Integrated Biodiversity Management, South Caucasus

Documentation of the information tour on spatial planning experience in Austria



Hanns Kirchmeir & Anna Kovarovics

Report

01/2017













Executive summary

From 8th to 15th January 2017 12 stakeholders, local representatives and project staff from the IEC/IBIS project participated in a study to the Austrian Alps in Carinthia.

The study tour took place within the frame of IEC/IBIS project and focused on the key topics structure and responsibilities of spatial planning in Austria.

The programme covered a wide range of lectures related to spatial planning in Austria. Representatives from the public sector as well as from the private sector talked about their work and experiences with the Austrian system and the possibilities and challenges within it. The participants had the opportunity to discuss the different topics with the lecturers and got an impression how spatial planning is dealt with in Austria.

The study tour started in the province of Carinthia, where the participants got an overview of the Austrian federal system, they visited municipality and district mayors and met spatial planners from the private sector. In the middle of the study tour they traveled to Vienna, where the public sector on national level was presented and where they visited the two Austrian universities, which offer spatial planning study courses.

The study tour ended with a day off for cultural sightseeing in Vienna. The participants arrived very inspired and satisfied in their home country on Sunday.

Table of Content

Executive summary	i
List of Figures	iii
List of Abbreviations	iv
1. Introduction	1
2. The study tour concept	2
2.1 Objectives and tasks	2
2.1.1 Documentation of the study tour	2
3. Detailed itinerary	3
4. Learning goals and summary	5
4.1 Study Tour Wrapup-Workshop	10
4.1.1 Steering board	10
4.1.2 Working group on cultural heritage	10
4.1.3 Budget on municipal level	10
4.1.4 Capacity	10
4.1.5 Data availability	11
4.1.6 Regional government	11
4.1.7 Sectoral and integrated planning	11
4.1.8 Strategic Environmental Assessment (SEA)	11
4.1.9 Land use rights	11
4.1.10 Skiing tourism development	11
5. Appendices	12
5.1 List of participants	12
5.2 Questions and Answers	12
5.3 Presentations	17

List of Figures

Figure 1: Lecture on spatial planning in Austria and visit in the municipality of Wernberg	5
Figure 2: Visit in Tyrol, getting to know a spatial planning company and meeting the governor of	f the
district	6
Figure 3: Visit of the Ministry of Agriculture and Forestry in Vienna	7
Figure 4: Meeting representatives of the Austrian Spatial Planning Conference, the University of Ap	plied
Life Sciences and a forestry inventory expert in Vienna	8
Figure 5: Meeting at the Technical University Vienna with Prof. Michael Getzner	9

List of Abbreviations

- ADC Austrian Development Cooperation
- IEC Integrated Erosion Control
- IBIS Integrated Biodiversity Management in the South Caucasus
- IM_{BES} Integrated Management of Biodiversity and Ecosystem Services
- GIZ Gesellschaft für internationale Zusammenarbeit
- BR Biosphere Reserve
- ToR Terms of Reference

1. Introduction

The implementation of study tours is a viable instrument and common approach to inspire local communities, widen the horizon of project staff and partners and offer new impulses for decision-makers. Consequently, in June 2015 the programme organized and implemented a study tour for three South Caucasian countries to Achental, Germany to give the programme staff and the local stakeholders the opportunity to get familiar with the Achental Eco model in Bavaria. In June 2016, an Azeri and Georgian delegation visited Klagenfurt in Austria to learn about the bio-engineering activities, sustainable forest activities and pasture management carried out in Austrian Alpine zone.

To deepen the understanding about the linkages between spatial planning, tourism development, natural hazards and nature conservation, in January this year a Georgian delegation visited Austria to learn about the structures and competences of the different actors in Austria's federal system, which resembles the Georgian one.

The mountainous areas of Austria faced similar challenges regarding land management and erosion control and have developed organizational forms, land-use practices and viable ways to ensure agricultural productivity, farmland and tourism whilst ensuring erosion control and nature conservation.

This study tour gave the participants the opportunity to get to know these approaches, meet planners and authorities and get a personal impression of the Austrian spatial planning system.

The comprehensive and dense programme covered all main topics as addressed by the IBiS programme focusing on enabling direct exchange between players and study tour participants. The study tour is a specific contribution to the IBiS project results (GE01- The legal, institutional and policy framework for IM_{BES} is improved, GE02 - The capacity of intersectoral bodies for IM_{BES} is improved and GE03 - Mechanisms for IM_{BES} and conflict resolution on local and regional level are improved).

The development of the technical concept of the study tour as well as technical facilitation, including interpretation was supported by Subject Expert/Principal Advisor of IBiS Project in the field of Spatial Planning and Protected Areas – Mr.Paata Shanshiashvili. The study tour was organized and implemented by E.C.O. Institute of Ecology and led by Dr. Hanns Kirchmeir and Anna Kovarovics.

2. The study tour concept

2.1 Objectives and tasks

A strategic tool to steer development in regions are spatial planning procedures. Spatial planning affects developments of different levels (municipality, district, province, national) as well as different sectors (infrastructure development, mineral extraction, agriculture and forestry, tourism ...). Spatial planning therefore must be an integrative process including different sectors and hierarchies. On the one hand, spatial planning relays on the availability of sound spatial data on relevant information needed to base decisions on. On the other hand, participative discussion process and moderation and mediation are needed to integrate different interest.

By integration of nature protection and environmental issues into the spatial planning procedure, these topics can be sustainable integrated into long term planning procedures. This integration needs adaption in the legal framework of spatial planning and needs active integration into the practical planning procedures as well new data on spatial distribution of natural and environmental heritage.

The objective of the study tour is to:

- Show legal background on spatial planning in Austria
- Explain different responsibilities on the spatial planning procedures of different hierarchies
- See planning documents on different levels and sectors
- See how the spatial planning is implemented (what is done by public administration, what is out-sourced to private planning companies)
- Personal discussion with actors in administration and planning specialist
- Explore how spatial planning is taught at Universities
- Support discussions in close coordination with Georgian expert in order to build the capacity of Georgian partners

2.1.1 Documentation of the study tour

All participants received a ring binder comprising information about the complete programme as well as background information and sufficient space for personal notes and individual documentation.

The Austrian facilitators of the study tour also documented the whole programme photographically and provided the pictures for the participants of the tour digitally.

During the lectures and meetings, especially during the discussions after the presentations of the invited specialists on spatial planning, the facilitators documented the questions and answers of the participants and summarized these notes in the annex.

3. Detailed itinerary

Sunday, 08.01.

Arrival delayed because of Snow-Storm in Istanbul (flights cancelled)

Monday, 09.01.

<u>Arrival</u>

Escort: Hanns Kirchmeir & Anna Kovarovics

10.30	Pick-up at Vienna Airport	
10.45-16.00	.00 Travel to Klagenfurt and Check-In at Hotel Sandwirth in Klagenfurt	
16.00-18.00	00 Lecture at the Alpen Adria University (Natia and Paata)	
18.30 Dinner at Uni-Pizzeria		

Tuesday, 10.01.

<u>Municipal Spatial Planning in Austria – Instruments and competences</u> Escort: Hanns Kirchmeir & Anna Kovarovics

08.30	Departure	
9.00-9.30	International obligations for spatial planning in Austria (DI. Robert Unglaub)	
9.30-12.00	Spatial planning on local level – Meeting with spatial planning specialist DI Josef Knappinger	
12.00-12.30	Trip to Wernberg	
12.30-14.00	Lunch at Restaurant Fruhmann	
14.00-14.30	Short walk to town hall	
14.30-16.30	Municipal instruments and competences – Meeting with mayor Franz Zwölbar and head of spatial planning department Bernd Wohlschlager	
16.45-17.15	Trip back to Klagenfurt	
18.00	Dinner at Restaurant Landhaushof	

Wednesday, 11.01.

<u>Spatial planning and nature protection – difficulties and approaches</u> Escort: Anna Kovarovics & Corinna Hecke

07.30-9.30	Trip to Lienz/Tyrol	
9.30-11.00	Spatial planning and nature protection - Meeting with spatial planning specialists	
11.00-12.00	Trip to Zettersfeld and lift-ride up the mountain (getting skiing equipment)	
12.00-13.30	Joint lunch at alpine guest house Bidner	
13.30-16.00	Group I: Skiing time in Zettersfeld	
13.30-16.00	Group II: Explore skiing resort by foot/cable car (bad weather: visit of Lienz city)	
16.00-18.00	Prioritization of different interests in spatial planning – Meeting with district governor (Interaction with ski resort, privatized?)	
18.00-20.00	Trip back to Klagenfurt	
20.00	Dinner at Restaurant Augustin	

Thursday, 12.01.

<u>Federal level – Spatial planning interests and competences of the federal state</u> <u>Escort: Hanns Kirchmeir & Anna Kovarovics</u>

8.00-12.00	Travel to Vienna and Check-In at Hotel Holiday Inn	
12.30-14.00	Lunch	
14.30-17.30	Forestry and natural hazards as spatial planning competence of the federal state – Meeting with specialists from the Ministry of Agriculture and Forestry (DI Richard Bauer)	
18.00-19.00	Dinner at Das Bieramt	
19.30-21.00	Concert at Mozart House Vienna	

Friday, 13.01.

Training on spatial planning in Austria – Curriculum and approaches

Escort: Hanns Kirchmeir & Anna Kovarovics

08.30-9.00	Travel to first district of Vienna	
9.00-10.00	Meeting with specialists from the Austrian planning conference as coordinator of the spatial planning on national level (Elisabeth Stix)	
10.00-11.00	Trip from 1 st to 18 th district	
11.00-13.00	Curriculum of the Department for spatial planning at the University of Applied Life Sciences (Prof. Gernot Stöglehner, Dr. DI Walter Seher)	
13.00-14.00	Lunch at Café Drechsler	
15.00-17.00	Innovative approaches in forest inventory (Günther Bronner)	
21.00-2:00	New Year's Dinner	

Saturday, 14.01.

<u>Final feedback and evaluation</u> Escort: Hanns Kirchmeir

9.00-10.00	rip to Spittelau	
10.00-12.00	Economic dimensions of spatial planning – Technical University Vienna Prof. Michael Getzner	
12.00	Individual program (Lunch)	
20.00	Dinner	

Sunday, 15.01.2017

Cultural programme

10.00-12.00	Meeting with Georgian Diaspore in Georgian Church	
12.00-02.00 Visit Belvedere Museum, to get familiar with Austrian famous masterpiece		

Departure at 16:00 by shuttle from the hotel Flight at 19:20

4. Learning goals and summary

Each day had pre-defined learning objectives. The following section presents the learning goals of the day as well as details about the presentations and information about the lecturers.

Tuesday, 10.01. Municipal Spatial Planning in Austria – Instruments and competences

Learning goal of the day: Getting to know the spatial planning system in Austria and the specific instruments and competences of the municipalities

In the morning, two spatial planning specialists owning private companies presented the spatial planning system in Austria and introduced their work and competences. After a lunch break, the mayor of the municipality Wernberg explained their instruments and competences and presented some best-practice examples of his career.

- Further information
 - 0 170110_a_spatial_planning_alpine_convention_robert_unglaub.pdf
 - o 170110_b_community_planning_in_carinthia_joseph_knappinger.pdf
 - Answers and Questions (see annex)



Figure 1: Lecture on spatial planning in Austria and visit in the municipality of Wernberg

Wednesday, 11.01.: Spatial planning and nature protection – difficulties and approaches

Learning goals of the day: Getting to know how spatial planning in Austria deals with tourism interests (e.g. skiing tourism) and nature protection interests (e.g. National Parks)

After a bus ride to Lienz in the province of Tyrol, Lukas Umgeher, employee at a local planning company talked about their way of dealing with different interests in spatial planning processes and showed examples of different approaches. After a short lunch at a mountain restaurant in the skiing resort of Zettersfeld, one part of the group explored the resort by skis, the other part by foot. In the evening the governor of the district of Lienz explained the spatial planning instruments and competences of the districts in Austria.

- Further information
 - 170111_a_land_use_nature_protection_revital.pdf
 - o 170111_b_government_district_lienz.pdf



Figure 2: Visit in Tyrol, getting to know a spatial planning company and meeting the governor of the district

Thursday, 12.01.: Federal level – Spatial planning interests and competences of the federal state

Learning goals of the day: Learning about the competences and instruments of the federal state of Austria, especially regarding forestry and natural hazard management

After a four-hour bus ride to the capital of Austria, two specialists from the Ministry of Agriculture and Forestry presented the laws and acts dealing with spatial planning and forestry/natural hazard management as well as their instruments and how the necessary data is collected and used.

- Further information
 - 170112_a_spatial_planning_forestry_bauer.pdf
 - o 170112_b_natural_hazard_management_pichler.pdf
 - Answers and Questions (see annex)



Figure 3: Visit of the Ministry of Agriculture and Forestry in Vienna

Friday, 13.01.: Spatial planning on Federal level; Training on spatial planning in Austria – Curriculum and approaches

Learning goals of the day: Getting familiar with a coordination of spatial planning on the national level and b.education - the Austrian University system and the curriculum of the institute.

First, the participants visited the workspaces of the Austrian Conference on Spatial Planning in the historical building Hofburg in the center of Vienna. The conference mainly focuses on connecting the different players in spatial planning in Austria and offers a communication platform for them. Later in the morning, Prof. Stöglehner from the University of Applied Life Sciences presented their approaches on research and teaching. In the afternoon, a forestry specialist discussed innovative approaches on forest inventories.

- Further information
 - o 170113_a_austrian_spatial_planning_conference.pdf
 - o 170113_b_institute_of_spatial_planning_university.pdf
 - 170113_c_forest_inventory_bronner.pdf
 - Answers and Questions (see annex)



Figure 4: Meeting representatives of the Austrian Spatial Planning Conference, the University of Applied Life Sciences and a forestry inventory expert in Vienna

Saturday, 14.01.: Economic dimensions of spatial planning

Learning goals of the day: Getting to know the economic dimensions of spatial planning and the curriculum of the Technical University of Vienna

Prof. Michael Getzner from the Technical University Vienna explains his research activities focusing on the economic dimensions of spatial planning and presents the curriculum of the institute.

- Further information
 - o 170114_a_economic_dimensions_of_spatial_planning.pdf
 - Answers and Questions (see annex)



Figure 5: Meeting at the Technical University Vienna with Prof. Michael Getzner

4.1 Study Tour Wrapup-Workshop

Feedback on the 13th of February 2016 on the study-tour on spatial planning to Austria.

Participants of the wrap-up workshop:

Ms. Nino Gventsadze, Mr. Kakha Potskhishvili, Ms. Maka Manjavidze, Bishop David (Irakli Makharadze), Mr. Irakli Kadagishvili, Mr. Eristo Lagazidze, Mr. Beka Baidauri, Mr. Christian Gönner, Ms. Natia Kobakhidze, Mr. Amiran Kodiashvili, Mr. Paata Shanshiashvili

Kirchmeir gave a short review on the study tour with all meetings.

After this summary, the participants gave their feedback on what was most important for them.

4.1.1 Steering board

The Austrian Conference on Spatial Planning was one of the most important meetings. The name "conference" was on the beginning misleading. It is a steering board. The group discussed if similar structures are meaningful for Georgia. There is already a national board on spatial planning including 14 ministries, the statistic agency, members of the chamber of economy and other representatives. But this Georgian board is only temporary and might be transformed to become permanent. There was the suggestion to include also external technical experts in that board. Also, the regions should be represented in this board. It would be difficult to include also the municipalities (because of high number), but it was stated, that coordination of spatial planning between municipalities is needed as well. Another institution that should be included in the board is the Church, as it is playing an important role in land management as well as in tourism. The monasteries can play an important role in education and capacity development in the field of spatial planning.

An experimental conference-platform might be built for the two pilot regions where GIZ is involved in the spatial planning process.

The strength of such a board is seen in the fact, that decision makers and technical experts are working together.

4.1.2 Working group on cultural heritage

The working group on cultural heritage should work on the inventory and need adequate resources for this task. This inventory is an important information for spatial planning.

4.1.3 Budget on municipal level

From the municipal administration, it is seen as a drawback, that money received from the ministry, which is not (fully) spent on the original purpose, has to be sent back to the ministry.

4.1.4 Capacity

The availability of urban and spatial planners is very limited at the moment. For Akhmeta it is difficult to find a forest-specialist to work on the forest inventory.

Cooperation with Austrian or German Universities in the field of spatial planning should be developed. Another option is an exchange program for experts between Austria and Georgia. (internships, volunteer programs, expert exchange program).

4.1.5 Data availability

The availability of high qualitative data is crucial to the spatial planning process. It has to be clarified, who is in charge to collect the data in the field. Who set up the standards for data acquisition.

It would be very important to have a current land cover map for Georgia.

4.1.6 Regional government

The regional governments should be empowered to take over steering competence in some of the spatial planning procedures. For example, in watershed management, where several municipalities are affected.

4.1.7 Sectoral and integrated planning

The different sectoral planning approaches should be integrated into one planning process. But it is also important to integrate different hierarchical levels (municipality <> province <> national<> EU).

4.1.8 Strategic Environmental Assessment (SEA)

SEA is seen as an important planning tool. If planning is done well, much less problems will be in and after the implementation of the project.

SEA should go hand in hand with the implementation of the Environmental Impact Assessment in planning. There is a USAID initiative on this issue.

4.1.9 Land use rights

Leasing and land property is still a challenging issue. For land leases, there is lack of proper documentation. Land property rights are not precisely documented in mountainous regions.

The land reclamation (land privatization) process might be improved.

4.1.10 Skiing tourism development

There is future potential seen in the skiing tourism development. How can private investors, land owners and local administration cooperate successfully? Maybe there are examples on Public-Private-Partnership in this field from Austria.

5. Appendices

5.1 List of participants

Ms.	Nino	Gventsadze	Ministry of Economy and Sustainable Development, Spatial Planning and Construction Policy Department, Deputy Head
Mr.	Kakha	Potskhishvili	Ministry of Economy and Sustainable Development, Spatial Planning and Construction Policy Department, Deputy Head
Ms.	Maka	Manjavidze	Ministry of Environment and Natural Resources Protection, Land Resources Protection and Mine Service, Main Specialist
Bishop	David	(Irakli Makharadze)	Bishop of Alaverdi Eparchy (Kakheti region - Akhmeta/Tushti)
Mr.	Irakli	Kadagishvili	State Attorney - Governor of Kakheti region
Mr.	Eristo	Lagazidze	Akhmeta Municipality, Director of Tusheti Protected Landscape Administration
Mr.	Beka	Baidauri	Municipality of Akhmeta
Mr.	Christian	Gönner	GIZ /IBIS "Integrated Management of Biodiversity", Team Leader Georgia,
Ms.	Natia	Kobakhidze	GIZ /IBIS "Integrated Management of Biodiversity ", Senior Advisor
Mr.	Amiran	Kodiashvili	GIZ /IBIS "Integrated Management of Biodiversity ", Field Coordinator
Mr.	Paata	Shanshiashvili	Subject Expert – Spatial Planning and Protected Areas Management, Technical Facilitator of the tour

5.2 Questions and Answers

Municipal instruments and competences – Meeting with mayor Franz Zwölbar and head of spatial planning department Bernd Wohlschlager (Municipality of Wernberg)

Summary presentation

- Wernberg was founded in 1864
- 23 towns, no official main village
- From 2300 citizens in 1956 to 5600 citizens nowadays
- 1950 1960 primarily small farmers, municipality mainly characterized agriculturally, single wells for each farm
- 1960-1970: water-pipe system for the whole municipality → economic upswing, new houses are built, people from the cities and the valleys move to Wernberg. Houses usually for two families, up to 1000 m² properties. Nowadays much smaller houses and properties.
- Until 1980: uncontrolled development of new building areas and properties, usually along the biggest streets. Natural border back then: forest.
- 1985: because of the uncontrolled development and the decrease of available area, it becomes more and more important to plan the development of the new areas for living more economically in a participative process with all citizens of Wernberg.

- 1986: Municipality buys property for a community centre, because of a political conflict, they ask the citizens weather to build the centre or not, citizen decision says no. Had to wait for more than ten years to build the community centre on this property.
- Main target of spatial planning: creating an official main village as center of the municipality, plan the development of living areas, commercial areas and local supplies.
- Land use plan is an important instrument, not possible without participation of citizens and land owners (must be informed and involved)

Questions and answers

Q: Is it possible to reclassify properties in the land use plan?

A: Yes, it is possible, must be communicated with the municipality and takes app. 1 year.

Q: If someone wants to construct a building for living or commercial purposes, how long does it take until he or she gets the permit?

A: If the application plan is submitted formally correct, it takes about 6 months for commercial buildings and about 2 months for residential buildings.

Q: How is the budget of the municipal government?

A: About 10 million \in /year. 8 million are needed for administration, for the community tasks of the government (schools, kindergarten, road maintenance, snow removal...), about 800.000 \in /year for projects and financing.

Q: What is the structure of the yearly budget?

A: Federal government (financial compensation), financial compensation between provinces and municipalities, municipal tax (3 % of salary of each employee payed by employer)

Forestry and natural hazards as spatial planning competence of the federal state – Meeting with specialists from the Ministry of Agriculture and Forestry (DI Richard Bauer)

Questions and answers

Q: Why spatial planning?

A: Balance between different interests and avoiding conflicts

Q: What is the legal background for the forest development plan?

A: Austrian Forest Act, decree on the forest development plan, guidelines for the forest development plan.

Q: As the four key functions of forest in Austria are: productive function, protective function, welfare function and recreational function, is there also an ecological function of the forest?

A: An ecological function is not defined by the law and therefore it cannot be reflected in the forest development plan.

Forestry and natural hazards as spatial planning competence of the federal state – Meeting with specialists from the Ministry of Agriculture and Forestry (DI Andreas Pichler)

Questions and answers

Q: Spatial planning is trans sectoral. How is Natural Hazard Management (NHM) integrated into spatial planning.

A: Competence is on the level of municipalities and provinces. NHM risk-maps are used in the spatial plans of municipality. Mayor makes decision, risk maps are not binding. But it is becoming more binding. Systems need time to learn. People learn from big events.

Q: Are there guidelines of NHM? Do you have models on hazard risks? Do they predict natural hazards?

A: Used data: Field data \rightarrow modelling \rightarrow evaluation of the model results \rightarrow evaluation of the past/old events. The models often cannot estimate sediments, wood debris.

Q: What is the difference between natural hazard mapping and risk mapping?

A: Risk mapping started with EU floods directive. Buildings, people, social and cultural heritage, economic activities.

Q: Is natural hazard assessment included into environmental risk assessment?

A: In strategic environmental risk assessment.

Meeting with specialists from the Austrian planning conference as coordinator of the spatial planning on national level (Elisabeth Stix)

Questions and answers

Q: Why is the federal system so strong in Austria?

A: Monarchy was centralistic, so strong federal provinces have been the reaction of the constitutional structure in the republic.

Q: What is the power of the decisions of the ÖROK?

A: Decisions are not binding. But if people work on these decisions, the board members bring in their power in their field of competences.

Curriculum of the Department for spatial planning at the University of Applied Life Sciences (Prof. Gernot Stöglehner, Dr. DI Walter Seher)

Questions and answers

Q: Are there obligations after the master thesis if you want to work in the field of landscape planning and lasts the certificate for life time?

A: 3 years of experience are needed, then there is a course at the chamber of civil engineers where they can get a certificate for the whole life.

Q: How much are the university costs in Austria?

A: Free for citizens of Austria and EU, Georgians? See web page of BOKU international office

Q: Do most of the graduates work in the private or in the public sector after university?

A: 70% landscape architectures got to private sector, spatial planning: 50% private, 50% public. Usually small companies 5-15 employees.

Q. Is the public sector in Austria compatible to the private sector?

A. Yes.

Q: Are the lifelong learning courses offered at the institute only for specialists in this specific field?

A: No, it is somehow open, even for people from other disciplines. You must pay for the course.

Q: Why Boku is so successful?

A: The university connects research with teaching. Planning theories are combined with practice (translate science to practice). There is knowledge demand from regions/and specific questions which have maybe short lifetime. Strong connection with local actors in teaching (bring innovation to praxis, customised teaching to the need of praxis).

Q: Does education and training benefit from open access to data?

A: The situation has improved. But still there are costs for data for students.

Economic dimensions of spatial planning – Technical University Vienna Prof. Michael Getzner

Summary

- 100 employees 90% researches, teachers 10% administrative staff
- Spatial simulation lab to model spatial development including virtual reality.
- 1000 students, 150-170 new per year.
- Bachelor program, Master program, doctoral colleges, (environmental aware in urban development)
- Five fields of research
 - Public Finance
 - Infrastructure economics and policy
 - Resource and environmental economics, ecological economics
 - Urban and reginal economics
 - Real-estate economics
 - Development of software tools & economic methods
 - Financial sustainability of infrastructure project
- Economy needs to be part of spatial planning.
- Two sides of the coin: All spatial developments have economic impact
- On the other side, economic developments have spatial impact

Questions and Answers

Q: Mining resources: economic value of industries based on mining?

A: two parts:

- 1. Easy: economic impact of the mining industry (production, employment, contribution to the GDP of mining sector
- 2. Harder: Impacts of mining sector what are out of marked (resettlement, destruction of ecosystems)

Q: What economic assessments are made during the planning procedure of municipality?

A: there is no legal need to include economics in the spatial planning procedure.

Q: Models on urban development: Is the need of compact development reflected in the legal system?

A: In the Austrian spatial development concept, it is state to be efficient with the land.

Q: What is the time frame of sustainable modelling?

A: 30 years

Q: What are opportunity costs?

A: Economic costs of benefits that are not realised (not chosen options)

Q: The Institute has some clients. Are there direct contracts between you and clients? Are the clients defining the research topics?

A: three different types:

- 1. Scientific research (financed by Austria or European science fund) (50-60% of the institute)
- 2. Public entities, that need planning (applied research)
- 3. Consulting service (municipality, trade union, big company) (not scientific work, using existing data and methodologies)

Q: Scenarios on ecosystems (that will be destroyed, damaged) are there costs of rehabilitation. Should they be re-cultivated or left as they are?

A: Set of scenarios is the most difficult work. We calculate the difference of different scenarios.

5.3 Presentations





Integrated Biodiversity Management South Caucasus IBiS

Programme office Ministry of Environment and Natural Resources Protection of Georgia

6 Gulua str 0114 Tbilisi, Georgia Tel: +995 322 201828 www.giz.de www.biodivers-southcaucasus.org

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH