

NIDECO Portrait and Annual Report 2005

Report

Author(s):

Kappel, Rolf; Pfister, Roger; Becker, Barbara; Kaufmann, Manfred

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NIDECO Network for International Development and Cooperation

2005

NIDECO Portrait and Annual Report

About NIDECO

Vision, mission and objectives

It is NIDECO's vision that the ETH Zurich makes its research and teaching capacities available as global public goods with a view to help solving problems in developing countries and countries in transition.

NIDECO's mission is to promote research and education at the ETH Zurich in the field of international development and cooperation, as well as to share its know-how with relevant institutions in developing countries and countries in transition through collaboration in the technical, natural, human and social sciences.

To achieve the above, NIDECO pursues the following goals:

- Promote and strengthen disciplinary and interdisciplinary collaboration in research and teaching in the field of international development and cooperation among units of the ETH Zurich and other units in the wider ETH domain, as well as with other universities and research institutions;
- Improve the presentation of the ETH's performance and capacities (research and teaching) in the field of international development and cooperation to research funding agencies, the political arena, the public and the academia;
- Promote field work of ETH doctoral students and other students in developing countries and countries in transition in the framework of their education and research;
- Promote doctoral candidates from developing countries and countries in transition at the ETH Zurich.

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NIDECO members

as of 31.12.2005

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Dorn, Silvia	AGRL
Escher, Felix	AGRL
Frossard, Emmanuel	AGRL
Goe, Michael	AGRL
Hurrell, Richard F.	AGRL
Kadarmideen, Haja N.	AGRL
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Sautter, Christof	AGRL
Stamp, Peter	AGRL
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Zhang, Peng	AGRL
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Grün, Armin	BAUG
Kinzelbach, Wolfgang	BAUG
Kytzia, Susanne	BAUG
Niemz, Peter	BAUG
Gruissem, Wilhelm	BIOL
Owiti, Judith A. (cand.)	BIOL
Stupak, Martin (cand.)	BIOL
Vanderschuren, Herve (cand.)	BIOL
Witholt, Bernard	BIOL
Pretsch, Emö	CHAB
Sandoghdar, Vahid	CHAB
Seeberger, Peter H.	CHAB
Wokaun, Alexander	CHAB
Zenobi, Renato	CHAB
Balderer, Werner	ERDW
Fidelibus, Corrado	ERDW
Giardini, Domenico	ERDW
Havenith, Hans-Balder	ERDW
Löw, Simon	ERDW
Seward, Diane	ERDW
Winkler, Wilfried	ERDW
Baumgartner, Rudolf	CESS
Bernauer, Thomas	CESS

Department

Hesselbein, Gabi	CESS
Kappel, Rolf	CESS
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Kossmann, Donald	INFK
Koumoutsakos, Petros	INFK
Nievergelt, Jürg	INFK
Widmayer, Peter	INFK
Ämmer, Dölf	ITET
Fichtner, Wolfgang	ITET
Sprengh, Daniel Theodor	MTEC
Dissertori, Günther	PHYS
Guekos, Georg	PHYS
Troyer, Matthias	PHYS
Bindler, Claudia	UWIS
Fischlin, Andreas	UWIS
Fleischmann, Karl	UWIS
Flühler, Hannes	UWIS
Ghazoul, Jaboury	UWIS
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Wehrli, Bernhard	UWIS
Zeyer, Josef	UWIS
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Schertenleib, Roland	EAWAG
Yang, Hong	EAWAG
Zurbrugg, Chris	EAWAG
Barreto, Leonardo	PSI

Since 2005, doctoral students (cand.) are eligible for NIDECO membership.

List of acronyms on inside back cover

Editorial

Rolf Kappel, President of the NIDECO Steering Committee



The third NIDECO Portrait and Annual Report documents major activities and achievements of the network during the year 2005. The structure of the report is the result of one particular effort: a Steering Committee workshop in February 2005 succeeded in giving NIDECO's strategy a clearer profile. In this Annual Report, we present the five interrelated areas of activities that can be seen as the five pillars of this strategy:

- Strengthening scientific capacities in developing countries and countries in transition
- Strengthening the ETH Zurich's engagement in issues of international development and cooperation
- Strengthening the ETH Zurich's scientific capacities for international development and cooperation
- Strengthening the visibility of the ETH Zurich's engagement for international development and cooperation
- Strengthening the integration of international development in the ETH portfolio

Our activities take place on a small scale but reach across institutions and countries. It is up to you, the reader of this report, to decide whether NIDECO makes a difference. Yet despite the modest scale of these activities, NIDECO has already made substantial contributions in facilitating the integration of science and development within the three years of its existence. Some of these contributions are described in this report. Furthermore, NIDECO as a network of members continues to grow and to attract interest from individuals and institutions alike. This continued growth underlines the demand for such a network that transcends disciplinary and departmental barriers. Problems of international development are highly relevant for the fate of many human beings and represent fascinating scientific challenges. The report on science and technology for the United Nations Millennium Project concludes: "It is more important than ever for developing countries to move ahead in scientific and technological development at an advanced level. Doing so will enable them to build local capacity that can help solve many science and engineering-related problems they face."¹

Such an endeavour calls not only for a reshaping of universities in developing countries, but also for efforts of universities in industrialised countries to provide support in scientific capacity building and in contributions to move research frontiers. The potential human and scientific rewards are high, and national and international organisations are increasingly engaging the world's top universities to develop conceptual and knowledge-based frameworks to achieve development goals. And the ETH Zurich should not stand back.

¹ UN Millennium Project, Task Force on Science, Technology, and Innovation (2005): *Innovation: Applying knowledge in development*, p. 99. Earthscan. London, Sterling Va.



Strengthening scientific capacities in developing countries

- Funding the exchange of doctoral candidates, post-docs and visiting scientists
- Funding pre-docs and master students from developing countries
- Funding teaching activities of ETH Zurich lecturers in developing countries

Above: Calculating landslide risk along the border of the Fergana Basin (Kyrgyzstan, Central Asia)

Strengthening scientific capacities in developing countries

Initially, NIDECO's budget was designated for the yearly funding of a preparatory year for five graduate students from developing countries and countries in transition, thus allowing them to fulfil the entry requirements stipulated by the ETH Zurich prior to taking up their actual doctoral work. However, in 2004 it became obvious that this funding tool did not fully meet the needs of ETH scientists. Until then, only six applications had been submitted, four of which were accepted. This lack in demand could partly be explained by the condition that the subsequent PhD project must be guaranteed and financed from other sources. Another reason could be the ongoing transition to BSc/MSc curricula: in the future, MSc courses will replace this pre-doc year.

As a consequence of this situation, the NIDECO Management and the Steering Committee worked out guidelines for three additional funding categories. The Vice-President Research adopted these proposals in October 2004, thereby broadening the financing possibilities with the following funding categories:

- **Seed money:** NIDECO promotes research projects of ETH scientists with partners in developing countries and countries in transition. Seed money is granted for the preparation of applications to obtain third-party funds for new projects, as well as for the implementation of results gained from previous research projects.
- **Teaching stays:** This funding category allows teaching activities of ETH lecturers in developing countries or countries in transition, including retired professors who could make their know-how and expertise available for this purpose.
- **Visiting scientists:** This category provides funds for a stay of visiting researchers from developing countries or countries in transition for up to six months at the ETH Zurich, during which specific research can be undertaken.

Following the ETH-wide information about these new funding instruments, fourteen applications were received in January 2005 and another eleven during the rest of the year, nineteen of which were accepted for (partial) funding: three pre-docs (one of which was withdrawn), seven visiting scientists, six seed money grants and three teaching stays. The majority of these are described in this chapter.

Seed money

**Domenico Giardini and Hans-Balder Havenith:
Landslide risk along the border of the Fergana Basin**

D. Giardini and H.-B. Havenith (Institute of Geophysics, ERDW, and Swiss Seismological Service SED) received NIDECO seed money for their project for the period from April 2005 to March 2006.

The objective was to evaluate landslide hazards in the Central Asian Republic of Kyrgyzstan. This country is almost entirely occupied by the Tien Shan mountains. One of the major concerns of the population of Kyrgyzstan is the management of risk related to natural hazards. In particular, landslides cause major problems in the Southern Provinces surrounding the Fergana

Valley where mass movement disasters occur almost every year – some related to the medium to high seismicity of the region. Our work was focused on initiating slope failures with a high potential of activation by seismic shaking. The risk is documented by the Kainama landslide, which killed 33 people in 2004. A swarm of relatively small-magnitude earthquakes and heavy rainfalls contributed to the triggering of this fatal loess slide in the region of Gulcha and Kainama.

The data recorded during the three main surveys (Kainama, Taran Bazar and Koytash) were processed in autumn/winter 2005; deterministic geophysical-geological models were developed for these slopes on the basis of this data. The topographic information was extracted from 3D surface models obtained by processing ASTER stereo-pair images and maps provided by the Kyrgyz Institute of Seismology (KIS). The ASTER images (and SPOT images, as well as aerial photographs provided by KIS) are also used to compute landslide susceptibility for all three visited regions in Southern, Eastern and Northern Fergana. With the constructed models, two types of analyses are performed: the geostatistic analyses of the geophysical data to produce probabilistic 3D models of the site and numerical simulations of seismic ground motions and slope stability under seismic conditions considering hydro-mechanic coupling. The first type of study is done by G. Danneels, PhD from the University of Liège, Belgium (who participated in the field trip); the latter is performed in collaboration with S. Alvarez (SED, ETH Zurich) and C. Bourdeau (ITASCA Consulting, Lyon, France).

The studies carried out within the project are being continued within the framework of a new project funded by the European Union as an International Scientific Cooperation Activity (INCO) to start in 2006. The new project, called *International Working Group on Natural Hazards in the Tien Shan (NATASHA)*, will focus on outlining the major issues of natural risk in the Central Asian mountain regions.

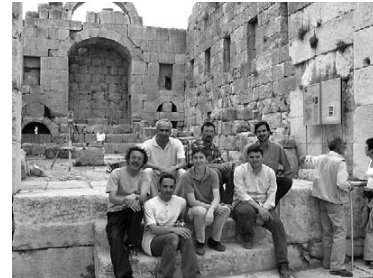
**Armin Grün and Emmanuel Baltasvias:
Recording and digital documentation of the
ancient city of Jerash, Jordan**

A. Grün and E. Baltasvias (Institute of Geodesy and Photogrammetry, BAUG) received NIDECO seed money for their project for the period from April to June 2005.

This cooperation with Jordanian academic partner institutions and the Department of Antiquities had two main goals. The first was the full mapping of the whole site and the neighbouring new city using modern digital technologies and airborne and terrestrial sensors. Various information layers were to be imported in a Geographic Information System where other data of archaeologists and the local authorities can be imported, combined and analysed. All this information would be an important decision support tool for the proper management and development of the ancient and the new city and will provide a complete record of all ancient monuments. The second aim of the project was the detailed documentation of the monuments, using terrestrial sensors (mainly digital cameras and laser scanners). Due to the large number of monuments, fully detailed 3D documentation, reconstruction and visualisation would be performed initially and as an example for only one of the major monuments which will be specified with the help of archaeologists, namely the Temple of Artemis. The first phase of the project, supported by the NIDECO seed money, was to be used for preparatory work of the project (incl. data acquisition and processing), refinement of project goals and partners and submission of project proposals for funding.

Other seed money grants

Two seed money grants were provided to **Alexander Wokaun** (Paul Scherrer Institute PSI) and **Wolfgang Kinzelbach** (Institute of Hydromechanics and Water Resources Management, BAUG), respectively, to prepare projects proposals for the Swiss National Science Foundation (*Bio-fuels in remote areas of Colombia*) and the European Union (*Eco-hydrologic and economic assessment of the Komadugu-Yobe-Chad River system, Nigeria, Niger, Chad*). However, neither proposal was accepted for funding.



Teaching stays

Jürg Nievergelt and Peter Widmayer:
Phil-Swiss IT School, De La Salle University
in Manila and Canlubang, Philippines,
September 7–13, 2005

J. Nievergelt and P. Widmayer (Institute of Theoretical Computer Sciences, INFK) obtained NIDECO funds for a five-day Information Technology School from 7–13 September 2005 at two campuses of De La Salle University, in Manila and Canlubang, a techno-park area about 50 km south of Manila. The school attracted more than 40 graduate students, instructors and junior lecturers from a dozen different universities located all over the Philippines.

The programme consisted of surveys and introductions to research areas of current interest offered by the following ETH Zurich lecturers:

- *Markus Gross*: surface representations and geometric modelling for computer graphics
- *Donald Kossmann*: web-based information systems
- *Jürg Nievergelt*: algorithms and educational software
- *Roger Wattenhofer*: networking and distributed systems
- *Peter Widmayer*: internet algorithms.

In addition, they presented lectures at two campuses of the University of the Philippines.

The echo from the participants and the local DLSU organisers was very positive, with a strongly expressed hope that this school would be the first of an ongoing series. They explained the importance of such efforts to support advanced education in IT due to the current economic situation resulting in a high demand for graduates in this domain. There is an active software industry in the Philippines, in particular in the area of business information systems. Because IT jobs are relatively well-paid, undergraduate enrollment in computer related curricula is high. The vast majority of BSc graduates moves to industry right away, leaving only a small minority willing to pursue graduate education. The universities rely on these few graduate students (mostly at the MSc level, very few PhD students) to teach the bulk of the undergraduates. After a few years as instructors with a demanding teaching load, graduate students often drop their studies because of a lack of research supervision. The universities need some help to break out of this vicious circle and establish a vibrant graduate education culture.

In response to this challenge, the group is planning to hold a second Phil-Swiss IT School during September 2006, hosted by the University of the Philippines.

Bruno Keller: Low energy design: freedom of architectural expression,
Summer School in Nanjing, China, September 5–18, 2005

B. Keller (Institute for Building Technology, ARCH) obtained NIDECO funds for a design course emphasising “High Comfort – Low Energy”, organised in collaboration with the School of Architecture at Southeast University, Nanjing, China, which took place from September 5–18, 2005.

The breathtaking speed of development and the immense construction boom in China demand immediate action in terms of energy-saving and environmental protection strategies. The course introduced the necessary elements for “high comfort – low energy” buildings. These conditions are, nevertheless, not a limitation for the freedom of architectural expression, an important factor to attract the students of architecture.

20 Master and Bachelor degree students participated in the summer school with great interest and curiosity; the work was intense, the output extraordinary.

The students were challenged with three assignments:

- *Delta skin*: Only three elements are necessary to design a building shell respecting the demands of “high comfort – low energy”: thermal insulation, low energy glazing and external flexible sunshade. An existing building on the campus had to be redesigned applying these elements.
- *Intermezzo*: Ice has to be protected from melting. This reference work did not have the intention of scientific precision, but by mere analogy enhancing the understanding.
- *Space conditioning*: The existing building had to be extended and spatially adapted to its future use. Parallel to the design work, questions of “high comfort – low energy” were embedded into the projects and compensatory technology for heating and cooling introduced.

All projects responded to the demand of “high comfort – low energy”, while each one established its own architectural character.

Due to the success of the first summer school programme, the School of Architecture of the Southeast University in Nanjing intends to implement the subject into the regular schedule of the architectural education programme. The Chair of Building Physics of the ETH Zurich supports this upgrade and will continue the challenging collaboration.





Caspar Wenk: Nutrition, University of Peradeniya, Sri Lanka, May 22–28, 2005

C. Wenk (Institute of Animal Sciences, AGRI) obtained NIDECO funds for a teaching stay in Sri Lanka from May 22–28, 2005.

The main purpose of his stay was to provide lectures in nutrition at the University of Peradeniya in central Sri Lanka. The first lecture, delivered to more than 200 third-semester students, dealt with nutrient homeostasis and

homeostasis in comparison to energy balance. It covered the basic nutritional concepts regarding humans and livestock. Another lecture to Master students focused on fodder additives. Of particular interest was the differentiation of the Swiss approach as opposed to that of the rest of Europe and the rest of the world. Both lecture blocks provoked lively discussions with well-educated and highly interested students. The teaching stay concluded with a public lecture on "Does only fat make fat?" which was attended by a critical audience and which resulted in stimulating discussions.

In addition, C. Wenk met the Dean of the Faculty of Agriculture to discuss reciprocal lectures between the University of Peradeniya and the ETH Zurich. He also visited the Sarvodaya Training Centre for Sustainable Agriculture, run by a private Sri Lankan foundation since more than 50 years. Its primary aim is to familiarise students from around the world with the country's traditional agriculture, focusing on ecological aspects. C. Wenk also took the opportunity to visit several sites that were devastated by the tsunami in December 2004.

Pre-doc grant scheme

The pre-doc **Kaushik Deb** completed his preparatory year in September 2005, while **Aschalew Zeleke** began his in February 2005 (see NIDECO Annual Report 2004). A. Zeleke was accepted as a doctoral candidate at the ETH Zurich in December 2005. His research forms part of the wider project "Potential tree legumes and food-feed crops for improving ruminant productivity in African small holdings", guided by his supervisor, Michael Kreuzer. Running from February to December 2006, this project is co-funded by both the Swiss Centre for International Agriculture (ZIL) and the International Atomic Energy Agency (IAEA).



Monireh Faramarzi from Iran has received the NIDECO pre-doc grant for the period from August 2005 to March 2006. Her supervisor is Rainer Schulz from the Environmental Science Department of the ETH Zurich, together with Karim Abbaspour and Hong Yang from the EAWAG as advisors for water issues and food aspects. Monireh Faramarzi obtained her B.Eng. and MSc in Iran from Shahid Bahaar University and Isfahan University of Technology (IUT), respectively. She has worked on hydrological characteristics of the Safa Dam River Basin in the Fars Province of Iran in her Bachelor training and on subsurface drainage issues in her MSc project. She has teaching experience in the field of hydrology at IUT and has been involved in GIS planning projects for the Province of Isfahan. Her doctoral research project will focus on the assessment of water endowments, using a GIS-based hydrological model (Soil and Water Assessment Tool SWAT). The objective is to assess the water constraints to food production and intra-country virtual water trade in Iran.



Ratna Karuna from Indonesia has received the NIDECO pre-doc grant for the period from March 2006 to February 2007. She will be supervised by Renato Zenobi from the Department of Chemistry and Applied Biosciences at the ETH Zurich, and by Katharina Rentsch from the Institute of Clinical Chemistry at the University Hospital Zurich. Following her BSc in Pharmacy from Airlangga University, Surabaya, Indonesia, Ratna Karuna was granted a scholarship to study at Leiden University, the Netherlands, where she obtained an MSc degree in Bio-pharmaceutical Sciences. She then gained practical experience by working for the Division of Pharmacology at the Leiden/Amsterdam Centre for Drug Research (LACDR), with the start-up of a new Liquid Chromatography-Mass Spectrometry (LC-MS) system. Her responsibility included implementing and ensuring the operation of the new system, developing analytical methods and transferring knowledge about the first LC-MS system to the division. Her doctoral study will focus on the development of analytical methods for lipids as biomarkers for the diagnosis of cardiovascular disease.

Visiting scientists

Alexey Morozov from Ukraine has been a NIDECO visiting scientist from May to October 2005 in the group of Jürg Gutknecht (Institute of Computer Systems, INFK).

He is a collaborator of XAI Medica, a spin-off company of the Kharkov Aeronautics Institute (KhAI), Ukraine, and a lecturer at KhAI. XAI Medica's product portfolio consists of classical diagnostic devices such as electrocardiogram devices, all based on 16-bit microcontroller architecture. The main goal of A. Morozov's stay at the ETH Zurich was to gain instruction on how to move from classical 16-bit microcontroller programming to modern 32-bit architectures.



J. Gutknecht's expertise in lean operating systems corresponds well to XAI Medica's need for a powerful operating system in view of future developments, notably of next-generation wearable medical devices. To study the related technical questions, a pilot project was launched, comprising a highly functional wearable device that monitors and diagnosis heart activity, respiration and hemodynamics in real time. This device is targeted to hospital intensive care units for the continued monitoring of outpatients who are supposed to leave intensive care but still need further supervision. A. Morozov's role during his stay was to develop advanced signal processing algorithms and to maintain a continuous link between hardware engineers in Kharkov and operating system developers in Zurich. The result is a promising solution that is well suited for clinical trials, such as those now in planning at the Basle University Hospital.



Norair Toomanian from Iran has been a NIDECO visiting scientist from May to November 2005. He stayed in the group of Hannes Flüher and Andreas Papritz (Institute of Terrestrial Ecology, UWS).

He obtained his BSc and MSc in the Department of Soil Science, Faculty of Agriculture, Isfahan University of Technology in Iran. After graduation, he joined the Iranian Agricultural Research Organisation to work in the Isfahan province. His activities concentrated on soil surveying and soil evaluation for strategic crops in the area. He was also involved in the project "Water management for sustainable irrigated agriculture in Zayandehrud basin" from the international team of the Iranian Agricultural Engineering Research Institute-International Water Management Institute (IAERI-IWMI). Starting his PhD degree in the same university, N. Toomanian focused on quantitative approaches for

soil surveying. The basic part of his PhD was modelling soil pedologic variables to predict the value of target attributes and map their distribution in study area under the supervision of Andreas Papritz. They constructed a digital elevation model from the study area using the digitised topo-maps and topo-lines and extracted the geomorphological and hydrological terrain attribute images. The geomorphic and geologic polygon maps with these images were used as predictors (totalling 19 images) in a hybrid geostatistical technique (universal kriging) to relate them to the sampled points. The predicting model of four pedologic variables were constructed and used for mapping their distribution in target areas. The accuracy and precision of the maps were checked with statistical criteria.



Anderson F. Albuquerque Pereira from Brazil is a NIDECO visiting scientist from January to December 2006. He will stay in the group of Matthias Troyer (Institute for Theoretical Physics, PHYS).

A. Pereira, a theoretical physicist from the state of Minas Gerais, Brazil, did his undergraduate and MSc studies in Physics at the Federal University of Minas Gerais (UFMG). Later, in the same university, he obtained his PhD degree under the supervision of Maria Elizabeth de Gouvea (UFMG) and George Balster Martins (Oakland University, USA). He studied, by means of both numerical and analytical approaches, properties of models believed to describe cuprate superconductors.

With the financial support from the Brazilian National Council for Scientific and Technological Development (CNPq) and NIDECO, he joins the Computational Physics group at the ETH Zurich, headed by Matthias Troyer, as a post-doc. His research interests include strongly correlated quantum systems, such as frustrated antiferromagnets and cold atoms trapped in optical lattices, and quantum computation. He is also interested in the development of new computational techniques for studying many-bodied quantum systems.

Three more grants for visiting scientists were accepted. Two candidates will come to the ETH Zurich in 2006, one subsequently withdrew his candidature.



Strengthening the ETH Zurich's engagement in issues of international development

- Organising scientific meetings and conferences
- Organising recurring multidisciplinary research colloquia for doctoral candidates
- Supporting the ETH Zurich departments in the arrangement of traineeships in developing countries
- Advising ETH Zurich research groups on research cooperation with developing countries

Above: An attentive audience at the NIDECO Annual Conference on November 11, 2005 in the new S-ENETH building

Strengthening the ETH Zurich's engagement in issues of international development

NIDECO's second strategic objective aims at providing platforms for the exchange of experiences in international development through the organisation of meetings, conferences and research colloquia.

NIDECO was particularly active during 2005 in this respect, thereby raising the profile of the ETH Zurich regarding its engagement in international development. Some of the events provided a particularly good opportunity to further elaborate NIDECO's network of partners, which will serve the research community at the ETH Zurich with partners for future research projects in developing countries and countries in transition.

In the summer term, the two-day colloquium "Selected aspects of sustainable development" was held. This was met with an even wider interest by both speakers and participants than the two previous times (p. 16–17). Based on earlier networking activities, NIDECO was approached by the European Association of Development Training and Research Institutes (EADI) for the organisation of a panel at its general conference on "Insecurity and development" in Bonn in September 2005 (p. 18–19). NIDECO was also a co-organiser of the interdisciplinary lecture series "Africa in transition", with a total of 28 presentations spread over the entire winter term from October 2005 to February 2006 (p. 22–23). Finally, the Annual Conference on "The role of science and technology for development" in November 2005 marked the highlight of NIDECO's activities in this field. It provided the platform for the signing of a Memorandum of Understanding between the ETH Zurich and the United Nations Environment Programme (UNEP), and it served as a forum for two key presentations and a panel session related to the conference theme (p. 20–21).

NIDECO's support of ETH departments in arranging traineeships in developing countries was stipulated as one of the activities of NIDECO's second strategic objective. However, in spite of several attempts in 2005 to arrange such traineeships through contacts with *economiesuisse*, the NIDECO Steering Committee came to the conclusion that this activity needs to be addressed by the individual supervisors who know the respective research institutions and private enterprises within their disciplines.

Colloquium "Selected aspects of sustainable development"

May 9 and June 12, 2005

Voices of the participants

"I appreciated the possibility of presenting my research project to a wider and quite diverse public. This forced me to be as generally understandable as possible and thus to rethink my own work and look at it from some distance."

"A very useful and informative series of talks. Although at times the presentations went beyond my ability to follow in detail (i.e. the very scientific stuff on genetics), I still gained a great deal from them and believe the talks were pitched at the correct level. The discussions were open and (for me) very useful."

"I enjoyed the broader view on all the projects. It allowed me to see beyond my own project, but also to evaluate the contribution of my work."

"Given the wide variety of disciplines that the audience comes from, the focus of the discussion is usually less on the scientific or the technical robustness of the research but more on the broader policy implications and general logical consistency. Making this a guideline for the presenters would perhaps enable greater benefit to the researchers from the discussion, as also make the discussion more lively and broad-based, even on disciplines outside of one's own research."

"The great variety of the subjects presented (tourism, photogrammetry, social sciences etc.) made the colloquium exciting and gained also an interesting insight into less known or absolutely unknown fields of research."

Since the very beginning, NIDECO has organised a Colloquium on "Selected aspects of sustainable development" every summer semester.

The third NIDECO Colloquium was attended by a larger audience than in the two preceding years, an indication that this platform of exchange for doctoral students and other researchers with projects related to international development and cooperation is now well-anchored in the interested academic community. The busy programme contained eleven presentations of doctoral students from six ETH departments (AGRL, BAUG, BIOL, GESS, MTEC, UWIS) as well as the EAWAG, complemented by three presentations from doctoral candidates at the University of Zurich. Eight professors attended the colloquium, thereby both supporting the students they supervise and providing valuable input to the lively discussions after each presentation.

The aspect of exchange, networking and interdisciplinarity proved especially valuable. Numerous links to other research projects related to a specific topic were pointed out by the participants. For example, an exchange of ideas between Reinhard Schiemann and the researchers at the Center for International and Comparative Studies of the University and ETH Zurich (CIS) dealing with the Nile was initiated. Dhan Bahadar Gurung was informed that he could benefit from a similar project that the student organisation "seed sustainability" had conducted on the Seychelles. Furthermore, Patrick Meroka's doctoral study is part of the National Centre of Competence in Research (NCCR) North-South, therefore allowing an exchange with this important network of researchers engaged in issues of international development and cooperation.

Programme

Session "Water Management"

Olivier Leupin (Supervisor S. Hug, EAWAG): Arsenic crisis in Bangladesh: The development of adapted treatments for drinking water
Reinhard Schiemann (Supervisor C. Schär, UWIS): Seasonal forecasting of water resources in the Aral Sea Basin
Patrick Meroka (Supervisor J. Helbling, University of Zurich): Common pool resource management, institutional change and conflicts in the Rufiji floodplain, Tanzania

Session "Governance and Culture"

Gabi Hesselbein (Supervisor T. Bernauer, GESS): Failed states and fragile statehood in sub-Saharan Africa
Barbara Bleisch (Supervisor P. Schaber, University of Zurich): The distant needy: World poverty and global duties
Martin Sauerbier (Supervisor A. Grün, BAUG): Management and GIS-based analysis of the geoglyphs of the Nasca region, Peru
Dhan Bahadar Gurung (Supervisor K. Seeland, UWIS): Integrating sustainable ecotourism development in the selected conservation areas of Bhutan to provide economic benefit to rural communities

Session "Energy"

Kaushik Deb (Supervisor D. Spreng, MTEC): A bottom-up approach to modelling energy demand: Case study of household energy demand in India
Andreas Kemmler (Supervisor D. Spreng, MTEC): Poor areas and access to electricity in India

Session "Food and Agriculture"

Christoph Heuberger (Supervisor R. Amadó, AGRL): Cyanide content of cassava and fermented products with focus on attiéké and garba
Herve Vanderschuren (Supervisor W. Gruissem, BIOL): Cassava mosaic disease resistance in transgenic cassava
Navreet Kaur (Supervisor B. Keller, University of Zurich): Analysis of powdery mildew resistance Pm3 gene diversity in the A Genome of wheat landraces
Aschalew Zeleke (Supervisor M. Kreuzer, AGRL): The anti-methanogenic potential of foliage from African multipurpose trees
Annabé Louw-Gaume (Supervisors E. Frossard and M. Kreuzer, AGRL): Adaptation of *Brachiaria* grasses to low-P soils

NIDECO panel “Failed states in sub-Saharan Africa”

EADI General Conference,
September 21–24, 2005

The European Association of Development Research and Training Institutes (EADI) is an independent, non-profit network of 150 organisations with 14 working groups addressing key issues in development research, training and information. Every three years, EADI organises a general conference. The conference from September 21–24 2005 in Bonn focused on “*Insecurity and development: Regional issues and policies for an interdependent world*”.

In this context, EADI invited NIDECO to organise a panel. In cooperation with NIDECO member Gabi Hesselbein, a Senior Researcher at the Center for Comparative and International Studies of the University and ETH Zurich (CIS), three further specialists in the field took part with the following inputs:

- *Gabi Hesselbein (CIS): Failed states in sub-Saharan Africa: An introduction*
- *James Putzel (Director, Crisis States Research Centre, London School of Economics and*

Political Sciences LSE): Institutional multiplicity and political organisation: Processes of state collapse and reconstruction in Africa

- *Jean-Pierre Lindiro Kabirigi (Pole Institute, Goma, Democratic Republic of Congo): Towards inclusive and sustainable peace in the Democratic Republic of Congo (DRC)*
- *Salman Bal (Assistant to the Representative on Conflict Issues, Swiss Federal Department of Foreign Affairs EDA, Berne): Prerequisites for a peace agreement and the contribution of the “international community”: The case of the Sudan*

Unfortunately, Jean-Pierre Lindiro Kabirigi was unable to attend, as he was refused a visa for the Schengen area. Instead, Gabi Hesselbein presented his ideas based on the abstract he had previously submitted.

The discussion among the some 70 participants following the three presentations was clustered around three issues:

- the role of traditional institutions/authorities
- the role of development assistance and/or private investment
- the definition of “failed states”.

The role of traditional institutions/authorities

Salman Bal argued that, in the cases of Sudan and Somaliland, hardly any state institutions had been left and that traditional structures were the only ones to be relied upon. It was therefore advisable to include them in the organisation of a country's future. One possibility was to get them involved in advisory opinions, for example on land and other vital issues. In Somaliland, this is possible through the so-called “Gurdi”, and in Botswana the House of Chiefs. However, their opinion should not necessarily be included in all matters, especially not in complicated technical, specialised matters. James Putzel cautioned listeners not to idealise the role of traditional authorities and similar entities. Referring to the HIV/AIDS pandemic in Africa, the opinion of traditional leaders was usually of little assistance in helping to solve the problem, given their attitudes toward the role of women and sexual practices. There was agreement that traditional leadership should be separated from political institutions, as such a connection could lead to corruption. Finally, referring to Montesquieu, Salman Bal concluded that any state had to dispose of a separation of power of some kind. As civil society was weak in most African states, traditional authorities were the only entities to possibly perform such a role.

The role of development assistance and/or private investment

James Putzel excluded the possibility of private-sector involvement in any African state where there was no political stability and where regulatory mechanisms were nonexistent. Any private business activity relied on these two factors. Gabi Hesselbein added that state-building had never been on the agendas of the relevant donor agencies. Rather, she argued that the creation and accumulation of wealth was the prerequisite for fostering the state, as only this could allow and make possible the distribution of economic resources, which in turn could prevent the failure of states. The generation of such resources could come about by a combination of state and entrepreneurial efforts.

Definition of “failed states”

The panel agreed that a typology was necessary. However, the concept of “failed state” was also considered a political matter. Gabi Hesselbein explained that her research was based on a sociological concept derived from Max Weber, according to which “failed” referred to the legitimacy or political authority of a state. Consequently, she equated the collapse of the central authority with state failure.

As the panel's chair, Barbara Becker eloquently moderated the discussion, while Roger Pfister summarised it in order to make a report available for the EADI website, as well as for the conference documentation.

Annual Conference “The role of science and technology for development”

November 11, 2005

In November 2005, NIDECO held its Annual Conference jointly with the Postgraduate Course on Developing Countries (NADEL), which celebrated its 35th anniversary with this event. The conference focused on the role that science and technology could play in alleviating poverty and promoting development.

In September 2000, the UN General Assembly had adopted the Millennium Development Goals (MDGs) wherein the member countries

committed themselves to promote well-targeted development. They agreed that until the year 2015, the proportion of people suffering from hunger and extreme poverty should be reduced by half as compared to 1990. A further goal was to ensure environmental sustainability.

Five years later at the NIDECO/NADEL conference, three actors reflected on the role of science and technology in implementing the MDG agenda. A particular focus was the connection between environment and development. Reflecting this linkage, the ETH Zurich and the United Nations Environment Programme (UNEP) signed a Memorandum of Understanding (MoU) at the conference (p. 30–31).

Key speakers were Professor *Klaus Töpfer*, the UNEP Executive Director, Professor *Calestous Juma* from Harvard University, who had chaired the MDG study on the role of science and technology, and Professor *Renate Schubert* from the ETH Zurich, who was in charge of writing the report for the German Federal Government on poverty reduction through environmental policy. Concluding the conference, a panel with government representatives and researchers debated the Swiss contribution to achieving the MDGs.

Reaffirming the ETH's commitment regarding the scientific assessment, monitoring and early warning concerning environmental problems, *Olaf Kübler*, in his opening address, emphasised that the ETH Zurich considered it a duty to make its know-how available to help finding sustainable solutions for the underprivileged societies of the world. *Klaus Töpfer* mentioned two practical examples to illustrate both the need and the importance of more scientific backing for UNEP's endeavours, namely handling the devastating effects of the tsunami in December 2004, and the environmental problems resulting from the increasing traffic and mobility in China. *Renate Schubert*, who chairs the German Advisory Council on Global Change (WBGU), emphasised the connection between environmental quality and poverty reduction. She demonstrated that the consequences of reduced harvests, soil salinisation or contaminated drinking water increased the level of poverty in developing countries, and not the other way around, as usually argued. *Calestous Juma* also pleaded for a paradigm shift, suggesting that international development cooperation should move away from the concept

of aid to the promotion of sustainable local know-how to resolve problems. He further argued that research and innovation would become central in the approach of development cooperation. The panel of Swiss experts presented case studies where this new thinking had already been applied. While the pursuit of individual scientific interests was considered legitimate, it was recognised that development-related research should not be curtailed by competition among researchers. A good example was the NCCR North-South, jointly financed by the Swiss National Science Foundation (SNF) and the Swiss Agency for Development Cooperation (SDC), where research was undertaken with the participation of researchers from developing countries.

Programme

Entering the cooperation between UNEP and ETH Zurich
(Moderator: *Barbara Becker*)

Olaf Kübler (President, ETH Zurich): Opening address

Klaus Töpfer (Executive Director, UNEP, Nairobi):

The role of science and technology to achieve environmental sustainability

Klaus Töpfer and Olaf Kübler: Signing ceremony of the Memorandum of Understanding between UNEP and ETH Zurich

Science and technology for development (Moderator: *Rolf Kappel*)

Rolf Kappel (President, NIDECO Steering Committee, and Director, NADEL, ETH Zurich): Welcome address and opening of the conference

Renate Schubert (Institute of Economic Research, ETH Zurich):

Fighting poverty through environmental policy

Calestous Juma (John F. Kennedy School of Government, Harvard University):

Technological innovation and development:

Challenges and opportunities for international research cooperation

Panel discussion: Research for development –
what can Switzerland contribute? (Moderator: *Claudia Binder*)

Claudio Fischer (State Secretariat for Education and Research, SBF)

Willi Graf (SDC)

Hans Hurni (NCCR North-South)

Ulrike Müller-Böker (University of Zurich)

José Romero (Swiss Agency for the Environment, BAFU)

*René Schwarzenbach (School Domain for Earth, Natural Resources
and the Environment S-ENETH, ETH Zurich)*

Closing remarks

Ruedi Baumgartner (Co-Director, NADEL)

Lecture series "Africa in transition"

Every semester, the University and ETH Zurich jointly organise an interdisciplinary lecture series directed at the general public. In the winter semester 2005/06, the chosen topic was "Africa in transition".

The preparatory team was composed of two representatives from the University of Zurich, namely Thomas Bearth (African Studies, Linguistics) and Gesine Krüger (Contemporary History). On behalf of the ETH Zurich, Rolf Kappel (President of the Steering Committee) and Barbara Becker (Executive Manager) from NIDECO were the co-convenors, ably supported by Roger Pfister (Scientific Assistant) for the editing of the publication and Dorota Niedzwiecka (Administrative Assistant) for the logistics.

In the media and public perception, Africa is regarded as a continent in crisis. However, this perception evokes questions not only with regard to Africa but also regarding ourselves: Is the perception of Africa as a continent in deficit not also the product of a deficit in perception, rooted in our common history with Africa?

Can we afford the mental, economic and political segregation of Africa and the resulting deficits in knowledge and comprehension in a world of increasing globalisation and interdependence of all areas of life? If science claims to have overcome eurocentrism, how does this fit together with the apparent ignorance vis-à-vis Africa?

In the lecture series "Africa in transition", experts of different disciplines and opinion leaders address the multiple realities and the changes on our neighbouring continent. The topics addressed range from arts and literature, political conflict and economy to issues of health, water or agriculture.

The objective of the lecture series is not unravelling the "mystery" Africa but, as a modest step in this direction, to lay new paths of understanding. This includes information on little known aspects of apparently well-known problems and their interpretation in a global and local perspective. This also includes the awareness that comprehension is a result of dialogue, as well as its precondition, a perception which is reflected in the choice of speakers.

The lecture series will be published in the vdf Series Zürcher Hochschulforum under the title "Afrika im Wandel", edited by Thomas Bearth, Barbara Becker, Rolf Kappel, Gesine Krüger, and Roger Pfister.

The topic "Africa in transition" was extremely well received by the audience. On the average, some 150–300 participants attended the lectures, many of them every week. After a couple of lectures, a lively discussion culture with regular contributors developed.

Due to the above-average and regular attendance, the organising team decided to conclude the lecture series with a reception. This was only possible thanks to the commitment of the convenors and an African participant who offered to prepare the buffet with her family at cost price.

Programme

Helmut Bley, Hannover / Peter Schaber, Zurich:

Afrika im welt- und zeitgeschichtlichen Raum der Gegenwart:
Ist ein Perspektivenwechsel notwendig?

Gesine Krüger, Zurich / Matthias O. Ezioba, Zurich:

Vergangenheitsbewältigung?
Zum Umgang mit Sklaverei, Kolonialismus und Apartheid

Said M. Khamis, Bayreuth / Werner Graebner, Bayreuth:

Global and local dimensions of African literature and music:
The example of East African Taraab poetry

Miklos Szalay, Zurich / Ursula Helg, Zurich:

Afrikanische Kunst: Ihre Ästhetik und Rezeption

Heike Behrend, Cologne / David Signer, Zurich:

Magie und ihre Mediatisierung in westafrikanischen Videos

Till Förster, Basel / Ticky Monekossa, Geneva:

Staat und Staatlichkeit in Afrika: Vom Zerfall zum funktionierenden Chaos?

Claudia Roth, Zurich / Rose Marie Beck, Frankfurt:

Afrika im Wandel: Soziale Sicherheit und Gender

Hans Hurni, Berne / Emmanuel Frossard, Zurich:

Nachhaltige Entwicklung in Afrika: Globale Agenda und lokales Wissen

Rolf Kappel, Zurich / Barbara Becker, Zurich:

Ist Afrika zu arm, die Armut selbst zu überwinden?

Rebekka Ehret, Basel / Julian Thomas Hottinger, Berne:

Konfliktursachen, Aufarbeitung und Versöhnung in Afrikas Krisenzonen

Marcel Tanner, Basel / Guéladio Cissé, Côte d'Ivoire:

Afrikas Entwicklung und die Herausforderungen im Gesundheitswesen:
Medizinische, soziale und kulturelle Dimensionen

Wolfgang Kinzelbach, ETH Zurich / Bernhard Wehrli, Lucerne:

Wasserwirtschaft und Feuchtgebiete in Afrika: Beispiel Okavango Delta, Botswana

Thomas Bearth, Zurich / Fan Diomande, Kassel:

Afrikas Sprachenvielfalt: Hindernis oder Ressource?

Heinrich Balz, Berlin / Guy Thomas, Basel:

Traditionelles Weltverständnis und Moderne im Spannungsfeld der Religionen:
Afrikanische Begegnungen



Strengthening the ETH Zurich's scientific capacities for international development

- Funding research cooperation (seed money)
- Initiating and promoting joint initiatives on common themes between ETH Zurich research groups and institutions in developing countries

Above: Engaged discussion between Anoja Wickramasinghe (UoP, left) and Klaus Seeland (ETH Zurich, right) during the post-tsunami workshop at AIT, Bangkok, in August 2005

Strengthening the ETH Zurich's scientific capacities for international development

Well-targeted research collaboration is the third strategic objective of NIDECO. The NIDECO Steering Committee identified two activities within the scope of NIDECO for achieving this objective.

First, NIDECO provides funds for the initial stages of research cooperation through seed money with the intention that this may result in proposals of larger projects to be funded by other agencies. Full NIDECO funding may be provided if the project activities are very limited with a modest budget.

As far as bilateral, disciplinary seed money activities are concerned, these are portrayed in the first chapter on the new set of NIDECO funding instruments (p. 6–7).

Second, NIDECO initiates and promotes joint initiatives on common themes between ETH research groups and institutions in developing countries. This activity concerns larger interdisciplinary initiatives involving several groups of the ETH Zurich and possibly more than one international partner.

Two such initiatives were in the focus of NIDECO's programme in 2005:

In January 2005, NIDECO invited all ETH scientists on behalf of the ETH President Olaf Kübler to share their expertise related to the tsunami catastrophe of December 26, 2004. This invitation provoked a very positive response which resulted in a group of a dozen scientists from a variety of departments who joined forces in a post-tsunami project on *"Sustainable management of natural hazards in the region of Southeast and South Asia"*. In the meantime, project activities have started in Thailand and Sri Lanka with the Asian Institute of Technology (AIT, Bangkok), and the University of Peradeniya (UoP, Kandy).

The second ETH-wide initiative was the preparation and signature of a Memorandum of Understanding (MoU) with the United Nations Environment Programme (UNEP). The preparatory process had been started in 2004. The signing ceremony took place at the NIDECO Annual Conference in November with the UNEP Executive Director Klaus Töpfer present (p. 20–21). The implementation of this MoU as a truly joint endeavour of both institutions remains a NIDECO task for 2006.

Post-tsunami initiative

Initial request for ETH involvement

In early January 2005, on the initiative of ETH President Olaf Kübler, NIDECO invited all ETH professors and NIDECO members to a meeting to discuss how ETH scientists could make their expertise available in response to the devastating tsunami of December 26, 2004. The reaction was overwhelming with more than 30 participants in the first meeting on January 18, 2005, representing nine departments, ETH management, EAWAG and the University of Zurich. It was concluded that the ETH Zurich had much to offer in terms of research experience and teaching capacities.

The participants agreed to initiate the development of a joint research project, exploring the individual research interests and existing contacts of ETH researchers in the region.

Coordinated research and teaching initiative

The second meeting of the ETH researchers took place on February 8 with 14 participants from six departments and from the University of Zurich. Two draft project proposals, which served as basis for the discussion, had been prepared in advance. It was agreed that the post-tsunami initiative should address natural hazards in the broadest sense, not exclusively focused on tsunamis. The ETH Zurich should concentrate on research, teaching and scientific advice (consultancies); the focus should be on South-east Asia. The project should be long-term, in the order of ten years. It should strive for flexible partnerships in the region, and permit the adjustment of the content to the needs of the partners.

Initial visit to the Asian Institute of Technology (AIT)

In early March, Michael Faber and Peter Stamp visited the Asian Institute of Technology (AIT) and the Asian Disaster Preparedness Center (ADPC) in Bangkok (Thailand) as well as associated institutes to explore their interest in such an initiative. The response was positive.

Joint project development

The third meeting was a one-day workshop on April 15 to develop the content of the project, based on 16 concept notes from the participating research groups. The meeting was attended by 18 researchers from five ETH departments, the University of Zurich and a visiting scientist from Istanbul. The group agreed that the initial focus would be on two different exposure types (slowly evolving hazards and suddenly occurring hazards). In addition, two pilot areas in Thailand and in Sri Lanka were considered.

After the workshop, intensive e-mail correspondence with AIT resulted in the agreement to pursue this joint initiative and to hold a regional workshop at AIT in late August.

AIT/ADPC/UoP/ETH Zurich project workshop

From August 23–25, a joint workshop between the AIT, the ADPC, the University of Peradeniya and the ETH Zurich was held in Bangkok. A proposal titled "Sustainable management of risks due to natural hazards in the region of Southeast and South Asia" had been drafted prior to the workshop by the ETH Zurich project team. Initial inputs of AIT and ADPC had already been integrated into the proposal. The objectives of the workshop were to discuss and revise this proposal, to reach consensus on the contents of the joint project, and to establish a long-term collaboration between the above-mentioned institutions in the field of sustainable risk management.

The collaboration between AIT, ADPC and ETH Zurich was formalised in a MoU signed on August 25 by Said Irandoust, President of AIT, Suvit Yodmani, Executive Director of ADPC, and Michael Faber, Chair Risk and Safety at the ETH Zurich.

During the workshop, a consensus on the general structure of the project was found, which is outlined in the following paragraphs.

The project concept at a glance

Background and objective: The objective is to enhance sustainable management of risks due to natural hazards in the region of Southeast Asia and South Asia. It is envisaged to provide an integrative framework not only for the specific activities planned within this initial project, but also for further project activities pursued by other groups. The project aims to:

- Provide aid in supporting decisions for the management of risks due to natural hazards with a special view to the long-term reduction of the vulnerability as well as the long term increase of robustness/resilience of natural resources;
- Provide a decision support system for international organisations to identify for what purposes they may provide financial support to reduce risks and improve long-term living standards most efficiently;
- Support, through research and development of tools, the needs and priorities identified by disaster risk reduction practitioners in communities, community organisations, and local and national governments;
- Perform educational activities improving the general knowledge in the region in regard to a holistic approach to risk management and the sustainable long-term management of natural resources;

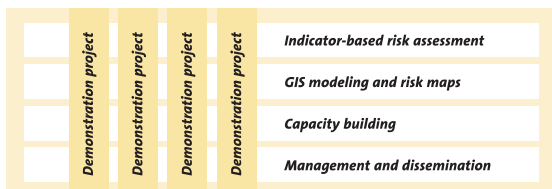


- Develop new and strengthen existing scientific collaborations with universities in the region and abroad;
- Reach out wherever suitable in order to create synergies with existing and new programmes of similar focus;
- Provide an integrative framework for other projects with similar aims so that co-ordination and exchange of knowledge and data may be enhanced and synergy achieved.

The aims of the project are addressed through five different types of activities, namely:

- Indicator-based risk assessment
- GIS modeling and risk maps
- Capacity building
- Project management and dissemination strategy
- Demonstration projects

The five different activities are interrelated as illustrated in the following diagramme.



The horizontal activities in the diagramme are thematically cross-cutting activities including the development of methodologies and tools, and capacity building. The vertical activities (demonstration projects) relate to the implementation of the methodologies, tools and schemes for capacity building on specific geographical locations. The columns refer to four demonstration projects initially covering the two countries (Thailand and Sri Lanka) and the two types of natural risks (quick and slow, respectively the two types of sites: coastal areas and upland areas).

The specific activities are:

- **Indicator-based risk assessment:** Developing a generic risk management framework for the efficient management of risks due to natural hazards with a special focus on the sustainable long-term management of natural resources.
- **GIS modeling and risk maps:** Modelling input and output relations between hazards and resulting risks by means of a geographic information system. GIS-based hazard and risk maps will form specific project outputs as instruments for land use planning.

- **Capacity building and knowledge transfer:** Setting up programmes for teaching and other educational activities in the region of Southeast and South Asia. An interactive scenario-based teaching platform will be developed on the relevant aspects of risk management and the significance of prevention, mitigation, vulnerability and robustness (resilience).
- **Project management and dissemination strategy:** Developing guidelines to facilitate collaboration and exchange of data and tools between different project groups, and elaborate a dissemination strategy to make the results available to decision-makers at different levels and to the affected communities and societies.
- **Demonstration projects** shall apply the conceptual framework and decision support tools at specific locations in the region of Southeast and South Asia. Two different types of demonstration projects are envisaged: one at an inland location (focusing on abiotic stress) and one at a coastal location (mainly tsunami-related). However, the risk assessment will be multi-hazard oriented from a decision making perspective at various levels, comprising legal authorities as well as smaller administrative units and local communities.

State of the post-tsunami initiative by the end of 2005

In December 2005, the pilot proposal "Coastal forest resources affected by the Asian tsunami – from disaster alleviation to sustainable resource management" was accepted for ZIL seed money funding. The project was developed by Klaus Seeland (UWIS) in collaboration with Peter Edwards (UWIS), Renate Schubert (GESS) and Jan Laue (BAUG). The seed money project will allow to identify one or several coastal sites in Thailand that will be further explored as demonstration projects.

A ZIL research proposal titled "Integrating agronomic and socioeconomic aspects of reversing soil degradation by tropical legume trees using GIS analysis" was submitted in December 2005 by Peter Stamp (AGRL), Bernhard Lehmann (AGRL) and Armin Grün (BAUG) in collaboration with UoP and AIT. The proposal was accepted for funding (after revision) in March 2006. In the framework of the overall post-tsunami project, this project will serve as one of the upland demonstration sites.

In November 2005 a dialogue with the consultancy company Ernst Basler and Partner AG (EBP) took place in order to identify possible joint activities which could be carried out under the umbrella of the post-tsunami proposal. The basic idea of this joint project is to use a software tool for risk mapping, management and communication previously developed by EBP and to adapt it to the generic indicator based risk assessment framework in an Asian context.

Memorandum of Understanding with the United Nations Environment Programme UNEP

UNEP in brief

The UNEP mission is to provide leadership and encourage partnership in caring for the environment by inspiring, informing, and enabling nations and peoples to improve their quality of life without compromising that of future generations.

UNEP is advocate, educator, catalyst and facilitator, promoting the wise use of the planet's natural assets for sustainable development. UNEP's global headquarters are in Nairobi, Kenya. Being based in Africa gives UNEP a first-hand understanding of the environmental issues facing developing countries. UNEP is represented across the globe by six regional offices. Its Europe office is located in Geneva, Switzerland.

"The United Nations Environment Programme plays a key global role in trying to ensure that environmental concerns and activities are better integrated in the broader sustainable development framework. Through policy advice, expert information and capacity building services, UNEP helps decision makers in government, business, and civil society make wise choices. As the deadlines for achieving the Millennium Development Goals grow near, I urge Governments to intensify their efforts and work even more closely with and through UNEP to protect the environmental basis on which our development depends." (UN Secretary General Kofi Annan in the UNEP Annual Report 2005)

visit with Olaf Kübler, the Swiss Embassy played a crucial and very constructive role as broker between the two institutions. The same holds true for the invitation of Klaus Töpfer to the signing ceremony in 2005.

Altogether, the preparation of the MoU took more than one year, involving the UNEP Divisions of Early Warning and Assessment, as well as Policy Development and Law.

In November 2005, ETH Zurich President Olaf Kübler and the Executive Director of the United Nations Environment Programme (UNEP), Klaus Töpfer, signed a Memorandum of Understanding to formally establish cooperation between the two institutions. The memorandum serves as a framework for collaboration in the area of scientific assessment, monitoring, early warning of environmental change and examining the interlinkages between environment and social systems. This is intended to enhance the scientific credibility, legitimacy, relevance and independence of environmental measures.

The idea of the MoU dates back to Olaf Kübler's visit to research and development institutions – among them the UNEP – in Nairobi, Kenya, in November 2003. This visit was organised by Barbara Becker, NIDECO's Executive Manager, who worked as a UNEP field project officer in the 1980s.

At that time, the ETH Zurich delegation was received very warmly by the UNEP Deputy Director, Bakary Kante, who offered to enter into such an agreement. This invitation was based on UNEP's policy to mobilise advanced research institutions for their cause by engaging in joint activities in the mutual interest of both parties.

In September 2004, Barbara Becker had another opportunity to visit the UNEP headquarters. A meeting with the Deputy Executive Director, Shafiqat Kakakhel, and senior staff members was organised in order to discuss the content of the future MoU. As was the case with the first

On the side of the ETH Zurich, Nikolaus Gotsch of the President's office, together with Rolf Kappel and Barbara Becker of NIDECO, were in charge of the preparation. Both parties were supported by their legal services.

The signing ceremony was part of the NIDECO Annual Conference in November 2005 (p. 20–21). For both heads of the signing parties, Olaf Kübler and Klaus Töpfer, this MoU was one of the last formal agreements before retiring from their functions.

In December 2005, the ETH School Board delegated the implementation of the MoU to the head of the School Domain of Earth, Environment and Natural Resources (S-ENETH), René Schwarzenbach. The NIDECO/ZIL management was given the operative mandate for this task. On the side of UNEP, Marion Cheate, head of the Division of Early Warning and Assessment, has been assigned for this MoU. A Steering Committee with four representatives from both the ETH Zurich and the UNEP will be formed in 2006.



The signing of the MoU found broad media coverage in Switzerland

*Tages-Anzeiger Online, Nov. 11, 2005: **ETH-Abkommen mit Uno-Umweltprogramm***
Die ETH Zürich und das Uno-Umweltprogramm UNEP haben ein Zusammenarbeitsabkommen unterzeichnet. Es steckt den Rahmen zur gemeinsamen Entwicklung von Strategien für Erfassung, Überwachung und Früherkennung von Umweltproblemen ab.

Zusammenarbeit zwischen ETH Zürich und UNO Gemeinsam Umweltprobleme angehen
Zürich (sda) Die ETH Zürich und das UNO-Umweltprogramm UNEP wollen gemeinsam Lösungen für die globalen Umweltprobleme erarbeiten. An einer Konferenz am Freitag in Zürich ist ein Abkommen zur Zusammenarbeit unterzeichnet worden.

*Neue Zürcher Zeitung, Nov. 12/13, 2005: **Umweltschutz als Entwicklungsförderung***
ETHZ und UNO Programm vereinbaren Zusammenarbeit
Die ETH Zürich und das UNO Umweltprogramm haben vereinbart, in ökologischer Frühwarnung und anderen wissenschaftlich abzustützenden Aufgabenbereichen regelmässig zu kooperieren. An einer Tagung wurde hervorgehoben, dass Umweltschutz keine Art von Luxus, sondern ein Beitrag zur Verminderung der Armut sei.

*ETHLife International, Nov. 17, 2005: **NADEL/NIDECO Conference: ETH collaboration in UN environmental programme***
Science and technology can give decisive new momentum to the fight against hunger, underdevelopment and environmental problems. This is the conclusion of an ETH-wide Network for International Development and Cooperation, NIDECO, and NADEL, the post-graduate course of studies on cooperation in development at ETH Zurich. To set the ball rolling a declaration of collaboration has been signed last Friday between ETH and the UN Environment Programme, UNEP.



Strengthening the visibility of the ETH Zurich's international engagement

- Representing the ETH Zurich in the scientific community
- Participating in scientific meetings and conferences
- Representing the ETH Zurich in the development community
- Representing the ETH Zurich in the public by means of cooperation with media and politics
- Operating the NIDECO website
- Operating an e-mail news service on events and topics concerning international development and cooperation

Above: Third-semester students of the University of Peradeniya (Sri Lanka) attending Caspar Wenk's lecture on nutrition (p. 10)

Strengthening the visibility of the ETH Zurich's international engagement

Increasing the visibility of the ETH Zurich's international engagement with respect to developing countries and countries in transition has been one of the reasons for creating NIDECO. In this regard, NIDECO fulfils an important function in implementing the mission statement of the ETH Zurich.

After three years of existence, NIDECO has become a well-established brand name within ETH Zurich and in the national research and development community. The following example may give anecdotal evidence of this reputation: In an external review of Swiss technical colleges (*Fachhochschulen*), NIDECO was quoted as an institutional model for collaboration by an independent expert outside the NIDECO community.

The following pages demonstrate how NIDECO conducts its networking activities with multiple stakeholders. This is shown by the example of the post-tsunami initiative, which exposed a wide range of partners within the ETH Zurich, in the national science and development community, in the private sector, and from regional and national institutions in developing countries. This example serves to synthesize the lessons learnt and to draw first conclusions for the further development of NIDECO's external and internal relations.

In many cases, however, NIDECO's presence in various national and international fora has been previously initiated. These well-established contacts are briefly described. A separate section is dedicated to NIDECO's public relations activities.

Networking and partnerships

By definition, networking is the core of NIDECO's activities, both internally and externally. This entire report is a testimony of NIDECO's relations with multiple partners.

The post-tsunami initiative as an example of NIDECO's approach to networking

The post-tsunami initiative (p. 26–29) may serve as an example for NIDECO's growing network with partners inside and outside the ETH Zurich during 2005. It shows that networking is a slow process of gaining confidence between individuals, of failures in the process due to incongruent institutional or personal agendas, of mutual learning and the experience of different cultural environments.

In January 2005, NIDECO launched a call to all ETH professors for the expression of interest in a post-tsunami research activity. After a series of meetings, this resulted in a number of new NIDECO members, partly from departments where NIDECO had not been well-represented previously. A close working relationship was established with another centre of competence, the Research Network for Natural Hazards at ETH Zurich (HazNETH). This collaboration continues and may lead to a post-tsunami sub-project within the new Centre of Competence Environment and Sustainability (CCES) of the ETH domain.

After the first meetings the content of a joint initiative took shape, which naturally led to the departure of colleagues whose profiles did not match this common denominator, unfortunately among them the scientist from the University of Zurich and the EAWAG. However, approximately one dozen ETH scientists organised themselves in the post-tsunami initiative with a Steering Committee of four professors from three different departments under the leadership of Michael Faber, the Chair of Risk and Safety, as the driving force of a joint project proposal. In early 2006, he was elected as a new member of the NIDECO Steering Committee, thereby strengthening the integration of the post-tsunami group into NIDECO.

Among the ETH scientists active in the development of the post-tsunami project proposal, new interdisciplinary partnerships for joint sub-projects were formed. This further strengthened the already close relationship between NIDECO and ZIL, the latter providing funds for the NIDECO initiative. Furthermore, this reinforced the close links with ETH President Olaf Küller, who took a strong personal interest in the initiative.

A request to the Swiss Agency for Development Cooperation (SDC) in early February 2005 for long-term investment in capacity building for natural hazard management received a negative response. Similarly, NIDECO's approach to the Director of Swiss Solidarity (Glückskette), Felix Bollmann, to explore joint activities in the tsunami-affected regions, was not successful. Both agencies focused exclusively on humanitarian aid and techni-

cal assistance. As argued in the last chapter (p. 41), research for development often falls into a void between the mandates of research and development funding mechanisms. A third intent to link research activities to the development community was unsuccessful as well. Interooperation, a Swiss foundation for development cooperation, was in principle interested in a joint project, but did not receive funding from Swiss Solidarity.

NIDECO carefully explored potential institutional partners in South and Southeast Asia. It opted for those institutions with which ETH members already had well-established collaborations. Several NIDECO members travelled to the region to explore the interests and demands of potential partners. Finally, a workshop was conducted in Bangkok with participants from the Asian Institute of Technology (AIT), the Asian Disaster Preparedness Centre (ADPC) and the University of Peradeniya, Sri Lanka. This workshop and a subsequent excursion to potential project sites in Sri Lanka served to consolidate professional interactions, to identify the research agenda and agree on joint activities. It was a tremendous learning experience at the level of individual interaction, streamlining divergent research interests into a joint agenda and establishing functioning teams for project development. Several promising sub-projects are being pursued further.

While the interaction with development agencies has not yet resulted in concrete activities or new sources of funding, another contact was successful in this respect. The Zurich-based consultancy company Ernst Basler and Partner AG had developed a software tool for risk mapping, management and communication as a mandate of the Swiss Federal Offices for the Environment (BAFU) and for Civil Protection (BABS), respectively. They agreed to share this tool with the ETH post-tsunami group and to adapt it to its needs in an Asian context. They offered to invest human resources for the adaptation and use of this tool and to translate it into English.

In conclusion, the one year effort of creating new partnerships has yielded impressive results with new project groups established, initial funding mobilised and promising partnerships on the way. At the same time, NIDECO experienced a number of lessons in individual and institutional collaboration, including a few failures and disappointments.

This overall promising activity has its price, however. First, it would not have been possible without the (modest) investment in human resources in the NIDECO management team. Establishing and maintaining contacts between a large number of partners from different backgrounds requires constant effort. Growing activities demand an increasing amount of organisation and coordination. Second, the experience of the post-tsunami initiative confirms that research collaboration depends on proper funding. This was most obvious during the workshop in Bangkok when the ETH group could not offer immediate funds for the projects to be developed. NIDECO's funding instruments are not sufficient for such an initiative. If the ETH Zurich seriously intends to respond to the tsunami catastrophe with its expertise, it needs to provide adequate means for implementation.

Continued NIDECO partnerships**Networking with international partners**

The foundation of NIDECO's international relations is the individual research and teaching partnerships of its members. Due to the new funding instruments that became operational in 2005, NIDECO can now more effectively support these direct interactions (p. 5–13).

The most promising international partner is UNEP (p. 30–31). At the European level, the NIDECO panel at the EADI General Conference in September 2005 was the most important networking forum (p. 18–19).

The Volkswagen Foundation in Hanover, Germany, invited the Barbara Becker as *ad personam* member in its peer review committee for the newly launched programme "Resources, their dynamics and sustainability" within the foundation's funding initiative "Knowledge for tomorrow – Cooperative research projects in sub-Saharan Africa". The first meeting of this committee took place in September 2005. This nomination built on the participation of a representative of the foundation at the NIDECO workshop in January 2004.

Roger Pfister became a member of the Steering Committee of the African Technology Development Forum (ATDF) in January 2005. With offices in Lusaka, Zambia and Geneva, the ATDF facilitates the formation of partnerships and linkages between academic/research centres, industry and government. In this context, NIDECO attempts to broker links with its members.

A number of NIDECO members, among them Rolf Kappel and Wolfgang Kinzelbach from the NIDECO Steering Committee, participated in the Swiss delegation to China in November 2005. This visit of some thirty scientists and policy-makers was part of the mandate to the ETH Zurich by the State Secretariat for Education and Research (SER) to be the leading Swiss institution for scientific relationships with China. An office for Sino-Swiss Science and Technology Cooperation has been opened at the ETH Zurich with which NIDECO will establish contact as needed.

Finally, NIDECO was occasionally involved in the visit of delegations from developing countries to the ETH Zurich, though never systematically invited to this important strategic activity. NIDECO stands ready for supporting the School Board in its contacts with delegations from developing countries and countries in transition.

Networking with national partners

The panel at the NIDECO Annual Conference in November (p. 20–21) assembled representatives of its most important national partners: the Swiss Agency for Development and Cooperation (SDC), whose Director, Walter Fust, is a member of the NIDECO Patronage Committee; the State Secretariat for Education and Research (SER) and the Swiss Federal Office for the Environment (BAFU). It is expected that NIDECO will continue and expand its relations with these three federal agencies.

Hans Hurni participated in the panel as Chair of the Board of Directors of the NCCR North-South "Research Partnerships for Mitigating Syndromes of Global Change". Several linkages exist through the participation of NIDECO members in various functions of the NCCR North-South, and the joint membership of Marcel Tanner in the governing bodies of both entities. In the course of 2005, discussions took place to explore the potential of a closer integration of NIDECO and NCCR activities. Although these discussions have not resulted in a formal collaboration, several interactions are taking place at the working level, e.g. through the participation of NCCR doctoral students in the NIDECO colloquium.



Ulrike Müller-Böker represented the University of Zurich in the same panel. The collaboration with our neighbour university was most obvious through the joint lecture series on "Africa in transition" (p. 22–23). Bilateral contacts with university staff continued. The same holds true for several other Swiss universities (Basel, EPF Lausanne, Graduate Institute of Development Studies IUED in Geneva).

Claudia Binder and Barbara Becker have remained active *ad personam* members of the Commission for Research Partnerships with Developing Countries (KRPE), while NIDECO continues to be one of about 60 institutional associate members.

Finally, the NIDECO Executive Manager represents ETH Zurich on the Board of the Student Hostel Justinus Heim, which offers accommodation to students from developing countries.

Networking within ETH Zurich

Within the ETH Zurich, NIDECO's closest partners are the Swiss Centre for International Agriculture (ZIL) and the Postgraduate Course on Developing Countries (NADEL). ZIL and NIDECO share one office and management. Emmanuel Frossard is a board member of both the ZIL and the NIDECO Steering Committee. The head of NADEL, Rolf Kappel, serves as NIDECO's president.

The School Domain of Earth, Environment and Natural Resources (S-ENETH) has become an increasingly important partner of NIDECO and ZIL, in view of its intended institutional development (p. 41–43). The implementation of the UNEP Memorandum of Understanding (p. 30–31) has been mandated to the chair of S-ENETH together with the NIDECO/ZIL management.

The well established working relationships with the Proctorates for Doctoral Studies and International Relations have been maintained and will be continued as required. The same holds true for Corporate Communications (CC), with whom the collaboration was particularly close in the preparation of the NIDECO Annual Conference (p. 20–21).

The NIDECO Executive Manager has continued to serve on the Strategic Board of ETH sustainability. Both units are complementary in some fields of activities, and therefore benefit from exchange of experiences.

Networking within NIDECO

In 2005, NIDECO membership grew from 71 to 82. A General Assembly was held on the morning of the Annual Conference in November 2005. Networking services to its members are the core of NIDECO. Although of low visibility, individual consultations and bilateral meetings are practised on a routine basis by the NIDECO management. The electronic mailing list on upcoming events and NIDECO-related business has become the most important regular means of communication with NIDECO members. In 2005, 29 news and events messages were sent out, as were five announcements of funding opportunities, and five messages on other topics.

All these activities would have not been possible without the strategic guidance and the support of NIDECO's supervisory committees and management (see inside cover). The Steering Committee met five times. It decided on the funding requests, and discussed the future strategic directions of NIDECO. The structure of this report and the last chapter (p. 41–43) are a direct result of these discussions. The Patronage Committee met in April 2005. It continued to be a constructive advisory body to guide NIDECO in critical issues of its development. The management team continued the promotion and support of all activities presented in this report.

Public relations**NIDECO Portrait and Annual Report 2004**

875 copies of the brochure on NIDECO were printed. In addition to the NIDECO members, a copy was sent to all professors at the ETH Zurich. It was equally useful as a PR tool when NIDECO staff participated at conferences or other events, and when NIDECO was present with a stand.

Public media

NIDECO actively sought contact with the media to publicise its activities. In particular, the Annual Conference in November (p. 20–21) received broad coverage in the *Neue Zürcher Zeitung (NZZ)*, *Tages-Anzeiger Online* and *ETH Life Online*. Furthermore, two sessions in the lecture series "Africa in transition", co-organised by NIDECO (p. 22–23), were reported with a positive feedback in the foreign affairs section of the *NZZ*.

NZZ, October 29./30, 2005: Afrika im Wandel, Vortragsreihe an der Universität Zürich

Die Universität Zürich und die Eidgenössische Technische Hochschule führen in diesem Wintersemester eine interdisziplinäre Veranstaltungsreihe durch, die unter dem Titel "Afrika im Wandel" politische, wirtschaftliche und kulturelle Aspekte des Schwarzen Kontinents beleuchten will. Den Anfang bildeten am Donnerstag Referate des Hannoveraner Historikers Helmut Bley und des Züricher Philosophen Peter Schaber.

NZZ, November 7, 2005: Erinnern statt vergessen. Vortrag Gesine Krügers in Zürich

... die an der Universität Zürich lehrende Professorin für außereuropäische Geschichte, Gesine Krüger, [hat] dem Ruf nach Gerechtigkeit und Wiedergutmachung für vergangene Menschenrechtsverletzungen Aktualität und vor allem sehr viel Sinn abgewonnen. Wichtig sei, meinte Krüger in ihrem Vortrag im Rahmen der Veranstaltungsreihe "Afrika im Wandel" an der Universität Zürich, eine neue Einstellung zur Geschichte als einer Geschichte von Opfern; es gehe um einen erhöhten Platz für die Opfer in der Geschichtsschreibung. ...

Website

The website has been updated regularly so as to ensure current information about all NIDECO activities and services. Equally, new entries have been added to the section on both relevant and ongoing research projects conducted by ETH lectures and completed doctoral dissertations. Its usefulness as a communication tool with the NIDECO members and others interested persons is reflected by the fact that the website was visited more than 70'000 times in 2005. The figures peaked in January and October/November, corresponding to the introduction of the new funding possibilities and the Annual Conference, respectively.



Strengthening the integration of international development in the ETH Zurich portfolio

- Supporting the ETH Zurich School Board in the implementation of this aspect of their mission statement

Above: The ETH Zurich main building

In legal terms, NIDECO has been founded as a so-called “Competence Centre” of the ETH Zurich with an initial time horizon of five years. The rules and regulations of NIDECO are in conformance with the guidelines prescribed for Competence Centres by the management of the ETH Zurich. These guidelines are quite flexible and can be adjusted case by case and, if need be, over time.

Making NIDECO a permanent institution of the ETH Zurich

Rolf Kappel and Barbara Becker

After three years of operation, we can certainly conclude that the rules and regulations of NIDECO have served the network well to carry out its functions and to further develop its mandate. However, with respect to institutional sustainability, the set-up of a Competence Centre has one shortcoming: the time horizon for financing with funds from the ETH management is limited. This also applies to NIDECO, which has a budget that is guaranteed from 2003 until the end of 2007. After the end of such an initial phase of funding by the ETH management, Competence Centres are supposed to mobilise funds from third parties to finance their budget requirements.

In cases where Competence Centres are vehicles to manage joint research activities of several research units, this model of initial funding makes sense. After five years of funding it can be expected that the research programme of a Competence Centre has been established and has “matured” to such an extent that third-party funding is a viable option. However, NIDECO is not a research-based Competence Centre but a network that fulfils general functions for the entire ETH Zurich (as documented by this report).

These functions are the implementation of an important aspect of the Mission Statement of the ETH Zurich: *Solutions to mankind’s most urgent problems – poverty, hunger, disease, the threat to our very existence due to the spread of human civilization – demand that we find new knowledge and skills required to manage challenges of the future.* The Mission Statement implicitly assumes that a network of knowledge and skills acquired in an interdisciplinary environment best respond to the natural and cultural interdependencies of life. *By integrating the natural sciences, technology, the humanities and social sciences, we can devise innovative concepts of education and research which will allow us to tackle the enormous challenges facing mankind, and help lay a path for a meaningful and sustainable development of present and future civilizations.*

NIDECO contributes to build such a network of knowledge and skills within the ETH Zurich. No research funding organisation will finance these core activities of NIDECO, and it is difficult to imagine that any type of sponsor would be willing to step in. In

other words, the functions of NIDECO are an essential element of what a university must do if it seriously wants to mobilise and increase its own capacities and external funds to strengthen research and teaching in the area of international development and cooperation.

What can be done to secure the existence of the network in the long run? In the course of 2005, the NIDECO Steering Committee explored several alternative models and discussed them with a number of stakeholders within the ETH Zurich. The most promising model that emerged from these discussions stipulates the merging of NIDECO with the Swiss Centre for International Agriculture (ZIL) and the integration of the new unit in the new School Domain of Earth, Environment and Natural Resources (S-ENETH).

ZIL

The Swiss Centre for International Agriculture (ZIL) is an association based at the Swiss Federal Institute of Technology in Zurich established in 1993. ZIL's mission is to initiate, support, and coordinate collaborative research by its members and partners that will enable resource-poor farmers in low-income countries to achieve sustainable improvements of their livelihoods. This includes the mobilisation of Swiss research capacity and the promotion of awareness about the role of agricultural and food science in meeting the human and environmental challenges of low-income countries.

S-ENETH

The School Domain of Earth, Environment and Natural Resources (S-ENETH) consists of the three ETH departments AGRI, ERDW and UWIS. It was established in April 2005. S-ENETH stands for internationally renowned research and education in earth, environmental and production systems, orientating itself on the highest internationally recognized standards. S-ENETH primarily aims at developing systems knowledge on the basis of fundamental scientific research connected to target and transformation knowledge to prospectively contribute to an environmentally and socially sound development and resource use.

ZIL has been one of the founding bodies of NIDECO. Both units share the same interest in anchoring development issues in the agenda and portfolio of the ETH Zurich. ZIL has conducted a large number of SDC-funded research projects over a period of 12 years, and just signed a four-year extension of its contract with the SDC. Its experience in research partnerships, interdisciplinary programme development, capacity building and networking is a solid basis for integration with NIDECO.

The rationale for linking the new unit to S-ENETH is based on two considerations: first, the majority of NIDECO members with research activities in developing countries deals with issues in the realm of S-ENETH, i.e. environmental problems in the widest sense. Therefore, S-ENETH is a natural "harbour" for the research-related activities of NIDECO. Vice versa, many of the research and teaching activities within S-ENETH deal

with issues of the earth, as well as the use of natural resources and the environment in developing countries, in countries in transition or on a global scale. Hence, the new unit would fit naturally into the overall concept and programme of S-ENETH. It has to be ensured, though, that all ETH-wide functions will be maintained, and that NIDECO services are not restricted to S-ENETH members. Second, the new School Domain may be considered as a pilot body within the ETH Zurich with a potential institutional model function. Therefore, linking NIDECO to S-ENETH is a forward-thinking strategy.

This two-step procedure of merging NIDECO and ZIL and subsequently integrating them into S-ENETH would have several benefits. First, the merger of NIDECO and ZIL would produce positive synergies as both units share common goals and complement each other in their activities. ZIL's capacity for promoting research in sustainable rural development and poverty alleviation would be enhanced by NIDECO which provides a forum for exchange of ideas and establishment of collaborations across disciplinary and cultural divides – necessary for the innovative research that ZIL aims to support. Second, ZIL and NIDECO already share the same staff in their headquarters, which are located in the same premises provided by the ETH Zurich. Third, integrating the new unit and its tasks into the structure and the activity portfolio of S-ENETH under the basic financing scheme ("Grundauftrag") would allow for permanent funding through the ETH management for the core staff needed for the headquarter (two full-time positions for the management and administration of ZIL and NIDECO combined).

An external evaluation of NIDECO will be carried out in the course of 2006. The NIDECO Steering Committee has suggested to the Vice-President Research, who acts as chairman of the NIDECO oversight committee, to include an analysis of long-term strategic and organisational concepts for NIDECO in the terms of reference for the reviewers. An external evaluation of ZIL, carried out in March 2005, has already made the suggestion "to bring ZIL and NIDECO closer together". The expected synergies look certainly promising, and we are keenly interested in the outcome of the evaluation. In any case, we will do our best to convince the management of the ETH Zurich that a strategic and organisational move to guarantee the sustainability of NIDECO (and ZIL) merits serious consideration.

Accounts

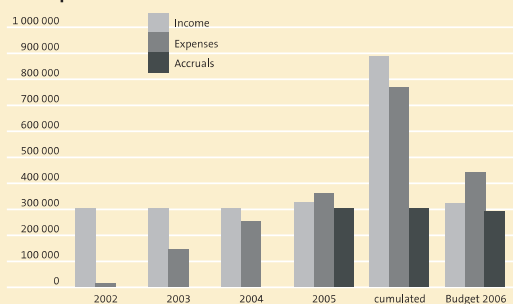
in CHF

Financial report 2005	Budget	Income	Expenses
Income 2005	300'000.00	310'000.00	
ETH contribution		300'000.00	
ETH contribution to the Annual Conference		10'000.00	
1. Personnel	120'000.00		121'955.45
2. Operational costs	30'000.00	10'000.00	47'368.46
2.1. Events / PR		10'000.00	45'191.44
2.2. Management			2'177.02
3. Grants	150'000.00		103'288.35
3.1. Pre-docs			4'145.35
3.2. Visiting scientists			37'800.00
3.3. Seed money			45'300.00
3.4. Teaching stays			16'043.00
Total income and expenditures as of Dec. 31 2005		310'000.00	272'612.26

Balance 2005

Expenses	272'612.26
Revenue	794'591.36
Opening balance Jan. 1 .2005	484'591.36
Income 2005	310'000.00
	794'591.36
Closing balance as of Dec. 31 2005	521'979.10

Development 2002–2006



ADPC	Asian Disaster Preparedness Center (Thailand)
AGRL	Department of Agriculture and Food Sciences
AIT	Asian Institute of Technology (Thailand)
ARCH	Department of Architecture
ATDF	African Technology Development Forum
BABS	Swiss Federal Office for Civil Protection
BAFU	Swiss Federal Office for the Environment
BAUG	Department of Civil, Environmental and Geomatics Engineering
BIOL	Department of Biology
CC	Corporate Communications
CCES	Centre of Competence Environment and Sustainability (ETH domain)
CHAB	Department of Chemistry and Applied Biosciences
CIS	Center for International and Comparative Studies
CSRS	Centre Suisse de Recherche Scientifique (Côte d'Ivoire)
DLSU	De La Salle University (Philippines)
EADI	European Association of Development Research and Training Institutes
EAWAG	Swiss Federal Institute for Aquatic Science and Technology (ETH domain)
EBP	Ernst Basler + Partner
EDA	Swiss Federal Department of Foreign Affairs
EPFL	Ecole Polytechnique Fédérale de Lausanne (ETH domain)
ERDW	Department of Earth Sciences
GESS	Department of Humanities, Social and Political Sciences
GIS	Geographic Information System
HasNETH	Research Network for Natural Hazards
IAEA	International Atomic Energy Agency
IAERI	Iranian Agricultural Engineering Research Institute
INFK	Department of Computer Science
ITET	Department of Information Technology and Electrical Engineering
IUED	Graduate Institute of Development Studies, Geneva
IUT	Isfahan University of Technology (Iran)
IWMI	International Water Management Institute
KFPE	Commission for Research Partnerships with Developing Countries
KhAI	Kharkov Aeronautics Institute (Ukraine)
LSE	London School of Economics and Political Sciences (UK)
MATH	Department of Mathematics
MDGs	Millennium Development Goals
MoU	Memorandum of Understanding
MTEC	Department of Management, Technology and Economics
NADEL	Postgraduate Course on Developing Countries
NCCR	National Centre of Competence in Research
NZZ	Neue Zürcher Zeitung
PHYS	Department of Physics
PSI	Paul Scherrer Institute (ETH domain)
SBF	State Secretariat for Education and Research
sda	Swiss News Agency
SDC	Swiss Agency for Development Cooperation
SED	Swiss Seismological Service
S-ENETH	School Domain of Earth, Environment and Natural Resources
SNF	Swiss National Science Foundation
STI	Swiss Tropical Institute, Basel
UFMG	Federal University of Minas Gerais (Brasil)
UN	United Nations
UNEP	United Nations Environment Programme
UoP	University of Peradeniya (Sri Lanka)
UWIS	Department of Environmental Sciences
WBGU	German Advisory Council on Global Change
ZIL	Swiss Centre for International Agriculture

List of acronyms

All units of the ETH Zurich in italics

The **Network for International Development and Cooperation (NIDECO)** is a centre of competence within the ETH Zurich, bringing together researchers and academics from a wide range of disciplines. Membership is open to all interested professors and scientific staff of ETH. In addition to being a network of individual scientists, NIDECO serves as an umbrella for several ETH units involved in international development and cooperation through research and education at the ETH Zurich.

NIDECO
Network for International Development and Cooperation
Scheuchzerstrasse 7, SEC, CH-8092 Zurich, Switzerland
Tel +41 44 632 79 35
Fax +41 44 632 15 89
www.nideco.ethz.ch