### Activities of ITS in developing countries 2005 - 2010



#### CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

The Czech University of Life Sciences Prague (CULS Prague) is the oldest agricultural university in the Czech Republic. The history of the University started with the establishment of the Department of Agriculture at the Czech Technical University Prague in October 26, 1906, by the Decree of Franz Josef I, Emperor of Austria. In 1952 the decree of the government of Czechoslovakia established the independent University of Agriculture by a transformation of the High School of Agriculture at the Czech Technical University in Prague.



At present, the Czech University of Life Sciences Prague (CULS Prague) has five faculties and two institutes: Faculty of Agrobiology, Food and Natural Resources, Faculty of Environmental Sciences, Faculty of Forestry and Wood Sciences, Faculty of Economics and Management and Faculty of Technology, Institute of Tropics and Subtropics and Institute of Education and Communication. The University is a very important education establishment with more than 20,000 students who, together with about 1,200 staff (teachers, researchers, technicians and administrative staff), constitute an University academic community where each of them has his or her own role. CULS Prague belongs among the leading Czech universities, which has been proved both in the international evaluation and by its successful graduates in all fields of agriculture and related sectors.

CULS Prague is proud of its current position within the Czech educational system and of its extensive international cooperation. University students and professors from all EU countries as well as from other regions and continents come to CULS Prague to study and share experience or participate in international conferences and workshops.



#### **INSTITUTE OF TROPICS AND SUBTROPICS**

Institute of Tropics and Subtropics (ITS) is the former Institute of Tropical and Subtropical Agriculture (ITSA). ITS is an independent, educational, research and scientific academic body of CULS Prague for research and studies of tropical and subtropical regions.



#### **Teaching and Instruction**

ITS offers education in agricultural, environmental and rural development in specific tropical and subtropical regions (TS) on both undergraduate and postgraduate levels. ITS graduates are awarded B.Sc., M.Sc. and Ph.D. degrees. Teaching activities are conducted by three ITS departments, which are provided with necessary facilities: experimental greenhouses, laboratories and computer hardware and software infrastructure.

#### **ITS departments are:**

- Department of Crop Sciences and Agroforestry in Tropics and Subtropics focused on crop production and agroforestry in tropical and subtropical areas.
- Department of Animal Science and Food Processing in Tropics and Subtropics focused on breeding, keeping, welfare and etology of farm, domesticated and wild animals in the tropics and subtropics.
- **Department of Economic Development** focused on poverty alleviation strategies, agricultural extension, farming systems, market-chain and microfinance development in tropics and subtropics.
- **Department of Sustainable Technologies** focused on implementation of appropriate technologies in rural areas of the tropics and subtropics.

#### **Other units of ITS:**

There are other ITS units and activities important for its main tasks implementation:

- Advisory and Project Service Centre
- Lifelong Learning Programme Erasmus Implementation Unit
- Erasmus Mundus Programme Implementation Unit
- Development Projects Implementation Unit
- Greenhouses of the ITS

The structure of study programmes respect the principles of BOLOGNA DECLARATION based on 3 + 2 academic years (B.Sc.) and (M.Sc.) followed by 3 years of Ph.D. studies. The subjects are compulsory and optional. Study programmes at ITS are as follows:

#### Two B.Sc. programs in Czech:

- "Tropical and Subtropical Agriculture"
- "Sustainable Rural Development in the Tropics and Subtropics"

#### Six M.Sc. programs in English:

- "Tropical Forestry and Agroforestry"
- "Tropical Crop Management and Ecology"



- "Sustainable Rural Development in the Tropics and Subtropics"
- "International Economic Development"
- "Animal and Food Science in the Tropics and Subtropics"
- "Wildlife Management in the Tropics and Subtropics"

#### Two Ph.D. program in Czech and English:

- "Tropical and Subtropical Agriculture"
- "Sustainable Rural Development in the Tropics and Subtropics"



#### **Research and Science**

ITS research activities encompass both basic and applied research in the field of tropical and subtropical agriculture and sustainable rural development in the tropics and subtropics. ITS cooperates especially with countries and regions selected according to priorities of the Czech Official Development Assistance together with countries where ITS has a long history of mutual relationship as: Angola, Moldova, Mongolia, Peru, Senegal, Uzbekistan, Vietnam or Zambia, new cooperation has been started in Kyrgyzstan, Haiti and Georgia for example. This booklet presents developing projects realized in named countries between years 2005 and 2010.

Research is financed by government grants and private donors or entrepreneurs' contributions. New research topics are being introduced with an emphasis on the sustainable development of rural areas in developing countries. ITS is a coordinating institution and participates in both Czech and international projects (EC, FAO and UNIDO). The projects where ITS is participating are mostly formulated by its research and scientific staff according to the needs of the recipient countries with the assistance of various foreign institutions involved. The project selection targets the most pressing sectors (usually food production and security, and rural development) and the poorest countries or regions.

ITS is an active member of international association **AGRINATURA** (The European Alliance on Agricultural Knowledge for Development). **AGRINATURA** secretariat has been hosted at the CULS since 2004. Since 1967 ITS has been publishing its scientific journal **AGRICULTURA TROPICA ET SUBTROPICA** (ATS) with ISSN 0231-5742 and ISSN 1801-0571 (on-line). The international scientific journal is published under the authorization of the Czech University of Life Sciences Prague and under the direction of the Institute of Tropics and Subtropics. The journal is published in English and focuses on ITS research and scientific activities in the field of tropical and subtropical agriculture and rural development. The journal is mailed to interested institutions in many countries of the world.







#### **AGRINATURA**



AGRINATURA is, "The European Alliance on Agricultural Knowledge for Development" encompassing 36 universities and research organisations from 19 European countries working with agricultural research, education, training and capacity strengthening for development. As such, AGRINATURA is the major institutional voice in Europe and the main gateway between Europe and developing and emerging economy countries in the field of agricultural research and education for development

AGRINATURA is formed by NATURA, the former association of European universities dealing with agricultural research and education for development, and ECART, the consortium of European institutions working in agricultural research for development, in order to capitalize on their respective strengths and expertise.

AGRINATURA has two pillars – An Association, open to all European agricultural research and education organisations, and a European Economic Interest Grouping (AGRINATURA-EEIG), as its operational arm.

AGRINATURA's goal is to make substantial European contributions to the Millennium Development Goals (MDGs) and the Paris Declaration by:

- Playing a proactive policy advocacy role for agricultural research and education for development in Europe and worldwide
- Developing and strengthening strategic alliances and partnerships with and between the different stakeholders in development, both in the North and in the South
- Encouraging networking and partnerships between institutions, organisations and individuals
- Organising, facilitating and implementing joint participation in European and international programmes and projects.
- For more information: www.agrinatura.eu









Angola Georgia Haiti Jordan Kyrgyzstan Mali Moldova Mongolia

# oing countries 2005 - 2010



Namibia Peru Senegal

Uzbekistan

Vietnam Zambia





# 2005 \$ 2010 1005 \$ 2010

#### Farming of Eland at Farm at Lány under Management of the Institute of Tropics and Subtropics, Czech University of Life Sciences Prague

#### Aims of eland husbandry at Farm at Lány

1. To evaluate the breeding technology from an animal welfare perspective and raise this species for meat production in the Czech Republic.

2. To continue with scientific research and further knowledge about eland.

3. To educate and train students of ITS CULS in breeding techniques with semi-domesticated species and to sponsor student research.

#### Research

Because there are many things we still do not know about eland physiology and behavior, we are challenged to describe their ability to adapt to different regions. We used infrared thermography to determine how eland cope with low temperatures. We found that eland can protect themselves against heat loss by reducing their body surface temperature as cattle do at ambient temperatures close to 0°C. Eland are also able to eliminate perennial weedy plants from pastures by permanent grazing. Their feeding behavior, reproduction, maternal

care and social behavior still raise many unanswered questions.

#### Domestication

Food and Agriculture Organization (FAO) recommended eland for domestication in 2000, because of their physiological, morphological and breeding similarities to cattle. One of the most successful domestication experiments has been running at Askanya Nova (Ukraine) since 1892. There, an intensive husbandry system with early weaning, milking and fattening, similar to intensive cattle management, is performed. On the other hand, the extensive ranching of game (including eland) prevails in Africa. We are at the beginning of the eland's domestication, because we have bred eland since 2000.



#### **Contact:**

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# Establishment of the Centre of Agricultural Education in the Bié Province

Target Country: Republic of Angola Project Coordinator: Bohumil Havrland Project Team: Petr Holecek, Petra Holikova, Michael Spicka, Santos Victor Ferreira, Jiri Hejkrlik, Jana Mazancova, Mirka Jopkova

Partner(s) of the Project: Ministry of Agriculture and Rural Development of Angola,

Ministry of Education, Ministry of Foreign Affairs of Angola, Government of the Bié Province Donor: Ministry of Education, Youth and Sports of the Czech Republic Duration of the project: 2003 - 2005

#### Aim of the Project:

To establish agricultural education and develop training and extension services for local farmers in the central province of Angola. The Bié province is one of the provinces most affected by four-decades-long Angolan civil war, which terminated in 2002. After the final examination the graduates will be the first technical experts educated in the province which, until the establishment of the Center, has lacked any secondary agricultural education. Therefore, the establishment of the Center aims to contribute to the improvement of the Angolan education system and to the resolution of socio-demographic problems, i.e. depopulation and the consequent decline of this region whose natural predispositions for agricultural production are unique.

#### **Outputs of the Project:**

Classes for local students, for first hunderd students opened in March 2004 Preparation and publication of study materials and textbooks for Czech and Angolan teachers Organization and publication of the school journal with students' participation Establishment of chemical laboratory, computer classroom and school library Practical training of students on the adjacent grounds Construction of poultry house for the establishment of poultry breed Organization of seminars and practical training in poultry production for students and local farmers Fishery production research in the province, including collection and preservation of fish symplex

#### **Contacts:**

**A 105NA** 

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#### **Centre of Agricultural Education in Bié Province**

Target Country: Republic of Angola Project Coordinator: Bohumil Havrland, Jana Mazancova Project Team: Martin Lostak, Hynek Ciboch, Zdena Horajsova, Martin Blabolil, Pavel Burian, Pavel Smrha, Jiri Hejkrlik, Dan Marek, Petra Charousova Partner(s) of the Project: Ministry of Agriculture and Rural Development, Fishery and Environment of Angola; Ministry of Education and Culture of Angola; CARE International Angola Donor: Ministry of Education, Youth and Sports of the Czech Republic

Duration of the Project: 2006 - 2009

#### Aim of the Project:

The aim of the project was to establish Centre of agricultural education and develop training and extension services for local farmers in the Bié province. Besides the secondary-school courses including both general and agriculture subjects, an applied research and consultant services complemented the integral part.

#### **Outputs of the Project:**

Preparation of educational materials and texts Education and training in the Centre for agricultural education Laboratories for chemistry, pedology and botany The computer laboratory and library Meteorological station Redaction of the school journal Demonstration poultry-raising and preparation of school plots Consulting services and courses for state and private agricultural consulters and farmers The school farm in Kunje

#### **Contact:**

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#### **Consultancy in Fish and Poultry Production**

Target Country: Republic of Angola Project Coordinator: Petra Chaloupkova Project Team: Pavel Trefil, Lukas Kalous Partner(s) of the Project: Government of Bié Province Donor: Ministry of Agriculture of the Czech Republic Duration of the Project: 2006 - 2009

#### Aim of the Project:

The intention of the project was to increase agricultural production and productivity in Bié province, which is the most destroyed province after the civil war in Angola. The main objective of the project was creation specific methodology of the fish and poultry production and its integrated system and establishing conditions of its implementation in the local communities.

#### **Outputs of the Project:**

Trained agricultural producers in the area of fish and poultry production and its integrated system Trained students of the Centre of Agricultural Education in Bié province in the area of fish and poultry production and its integrated system

Establishment of websites, which includes information about the project, fish and poultry production in Angola available in Czech and Portuguese

Implementation of the integrated system of fish and poultry production in the selected communities in Bié province Publishing of scientific study (methodology and practical manual) of fish and poultry production and its integrated system useful for local farmers, students of agriculture, provincial government and nongovernmental organizations

#### **Contact:**

O U U

Name: Petra Chaloupkova E-mail: chaloupkova@its.czu.cz Websites: www.angola.czu.cz







#### Capacity Building in the Area of Fish and Poultry Production

Target Country: Republic of Angola Project Coordinator: Petra Chaloupkova Project Team: Pavel Trefil, Lukas Kalous, Miloslav Petrtyl, Zdenka Horajsova Partner(s) of the Project: Government of Bié Province Donor: Ministry of Agriculture of the Czech Republic Duration of the Project: 2008 - 2009



#### Aim of the Project:

The project was connected with presently running development project Consultancy in Fish and Poultry Production in Bié province. The intention of this project was to provide capacity building and training of local experts in the area of fish and poultry production and its integrated system. Trained experts are able to support extension of the integrated system in the province and through the implementation helps to stabilized socioeconomic conditions of the local farmers.

#### **Outputs of the Project:**

Trained experts in the area of fish and poultry production and its integrated system Establishment of Consultancy Centre "Fish & Chicken", which serves for local farmer Implementation of farms of integrated system of fish and poultry production Promotion of the outputs of the project, publishing learning materials

#### **Contact:**

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#### Support of the Agricultural Training School in Catabola

Target Country: Republic of Angola Project Coordinator: Jana Mazancova Project Team: Jiri Hejkrlik, Bohumil Havrland, Hynek Ciboch, Martina Mandova (ADRA), Vit Lesak (ADRA) Partner of the Project: ADRA, o. s., Ministry of Agriculture and Rural Development, Fishery and Environment of Angola; CONCERN, Red Cross Angola Donor: Czech Development Agency Duration of the Project: 2009 - 2011

#### **Aim of the Project:**

The aim of the project is to support the Agricultural school and develop training and extension services for local farmers in the Bié province. Besides the secondary-school courses including both general and agriculture subjects, the projects focus on applied research and consultant services.

#### **Outputs of the Project:**

Preparation of educational materials and texts Education and training in the Agricultural school Support of Angolan teaching staff Laboratories for chemistry, pedology and parasitology The computer laboratory and library Meteorological station Demonstration poultry-raising, livestock breeding and preparation of school plots Facilities for maintenance of agricultural machinery Centre for processing of agricultural products Students hall Consulting services and courses for state and private agricultural consulters and farmers The school farm in Catabola

#### **Contact:**

**VIODN** 

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#### Improvement of Institutional Conditions for the Development of Agricultural Training School in Catabola and Empowerment of Extent and Quality of Extension Services in Catabola Municipality, Bié Province

Target country: Republic of Angola Project coordinator: Jana Mazancová Project team: Jiří Hejkrlík, Hynek Ciboch, Kristina Rušarová Partners of the project: ADRA o. s., ONICO s. r. o. Partners in Angola: Directory of Agriculture of Bié Province, Directory of Education of Bié Province Donor: Czech Development Agency Duration of project: 2010 - 2011

#### Aim of the project:

Enhancement of the institutional conditions of Agricultural Training School and improvement of extension services in Catabola.

#### **Outputs of the project**

Well running officially registered Agricultural Training School Improvement of competencies of extension technicians in Catabola Sustainable operation of laboratories of pedology and parazitology and of the Centre of Processing of Agricultural Products

Trained extension agents and teachers from Catabola and other regions

Establishment and management of Farmers' Field Schools

#### **Contact:**

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# Establishment of Agor-service Center in Martivili, Region Samegrelo

Target Country: Republic of Georgia Project Coordinator: Bohumil Havrland, Hynek Ciboch Project Team: Dilmurod Gaybullaev, Josef Novák, Thomas Kadlec Partner(s) of the Project: Martvili Agro-service Center, Mertvili, Gergia Donor: Czech Development Agency, Czech Republic Duration of the Project: 2009 - 2010

#### Aim of the Project:

The aim of the project was establishment of the Martvili Agro-service Center (MASC) in Martvili district, provide financial funds for its one-year operation, train its management and training staff, help to select proper equipment both farm machinery and office equipment, organize demo-projects at selected MASC farmers and work out a Strategic plan for 2010 – 2013 which would be a guide document for the MASC operation.

#### **Outputs of the Project:**

Provision of financial funds for the MASC operation 15 MASC trainers trained Educational materials and texts prepared for training sessions 24 demo-projects prepared Selected farm machinery and office equipment supplied to the MASC Strategic plan worked out and discussed with the MASC Management

#### **Contact:**

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#### Strategic Plan for Improvement of Agricultural Production through Capacity Building in Haiti

Target country: Haiti Project coordinator: Jana Mazancová Project team: Jiří Hejkrlik, Hynek Ciboch, Bohumil Havrland, Martina Mandova (ADRA CR), Jakub Nemec (ADRA CR), Christina Masching (ADRA Canada) Partners of the project: ADRA Czech Republic, ADRA Canada Partners in Haiti: local NGOs in the Section 2 and 3 in Petit Goave Donor: ADRA Czech Republic, ADRA Canada Duration of project: 2010 - 2012



#### Aim of the project:

Ensurance of food and seed security of rural population in the Sections two and three of Petit Goave. Improvement of competencies of extension agents and local farmers in agriculture and environmental protection.

#### **Outputs of the project**

600 rural families improved their livelihood in a sustainable way 400 farmers are trained in improved agricultural techniques 300 rural families are trained in sustainable use of natural sources 100 extension technicians are trained in principles of sustainable rural development Four training centers are established and well managed, the relevant staff is trained

#### **Contact:**

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#### Crossbreeding of imported mutton and prolific sheep breeds with local Awassi sheep and the development of research, training and extension Centre in Jordan

Target Country: The Hashemite Kingdom of Jordan Project Coordinator: Momany Shaker Mohamed Project Team: Mohamed Momany, Ivan Sada, Martina Malinova Partner(s) of the Project: Jordan University of Science & Technology Irbid Donor: Ministry of Agriculture of the Czech Republic Duration of the Project: 2002 - 2008

#### Aim of the Project:

The aim of the project was establishment of the Martvili Agro-service Center (MASC) in Martvili district, provide financial funds for its one-year operation, train its management and training staff, help to select proper equipment both farm machinery and office equipment, organize demo-projects at selected MASC farmers and work out a Strategic plan for 2010 – 2013 which would be a guide document for the MASC operation.

#### **Outputs of the Project:**

Crossing and selection to improve performance traits of local sheep Creating a synthetic line of breed which joins excellent character and performance of indigenous and Eurpean breeds

Training and extension services to local animal farmers, university and high school students Establishing a permanent training and extension service Centre

#### **Contact:**

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#### Sustainable Rural Development in Leylek District

Target Country: Kyrgyz Republic Project Coordinators: Vladimir Verner, Jan Banout Project Team: Zbynek Polesny, Bohdan Lojka, Jana Lojkova, Alexander Kandakov, Petr Ehl, Iva Kucerova, Bekmat Masaidov, Aibek Usupbekov, Aibek Kulmashev Partner of the Project: Kyrgyz Agriculture University after K.I.Skryabin Donor: Ministry of Agriculture of the Czech Republic Duration of the Project: 2008 - 2010

#### Aim of the Project:

Overall intension of the project is to improve the living standard of families settled in Leylek district. The main project objective is to improve the quality and quantity of agricultural production in Kulundu valley.

#### **Output of the Project:**

Total number of four outcomes will be carried-out during the project implementation:

- Firstly, development study of the target area will be compiled by the project team members. All project outcomes, results and pros and cons of designed methods will be described and comment, and, future expectation and main constrains of development marked out.
- Secondly, field demonstration plots will be established in target area, Kulundu valley, on total area of 7 hectares. Recommendation of project team members will be demonstrated there and 47 households will participate on running those plots.
- Thirdly, at least 47 households will be engaged into workshops and educational meetings aimed on improved agricultural systems, waste management, post-harvest processing, farm economics and impact of human/ agricultural activities on local environment.

Fourthly, capacity building and PR activities focused on project activities and target area.

#### **Contact:**

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# www.its.czu.cz

SYZSTAN

# Experimental and Training Center in Republic Mali

Target Country: Republic of Mali Project Coordinator: Richard Sovjak Project Team: Hedvika Gabrielova, Tereza Vondrova Donor: Ministry of Agriculture of the Czech Republic Duration of the Project: 2001 - 2005

#### Aim of the project:

The main objectives of this project were to assist Mali to reach economic self-sufficiency by using the potential of local breeds of goats and sheep and to introduce new methods of the processing of meat and milk products in order to reduce the expenses of importing these commodities.

#### **Outputs of the Project:**

Performance of chemical and microbiological examinations used for checking meat and milk quality and composition Construction of chemical and microbiological laboratories Equipment of laboratories Training of specialists Increasing of meat and milk production of small ruminants Assesment of true milk and meat production of local sheep and goat breeds Contruction of stables and pens Cross-breeding of Sahel goat Processing of animal products Evaluation of traditional methods in animal protein processing Introduction of small-scale technologies for meat and milk processing

#### **Contact:**

MALI

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#### Support to the Study Programme Development at the State Agrarian University of Moldova in Chisinau and Harmonization of its Educational System with EU Standards

Target Country: Republic of Moldova Project Coordinator: Bohumil Havrland Project Team: Martin Muzikant, Alexandr Kandakov, Jaroslav Vana, Sergej Ustak, Constantin Ojog Partner(s) of the Project: State Agrarian University of Moldova, Chisinau Donor: Ministry of Education, Youth and Sports of the Czech Republic Duration of the Project: 2006 - 2008

#### Aim of the Project:

Development of study programmes including formulation of new ones Harmonization of the education system with the EU one Introduction of new research and advisory activities (ecology, alternative energies) Establishment of a "Pedagogic laboratory" and "Laboratory of Bio-energy"

#### **Outputs of the Project:**

Proposal of restructuring study programmes, implementation of new environmental programmes Revised selected of current study subjects including their syllabi and their enlistment in study fields Evaluation of the implemented credit system ETCS and its utilization for international mobility of students and

for controlling performances of faculties and departments Reorganization of study according to the Bologna declaration and control of its effect on the preparation quality of experts

Expansion of SAUM teachers' qualifications in pedagogical, scientific and research and advisory activities Laboratory of consultant service for students and teachers in issues of instruction, research and training courses

for selected SAUM staff at the Czech University of Life Sciences and other pedagogical workplaces in the Czech Republic

Laboratory for applied research, demonstration course and consultant of service in the field bio-power Training of selected workers for "Laboratory bio-energy" at the Czech University of Agriculture and research institutions in the Czech Republic

Establishment of contacts between the Moldavian state university in Chisinau and Czech educational and research institutions and private businesses

Stays of teachers, research and executive workers of the Moldavian state university in Chisinau at the Czech university of agriculture and other Czech pedagogical and research institutions

#### Contact:

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#### Support to the Rural Development - the Improvements of Management Qualifications and Advisory Capacities

Target Country: Republic of Moldova Project Coordinator: Bohumil Havrland Project Team: Martin Muzikant, Alexandr Kandakov, Sergej Ustak, Constantin Ojog, Hynek Ciboch Partner(s) of the Project: Agency for Sustainable Development, Chisinau; ACSA agency Donor: Ministry of Agriculture of the Czech Republic Duration of the Project: 2006 - 2009

#### Aim of the Project:

Courses, workshops and excursions in the Czech Republic and Republic of Moldova to improve management and advisory qualifications

Establishment of an information system for the agricultural and agri-food sectors Formulation of methodology and contents of training for farmers and other workers in the agricultural sector Recommendations on organization and management of the ACSA agency

#### **Outputs of the Project:**

Courses, workshops (seminars) and excursions for consultants of ACSA in agriculture and rural development, farm management

Stays in Czech Republic of selected management and coordination staff in the agricultural and rural development sectors, management of companies (KSP) and consultants ACSA and Ministry of Agriculture

Establishment of information system on agricultural and food products and its utilization for the establishment of trade and cooperation relationships and marketing of Moldavian agricultural and food products

Gathered information and experience, analyses of available references and formulation of methodology for training farmers and KSP workers

Organization of model training sessions as the way of verification of methodology and contents of training for farmers and KSP

Recommendation on organization and management of the ACSA agency Proposal and implementation of new approaches to

ACSA consulting activities

#### Contact:

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#### **Identification of Animals in Central Region**

Target Country: Mongolia Project Coordinator: Daniela Lukesova Project Team: Batkhuu Enkhtuya, Vaclav Kouba, Jan Minar, Josef Holejsovsky, Alica Kocisova, Bohumil Havrland, Zayat Batsukh, Jiri Tomes, Zdenek Hanzalek, Josef Machac, Pavel Ramerth Partner of the Project: Mongolian Ministry of Food and Agriculture Donor: Ministry of Agriculture of the Czech Republic Duration of the Project: 2007 - 2009

#### Aim of the Project:

To assist Mongolian Ministry of Food and Agriculture in improvement of livestock production and health through new identification of food producing animals in order:

Facilitation of the introduction of identification of food producing animals following European Union standard Facilitation of the export of food and other products of animal origin in European Union Facilitation of the movement and breeding control of food producing animals Facilitation of the monitoring of communicable diseases of food producing animals

For this purpose the project will prepare and equip selected specialists from individual Central Region commons in ear-marking of cattle who will transfer their new knowledge and skill to others (multiplying effect).

#### **Output of the Project:**

Initiated identification of cattle in Central Region of Mongolia according to European Union standard Selected Mongolian specialists from individual somons trained in identification of animals by ear-marking Trainees of the project courses equipped by instruments for ear-marking Special manual in Mongolian language for ear-marking of food producing animals prepared for the project courses and for eventual use in the whole Mongolia

#### **Contact:**

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#### Support to Development of Secondary and Tertiary Agricultural Education in Namibia

Target Country: Republic of Namibia Project Coordinator: Petr Kosina Project Team: Petra Holešovská, Jiří Kortus Partner of the Project: University of Namibia – Faculty of Agriculture & Natural Resources, Ministry of Agriculture, Water and Rural Development in Namibia, Ministry of Basic Education, Sport and Culture in Namibia Donor: Ministry of Education, Youth and Sports of the Czech Republic Duration of the Project: 2003 - 2005

#### Aim of the Project:

The main objective was to improve Namibian human resources in the field of agriculture and natural resources by assisting in the stabilization and enhancement of specialized agricultural education. Only welltrained specialists can ensure food security in Namibia by improving agricultural productivity, promoting sustainable development and sustainable utilization of natural resources.

#### **Output of the Project:**

Assistance in the teaching of subjects for which there are currently no specialists at the Faculty of Agriculture & Natural Resources (or even in Namibia) – funding of visiting lecturers from the Czech Republic (8 months/year) Organization of specialised workshops in Namibia – with the assistance of Czech specialists Preparation and publication of joint study materials, textbooks, technical literature and demonstration teaching aids for agricultural education

Material, financial and technical assistance with the improvement of crop science research and demonstration centre at Ogongo Agricultural College

#### **Contact:**

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#### Establishment of Development and Extension Centre for Sustainable Agriculture in the Peruvian Amazonia

Target Country: Republic of Peru Project Coordinator: Bohdan Lojka Project Team: Jana Lojková, Jan Banout, Zbyněk Polesný and others Partner of the Project: Universidad Nacional de Ucayali; Universidad Nacionál de la Selva; Fuerza por la Selva Viva Donor: Ministry of Agriculture of the Czech Republic Duration of the Project: 2003 - 2006

#### Aim of the Project:

Establishment of local expertise and building of an extension centre for sustainable agricultural and agroforestry practices. The project will help to control extensive deforestation caused by traditional slashandburn farming. Project is based on participation of local stakeholders: farmers, communities, farmer organizations, NGO's and University.

#### **Output of the Project:**

Establishemnt of extension and development centre CIDRA (Centro de Investigacion y Desarrollo Rural Amazónico Establishment of agroforestry nursery for native fruit and timber trees

Development of suitable agroforesty systems for small farmers as an alternative to slash-and-burn farming Establishment of demonstration plots and trials of improved agroforestry systems with the participation of local farmers

Development and implementation of simple alternative methods for improvement of production of small farmers (solar drying, composting, fire prevention)

Support of marketing of local products and organic certification Capacity building

**Contact:** 

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# PER

# Sustainable Management of Natural Resources in Peruvian Amazon

Target Country: Republic of Peru Project Coordinator: Bohdan Lojka

Project Team: Jana Lojkova, Jan Banout, Zbynek Polesny, Daniel Preininger, Barbora Rousova, Michal Kulik, Blanka Krivankova, Lucie Banoutova, Olga Sklenickova, Jitka Krausova, Jakub Vicha

Partner(s) of the Project: UNU - Universidad Nacional de Ucayali, ICRAF – World Agroforestry Centre, INIA – Institución Nacional de Investigación Agraria

Donor: Ministry of Agriculture of the Czech Republic Duration of the Project: 2007 - 2009

#### Aim of the Project:

Improvement of agroforestry systems and production of small-scale farmers

Project supports investigation, development and implementation of suitable agroforestry systems that would lead to increased diversification and improved sustainability of agriculture production and also development and implementation of simple intermediate technologies for processing of agriculture and forestry products

Improved marketing of local agroforestry products (Main objective of this point is support of marketing of product of small-scale farmers via sale cooperative, elaboration of market analysis for chosen product, support of organic certification, that should lead to increase market prices of the products)

Capacity building among local farmers, agricultural and forestry experts, extension service and governmental authorities, students and university staff

#### **Outputs of the Project:**

Use of improved agroforestry methods among farmers Implementation of intermediate technologies in agriculture and forestry Better access of local products to the national and international markets Organic certification of local small farmers Agroforestry manual as a tool for agroforestry systems dissemination Improvement of technical skills of local farmers, experts, authorities and policy makers Improvement of educational and practical training facilities on UNU

#### Contact:

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#### The Conservation and Breeding of the Western Giant Eland in Senegal

Target Country: Republic of Senegal Project Coordinator: Petr H. Verner Project Team: Pavla Hejcmanova, Marketa Antoninova and others Partner(s) of the Project: Directorate of National Parks in Senegal Donor: Ministry of Foreign Affaires of the Czech Republic Duration of the Project: 2000 - 2006

#### Aim of the Project:

The project aimed to participate in the Western Giant Eland conservation and breeding in Senegal, to support the wildlife conservation, to educate local people in the management of natural resources and, in consequence, to contribute to the rural development on periphery of national parks by promoting ecotourism.

#### **Outputs of the Project:**

An aerial survey of the Western Giant Eland in the Niokolo Koba National Park and Faleme region Proposal of a strategy of in-situ protection by fencing an area in the natural habitat of the antelope in the park Research of the antelope ecology in the park The site location, construction of water dams Organization of several workshops for local authorities and for Senegalese wildlife specialists Construction of a new guarding camp Connection with the Society for Protection of Environment and Wildlife in Senegal (SPEFS) - Bandia Reserve management which, in May 2000, started the breeding of the Western Giant Eland in captivity

Support of antelope breeding in captivity, participation in research, identification of animals, and genetic management of the herd

Construction of a special enclosure of 50 ha for Giant Eland breeding in the Fathala Reserve in the Delta du Saloum National Park

#### **Contact:**

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#### Support to Natural Reserves and National Parks of Senegal

Target Country: Republic of Senegal Project Coordinator: Marketa Antoninova Project Team: Pavla Hejcmanova, Karolina Kolackova, Jiri Vahala, Michal Hejcman, Petr H. Verner Partner(s) of the Project: Directorate of National Parks of Senegal, Society for the Protection of the Environment and Fauna in Senegal Donor: Ministry of Environment of the Czech Republic Duration of the Project: 2007 - 2009

#### Aim of the Project:

The project aimed to participate to the Western Giant Eland (Taurotragus derbianus derbianus) conservation and breeding in Senegal, to support the wildlife conservation, to implement local people to the management of natural resources and in consequence to contribute to the rural development on periphery of national parks by promoting ecotourism and biodiversity conservation education.

#### **Outputs of the Project:**

To support the captive breeding programme of Giant eland in semi-captivity To create new breeding herds of Giant eland in Fathala Reserve in Delta du Saloum National Park, Senegal To promote ecotourism in the Delta du Saloum National Park region Education of locals and their children about necessity of biodiversity conservation and strengthening the knowledge in the sustainable wildlife utilization

To contribute to the economic and rural development in the region

#### **Contact:**

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#### Improvement of the Quality of Drinking and Irrigation Water in the Aral Sea Region by Cleaning Equipment and Sorbents Produced in the Czech Republic

Target Country: Republic of Uzbekistan Project Coordinator: Vladimir Krepl Project Team: Radomir Malis, Milos Horak and short-term experts Partner(s) of the Project: Faculty of Biology and Crop and Soil Sciences, Tashkent University, Academy of Sciences of the Uzbek Republic Donor: Ministry of Agriculture of the Czech Republic Duration of the Project: 2004 - 2006, project extended to 2007 - 2008

#### **Aim of the Project:**

The focus was on the development of small water treatment facilities infrastructure in Uzbekistan with the aim of improving water management and environmental protection. During the project implementation the facility demonstration and consequent negotiations with potential local buyers and partners for joint manufacturing company in Uzbekistan took place. The water treatment facility was installed in a chosen locality of Aral Sea. That will improve the supply of this environmentally endangered region with safe water.

#### **Outputs of the Project:**

Preparation and data processing of complex technological solution of water management for children hospital in NUKUS

Work out a project in sanitarian and water-supply network including engineering legalization at the Tuberculosis elimination children hospital (sanatorium) in Nukusu

Transport of the cleaning potable water technology to sanatorium in Nukusu from Czech Republic

Negociations with heads of management, academic community and businessmen in the Khorezm region and Karakalpakstan

#### **Contact:**

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# Support of freshwater fish farming in mountain areas

Target Country: Socialist Republic of Vietnam, Lang Son and Cao Bang provinces Project Coordinator: Petra Chaloupkova Project Team: Lukas Kalous, Miloslav Petrtyl, Jan Banout, Dana Polakova Partner of the project: Research Institute for Aquaculture No. 1. Donor: Ministry of Agriculture of the Czech Republic Duration of the Project: 2008 - 2010

#### **Development intention:**

Development intention of project is improving the life quality of rural people by introducing sustainable technologies in the area of freshwater fish farming leading to the increase in production and in creating a more stable socio-economic environment in the target area. The proposed project will bring broad suitable available farming technologies, deriving from local conditions that will be permanently sustainable, easily reproducible and environment-friendly.

#### Aim of the Project:

The main objective of the project is implementation of sustainable freshwater fish farming in the provinces of Lang Son and Cao Bang.

#### **Outputs of the Project:**

The analysis of aquaculture potential Selection of farmers cooperatives and its management strategy Capacity building of members of fish farming cooperatives Implementation of demonstrative fish farming systems Promotion of implemented fish farming systems

#### **Contact:**

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#### Sustainable Development in Phong My Commune

Target Country: Socialist Republic of Vietnam Project Coordinator: Jan Banout Project Team: Vladimir Verner, Bohdan Lojka, Jaroslav Havlik, Jana Lojkova, Zbynek Polesny, Olga Zarubova-Pffefermann, Petr Ehl Partner of the project: Centre for Rural Development in Central Vietnam (CRD) Donor: Ministry of Agriculture of the Czech Republic Duration of the Project: 2006 - 2009

#### Aim of the project:



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The overall objective of the project was the improvement of livelihoods of pure households in Phong My commune. The target

of the project was improvement of homegardens, agroforestry practices, livestock breeds, implementation of intermediate (appropriate) technologies and capacity building for local stakeholders.

#### **Outputs of the Project:**

Ensuring a Sustainable Production of Good-quality Food Improvement of homegardens biodiversity Distribution of new livestock breeds in selected households Implementation of solar dryer for postharvest processing of local products Microbiological sampling of stored food in selected villages in Phong My commune

Water Access and Sanitary Equipment Building of irrigation channels to improve a rice production

Building of local toilets and composting latrines

Capacity Building Rapid Rural Appraisal for problems identification in the target area Solar treatment of drinking water – workshop Principles of animal husbandry – workshop Principles of tree plantations in home gardens and agro forestry plots – workshop

#### **Contact:**

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#### Technical and Methodical Assistance in Development of Technical, Environmental and Agricultural Engineering at the Hanoi Agricultural University (HAU), Hanoi, Vietnam

Target Country: Socialist Republic of Vietnam Project Coordinator: Vladimir Krepl Project Team: Jan Chysky and short-term experts Pastnar(c) of the project (CEPCC) Ministry of Fr

Partner(s) of the Project: CEPECE – Ministry of Education and Training (Centre for International Professional and Technological Cooperation and Exchange), HAU – Hanoi Agricultural University Donor: Ministry of Trade and Industry of the Czech Republic Duration of the Project: 2006 - 2010

#### Aim of the Project:

The project aims at development of qualified human resources in teaching as well as extension/advisory areas with a special emphasis on applied technical, environmental and agricultural engineering in Vietnam. Enhancement of communication and didactical skills of teachers and advisors is essential in order to effectively disseminate relevant information at all levels. Furthermore, the project contributes to the improvement of the development process of scientific and applied research based on real conditions resulting from a practical survey.

#### **Outputs of the Project:**

Analysis of the current competencies of teaching and advisory staff of HAU in technical, environmental and agricultural engineering; organization of relevant workshops

Assessment of environmental studying programmes and needs identification; joint development of the proposal of environmental studying programmes

Needs identification in practical technical and environmental engineering; selection of location and equipment for the technical environmental laboratory

Selection of location and staff for Centre for Rural Sociology

Assessment of current advisory services and competencies in environmental problematic of the CEPECE staff; organization of relevant workshops

#### **Contact:**

VIETNAN

Name: Vladimir Krepl E-mail: krepl@its.czu.cz





# Improving the Production Characteristics of Livestock in Kaoma District

Target Country: Republic of Zambia Project Coordinator: Josef Holejsovsky Project Team: Richard Sovjak, Daniela Lukesova, Girma Tewolde Partner(s) of the Project: Ministry of Agriculture and Cooperatives, Zambia Donor: Ministry of Agriculture of the Czech Republic Duration of the Project: 2007 - 2009

#### Aim of the Project:

Increased milk and meat production of Barotse breed cattle Improvement of veterinary care in Kaoma district Introduction of border inspection control at the border with Botswana

#### **Outputs of the Project:**

Selected Barotse breed cattle animals with higher milk and meat production and/or crossbred of Barotse breed cattle with higher milk and meat production New and renewed Veterinary Camp Houses and their appropriate equipment newly constructed border inspection

post at the border with Botswana

#### **Contact:**

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#### **AGRICULTURA TROPICA ET SUBTROPICA**

The international scientific journal is published under the authorization of the Czech University of Life Sciences Prague and under the direction of the Institute of Tropics and Subtropics www.agriculturaits.czu.cz

The contents of Volume 22 to 43 and full papers from Volume 38 are available at the some above-mentioned address or at http://ezb.nkp.cz/

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#### Periodicity

The journal is published quarterly in English (numbers 1 – 4) and distributed worldwide via internet www.its.czu.cz or www.agriculturaits.czu.cz

#### Submission of manuscripts:

#### Manuscript in electronic version should be addressed to:

Czech University of Life Sciences Prague Institute of Tropics and Subtropics Kamýcká 129 165 21 Prague 6 Czech Republic E-mail: vlkovav@its.czu.cz Tel.: +420 224384186 Fax: +420 234381829

ISSN 0231-5742 ISSN 1801-0571 (on-line) www.agriculturaits.czu.cz



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This booklet was compiled thanks to financial support of grants provided by LLP Erasmus and developing programmes of the Ministry of Education, Youth and Sports of the Czech Republic.

