Norwegian Society on nature protection and Small Grants of GEF – partner links with this project will allow us to provide additional support to universities – to create special demonstration zones of using solar energy near microreserves of wild nature. This will strengthen educational services on microreserve areas and ensure comfort, as hot water from sun installations will be available for students and visitors. Packs of educational materials, issued within the project, will be also available for our universities.
- ***“Environmental memories” initiative*** under support of UNESCO – this will help us to provide more consultations and educational seminars for our initiative groups from Naryn State University and Osh State University. The students from our 3 project universities were also involved in Ecological Essays Completion. The project has strong links with the CBD focal point from Governmental Agency on environmental protection and forestry – their specialists, especially from Department of Ecological education - provide constant information, expert and political support to our project.
- ***Information campaign “Biodiversity and climate change” in cooperation with British Council*** – Cooperation with this project allowed BIOM and FSC to conduct wide information campaign in Kyrgyzstan on biodiversity and climate change, including a series of information meetings at the universities in 4 regions of Kyrgyzstan, mass-media campaign, eco-café in Bishkek and issuing of new posters. Darwin project

universities were also involved in the project and got information wall banners and materials on Biodiversity and Climate change, which they put in the central halls.

- **SPARE project.** This International project supported by the Norwegian government, focused on raising capacity of schools to save energy and skills to use renewable energy resources. We included the 25 “School Green land” project schools in the SPARE network and conducted 3 joint network meetings. This allowed us to develop a common Strategy of BIOM’s Eco-school network for 2008-2009 school year, disseminating experience on the creation of microreserves of wild nature among SPARE schools, passing on knowledge and methods of biodiversity education and out of classroom lessons. As a result of this cooperation SGL schools were able to take part in 2 ecological competitions and got international awards.
- **Information campaign in cooperation with French Embassy in Kyrgyzstan.** This cooperation helped us to involve “School Green Land” project schools into creative process of conducting ecological lessons on biodiversity conservation on the basis of materials from world-famous photographer Yan Artus Bertran. The photo-exhibition “A world from above” was a great success in Bishkek. Work with French Embassy allowed us to provide associated education materials to teachers from School Green land as well as for Darwin project universities.
- **UNDP & European Commission project on Emergency Situations –** Links with this project allowed us to include ideas of biodiversity conservation as necessary factor for ecological security into methodical pack for schools of Kyrgyzstan “Learn how to live near danger”. For example, destruction of nature communities around villages - deforested mountainsides, degradation of mountain steppes and meadows as a result of overgrazing, etc - makes them unsafe for people’s life. Great role of not-disturbed wild ecosystems in ensuring ecological security were shown and practical advice for schools and communities on protection of biodiversity near villages were prepared. The methodical pack – Illustrated book for students and manual for teachers – were issued and distributed among schools. School Green Land network became pilot schools in this process.
- **FAO project “National Forest programme Facility”,** Its aim is the implementation of the Forestry policy of Kyrgyzstan through conducting an information campaign on the involvement of local communities in community based forest management. Cooperation with this project allowed us to get new information materials – such as new posters and identification keys for our Darwin project universities and also actively involved teachers and students from Naryn State University in conducting an information campaign on protection of forests in Naryn region.

## 4 Project Achievements

### 4.1 Impact: achievement of positive impact on biodiversity, sustainable use or equitable sharing of biodiversity benefits

The impact of the project is positive in many aspects – both for improvement of biodiversity conservation and capacity building of people.

In term of biodiversity conservation activities, we were able to contribute to Ex Situ Conservation through restoration of nature territories near 3 universities of Kyrgyzstan, such as meadow and steppe area in KSU, high mountain meadow and steppe area near NSU and riverside of wild bushes and trees near OshSU. We were also able to transform “dead” places, such as university landfills into restored nature territories with new ecological niche (pond areas in OshSU and KSU). In total more then about 3500 square meters of land “came back to life”.

Through support of Botanic garden in ISU we were able to contribute to restoration of Issyk-kul conifer forests and protection of wild sea buckthorn bushes on the coastline of Issyk-Kul lake through direct ecological actions of ISU students and schools on planting saplings in mountain

(more than 500 young conifer trees) and coastline areas (more than 300 young saplings of sea buckthorn bushes were planted).

We were able to get several concrete and sustainable results of capacity building activities within the project.

For example, the project raised capacity of Kyrgyz educator to implement Section 3.2 (Ecological Education) in National Plan and Strategy on biodiversity conservation of Kyrgyzstan. We were able to achieve this through training of academic staff in 4 institutions (including KSU – the leading university of Kyrgyzstan), development of new Biodiversity Education module, its integration in the ITT programmes and creation of new supporting resources on biodiversity conservation.

At the moment we have a national team of 15 key people (and 45 people in general in all 4 universities), who passed intensive training on education for biodiversity conservation. These people are skilled in algorithm and technology of microreserve creation as well as in many educational technologies on biodiversity education, including field study work.

The visible changes in quality of biodiversity education in Naryn State University were marked by Mrs Buldjurova - Minister of Education of Kyrgyzstan, who visited this university and told, that “Such methodical support, materials and syllabus should be developed for each university course in Kyrgyzstan...”. And this she told about our new BEM.

Cooperation with British partners (during all steps of the project) significantly raised capacity of local partners in their understanding of SD issues, which allowed local partners (BIOM, consortium of project universities and some other partners) to establish in 2007 Regional Center of expertise on ESD (under patronage of UN Institute in Tokyo) with key focus on protection of mountain ecosystems. Strengthening of project Development Team (DT) also allowed them to cooperate with other countries of Central Asia who took part in some regional and international conferences (such as ESD Panel of experts in Geneva (March 2008), 9-th meeting of parties of CBD in Germany (Bonn, 2008), 7-th Regional Conference on Ecological education and ESD (Almaty, November, 2008), exchange of educational materials in this sphere, etc.

All these significantly supported the national platform of Education for Sustainable Development in the country - through close work within the project with schools and universities from different regions of Kyrgyzstan, support of network “Schools and universities of Kyrgyzstan for SD and biodiversity conservation”, delivered the first national conference on Biodiversity Education and ESD in Kyrgyzstan (project final dissemination event) and other positive impacts.

New Biodiversity Education module was also developed with focus not just on the practical ecological aspects of biodiversity but also in the context of sustainable development. This provides opportunities for other universities of Kyrgyzstan to integrate it in their curricula as contribution to ESD Decade.

Our 4 project universities, who are more skilled and informed about biodiversity and ESD, than others, are now ready to provide expertise in this sphere. The evidence of that is a big interest of local schools in Bishkek, Osh, Naryn and Osh cities to event and activities at the university microreserves. In KSU at present we have to make a special timetable for school visit, because we had many applications and requests from schools to take part in open door lessons after the official opening of microreserve in September 2008. So, this indicates, that KSU, OshSU, NSU and ISU can develop their microreserve territories as regional field study centers. BIOM is willing to support this by resources, expertise and funds (through different ecological projects). The project also contributed to implementation of country obligations under the Biodiversity Convention. The BETT project was mentioned as a good example of biodiversity education in 4-th National Report on Biodiversity Conservation of Kyrgyzstan.

And of course, the post project largely contributed to capacity of NGO “BIOM”, which at the moment has a very good status as specialists in the sphere of biodiversity conservation, and

the evidence of that is their involvement in different projects as experts and consultants on biodiversity - for example, preparing of 4-th National Report on realization of CBD in Kyrgyzstan, Japan project "Information campaign on Red book of Kyrgyzstan" project, etc.

## 4.2 Outcomes: achievement of the project purpose and outcomes

The project purpose is 'to improve the quality of biodiversity education so that young people are better equipped to make decisions that enhance rather than reduce biodiversity in Kyrgyzstan.'

In order to achieve this we have trained 15 members of higher education academic staff in Osh State University, 10 in Issyk-Kul State University, 10 in Naryn State University, and 10 in Kyrgyz State University. A total 45 people at 4 Institutions. They have received at least 120 hours of training on effective Biodiversity learning. We also involved schools, NGOs and some governmental organizations (for example the Osh territorial Department on Protection of Environment, Ak-Su Forest Department in Issyk-Kul) in our educational events. This has strengthened local partnerships in the field of biodiversity education. Representatives from Ministry of Education, Science and Youth policy of KR and State Agency on Protection of Environment and Forestry of KR provided consultative and political support to the project. Integration of the new Biodiversity Education Module and creation of the micro reserves allowed us to raise quality of biodiversity education in 3 regional universities of Kyrgyzstan and initial teacher training and in local schools.

## 4.3 Outputs (and activities)

### 1. A Biodiversity Education Module (BEM) developed and integrated in the curriculum of students training to be biology and ecology teachers

This output has been fully achieved. We have got a new biodiversity module developed and integrated into the teaching programmes for students training to be Biology and Ecology teachers in the Issyk-Kul State University and the Osh and Naryn State Universities. All pilot Universities fulfilled their commitment to integrate the module into the Biology and Ecology degrees courses. Module is formally accepted as part of the Biology and Ecology teacher training degrees – and we have formal statements from the University Administrations.

Since September 2007 **Issyk-Kul and Naryn State** universities started delivering the new Biodiversity Education Module for 3rd and 4th year students specialising in ecology and biology. From March 2007 Osh State University also started delivering the module.

- ✓ **Naryn State University** – BEM was officially provided for speciality – "553500. Protection of environment". The module included 102 hours (64 hours – for lectures and practical trainings and 38 hours for self-dependent work of students). At the moment the course is also officially provided for speciality "540100. Natural Science Education (Biology) in NSU."
- ✓ **Issyk-Kul State University** – BEM was officially provided for speciality "511101 Ecology" as course for students. It includes 70 hours in total – 32 hours (22 hours for lectures and 10 for practice) and 38 hours for self-dependent work of students.
- ✓ **Osh State University** – the course is provided both in Kyrgyz and Russian language for speciality "511101 Ecology" for students of the 4th year course. It includes 108 hours in total – 46 hours (24 hours for lectures and 38 for practice) and 38 hours for self-dependent work of students.
- ✓ **Kyrgyz National University** – course materials were disseminated among university teachers from different chairs of biology faculty in KNU and at the moment many of them use the course materials in their lectures – especially within such courses as "Applied ecology", "Hydrobiology", "Economy of nature management", "Biocenology", "Law bases of environmental protection", etc.

In October and November 2007 and again in January, February and March 2008 BIOM organized monitoring visits to universities to check the process of delivering the module. Results of the visits showed that the process is moving smoothly – the course is provided to students according to universities' schedules, students are attending the course and there is regular evaluation on it. In Naryn and Issyk-Kul the new module is already successful - teachers, responsible for providing lectures on BEM, were asked by other teachers to allow visiting the lectures, organize "open lectures", use materials, copy power point presentations, etc. Results of express-evaluation among students and teachers of Osh State University, conducted by BIOM team, demonstrated that student's attitude towards the new biodiversity module is positive, and they even think, that it is advanced education, different from other courses at their university. (see pictures in Appendix 9)

The students pass examinations at the end of course. The course will be included into the list of courses, marked in a special Attachment to the Diploma.

Delivering of the module – see the picture in Appendix 11

## 2. Demonstration teaching micro reserves

This output has been fully achieved. All 3 State Universities created their reserves and their functioning would be available on a long term basis according to management plans. We also created one extra micro reserve in Kyrgyz State National University – leading University of Kyrgyzstan.

Naryn State University – the area of the reserve was cleaned from rubbish, also a big dust-hole was sorted out and covered by soil. A great number of trees, including coniferous trees (native to Naryn mountain area) were planted. Areas of wild bushes, steppe and wild meadow were created and necessary water supply provided. In spring 2008 several new complexes of trees were planted and creation of summer class completed.

Issyk-Kul State University - we supported University Botanic Garden and helped them to create 2 zones, 1 - sowing hotbed for growing young juniper trees 2 – area for striking roots of juniper trees. In 2-3 years this will allow university to contribute to solution of the problem of juniper forests degradation in Issyk Kul region, as they aimed to plant young conifer seedlings on the deforested mountainsides by student groups.

Kyrgyz National University – microreserve in KNU was created in the courtyard of the university building, where all natural-science faculties are situated. That was a dry abandoned area, covered by construction waste. In July-August 2007 the territory was cleaned, covered by a layer of soil, supplied by water. In September- October 2007 more than 150 diverse wild species of Kyrgyzstan were planted in KNU microreserve, and several ecosystem zones was organized, such as ecosystem of south walnut forests, area with conifer trees, pond and alpine hill, areas with steppe and meadow plants, model of ecosystem of Issyk-kul desert area, etc.

Osh State University – The area of the reserve was cleaned from rubbish and encircled by fence for protection from cattle (Osh State University co-financed this activity). A pond area was created. The idea to make ecological corridor between microreserve area and riverside bushes of Ak-bura River near university building were realised. It is now possible to get to the river from the microreserve area directly. As further steps the university is going to create zones of red list plants of Kyrgyzstan, zones of plant-barometers, etc.

In all universities both teachers and students were involved in the process of microreserve creation. The universities enlisted consultative support of experts (landscape designers, botanists, zoologists, foresters).

At the areas of all 4 reserves we had got visually positive changes – cleaning areas of microreserves, planting trees, bushes, creating ponds, attracting invertebrates and other animals, growing red-list species of Kyrgyzstan – all these improved biodiversity in university grounds. Detailed data and real evidences are available in project biodiversity survey.

See the pictures in Appendix 9.

### 3. Resources developed to support the BEM

This output was fully achieved. We developed and issued the Manual for university teachers with full description of lectures as well as sets of methodical materials and handouts for students to support realisation of BEM. We also issued water identification key to allow wider biodiversity monitoring.

### 4. The outcomes of the project are disseminated and promoted widely through the SGL network

This output was fully achieved through:

- 6 project Newsletter ( Pilot Newsletter and Newsletters 1 - 5).
- Project web pages are placed on BIOM's web-site – [www.biom.org.kg](http://www.biom.org.kg).
- A serial of articles about project were issued both in local and national press, we also got good mass-media coverage at the project dissemination events in September-October 2008.
- SGL network of 25 schools established in original project was enhanced. This network now includes about 50 schools, we have also organized capacity building seminars and meeting on Network Strategy development for the 2008-2009 school year.
- Dissemination conference took place in Bishkek on 27-28 of October and achieved its results on presenting new Biodiversity module, project materials and demonstration teaching microreserves to more than 10 universities in Kyrgyzstan, which provide ecological education for students (Jalalabat State university, Kyrgyz-Uzbek university in Osh city, Osh Technical university, Bishkek Humanitarian university, Kyrgyz-Russian (Slavonic University, Pedagogical University, Kyrgyz-Turkish university and some others) , regional departments of education from Karakol, Osh and Jalalabat cities, educational and scientific institutions, National Academy of Science, methodical ecological centers and other educators. In total more than 40 people took part at the conference. The response of participants was very positive, and results of the express-questioning and data of the questionnaires, which participants were asked to complete after the conference period, showed, that 70% of people think, that conference was very practical and helped them to raise professional qualification, 85 % of participants confirmed, that they wish to use project materials in their work, and about 68 % said, that they want to use educational module or its elements in their universities (school, centers, etc). Jalalabat State University wants to start delivering of the Biodiversity module for their student next year.

As the most interesting sessions (parts of the conference) 29% of the participants marked "Presentation of the module (syllabus, experience of universities, etc.)", 20 % - presentation of the UK experience in biodiversity education (FSC's session)", 21 % - "Creation of microreserves at the universities' and schools' areas" and excursion to the microreserve of KSU, 14% - master-class on bioindication and red list species, 15 % - presentation of the project materials.

See the detailed program and pictures of the conference in Appendix 12.

We also attended and made presentation about project at more than 5 seminars (national and international levels).

Darwin Project results were presented on several national and international conferences and meetings in Kyrgyzstan, such as:

- First national forum of NGOs of Kyrgyzstan – project materials were presented in evening master-class - Kyrgyzstan. Bishkek, 9 June 2007.
- Ceremony "Faces of the year" – project results were presented during ceremony of rewarding of BIOM members - Kyrgyzstan. Bishkek, 19 August 2007.
- National Youth Ecological Forum under support of UNEP – project results were presented as good practice – Kyrgyzstan. Bishkek, 17 October 2007.



- Central Asian (Regional) Youth Ecological Forum under support of UNEP – project results were presented as good practice – Kyrgyzstan. Bishkek, 15 November 2007.
- Third meeting of the UNECE Steering Committee on ESD - project results were presented during expert Panel on competences of ESD - Switzerland, Geneva, 31 of March -1-st of April

#### 4.4 Project standard measures and publications

All planned project publications were published. They included:

**A handbook** with detailed description of the module “Bases of biodiversity conservation and Sustainable Development” - texts of 16 lectures, 14 practical trainings and a great number of diverse student-centered learning activities, games and outdoor fieldwork.

**Additional materials**, such as power point presentations, CD, handouts, maps, cards for games, etc. As well as power point presentation we prepared separate printed slides to support delivering of the module, as very often teachers of regional universities of Kyrgyzstan don't have an opportunity to use LCD projector on their lectures.

The Handbook and other materials of the module were distributed amongst teachers from project universities at the Capacity Building Seminar for university teachers held in Bishkek in September 2007.

We also developed **3 information wall banners** – 1. Biodiversity of Issyk-Kul Lake, 2. Ecosystem functions of forests, 3. Biodiversity Conservation and Sustainable Development. We had them printed on big pieces of flex and placed them in halls and training rooms in 4 universities of Kyrgyzstan. See the pictures of these banners in Annex 7.

**Project poster** on Biodiversity conservation and Sustainable development – it is A1 format nice designed poster with a big map of main ecosystems of Kyrgyzstan and Red list species around, it also includes messages about necessity of biodiversity conservation and achievement of sustainable development. We were also able to get expertise of UNESCO and UN Decade secretariat about this poster and widely distribute its hard copy and electronic version under support of Darwin Initiative.

**Identification Key** - on identification state of the ecosystems in the south of Kyrgyzstan with red list plant species of Juglans regia forests and south meadows of Kyrgyzstan. Cooperation with national academy of Science and Council of young scientists of Kyrgyz State National University allowed us to distribute it widely among universities of Kyrgyzstan.

**Water identification key** in Kyrgyz language

#### 4.5 Technical and Scientific achievements and co-operation

This project was not designed as a scientific project, though we had a component with pre- and post- project surveys in order to measure a beneficial effect of the project in 2 dimensions:

- Situation in the project universities
  1. Response, knowledge, skills of students, who passed through education on our course “Bases of biodiversity conservation and Sustainable development”.
  2. Response from university teachers about level of biodiversity education before and after the project.
- Situation in micro reserve areas – the purpose of the survey was to identify changes at the microreserve territories, observe the dynamic of the natural growth, changes of biodiversity, observe the indicators of nature restoration at the territories during 2 years (2006-2008) period.

The data of the both surveys is presented in the separate reports.

Close cooperation with many scientific organizations, such as Institute of Biology and Institute of Chemistry of National Academy of Science, Kyrgyz Institute of land (pasture department), laboratory of hydrobiology, famous scientists of Kyrgyzstan, such as ecologist Emil Shukurov and Aron Brudny allowed us to build a strong scientific support of the project during all period of its realization.

## 4.6 Capacity building

There were a number of capacity building events within the project. All of them were conducted according to the project schedule.

**Training course 1 - Biodiversity education and methods** - it took place in Bishkek city (on 6-8-th of September, 2006) and was conducted for members of project development team (DT) by FSC expert Jonathan Oldham together with BIOM team. The training included 2 practical and 3 theoretical parts – session about role of biodiversity and modern approaches to biodiversity conservation, including ecosystem approach. The other session was devoted to concept of sustainable development – it included presentation, discussion and role game. One more theoretical part provided info about experience and best practices, which we got in previous Darwin project – “School Green Land”, including methodology of creation of microreserves. The whole second day of the training was devoted to obtaining new knowledge and skills in the sphere of outdoor learning methodology – we visited 2 places – botanic garden and a pond area in Bishkek, where DT members were able to participate in different types of field study activities, using identification keys (insects, plants, etc.) and ecological equipment. Also DT members learned a lot about new outdoor ecogames, which could be conducted with students. The third practical day of training was spent for development of first drafts of microreserves in 3 universities.

### **Training Course 2 – Student Centred Learning and Learning out of the Classroom**

This training course took place in Bishkek city on October 26th and was conducted by FSC expert James Hindson for members of project DT. It included a number of sessions, focused on Student Centred Learning methodology and a part of work on Planning the BEM. At this meeting a serial of key themes for BEM were identified and the draft of BEM structure developed.

### **Training Course 3 – Curriculum and Course Planning – Assessment - Planning the BEM and supporting Resources**

This training course was conducted during visits of project manager and members of Development Team to 3 project universities – to Osh State University ( in April 27-28 2007), to Issyk-Kul State University (In May 16-17, 2007) and Naryn State University ( In May 23-24, 2007). During these visits we have conducted 1-day training for mixed groups, which included experienced university teachers, young teachers and students in order to ensure involvement of all groups in the process of development new biodiversity educational module. We were satisfied by results, as students also contributed to the process and suggested their ideas about links between BEM and university microreserve. Involvement of experienced and young teachers allowed us to get both high quality of content and innovations.

The other part of this course on Planning the BEM and supporting Resources took part in June 7-14, 2007 during visit of project leader, FSC expert James Hindson to 3 project universities in Kyrgyzstan.

### **Training Course 4 - Capacity building workshop on training university teachers to deliver BEM**

This workshop took place in Bishkek city on 17-19th of September 2007 and was aimed to raise the capacity of teachers from universities in delivering the newly developed Biodiversity Education Module and to share information and experience of biodiversity education between the project partners. The seminar was conducted by the BIOM team together with the FSC expert, James Hindson. The workshop was very practical and included a demonstration of key themes of the module – both content and activities. 1/3 of the lectures and activities at the workshop were conducted by teachers themselves, this allowed partners the opportunity to give feedback to each other and practicing the most difficult elements of the module. One of the important issues for discussion at the workshop was Student Centred Learning and Learning out of the Classroom. These were discussed with participants in each session.

(see pictures of capacity building seminars in Appendix 8).

## 4.7 Sustainability and Legacy

The fact that the BEM has been formally accepted as an optional module at university level and listed in university catalogues is the biggest indicator of sustainability. The interest and enthusiasm shown by students and lecturers for the module as documented above is another. There is customer demand!

The Darwin project is the only project in Kyrgyzstan which is working at the moment on strengthening curricula of ecological chairs and faculties of High Education Institutions. This is very important, as in March 2005 Kyrgyzstan confirmed its obligations on fulfilment of the UNECE Strategy on Education for Sustainable Development. That's why integration and piloting of this new module, called "Biodiversity Conservation and Bases of Sustainable Development" is actually a good contribution to implementation of the UN Decade on ESD in Kyrgyz Republic. Our strategy to achieve sustainability is built on a strong network of Schools and Universities of Kyrgyzstan, available to promote ESD principles in all regions of the republic. BIOM has started coordinating this network activities and we expect to reach our goals through delivering diverse educational events for members of our network, information campaigns, publishing of methodical and propaganda materials and periodical issuing of Newsletter, etc.

Fundraising to support the network of schools and universities is very important, and both BIOM and FSC pay strong attention to this issue through attracting different project opportunities, invitations to capacity building seminars, cross-project activities and preparing new proposals, etc. This year, for example, BIOM, FSC and project universities in cooperation with some European High Educational Institutes developed a proposal for Tempus program, which aims to develop a new module on Sustainable Development and officially integrate it into curricula of some Universities in Central Asia.

## 5 Lessons learned, dissemination and communication

The design of the project as well as the exit strategy has not been changed over the project period. There were no significant difficulties encountered during the past project year or specific lessons that we have learned.

Dates of some events were moved for several months, these delays were not significant and in general the project has gone very smoothly. We have achieved the major part of our planned objectives and outcomes and have not changed our planning for the following year of the project.

The only critical thing was that we will had to move the date of Final Dissemination conference for the project to October 2008, because of the end of the academic year – April - May 2008 coinciding with the end of project and the beginning of academic year (September 2008) is not a good time for organizing a big conference for the University. We applied to the Darwin Initiative by letter to allow us to move the date of dissemination event to October 2008.

Dissemination and communication of the project results has been through online and print publications, attending relevant seminars and the project dissemination conference. See 4.3. for full details.

### 5.1 Darwin identity

As in the original project, the Darwin Logo was used on all printed and electronic materials – for example on all training materials, materials for students and on the website. The logo was also used on signage at the participating Institutions piloting the Biodiversity Learning module to say that they are taking part in the project, and on the equipment to be purchased as part of the project. Demonstration stands in all 4 micro reserves also contained signs with Darwin's, BIOM's and FSC's logos.

In 2007-2008 year original Darwin project also approved as :

- UNECE best practice on ESD – please see website <http://www.unece.org/env/esd/GoodPractices/list.html> for details.
- Good practice in Dubai Best Practices & Local Leadership Programme UN-HABITAT.

*The project received substantial media coverage.*

Wide distribution of information about project was made on its first step – big university meetings were conducted with teachers and students. Then a series of articles about project activities were issued – 3 regional newspapers – in Karakol, Osh and Naryn cities. The information was also widely distributed through pilot project Newsletter among universities, schools, departments of education, international organizations, etc. Also it was put in “Ecois” Newsletters, which distributes information among eco NGOs of Kyrgyzstan. Radio broadcast were also made 3 times in Central Kyrgyz radio channel (on the base of Governmental TV-radio company).

On 30-th of August 2007 we conducted a press-conference in Bishkek city, where current project results were presented. 2 radio broadcasts and 2 articles in national level newspapers were also made.

Promotion of Darwin project was also done through public information events, conducted within the project during May-October 2008:

- ✓ **Public event on Central “Ala-Too” square** of Bishkek city – this project event was conducted by BIOM in central square of Bishkek – Alatau square on September 2008 and was open for all visitors. The event was started with an official opening followed by a diversity of ecological workshops for people like “Smells of nature” and “Touch of nature” (participants could guess the name of the wild plants by testing its nice smells or touch to them with keeping their eyes closed), or “Colors of nature” (painting red list species on the flat stones), “Miracles of nature from the clay” (participants were able to make a handicrafts – statues of red list species from clay – by themselves. The project event on the central square was a big success (more than 1500 people visited it) and resonance in mass-media. The closing ceremony of the event was organized as rewarding of the young people, who sent their photographs of wild nature and red list species to the competition among schools, organized by BIOM in June 2008.
- ✓ **“Gold autumn ball”** – this public event on project was organized at the territory of microreserve of Kyrgyz National University - it was also open for all visitors, but the main accent was made to university students and teachers as a group, who can significantly contribute to distribution of information about Red list species of Kyrgyzstan and their protection. More than 150 people took part at this event, which was designed like open interactive exhibition for participants. Visitors were able to play ecological games (guess the names of Red list species of Kyrgyzstan), get experience of looking into binocular and see little water creatures from the pond, get an advice on biodiversity conservation from “Tree of green advises”, etc.
- ✓ **“Alive pearls of Kyrgyzstan”** – this public event on project was organized by Osh State University at the biological faculty and involved more than 30 schools from Osh city. The event was designed as celebration of ecological holiday for schools and included bright presentation about Red list species, outdoor games and activities, competition among school teams, etc. The event had a good coverage in mass-media of Osh city.

Public information events also took place in Naryn and Issyk-Kul state universities.  
(See the pictures in Attachment 10))

Issuing of project Newsletters significantly helped to inform community educator’s about project activities. At the moment our project newsletter is the only resource on Education for Sustainable Development, which is produced and distributed in Kyrgyzstan.

Project pages on the BIOM web site – [www.biom.org/kg](http://www.biom.org/kg) were created. They include information about new Darwin project in Kyrgyzstan, information about previous Darwin project

“School Green land”, map of the network, algorithm of micro reserve creation, materials (lectures) on Biodiversity education module, photo gallery, etc. Now we work on creating an English version of these pages and creation of project library.

## 6 Monitoring and evaluation

A number of standard FSC monitoring systems were put in place during the project. These systems rely on local partners taking responsibility for the monitoring process. Our project manager implements current monitoring of the progress on each indicator to ensure that the project meets its objectives within the timescale and budget. She submits regular reports to the FSC and the project partners. These reports are based on visits to the Universities (no less, then once in 2 or 3 month) and from the reports provided by the Universities to BIOM. FSC members also take part in monitoring process during their visits to Kyrgyzstan. During project period FSC experts visited Kyrgyzstan 6 times – in June 2006, September 2006, June 2007, September 2007, March 2008 and October 2008.

Regular contact between the FSC and BIOM during the project was also realised through email and Skype.

Close cooperation between BIOM and project universities was realised through permanent monitoring visits to universities (with frequency of 1-2 times a month or sometimes once in 2 month) and also through regular planning meeting during visits of DT imembers to Bishkek.

We also organized regular design-making and negotiation process between members of Development Team and beneficiaries through actively working mailing list - [biom\\_group@yahoo.com](mailto:biom_group@yahoo.com).

To get some data for monitoring and evaluation of the project effect, we had 2 project surveys:

- Survey on measuring level of biodiversity education in project universities before and after the project, aimed to get a picture of situation in the project universities in 2 aspects:
  1. response, knowledge, skills of students, who passed through education on our course “Bases of biodiversity conservation and Sustainable development”
  2. response from university teachers about level of biodiversity education before and after the project
- Biodiversity survey – to identify changes at the micro reserve territories, observe the dynamic of the natural growth, changes of biodiversity, observe the indicators of nature restoration at the territories during 2 years (2006-2008) period.

### 6.1 Actions taken in response to annual report reviews

*1. Reviewer's comment - The teacher in training level is the ideal focus for this project. I am not 100% clear if it is only teachers in training that can opt to do the biodiversity education module, or is it open to any biology/ecology etc. students?*

The system of teacher training is different in Kyrgyzstan to the UK. A pedagogical module is offered as part of the normal BSc Biology degree and students wanting to be teachers take this. A high proportion of students do take the pedagogical options as it provides them with job qualification on leaving University – even though many do not take it up. The BEM is focused on raising capacity of biology/ecology students in universities, which are going to be school teachers of biology and ecology in the future (pre-service teachers). The project also continues to work with in-service teachers from schools from different regions of Kyrgyzstan (joint into School Green Land network, created in original Darwin project). Of course, we work with in-service university teachers, who are responsible for realization of the BEM and other university teachers, who can be involved in delivering BEM in the following years.

2. *Reviewer's comment - What are the links between the universities and the schools that have been part of this project since 2004? Could part of the BEM, or other projects the ITT students are involved in allow the students to work closely with nearby schools to develop biodiversity gardens (or Microreserves) in the schools? (Please address in next year's report).*

The links with project universities and School Green land schools were developed fruitfully this year. We successfully got agreements between schools and universities to do practical pedagogical work of students in SGL schools. This allowed us to conduct a series of open lessons on biodiversity, including outdoor lessons in school microreserves in April and March 2008. Involvement of students also helped us to recover some schools microreserves and built links with new schools. Besides this all 3 project universities conducted ecological events for SGL schools in Naryn, Issyk-Kul and Osh regions this spring, devoted to celebration of Earth Day. At the moment – from 19 to 23 of May we organized ecological week on biodiversity conservation for SGL schools in Osh city, including school ecological festival, action on Osh State University microreserve, recovering school microreserves in Osh, etc. (Please, see pictures in Appendix 7.)

3. *Reviewer's comment - Has the project developed conservation horticulture as a teaching medium for students of all ages? Given the existence of the microreserves, there is great potential for their development to act as real reserves for genetic diversity of rare and threatened wild plants. The Issyk-Kul state university has evidently begun to incorporate this model into their Microreserve, which is great to see. Advice and resources for this are readily available from Botanic Gardens Conservation International (BGCI) and there is a great deal of expertise in UK botanic gardens to set up small scale ex-situ propagation and re-introduction regimes for important plants. Indeed, this is a great way to bring in arboriculture and horticulture students, as well as local community and schools groups that can all get involved in a simple yet elegant biodiversity conservation project. (please clarify the range of ways the microreserves are going to be used in next year's report)*

The project has not really addressed this opportunity. Although we recognise the potential it would be problematic in terms of time and resources. The purpose of the microreserves are to provide a varied environment that lecturers can work in with their students to demonstrate ecological monitoring techniques and approaches to student centred learning in the environment. The resources are not really currently available to enable reserves (which are quite small) to be used for ex situ propagation and reintroduction – although we recognise that this is a good idea. That this is happening in Issy Kul is largely due to the specific interest of the staff at the University and the location of the micro reserve – unplanned added value for the project. Having said that linking learning with ex situ conservation would make an interesting future project.

## 7 Finance and administration

### 7.1 Project expenditure

| Item   | Budget (please indicate which document you refer to if other than your project application) | Expenditure | Balance |
|--|---|-------------|---------|
| Rent, rates, heating, overheads etc  |   |             |         |
| Office costs (eg postage, telephone, stationery)   |   |             |         |
| Travel and subsistence   |   |             |         |
| Printing   |   |             |         |
| Conferences, seminars, etc   |   |             |         |
| Capital items/equipment  |   |             |         |
| Others   |   |             |         |
| Salaries (specify)<br><i>James Hindson</i><br><i>Jonathan Oldham</i><br><i>JJ &amp; KT</i><br><i>Evgenia Postnova</i><br><i>Assistant Project Manager</i><br><i>Development Team</i><br><i>Ilia Domashov</i><br>TOTAL salaries |   |             |         |
| TOTAL  |   |             |         |

### 7.2 Additional funds or in-kind contributions secured

Additional funds for realisation of the project were raised through cooperation of BIOM with great number of international organizations and their projects, such as:

- **The project “Communities of Kyrgyzstan for biodiversity conservation”** supported by the Japanese “Keidanren” Nature Conservation Fund has the purpose of capacity building of local communities of Kyrgyzstan in biodiversity conservation through direct actions on the protection of wild nature and an information campaign about role of biodiversity. The materials were provided to all universities, as well as partner links between Issyk-Kul State University, school from “School Green Land” (educated in previous Darwin project) and 2 villages, involved in Keidanren project, were established. All of them and BIOM will become partners on realization of information campaign on protection of wild ecosystem of sea-buckthorn bushes around Issyk-kul Lake.
- **The project “Sun energy – for Kyrgyzstan”** under support of Norwegian Society on nature protection and Small Grants of GEF – partner links with this project will allow us

to provide additional support to universities – to create special demonstration zones of using solar energy near microreserves of wild nature. This will strengthen educational services on microreserve areas and ensure comfort, as hot water from sun installations will be available for students and visitors. Packs of educational materials, issued within the project, will be also available for our universities.

- **“Environmental memories” initiative** under support of UNESCO – this will help us to provide more consultations and educational seminars for our initiative groups from Naryn State University and Osh State University. The students from our 3 project universities were also involved in Ecological Essays Completion. The project has strong links with the CBD focal point from Governmental Agency on environmental protection and forestry – their specialists, especially from Department of Ecological education - provide constant information, expert and political support to our project.
- **Information campaign “Biodiversity and climate change” in cooperation with British Council** – Cooperation with this project allowed BIOM and FSC to conduct wide information campaign in Kyrgyzstan on biodiversity and climate change, including a series of information meetings at the universities in 4 regions of Kyrgyzstan, mass-media campaign, eco-café in Bishkek and issuing of new posters. Darwin project universities were also involved in the project and got information wall banners and materials on Biodiversity and Climate change, which they put at the central halls  
(see pictures in Appendix 7).
- **SPARE project.** This International project supported by the Norwegian government, focused on raising capacity of schools to save energy and skills to use renewable energy resources. We included the 25 “School Green land” project schools in the SPARE network and conducted 3 joint network meetings. This allowed us to develop a common Strategy of BIOM’s Eco-school network for 2008-2009 school year, disseminating experience on the creation of microreserves of wild nature among SPARE schools, passing on knowledge and methods of biodiversity education and out of classroom lessons. As a result of this cooperation SGL schools were able to take part in 2 ecological competitions and got international awards.
- **Information campaign in cooperation with French Embassy in Kyrgyzstan** . This cooperation helped us to involve “School Green Land” project schools into creative process of conducting ecological lessons on biodiversity conservation on the basis of materials from world-famous photographer Yan Artus Bertran. The photo-exhibition “A world from above” was a great success in Bishkek. Work with French Embassy allowed us to provide associated education materials to teachers from School Green Land as well as for Darwin project universities.
- **UNDP & European Commission project on Emergency Situations** – Links with this project allowed us to include idea of biodiversity conservation as necessary factor for ecological security into methodical pack for schools of Kyrgyzstan “Learn how to live near danger”. For example, destruction of nature communities around villages - deforested mountainsides, degradation of mountain steppes and meadows as a result of overgrazing, etc - makes them unsafe for people’s life. Great role of not-disturbed wild ecosystems in ensuring ecological security were shown and practical advice for schools and communities on protection of biodiversity near villages were prepared. The methodical pack – Illustrated book for students and manual for teachers – were issued and distributed among schools. School Green Land network became pilot schools in this process. (see pictures in Appendix 10).
- **FAO project “National Forest program Facility”**, Its aim is the Implementation of the Forestry policy of Kyrgyzstan through conducting an informational campaign on the involvement of local communities in community based forest management. Cooperation with this project allowed us to get new information materials – such as new posters and identification keys for our Darwin project universities and also actively involved teachers and students from Naryn State University in conducting an information campaign on protection of forests in Naryn region.

In total we raised more than 20 000 USD for realisation of the project.



### 7.3 Value of DI funding

Without Darwin funding our post project could be realised, but the impact of the project might be much less. For example, we could only involve only universities in Bishkek – not regional universities, as BIOM were not able to cover travel and another costs, caused by visits to regional universities and training of their staff.

In terms of biodiversity effect - without Darwin support we could create only 1 microreserve of wild nature – in Kyrgyz State National University instead of the creation of 4 plots (with such support).

We also couldn't provide to our 4 universities all necessary biodiversity equipment and supporting educational materials. Due to publications – teacher's manual, posters, informational banners, identification keys, project newsletters, etc - our project disseminated their results and became a good practice for other universities. Without Darwin support we couldn't get hard copies of these publications and distribute only electronic version, which are still difficult to use in regional universities and schools in Kyrgyzstan.

Development of the new Biodiversity module were able without Darwin funding, though its integration into official university curricula during 2 years period were not possible without such support. As project materials and training of teacher's staff in regional universities happened due to Darwin support.

## Annex 1 Report of progress and achievements against final project logframe for the life of the project

| Project summary   | Measurable Indicators  | Progress and Achievements April 2007 - March 2008  | Actions required/planned for next period                                  |
|---|--|--|---|
| <p><b>Goal:</b></p> <p>To draw on expertise relevant to biodiversity education from within the United Kingdom to work with local partners in Kyrgyzstan to achieve the conservation of biological diversity, and the sustainable use of its components.</p> |  | <p>Project was able to contribute to Ex Situ Conservation through restoration of nature territories near 3 universities of Kyrgyzstan, such as ecosystems of meadow and steppe areas and riverside of wild bushes. During project period university landfills were transformed into restored nature territories. In total more than about 3500 square meters of land were “came back to life”.</p> |   |
| <p><b>Purpose</b></p> <p>To improve the quality of biodiversity education so that young people are better equipped to make decisions that enhance rather than reduce biodiversity in Kyrgyzstan.</p>  | <p>15 members of HE Academic staff at 3 Institutions, Schools and NGOs receiving at least 120 hours of training on effective Biodiversity learning.</p> <p>Higher quality of biodiversity education in University initial teach training and in schools.</p> <p>An improvement in biodiversity in university and school grounds.</p> | <p>All completed as described in report</p> <p>Pre project survey completed</p> <p>Pre project survey completed</p>  | <p>Post project survey completed</p> <p>Post project survey completed</p> |
| <p><b>Output 1.</b></p> <p>A Biodiversity Education Module (BEM) integrated in the curriculum of students training to be biology and ecology teachers.</p>  | <p>A 30 hour module is developed and integrated into the teaching programmes for students training to be Biology and Ecology teachers in the Issyk-Kul State University and the Osh and Naryn State Universities by the end of year 1</p>  | <p>Completed</p>   |   |

|   |  |  |
|---|--|--|
| Activity 1.1 Y1 – Preparation and delivery of three training events for the Development Team.   |  | Described in full detail in report and completed - continue to offer the module in future years  |
| Activity 1.2 Piloting of BEM with one cohort of students including lectures, workshops at the University – work on the Micro reserve and training in schools.   |  | Described in full detail in report and completed, no further activity planned  |
| Activity 1.3, Y2 – on going coaching of the DT through visits by BIOM and FSC.  |  | Described in full detail in report and completed, no further activity planned  |
| Activity 1.4 Biodiversity Education Module development and announcement of piloting, production of guidelines for Universities and training materials for students.   |  | Described in full detail in report and completed, no further activity planned  |
| <b>Output 2.</b><br>Demonstration teaching micro reserves.  | A demonstration micro reserve established at each of the three State Universities – by year 2.   | Completed and described in report  |
| Activity 2.1 - Confirmation of micro reserve location at University site and development of micro reserve management plan, starting making of the reserve.  |  | Described in full detail in report and completed,  |
| Activity 2.2. Continued development and use of the reserve.   |  | Described in full detail in report and completed - ongoing maintenance and development of micro reserve  |
| <b>Output 3.</b><br>Resources developed to support the BEM and SGL network.   | An education for sustainability Kyrgyzstan website developed and 4 sets of teaching materials created for students – by the end of year 1. Additional materials will include an appropriate identification key to allow wider biodiversity monitoring. | All completed – appropriate indicators   |
| Activity 3.1 – Creation of web pages on new BIOM website ( <a href="http://www.biom.org.kg">www.biom.org.kg</a> ) development of simple identification key to a major group of plants to be identified during the project (for example trees) |  | Completed  |
| Activity 3.2 First Newsletter and in Y2 Newsletter produced regularly.  |  | Completed – project news was integrated into the new BIOM national newsletter covering all their projects and general environmental news – the only one in Kyrgyzstan – will be ongoing.   |
| <b>Output 4.</b><br>The outcomes of the project are disseminated and promoted widely through the SGL network.   | A dissemination conference held for all <b>51</b> Universities in Kyrgyzstan attended by 70 academic staff; at least 25 articles/broadcasts in the media; 1 seminar held in 10 other H Ed Institutions; regular School                                 | Dissemination conference took place in Bishkek on 27-28 of October and achieved its results on presenting new Biodiversity module, project materials and demonstration teaching microreserves to more than 10 universities in Kyrgyzstan. In total more 40 people took part at the conference. |

|   |   |  |
|---|---|--|
|   | <p>Green Land Newsletters produced.<br/>         At least 2 national and 2 regional<br/>         TV will enlighten the project<br/>         activities and results on different<br/>         project steps.</p> | <p>High levels of media interest as described above.</p> |
| <p>Activity 4.1. Dissemination Seminars and Visits to key HE Institutions</p> |   | <p>Completed and described in the Final report.</p>      |

## Annex 2 Project's final logframe, including criteria and indicators

| Project summary   | Measurable indicators  | Means of Verification  | Important assumptions  |
|---|--|--|--|
| <p><b>Goal:</b></p> <p>To draw on expertise relevant to biodiversity education from within the United Kingdom to work with local partners in Kyrgyzstan to achieve the conservation of biological diversity, and the sustainable use of its components.</p>                                       |  |  |  |
| <p><b>Purpose:</b></p> <p>To improve the quality of biodiversity education so that young people are better equipped to make decisions that enhance rather than reduce biodiversity in Kyrgyzstan.</p>   | <p>15 members of HE Academic staff at 3 Institutions, Schools and NGOs receiving at least 120 hours of training on effective Biodiversity learning.</p> <p>Higher quality of biodiversity education in University initial teaching training and in schools.</p> <p>An improvement in biodiversity in university and school grounds.</p>  | <p>Ministry of Education and Department of Environment Reports.</p> <p>Project pre and post project survey reports.</p> <p>Biodiversity monitoring.</p>  | <p>That our training will be successful in raising the quality of Academic and school teaching.</p> <p>That the Academic Staff we select will be able to implement the new approaches to learning in their courses!</p>  |
| <p><b>Outputs:</b></p> <p><b>1</b> A Biodiversity Education Module (BEM) integrated in the curriculum of students training to be biology and ecology teachers.</p> <p><b>2</b> Demonstration teaching micro reserves.</p> <p><b>3</b> Resources developed to support the BEM and SGL network.</p> | <p>A 30 hour module is developed and integrated into the teaching programmes for students training to be Biology and Ecology teachers in the Issyk-Kul University and the Osh and Naryn State Universities by the end of year 1.</p> <p>A demonstration micro reserve established at each of the three State Universities – by year 2</p> <p>An education for sustainability Kyrgyzstan website developed and 4 sets of teaching materials created for students – by the end of year 1. Additional materials will include an appropriate identification key to allow</p> | <p>Module is formally accepted as part of the Biology and Ecology teacher training degrees – formal letters/statements from the University Administrations.</p> <p>Biodiversity Micro Reserve Management Plan produced; photographic evidence of reserve.</p> <p>Website address promoted and number of hits recorded; copies of resources produced sent to Darwin Initiative.</p> | <p>That the pilot Universities will be able to fulfil their commitment to integrate the module into the Biology and Ecology degrees courses.</p> <p>That locations can be identified for the HE Institutions to be able to develop teaching micro reserves and that these will be available on a long term basis.</p> <p>That the website will be used by students and teachers.</p> |

|  |  |  |  |
|--|--|--|--|
| <p><b>4</b> The outcomes of the project are disseminated and promoted widely through the SGL network.</p>  | <p>wider biodiversity monitoring.</p> <p>A dissemination conference held for <b>participants from 10</b> Universities in Kyrgyzstan attended by 40 academic staff; at least 25 articles/broadcasts in the media; 1 seminar held in 10 other H Ed Institutions; Regular School Green Land Newsletter produced.</p> <p>At least 2 national and 2 regional TV will enlighten the project activities and results on difference project steps.</p>  | <p>Reports for Dissemination Conference, Seminars; Newsletter submitted to the Darwin Initiative</p> | <p>The other HE Institutes will be willing to attend the Dissemination events and consider adopting the BEM.</p> |
| <p><b>Activities</b></p> <p>Project Management</p> <p>Training</p> <p>Course Development and piloting</p> <p>Establishment of Micro Reserves</p> <p>Network support</p> <p>Promotion and Dissemination</p> | <p><b><i>Activity Milestones (Summary of Project Implementation Timetable)</i></b></p> <p>Y1 – Inception Workshop with all the partners, confirmation of the Development Team members, written contracts with participating Universities, Monitoring and Reporting; pre project baseline survey of DT and students,</p> <p>Y2 – Monitoring, Reporting and evaluation, post project survey of DT and students.</p> <p>Y1 – Preparation and delivery of three training events for the Development Team.</p> <p>Y2 – on going coaching of the DT through visits by BIOM and FSC.</p> <p>Y1 – Biodiversity Education Module development and announcement of piloting, production of guidelines for Universities and training materials for students.</p> <p>Y2 – Piloting of BEM with one cohort of students including lectures, workshops at the University – work on the Micro reserve and training in schools.</p> <p>Y1 – Confirmation of micro reserve location at University site and development of micro reserve management plan, starting making of the reserve.</p> <p>Y2 – Continued development and use of the reserve.</p> <p>Y1 – Creation of web pages on new BIOM website (<a href="http://www.biom.org.kg">www.biom.org.kg</a>) development of simple identification key to a major group of plants to be identified during the project (for example trees)</p> <p>Y1 – First Newsletter</p> <p>Y2 – Dissemination Seminars and Visits to key HE Institutions</p> <p>Y1 and Y2 – Newsletter produced regularly.</p> |  |  |

## Annex 3 Project contribution to Articles under the CBD

### Project Contribution to Articles under the Convention on Biological Diversity

| Article No./Title   | Project % | Article Description   |
|---|-----------|---|
| 6. General Measures for Conservation & Sustainable Use    |           | Develop national strategies that integrate conservation and sustainable use.  |
| 7. Identification and Monitoring                          |           | Identify and monitor components of biological diversity, particularly those requiring urgent conservation; identify processes and activities that have adverse effects; maintain and organise relevant data.  |
| 8. In-situ Conservation                                   |           | Establish systems of protected areas with guidelines for selection and management; regulate biological resources, promote protection of habitats; manage areas adjacent to protected areas; restore degraded ecosystems and recovery of threatened species; control risks associated with organisms modified by biotechnology; control spread of alien species; ensure compatibility between sustainable use of resources and their conservation; protect traditional lifestyles and knowledge on biological resources. |
| 9. Ex-situ Conservation                                   | 10%       | Adopt ex-situ measures to conserve and research components of biological diversity, preferably in country of origin; facilitate recovery of threatened species; regulate and manage collection of biological resources.   |
| 10. Sustainable Use of Components of Biological Diversity | 10%       | Integrate conservation and sustainable use in national decisions; protect sustainable customary uses; support local populations to implement remedial actions; encourage co-operation between governments and the private sector.   |
| 11. Incentive Measures                                    |           | Establish economically and socially sound incentives to conserve and promote sustainable use of biological diversity.   |
| 12. Research and Training                                 |           | Establish programmes for scientific and technical education in identification, conservation and sustainable use of biodiversity components; promote research contributing to the conservation and sustainable use of biological diversity, particularly in developing countries (in accordance with SBSTTA recommendations).  |
| 13. Public Education and Awareness                        | 75%       | Promote understanding of the importance of measures to conserve biological diversity and propagate these measures through the media; cooperate with other states and organisations in developing awareness programmes.  |
| 14. Impact Assessment and Minimizing Adverse Impacts      |           | Introduce EIAs of appropriate projects and allow public participation; take into account environmental consequences of policies; exchange information on impacts beyond State boundaries and work to reduce hazards; promote emergency responses to hazards; examine mechanisms for re-dress of international damage.   |
| 15. Access to Genetic Resources                           |           | Whilst governments control access to their genetic resources they should also facilitate access of environmentally sound uses on mutually agreed terms; scientific research based on a country's genetic resources should ensure sharing in a fair  |

| Article No./Title                        | Project % | Article Description  |
|--|-----------|--|
|  |           | and equitable way of results and benefits.   |
| 16. Access to and Transfer of Technology |           | Countries shall ensure access to technologies relevant to conservation and sustainable use of biodiversity under fair and most favourable terms to the source countries (subject to patents and intellectual property rights) and ensure the private sector facilitates such assess and joint development of technologies.                 |
| 17. Exchange of Information              | 5%        | Countries shall facilitate information exchange and repatriation including technical scientific and socio-economic research, information on training and surveying programmes and local knowledge  |
| 19. Bio-safety Protocol                  |           | Countries shall take legislative, administrative or policy measures to provide for the effective participation in biotechnological research activities and to ensure all practicable measures to promote and advance priority access on a fair and equitable basis, especially where they provide the genetic resources for such research. |
| Other Contribution                       |           | Smaller contributions (eg of 5%) or less should be summed and included here.   |
| Total %                                  | 100%      | Check % = total 100  |



## Annex 4 Standard Measures

| Code No:                                     | Description  | Year 1 Total   | Year 2 Total  | Total to date    | Total planned from application |
|--|--|--|---|------------------|--------------------------------|
| 4A / 4B – Biology and Ecology undergraduates | 50 hours spread over 20 weeks to include 1 hour lectures/workshops/seminars a week, 20 hours of practical work and 10 hours of assignments                                 | Y1, M10<br>(done – module developed and integrated)                            | to Y2 M19<br>(done – module provided for students)  | 50 hours         | 50 hours                       |
| 6A/ 6B from three partner Institutes         | 6 University Academic Staff, 6 SGL Teachers and 3 NGO representatives<br>120 hours spread over 3, 4 day workshops (60 hours) and practical work and assignments (60 hours) | Y1, M2 – M4<br>(done – 12 members of current staff + diverse experts involved) | 0   | 15 x 120 hours   | 15 x 120 hours                 |
| 7  | Training Handbook for delivery of the BEM (Ring binder file format), Handout Resources for ITT students, Specific BEM web pages for Staff and Students.                    | Y1, M 9<br>(not done - moved to year 2)<br><br>Y1, M 5<br>(done)               | (done)<br><br>Y2, M 10<br>(done)  | All completed    | All completed                  |
| 8  | 2 members of staff will spend 40 days in Kyrgyzstan  | 10   | 10  | 20               | 20                             |
| 9  | Three Management plans produced for Biodiversity Micro reserves  | Y1 M2-M4<br>(done)   | 0   | 4, including KSU | 3                              |
| 10   | One identification key produced (probably for trees in Kyrgyzstan)   |  | Y2, M21<br>Done (the key is issued)   | 1                | 1                              |
| 14A<br>14B                                   | 1 Dissemination Conference and a minimum of 5 seminars<br>Based on the original project we expect to attend 5 events   |  | Y2, M24<br>Done – conferece conducted<br><br>Throughout<br>Done – we visited more then 5 events | 5/5              | 5/5                            |
| 15A/B  | 5 to the national press and 15 (5 by each Institution) to local press  | Throughout<br>(done)   | (done)  | 20               | 20                             |

|             |  |  |                                     |                                |         |
|-------------|--|--|-------------------------------------|--------------------------------|---------|
| 16A/16B/16C | 6 newsletters – circulation 250 in Kyrgyzstan and 25 in the UK                     | Y1 M 2, 6,10<br>(done – 3 issued)  | Y2 M,14,18, 21<br>(done – 3 issued) | 6                              | 6       |
| 17B         | School Green Land Network of 25 schools established in original project – enhanced | Throughout<br>(done – SGL network enhanced, special coordinator appointed)       | Done                                | 25                             | 25      |
| 18A/C       | Based on previous experience – 2 national and 2 local programmes                   | Throughout<br>done   | done                                | 4                              | 4       |
| 19A/C       | Based on previous experience – 2 national and 2 local programmes                   | Throughout<br>done   | done                                | 4                              | 4       |
| 20          | £9000 for computer and biological equipment  | done<br>(spent for equipment and micro reserve creation)                         | Partly done                         | 9000GBP                        | 9000GBP |
| 22          | The three Biodiversity Micro Reserves will have a small research component         | Throughout<br>(done – locations chosen, reserves are in the process of creation) | done                                | 4, including KSU micro reserve | 3       |
| 23          | Approx 3000GBP   | At the end of project  | 1000                                | 1000                           | 3000    |

## Annex 5 Publications

| <b>Type *</b><br><b>(eg journals, manual, CDs)</b>  | <b>Detail</b><br><b>(title, author, year)</b>  | <b>Publishers</b><br><b>(name, city)</b> | <b>Available from</b><br><b>(eg contact address, website)</b> | <b>Cost £</b>                   |
|---|--|--|---|---------------------------------|
| Pilot project newsletter  | "Universities of Kyrgyzstan for biodiversity conservation", BIOM, 2006   | "Euro", Bishkek city                     | BIOM's address  | 20 (0,2 per £ each)             |
| Newsletter # 1  | "Education for Sustainable Development in Kyrgyzstan", BIOM, 2007  | "Euro", Bishkek city                     | BIOM's address  | 84 (0,84 £ per each)            |
| Newsletter # 2  | "Education for Sustainable Development in Kyrgyzstan", BIOM, 2007  | "Euro", Bishkek city                     | BIOM's address  | 84 (0,84 £ per each)            |
| Newsletter 3  | "Education for Sustainable Development in Kyrgyzstan", BIOM, 2008  | "Euro", Bishkek city                     | BIOM's address  | 157 (1,57 per each)             |
| Newsletter 4  | "Education for Sustainable Development in Kyrgyzstan", BIOM, 2008  | Arashan, Bishkek city                    | BIOM's address  | 195(1,95 per each)              |
| Newsletter 5  | "Education for Sustainable Development in Kyrgyzstan", BIOM, 2008  | 25 kadr, Bishkek city                    | BIOM's address  | 237 (1,57 per each) -150 copies |
| Manual for university teachers (lectures on Biodiversity educational module and supporting materials) | Bases of biodiversity conservation and sustainable development: course of lectures. Korotenko V., Domashov I., Postnova E., Kirilenko A., Hindson J., 2007 | "Euro", Bishkek city                     | BIOM's address  | 585 (23, 4 per each)            |
| Packs of the additional materials (additional to Manual for university teachers)                      | Korotenko V., Domashov I., Postnova E., Kirilenko A., Hindson J., 2007   | "Euro", Bishkek city                     | BIOM's address  | 30 copies                       |
| Information banners (3 types)   | 2008   | Continent, Bishkek city                  | BIOM's address  | 12 copies – 4 copies of each    |

|  |  |                         |                |                     |
|--|--|-------------------------|----------------|---------------------|
| Forest-meadow identification Key                                     | "Identification of state of the ecosystems in the south of Kyrgyzstan", 2008 | Continent, Bishkek city | BIOM's address | 1000 copies         |
| Project poster Biodiversity conservation and Sustainable development | Biodiversity conservation and Sustainable development, 2008                  | Continent, Bishkek city | BIOM's address | 1000 copies         |
| Water identification key in Kyrgyz language                          | Korotenko V., Domashov I., Postnova E., 2008                                 | "Salam", Bishkek city   | BIOM's address | 399 (0,80 per each) |

## Annex 6 Darwin Contacts

|                                       |   |
|---------------------------------------|---|
| <b>Ref No</b>                         | EIDPO11   |
| <b>Project Title</b>                  | Biodiversity Education and Teacher Training (BETT)                |
|                                       |   |
| <b>UK Leader Details</b>              |   |
| Name                                  | James Hindson (until 30/09/2008) Richard Dawson (from 01/10/2008) |
| Role within Darwin Project            | Project Leader  |
| Address                               | The Field Studies Council, Preston Montford, Shrewsbury, SY4 1HW  |
| Phone                                 |   |
| Fax                                   |   |
| Email                                 |   |
| <b>Other UK Contact (if relevant)</b> |   |
| Name                                  |   |
| Role within Darwin Project            |   |
| Address                               |   |
| Phone                                 |   |
| Fax                                   |   |
| Email                                 |   |
| <b>Partner 1</b>                      |   |
| Name                                  | Postnova Evgenia  |
| Organisation                          | Ecological Movement "BIOM"  |
| Role within Darwin Project            | Project manager in Kyrgyzstan                                     |
| Address                               | Molodaya gvardia street 74-106 Kyrgyzstan 720010                  |
| Fax                                   |   |
| Email                                 |   |
| <b>Partner 2 (if relevant)</b>        |   |
| Name                                  |   |
| Organisation                          |   |
| Role within Darwin Project            |   |
| Address                               |   |
| Fax                                   |   |
| Email                                 |   |

# Annex 7 Pictures of the project materials

## Образование для Устойчивого Развития

*Внесём свой вклад!*

### ЖИЗНЬ СОЗДАЕТ УСЛОВИЯ ДЛЯ ЖИЗНИ

Естественные экосистемы Кыргызстана и планеты в целом создают и поддерживают условия для существования Жизни на Земле!

**Экосистемные функции**

- Формирование, регуляция и стабилизация климата (температуры, влажности и т.п.)
- Регуляция газового состава атмосферы
- Образование и повышение плодородия почвы, предотвращение эрозии почв
- Снижение частоты и разрушительности стихийных бедствий
- Привлечение осадков, водорегуляция и очистка воды
- Поддержание и воспроизводство биоразнообразия

Социальная сфера  
Экономическая сфера  
Искусственные экосистемы  
Естественные экосистемы

*Сохраним от разрушения!*

### УСТОЙЧИВОЕ РАЗВИТИЕ

**УР =** [ Социум, Экономика, Естественный капитал ]

Культура и цивилизация, организация социальной и экономической сфер жизни базируются на использовании ресурсов экосистем. При этом важно различать искусственные экосистемы, тесно связанные с жизнедеятельностью человека, и естественные, которые поддерживают Жизнь как таковую, а, значит, и всю систему нашего общества.

### Экосистемы Кыргызстана

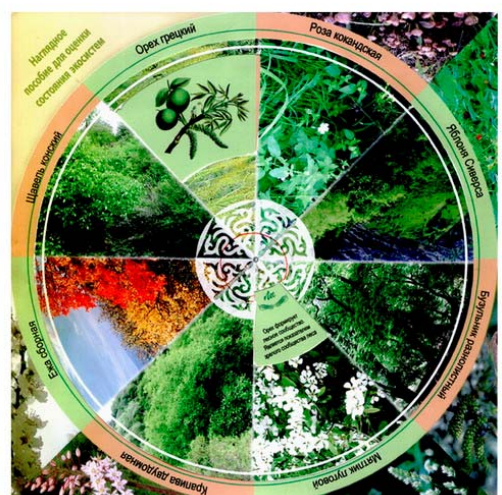
**Условные обозначения экосистем КР:**

|                          |                                     |
|--------------------------|-------------------------------------|
| Паша и орошение          | Крепкий смешанный лес               |
| Алпатау                  | Крепкий смешанный лес               |
| Завсильный               | Среднетравянисто-луговые экосистемы |
| Пастбищно-луговой        | Монгольский лес                     |
| Пастбищно-луговой степи  | Овощные и медовые                   |
| Среднетравянисто-луговой | Арчагы лес в редкой                 |
| Среднетравянисто-луговой | Еловые-берёзовые лес                |
| Среднетравянисто-луговой | Ореховый лес                        |
| Среднетравянисто-луговой | Среднетравянисто-луговой            |
| Среднетравянисто-луговой | Разношерстные разнотравные          |
| Среднетравянисто-луговой | Низкотравянисто-луговой             |
| Среднетравянисто-луговой | Степи, высокогорные тундры, степи   |

**Экосистемы Кыргызстана:**

- Чирская остроушка *Sporophila austroasiatica orientalis*
- Рыбчик Эдуарда *Pelecanus eduardi*
- Дятеловидная сетчатка *Dryophanes duplicatus*
- Аполлон обыкновенный, подвид Меркуриера *Parnassius (Lycaon) zeyheri mercuriaria*
- Томилан Коуфана *Thymus koufanianus*
- Большой лесной дятел *Dendroica major*
- Сыч *Bubo bubo*

### Естественные экосистемы – основа для Устойчивого Развития





**Banner 1 SD and nature conservation**



**Banner 2 Ecosystem functions**



**Banner 3 Issyk-Kul lake and mechanism of work of nature biofilter**

## Annex 8 Pictures of the capacity building seminars

Training Course 1 - Biodiversity Education and ESD, Micro reserve Planning and Development - pictures.



Training Course 2  
- Student Centred Learning and learning out of the classroom





**Training Course 3**  
**– Curriculum and Course Planning – Assessment - Planning the BEM and supporting Resources**



**Joint seminar for schoolteachers – Darwin project and SPARE program**



**Training Course 4 - Capacity building workshop on training university teachers to deliver BEM**



## Annex 9 Pictures of the microreserves

### Issyk-Kul State university – before and after



### Naryn State university – before and after





## Osh State university– before and after



## Kyrgyz State University – before and after





## Annex 10 Pictures of the public events

Public event on biodiversity conservation on “Ala-Too” Square - the central square of Bishkek city



“Gold autumn ball”



The Public event in Osh city “Alive pearls of Kyrgyzstan”



## Annex 11 Delivering of the module



## Annex 12 Pictures and Agenda of the Final dissemination event







Kyrgyz National University named  
after Zh. Balasagyn



State Agency on  
Environment Protection and  
Forestry

## «Education for biodiversity conservation in Kyrgyzstan»

*Location:* Bishkek, Kyrgyz State University named after J. Balasagyn

*Date:* October 27-28, 2008

### First day

**09.00 - 09.30**

Registration of participants

**09.30 – 10.00 Opening, welcoming speech, presentation of objectives and tasks**

*Sidorenko R.V., deputy of Zhogorku Kenesh of Kyrgyz Republic*

*Niyazova E.A., vice-chancellor on youth and social policy, KNU named after Zh. Balasagyn*

*Duyshenova Zh.K., leading specialist of environmental education division in the State Agency on Environment Protection and Forestry of the KR, focal point on Education for Sustainable Development in Kyrgyzstan*

*Dawson R., manager of the British public organization – Field Studies Council*

**10.00 - 10.15 Education for sustainability: experience of realization of programs on biodiversity conservation in schools and universities of Kyrgyzstan**

*Evgeniia Postnova, coordinator of educational programs of Ecological Movement “BIOM”*

**10.15 - 10.45**

**Education for biodiversity conservation in UK: methods and practices.**

*Richard Dawson*

**10.45 - 11.30**

**The theory of biotic regulation and modern approaches to biodiversity conservation**

*Emil Shukurov, professor, honored worker of science, chairman of the “Aleyne” Ecological Movement of Kyrgyzstan*

**11.30 - 13.00**

**Universities of Kyrgyzstan support biodiversity conservation: experience on creation of micro-reserves of wild nature**

- *History of creation of microreserve in Kyrgyz State University.*

*Domashov I.*

- *Experience of student ecological working group in microreserve of NSU*

*Shermatov S.*

- *Steps to recover Issyk-Kul forests: microreserve in ISU Botanic Garden*

*Konovalov A.*

- *Parade of ecosystems in OshSU microreserve: opening doors to schools.*

*Muratova R.*

*Discussion and questions of participants*

|                      |   |
|----------------------|---|
| <b>13.00 - 14.00</b> | <i>Lunch</i>  |
| <b>14.00 - 16.00</b> | <b>Outdoor session: examples of fieldwork in microreserve (excursion to KNU microreserve)</b><br><i>Master class , provided by Subanova M.S., head of natural and mathematical disciplines department in Kyrgyz Academy of Education</i>  |
| <b>16.00 - 16.20</b> | Coffee break  |
| <b>16.20 – 16.50</b> | <b>Microreserves of wild nature in school territories</b> <ul style="list-style-type: none"> <li>• <i>School Green Land network as example of UN best practice</i></li> <li>• <i>Traditions of national pedagogy and work in a micro-reservation park: Kelechek school, Bishkek</i></li> </ul> <i>Postnikova L.</i> |
| <b>16.50- 17.00</b>  | <b>Wrap-up the conference and closing the first day</b>   |

### Second day

|                      |   |
|----------------------|---|
| <b>9.30 – 10.30</b>  | <b>New educational course for universities – Bases of Biodiversity conservation and Sustainable Development</b><br><i>Postnova Y.A.</i>   |
| <b>10.30 - 12.00</b> | <b>Experience of implementation of the course in universities of Kyrgyzstan</b><br><i>Speeches of ISU, NSU, OshSU and KNU lecturers</i>   |
| <b>12.00 - 13.00</b> | <b>Student centered approach and interactive methods as methodical base of the new course</b><br><i>Interactive session: Trade game</i><br><i>Domashov I., Postnova Y.A., Vetoshkin D..</i>   |
| <b>13.00 - 14.00</b> | <i>Lunch</i>  |
| <b>14.00 - 15.00</b> | <b>Lectures on Psychological foundations of Sustainable Development</b><br><i>Corresponding member of NAS of the KR, professor Brudny A.A., American University, Laboratory of Psychology</i> |

7.3.1

7.3.2 15.00 – 15.20 **Coffee break**

**15.20 – 16.40 Master classes**

- *Bioindication of water reservoirs in Kyrgyzstan. Red list species of fishes of Kyrgyzstan.*  
*Kustaryova L.A., Biological and Soil Institute in the National Academy of sciences of the KR*
- *Lessons of alternative energetics*  
*Ilya Melyakov*

*Discussion in groups*

**16.40 – 17.00      Wrap-up and closing the conference.**

**Distribution of project educational materials among participants.**

**17.00 – 18.30      Evening party for participants of the conference**

## **Annex 13**      **List of Supporting Documents to be supplied as hard copy**

**Newsletters - Issues 1 - 5**

**Identification Keys sample 1**

**Identification Keys sample 2**

**CD of Project Resources**

**Project Poster**

**Invitation to Launch Event – Bishkek microreserve**