



# Background, preparatory lectures and preliminary programme of the excursion of the Module "Natural Resource Management in Central Asia" (as of 29.05.2017)

### Background

The module "Natural Resource Management in Central Asia" will take us on a 12 day excursion to Kyrgyzstan. Central Asia can be considered a very interesting study region for analysing and developing sustainable land use concepts. This is due to its vulnerability to the effects of climate change and dependency on natural resources, but also because of the unique ecosystems and diversity of land use systems. Problems related to post-socialist transformation processes makes the governance and management of forests, pasture land and water especially challenging.

Against this background, the main goal of the Module "Natural Resource Management in Central Asia", offered by the Chair for Silviculture, is to familiarize students with land use practices and their environmental implications in the Kyrgyz Republic. They will gain competencies in analysing different land use types in the area from an ecological, social and economic perspective.

In preparation to the course, introductory lectures will be held (four sessions between 16.06. and 04.07.). After the preparatory lectures, students will identify and work on specific self-chosen topics. The result of their research will be presented before and during the excursion. During the excursion, students will further substantiate their research. At the end of the module, students will submit a report on their individual research topic as well as general aspects of the excursion.

## Schedule for preparatory lectures

Lectures will be held by invited experts. All participants should take part in these lectures.

### 16th of June:

Prof. Dr. Schmidt-Vogt gives a general introduction to the module.

Prof. Dr. Jörg Stadelbauer will give a general introduction to the geography and natural resources of Kyrgyzstan, with a strong emphasis on the water sector (irrigation and the Water-Energy-Nexus as an international political issue). He will also introduce to some individual destinations of the excursion.

### 19th of June:

Dr. Andrei Dörre will speak about pasture management in the Kyrgyz Republic. This will cover especially legal issues that facilitate/influence/hinder the diversification of pasture-based land use systems. He will also speak about integrated land use systems that are associated with pastures (e.g., in combinations with forestry or horticulture), and how these production systems (and the associated value chains and ways of distribution) are affected by legal regulations. He will also give a





general introduction to the research approach of political ecology and possibilities of its application in the context of land use systems.

### 29th of June:

Ms. M.Sc. Gulbahar Abdurasulova will give a more specific introduction to the forest resources and their use in the country, including their economic relevance. She will then present the Climate Change Adaptation Programme and Action Plan for 2015-2017 for the Forest and Biodiversity sector in the Kyrgyz Republic.

Prof. Dr. Matthias Schmidt will focus more specifically on the political ecology, and land-use dynamics of the Walnut-Apple Forest. He will also give an introduction to general aspects of the post-soviet transformation processes.

### 4th of July:

Ms. M.Sc. Klara Dzhakypbekova will speak about horticulture and agroforestry systems in Kyrgyzstan/Central Asia and forest restoration activities.

Table 1: Schedule

| Fri,<br>June 16 | 15:00-<br>16:30 | Introduction to the Module "Integrated Land use Systems"  | Prof. Dr. Dietrich Schmidt-Vogt (University of Central Asia/Freiburg University, Chair of Silviculture) Dr. Steffen Entenmann (Freiburg University, Chair of Silviculture) |
|-----------------|-----------------|---|--|
|                 | 16:45-<br>18:30 | Kyrgyzstan: Geographical Overview, Natural Resources and Water Use  | Prof Dr. Jörg Stadelbauer (Freiburg University, Chair of Human Geography   |
| Mon,<br>June 19 | 14:00-<br>14:20 | Introduction to Examples Asia*  | Prof. Dr. Dietrich Schmidt-Vogt (University of Central Asia/Freiburg University, Chair of Silviculture)  |
|                 | 14:20-<br>16:45 | (Un)Integrated Land Use Systems, Shifting<br>Pasture-Related Legal Arrangements and<br>Socio-Ecological Challenges in Kyrgyzstan* | Dr. Andrei Dörre (FU Berlin, Department of Geography)  |
| Thu,<br>June 29 | 9:00-<br>10:00  | The forest sector of the Kyrgyz Republic and the Climate Change Adaptation Programme and Action Plan for 2015-2017                | M.Sc. Gulbahar Abdurasulova (Freiburg University)  |
|                 | 10:00-<br>12:30 | Political-Ecology and Land-Use Dynamics of<br>the Walnut-Apple Forest in the Kyrgyz<br>Republic                                   | Prof. Dr. Matthias Schmidt (Augsburg University, Chair for Human Geography)  |
| Tue,<br>July 04 | 14:00-<br>16:00 | Agroforestry and Forest Restoration in the Kyrgyz Republic (preliminary title)  | M.Sc. Klara Dzhakypekova (Freiburg University)   |

<sup>\*</sup>Joint lecture with "Integrated Land Use Systems" Summer School





### Preliminary programme of the excursion

### Bishkek (capital) and surroundings

- University of Central Asia (UCA) Headquarter:
  - o Establishment of a regional University with focus on mountainous regions
  - o Exchange with Scientists of the Mountain Society Research Institute (MSRI)
- Visits of Partners of the MSRI: GIZ, NGO "Camp Alatoo", Regional Centre for Environmental and Ecological Research in Central Asia (RCEECA) etc.
- Dordoi Bazaar: regional (agricultural) markets as a synthesis of regional production- and exchange processes
- Visit of National Park Ala Archa
- Visit of agricultural holdings and production sites

### Ysyk Köl und Tian Shan-Mountains

- Karakol-University
- Fruit production at the southern shore of the Ysyk Köl (Conservation of Agrodiversity in apple production)
- Jeti-Oguz: Mountain pasture management, Spruce forests (Picea schrenkiana), yurt-tourism

#### Naryn

- University of Central Asia, Naryn Campus; exchange with Students and Staff at the UCA
- Citizen Science Projects of the MSRI
- Decentralized Pasture Management (Pasture User Communities)
- Resource extraction and the environment: Kumtor Goldmine.
- Nature Conservation

### Southern part of the country: Osh/Jalalabad

- Walnut and Wild Fruit Forests
- Agroforestry Systems
- regional (agricultural) markets as a synthesis of regional production- and exchange processes
- Small-scale Agriculture
- Water User Associations

### Contact:

Please contact Dr. Steffen Entenmann for more information. Registration: as soon as possible, but at the latest until 12.06. to steffen.entenmann@waldbau.uni-freiburg.de.