

Applied Research in Development and Cooperation



A Program of the Swiss Universities
of Applied Sciences and Arts (2007-**2013**)



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development
and Cooperation SDC

KFH

Rektorenkonferenz der Fachhochschulen der Schweiz
Conférence des Recteurs des Hautes Ecoles Spécialisées Suisses
Conferenza dei Rettori delle Scuole Universitarie Professionali Svizzere
Rectors' Conference of the Swiss Universities of Applied Sciences

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Cover Picture

This picture represents a symbol of the philosophy of the KFH-DC program: a network of partnership for applied research in developing countries, filling up the gaps between North and South and between East and West. It has been taken in 2006 in Tamil Nadu (India) in a fishermen's village affected by the 2004 tsunami.

The author is **Daniel Pittet**, a researcher within this program (at SUPSI) who graduated as civil engineer at the Ecole d'Ingénieurs et Architectes of Fribourg (now part of HES-SO) and obtained a Master of Advanced Studies in architecture and sustainable development at the EPFL in Lausanne. He has worked for several years in Nepal in the field of national road network maintenance management for SDC and Nepal Department of Roads as well as a consultant for the NGO Kam For Sud in the field of sustainable housing.

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Introduction



Access to drinking water, a target of the eighth Millennium Development Goals of the United Nations. (India, 2006)

Preface

The Swiss Universities of Applied Sciences and Arts

The creation of the universities of applied sciences and arts (UAS) in the mid nineties led to a new type of university that in a short time has become firmly established as part of Switzerland's educational system. The universities of applied sciences and arts offer practical university-level education and training and are in great demand with both students and employers. With over 50'000 students the UAS accounts for one third of the total students (120'000) involved in the tertiary education. In the innovation process the UAS are performing a bridging role linking science, the economy and society.

UAS provide a practice-oriented education, accommodating the needs of both students and the job market. Highly qualified teachers who are often involved in research and/or professional practice represents a guarantee of adhesion to the local economy. All departments of the UAS also conduct distinguished research aimed at solving problems related to their respective professional fields. This makes the UAS an important link in the innovation chain. Research at the UAS is also closely combined with instruction, enabling students to gain research expertise in their respective professional fields. The fact that the education they receive is practice-oriented grants students graduating from UAS very good prospects on the job market. Recent studies have shown that 96% of all UAS students find employment in their professional field within twelve months of graduating. This confirms that the education supplied by the UAS meets the demands of the job market. A UAS degree also serves as an entry qualification to further studies at universities both in Switzerland and abroad.

The KFH and the UAS

KFH encompasses the rectors of the UAS which are acknowledged by the Swiss Confederation. The Conference was established in 1999 in order to represent the interests of the universities of applied sciences and arts when dealing with the Confederation, the cantons and other institutions in charge of education and research policy as well as the public in general. It works in partnership with the Council of the UAS of the Swiss Conference of Cantonal Ministers of Education and maintains close contacts to the Federal Office for Professional Education and Technology, which manages and cofinances the UAS on the national level.

KFH program on applied research in development and cooperation

The guidelines and the philosophy of UAS applied research in developing countries encompass the principles of the Swiss foreign policy (independence, neutrality, impartiality and humanity), implementing an ethical agenda with the aim to help reducing poverty and alleviating human suffering. The program on applied research in partnership with developing and transition countries started already in 2000 and was financed since the beginning from the Swiss Agency for Development and Cooperation. The KFH Office for development and cooperation was initially assigned to an internal working group of the KFH and to Swisscontact. In 2007 a **KFH Development and Cooperation Office** was established at the University of Applied Sciences and Arts of Southern Switzerland (SUPSI). Since its establishment the DC Office has launched eight calls for proposals, increasing significantly the number of submitted projects, close to 200 projects. Peer reviewing has been performed according to the international standards for competitive research also used by the Swiss National Science Foundation, triggering a continuous improvement of the quality of projects. The program has been opened also to the Universities of Teacher Education (UTE). UAS, being particularly focused on applied research, play an important role in the economic development of our country, particularly as a result of its connections with small and medium-sized enterprises. Nowadays, having shown their impact at the regional level, they are interested in progressively developing an international involvement. The positive outcome of this program has been recognized by an external evaluation (KEK Consultants, 2010). Beginning with 2013 the DC Office will be integrated in the international resort of KFH.



Marc-André Berclaz
President



Thomas Bachofner
Secretary General

KFH Development and Cooperation strategy

1. Environment, general background

Globalization is bringing about a growing amount of international networking of economic and social connections. For example, in the field of modern technology in the industrial countries there is a growing international market for research services which are financially supported by business. In the framework of global production chains, companies are active in industrialized countries as well as in developing and transitional (D&T) countries. In other fields too (e.g. health, social development and education) the importance of international networking and cooperation is growing.

These developments are spawning new challenges and opportunities for teachers and researchers at the universities of applied sciences and arts. Teachers must not only prepare graduates for an international environment in terms of expertise, but also in terms of working in an intercultural context. Researchers must find their place in and interact to a greater degree within an international environment. In this environment cooperation with developing and transitional countries should be of special interest to UAS. These countries must expand their own capacities in order to integrate on a global level. In this context, application oriented research and development (aR&D), the specialty of UAS, assumes an important role. Research which delivers the most direct benefit in the form of applications is essential under the economic, social and technological conditions in these countries.

Research with and in developing and transitional countries under the aspect of global integration is certainly also in the interest of industrialized countries. However, the private sector tends not to finance research whose profits are difficult to internalize. That is why research with D&T countries cannot be financed exclusively by the market, but must in part also be viewed as an international, public good.

This is the point of departure of support by agencies for development work (In Switzerland, the Swiss Agency for Development and Cooperation: SDC) in research. They make available funds sustainability to strengthen institutional and individual research capacities in D&T countries. At the same time, they are interested in seeing to it that specific, development relevant research results are generated. For this purpose they work purposefully together with Swiss research experts in areas which are important for questions of development.

At the moment, research in development and cooperation still bears the heavy imprint of the universities because they were once involved in this field. In application-oriented research the universities of applied sciences,

however, have a competence which, for one, is of enormous importance for developing and transitional countries and, for another, supplements university research. Considering the rapid economic development in threshold countries, moreover, the interest of the private sector in Switzerland and in the D&T countries in this specific research competence will no doubt increase.

The formal bases for this involvement from the perspective of the UAS are the expanded mission (application oriented research and development, services for the benefit of third parties and cooperation with universities and research institutions at home and abroad) as well as the goals defined by the Swiss federal authority which requires more aR&D involvement on the part of UAS and greater national and international networking. In terms of development cooperation the act creating the SDC defines its mission as being to promote scientific research in the field of development cooperation and humanitarian aid and to support academic training and the teaching in these subject areas.

Objectives defined by the Confederation

The universities of applied sciences and arts shall intensify their special role as an engine of innovation at the interface between practice and science. They shall expand their cooperation with implementing agencies and other universities, network their research activities and assure the transfer of research results.

Hence, application oriented research in cooperation with partners in developing and transitional countries offers universities of applied sciences and arts a good opportunity to position themselves in the international research environment and to intensify their international networking. At the same time aR&D provides the basis for making teaching responsive to requirements placed on graduates in an international environment.

2. Experiences

Currently there are at least 50 UAS branches, departments and universities of teacher education involved in a cooperation with developing and transitional countries. Some of these UAS already have competence centers for cooperation with D&T countries (e.g. the Center for Development and Cooperation of the Bern University of Applied Sciences and the Institute of International Cooperation in Education of the PHZ in Zug) or are creating them. But their involvement mostly takes place on the

level of individual departments and emerges from the initiative of individual teachers who are interested in the subject area. Moreover, at different UAS adult education modules are being extended to development and cooperation subjects and sustainability. Hence, the cooperation with development and transitional countries is certainly important for some UAS, although in their formal mandates (mission, strategies of the UAS) there is no explicit mention of the priority of the subject.

Potential and benefits of this kind of cooperation are presented in the evaluation of the SDC financed program Initiation of Research Partnerships with D&T Countries and elsewhere.

There is evidence that these projects enable the UAS to build competences and offerings which are not only growing in importance for D&T development and cooperation agencies, but also generally speaking in the context of a globalized world economy.

The cooperation promotes the national and international networking of the UAS. The UAS cooperate both with universities and universities of applied sciences and arts as well as with private enterprises and NGOs in D&T countries. In Switzerland this results in cooperations between universities and companies. The cooperation leads to greater competence in the management of research projects both in the Swiss UAS as well as in the D&T partners. It permits student exchanges and the establishment of new courses. Frequently, what results is a modification / enhancement of curricula and teaching methods and the bond between research and teaching is improved.

Besides this direct, practical benefit for the UAS, the cooperation with developing and transitional countries also promotes ethical solidarity and aspects of foreign policy (international positioning of Swiss research).

The experience in the competition for research funds available from the SDC and the Swiss National Scientific Foundation (SNF) for projects with D&T countries reveals the potential of application-oriented research (as comparative advantage of the UAS), in comparison to basic research in this field. However, the public funds available to finance activities like these are relatively modest and potential partners from the private sector willing to finance such projects must first be convinced of the benefits of this kind of cooperation. Hence, while the benefits for the UAS justify increased involvement in this area, the financial arrangements pose an enormous challenge.

3. Mission

In the context of an increasingly globalized economy and society, the Swiss Universities of Applied Sciences and Arts have their own interest in cooperating with developing and transitional countries on teaching and research. This is their way of assuming responsibility for balanced global development. The interaction and cooperation with partner institutions in D&T countries form the foundation on which students and teachers in teaching and research can come to grips with development cooperation and, by doing so, acquire and deepen their competences in an international and intercultural context.

4. Objectives

General

- Universities of applied sciences and arts and their partner institutions in developing and transitional countries expand their teaching and research capacity in matters related to global sustainability and development.

Research objectives

- Build knowledge and research capacities in application-oriented research at the UAS on the personnel and institutional level and at the partner institutions in D&T countries.
- Promote knowledge transfer between teaching, research and application and between the UAS and the partner institutions in D&T countries.

Teaching objective

- The UAS offers its graduates opportunities to acquire expertise and methodological competence in matters related to development and intercultural cooperation.

Instruments

- Research partnerships with D&T countries
- Experience and knowledge sharing by forming networks, by educational opportunities for teachers and students and by exchange programs for teachers and students.
- Courses on the subject Development and Cooperation/Sustainability.
- Institutionalized transfer of the results of application-oriented research into teaching and practice by cooperation with users (private business, public administration and society).

5. Organizational form

General

For the implementation of the strategy the KFH has provided for three measures:

1. Establishment of a Development and Cooperation Office
2. Agreement with SDC
3. Establishment of a network

The Development and Cooperation Office

The DC Office is part of a general secretariat. It is located by contractual agreement at an UAS. The costs of the DC Office are born by:

- Contributions from the universities of applied sciences and arts
- Contributions from other associated organizations which are recipients of services
- Contributions from the SDC program
- Overhead contributions from research and service assignments generated by the network (3% of the overall turnover volume, maximum of CHF 10,000.00)
- Proceeds from contributions for events
- Proceeds from other services.

The DC Office

- Organizes in a suitable manner a network among researchers and teachers of the UAS and UTE, research, and services who are interested in cooperation with D&T countries,
- Implements the SDC program Promotion of Research Partnerships of Swiss Universities of Applied Sciences and Arts with Developing and Transitional Countries,
- Seeks outside the SDC additional funding for teaching and research partnerships with D&T countries,
- Offers network members and the institutions supporting the DC Office services against a reasonable charge for the costs,
- Mentors as much as time will allow working groups arising in the context of the network,
- Assures information and experience sharing both within and without the organization,
- Organizes conferences and educational events for the members of the network,
- Represents the network to the public,
- Maintains contact with other institutions and networks with a similar or identical orientation, especially with those in university environments
- Is controlled by a Steering Committee consisting of representatives of all 7 UAS.

The DC Office is managed by one coordinator (20 percent part-time appointment). The coordinator is provided with additional secretariat and bookkeeping resources. Requirements for position: researcher with experience in cooperation with D&T countries, leadership position or experience at an UAS.

The Steering Committee (SC)

- Submits a proposal to the general secretariat for the election of the coordinator
- Manages the DC Office strategically (defines focal points, drafts development plans etc.)
- Approves the DC Office's annual program
- Monitors the performance of the SDC program and if needed sends a proposal to the KFH
- Nominates the representatives of UAS and Universities of Teacher Education (UTE) in the approving body of the SDC program
- Supports and advises the coordinator
- Approves the reports of the coordinator
- Reviews budget and accounts and communicates to the attention of the KFH
- Is chaired by one representative of the general secretariat of the KFH.

Agreement with SDC

The KFH concludes an agreement with SDC on the Program for the Promotion of Research Partnerships of Swiss Universities of Applied Sciences and Arts with Developing and Transitional Countries. The program is conducted by the DC Office.

Tasks of the DC Office for the SDC program:

1. Inform target recipients (UAS and UTE) about program
2. Compose a team of experts to advise project writers and to process project applications for consideration by the Assessment Committee, (Experts Pool)
3. Execute the resolutions of the Assessment Committee, secretariat of the Assessment Committee,
4. Acquire evaluation reports and preparation for the Assessment Committee,
5. Handle the financial transactions related to the program,
6. Represent the program in public,
7. Write reports to be sent to the KFH.

(The tasks and the principles of the composition of the Assessment Committee are specified in the agreement with SDC.)

Tasks of the KFH

Conference

- Resolution to establish the DC Office (incl. financing) and decision on location
- Concluding agreement with SDC regarding program
- Approval of program reporting to be sent to SDC.

General secretariat

- Agreement with UAS regarding location of DC Office
- Head of Steering Committee
- Election of coordinator
- Representation of program to the SDC.

Network

To anchor the subject of development and cooperation and the processing of the SDC program to the UAS a network consisting of interested UAS, extensions or departments/institutions and teaching is established.

A network offers the following advantages:

- Existing resources can be brought together without heavily hierarchical administrative structures and processes.
- The extension of the structure can take place in steps on the basis of concrete experiences and by means of sharing between those interested in the subject and involved partners. This means that, to the extent which new UAS participate, the subject area will be on a broader footing.
- The subject is developed on the basis of effective benefit for the participants, not solely on the basis of the institutional mandate.

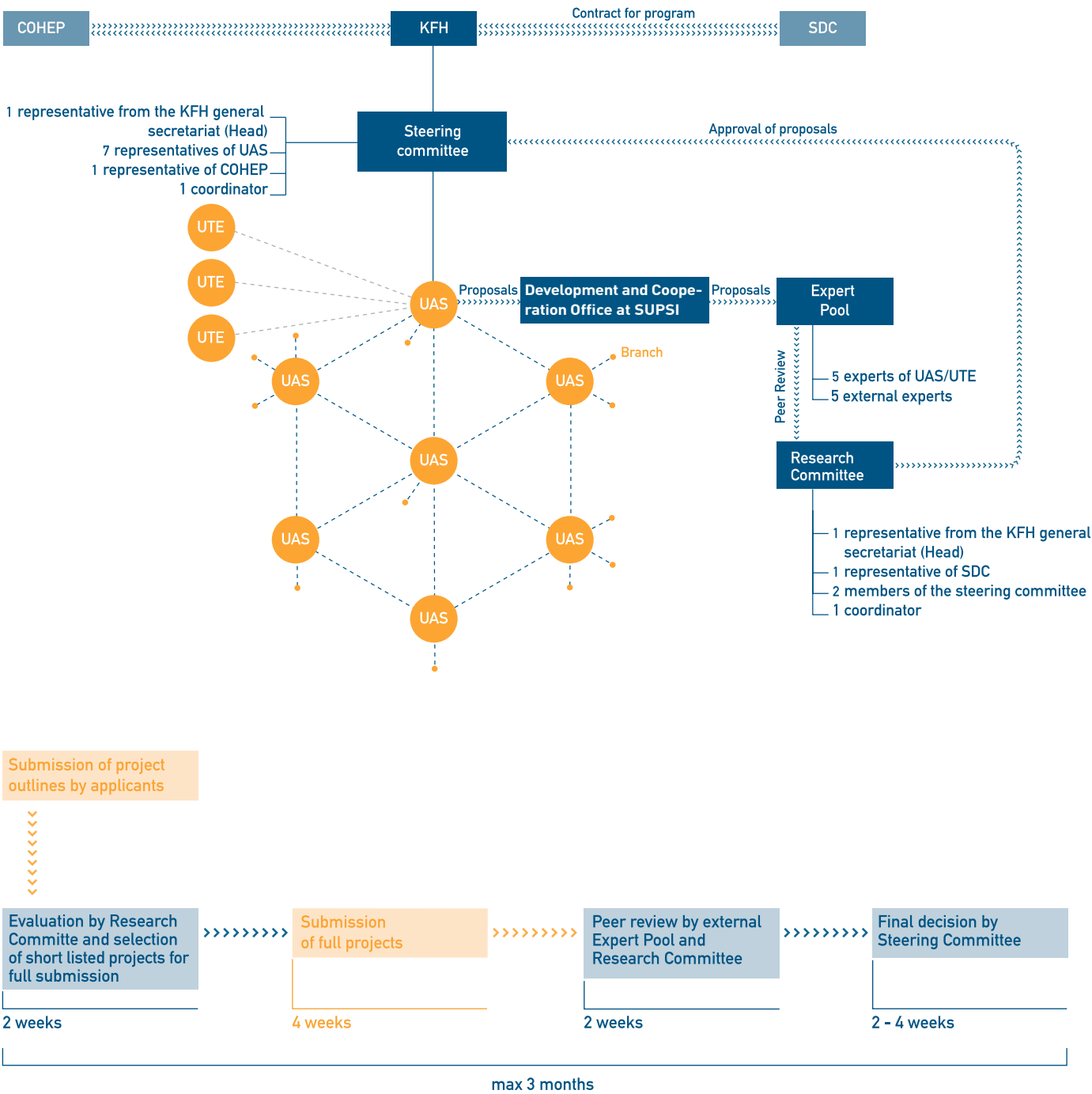
Purpose

By means of the effective networking of the UAS or their institutions and the interested teachers and in close cooperation with additional partners (public administration, public and private corporations, etc.) the following should be achieved:

- Acquisition and exchange of knowledge and skills (competences) in the field of development cooperation.
- Reinforcing the role of the UAS in the field of Development and Cooperation by external and internal communication of competences and comparative advantages of the UAS
- Support of the UAS in making contacts with partner institutions D&T countries
- Influencing the awarding of research funds, and mobilizing funding for activities of the UAS in the field of DC.



Instruments & Procedures



Steering and Research Committees

Steering Committee

Anne Crausaz Esseiva ^{1,2} President	General Sekretariat Rector's Conference of the Swiss UAS
Claudio Valsangiacomo ³ Head of KFH Development and Cooperation Office (non voting member)	Scuola universitaria della Svizzera italiana
Wiltrud Weidinger ⁴	Pädagogische Hochschule Zürich
Franco Gervasoni	Scuola universitaria professionale della Svizzera italiana
Mark Jaeggi	Zürcher Fachhochschule
Lucas Luisoni	Haute École Spécialisée de Suisse Occidentale
Thomas Heim ⁵	Fachhochschule Nordwestschweiz
Gülkan Akkaya ⁶	Hochschule Luzern
Albin Reichlin ⁷	Fachhochschule Ostschweiz
Kurt Wüthrich	Berner Fachhochschule

- ¹ until December 2009 Hans-Kaspar von Matt (KFH)
² until June 2010 Andrea Aeberhard (KFH)
³ until August 2008 Federico Flückiger (SUPSI)
⁴ until November 2011 Markus Diebold (PHZ)
⁵ until November 2011 Urs Mühlethaler (FHNW)
⁶ until November 2011 Walter Schmid (HLU)
⁷ until June 2009 Peter Wieser (FHO)
⁸ until September 2011 Dominique Simone Rychen (SDC)

Research Committee

Anne Crausaz Esseiva ^{1,2} President	General Sekretariat Rector's Conference of the Swiss UAS
Claudio Valsangiacomo ³ Head of KFH Development and Cooperation Office (non voting member)	Scuola universitaria della Svizzera italiana
Jon-Andri Lys ⁸ SDC Representative	Swiss Commission for Research Partnership with developing Countries
Lucas Luisoni	Haute École Spécialisée de Suisse Occidentale
Kurt Wüthrich	Berner Fachhochschule

Expert Pool

5 experts from UAS/UTE

5 external experts

The importance of true partnerships for applied research in developing and transitional countries

In the context of an increasingly globalised economy and society and in the failure of the globalised financial economy to address the true needs of D&T country facing more and more increasing poverty, the international academic world should cooperate with D&T countries on teaching and research mainly focusing on the Millennium Developing Goals. Eradication of extreme poverty and hunger, universal primary education, gender equality, reduction of child mortality, improvement of maternal health, combat of epidemics (especially HIV and tuberculosis), ensuring environmental sustainability are all issues that should be addressed by the international research community. The fact of cooperating all together focusing on this issues will significantly improve not only the personal enrichment of the single individuals, but also the prevention of international armed conflicts. This is the way of assuming responsibility for balanced global development of researcher of the whole world. The interaction and cooperation with partner institutions in D&T countries form the foundation on which students and teachers in teaching and research can come to grips with development cooperation and, by doing so, acquire and deepen their competences in an international and intercultural context. The main concern when research partnerships are formed is to strengthen the total capacity of all those involved for doing effective research, both on the individual and on the institutional level.

The 11 principles for research partnerships, developed by the Swiss Commission for Research Partnerships with Developing Countries (KFPE) have been adopted one to one in the KFH strategy for development and cooperation. These principles have been followed by those submitting research project requests taking into account the specific context. Words like mutual, together, share, transparency, collaboration, equitably are relevant for the philosophy adopted by KFPE as well as for the philosophy of this KFH program.

Further criteria for research in and with D&T countries should however include also:

- Application research and development should be preferred to fundamental research. In other words, project outputs should rather favor application-oriented issues than increasing the citation index of authors.
- Realization of applied research and development on subjects relevant to development in the particular country where the project is conceived.

- Building of knowledge and research capacities in the field of applied research in the partner organizations (individual and institutional capacity development).
- High degree of originality, potential (scientific, economic, social, ecological, etc.) or innovative ideas are preferred.
- Suitability for valorization of results and sustainability (spread, practical application, political development).
- Gender: as there is no sustainable development without gender empowerment, its contribution to gender justice should be integrated into the design and implementation of the research project from the beginning.
- Development of research methods and topics that have a good potential of replicability.
- Work on fields of study oriented towards the search for improving global sustainability.

Further, while internationalisation of universities represents a big opportunity for the academic institutions of industrialized countries in terms of visibility and image, any type of international exchange program (student exchange, research partnership, educational or teaching programs) should be based on sustainable ethical principles. Competitive research in the domain of Development and Cooperation should mandatory include all of the above principles and substantive criteria in order to guarantee a minimum of ethical philosophy and equitable final results for the partner country.



Claudio Valsangiacomo
Head of the KFH Development
and Cooperation Office

Guidelines for the Calls for proposals



Claudio Valsangiacomo and Elena Torrisi
of the KFH Development and Cooperation
Office (at the Swiss University of Applied
Sciences and Arts of Southern Switzerland).

The program supports universities of applied sciences and arts (UAS) or universities of teacher education (UTE) working in cooperation with developing and transition countries on projects involving applied research and development.

For this purpose a UAS/UTE submitting a request cooperates with a competent institution in the partner country which has an interest in a mutual transfer of know-how and a research partnership with a Swiss UAS/UTE and is willing to make a contribution towards this end.

The program is committed to solidarity with developing and transition countries and promotes international opening and worldwide partnership cooperation among Swiss Universities of Applied Sciences and Arts.

The following goals of the program are binding for the cofinancing of the submitted projects:

- Realization of application-oriented research and development (aR&D) on development-relevant subjects by Swiss UAS/UTE in cooperation with partner institutions in development and transition (D&T) countries.
- Building and expansion of knowledge of research capacities on the institutional and individual level at partner institutions and UAS/UTE.
- Knowledge transfer in connection with aR&D between the participating institutions.

The three objectives are basically valid for every project. In this context, the realization of aR&D related to development relevant subjects forms the core of the program and, hence, a focal point in assessing co-financing requests (cf. Chapter 6, Criteria of the Selection of Co-Financing Requests). In addition, the following principles are indispensable to achieving the stated objectives:

- The technical-scientific knowledge transfer should be designed to achieve a knowledge sharing in the sense of “mutual learning for change.”
- The building of competences is oriented both towards expertise and methodology as well as abilities in relation to intercultural cooperation.

Further information on more detailed procedure can be obtained on our website (www.kfh.ch/dc).

Annual reports (summary)

Annual report 2006

In 2000 the Swiss Agency for Development and Cooperation established a program for encouraging research partnerships between the Swiss Universities of Applied Sciences and Arts and developing countries. The program was initiated by Swisscontact, with a working group directed by Arthur Gunter, former Head of the University of Applied Sciences of Eastern Switzerland. In early 2007, the SDC made contact with the KFH asking them to take over the program for the following financial period. KFH established therefore a Steering Committee and gave it the mandate to develop a strategy, an organizational concept and an implementation plan for dealing with the program. Placed under the direction of Werner Inderbitzin, University of Applied Sciences of Zürich, the working group developed a concept under which the mission and strategy have been endorsed by the KFH on September 21st and the organization on December 14th. For implementing the strategy and SDC programs, KFH established a DC Office, whose mandate is to support the network of researchers interested in the cooperation issue with developing countries and find ways to funding projects.

Annual report 2007

The SDC funds the development and establishment of research partnerships with developing countries with 2.5 million CHF for the years 2007-2011. The KFH signed an agreement in this regard with the SDC. A DC Office was established for the strategy implementation of the SDC program. Following a tender to which four Universities of applied sciences and arts responded, the KFH DC Office was attributed to the University of Applied Sciences and Arts of Southern Switzerland (SUPSI). An agreement between the KFH and the SUPSI regulates powers and responsibilities of both parties. The SUPSI appointed Federico Flückiger as leader of the KFH Development and Cooperation Office. A steering committee for strategy implementation, composed by delegates from all UAS, has been set up. The committee also includes a representative of the COHEP (Swiss Conference of Rectors of Universities of Teacher Education), the program has been in fact opened to UTEs. Within the deadline for the first call for proposal of 1st October, 17 proposals were submitted and 5 were funded. A first "Information day on development and cooperation" has been organized at the University of Teacher Education Central Switzerland in Zug (60 participants). Together with presentations of projects by UAS researchers there were contributions from the KFH DC Office (Federico Flückiger) from the KFH General Secretariat (Hans-Kaspar von Matt) and the UTE Central Switzerland (Markus Diebold).

Annual report 2008

Since august 2008 Claudio Valsangiacomo is the new head of the KFH Development and Cooperation Office at SUPSI. The former head of the office, Federico Flückiger, has been appointed to other functions as head of the informatics department at the Fernfachhochschule in Brig. Elena Torrissi, in charge of the administration, has been on maternity leave for 5 months and was substituted by Viola Tettamanti. Among the most relevant activities of the CO there are: the organization of the second and third call for proposals, the development of an internet platform for automatic submission of projects, the organization of the second "Information day on development and cooperation" at the Bern University of Applied Sciences (70 participants). Together with presentation of projects by UAS researchers there were contributions from the State Secretariat for Research (Mauro Dell'Ambrogio), the Swiss Agency for Development and Cooperation (Dominique Simone Rychen), Swisscontact (Urs Egger) and ProGender (Heike Wach).

Further, the DC Office was active in coaching young researcher in the design of new project and application to other funding agencies such as the Swiss National Science Foundation, and in organizing two meetings of the Steering Committee, two meetings of the scientific Committee and one meeting of the expert pool. Within the deadlines for the calls for proposals of 1st April and 1st October, 19 and 21 proposals were submitted. Out of 40 proposals, 9 were funded. The Holcim Awards Acknowledgement prize 2008 Asia Pacific has been given to Tom Schacher (also member of SDC), a UAS researcher within the KFH-DC program.

Annual report 2009

Among the major activities of the DC Office, beside the routine meeting of the Steering Committee, Research Committee and Expert Pool, there are the organization of the fourth and fifth «call for proposals», the organization of the third "Information day on development and cooperation" at the College of Engineering and Architecture of Fribourg (60 participants). Together with presentations of projects by UAS researchers there were contributions from the Commission for Research Partnerships with Developing Countries (Jakob Zinsstag), from the Swiss National Science Foundation (Elisabeth Schenker) and from the Swiss Agency for Development and Cooperation (Anton Stadler).

Within the deadlines for the calls for proposals of 1st April and 7th September, 25 and 21 proposals were submitted. Out of 46 proposals, 10 were funded. The sub-

mission procedure has been slightly changed starting with the fifth call by dividing the submission procedure in two steps. In a first step researcher were asked to submit an outline of the project, the Scientific Committee selected then a short list of proposals to be submitted as “full projects” within one month. External peer review and final decision by the Steering Committee followed than the regular procedure.

In a publication of the Commission for Research Partnerships with Developing Countries two out of twelve success stories were from UAS (see www.kfpe.ch, Success Stories). Within the call for proposals SNF-SCOPES (Scientific cooperation between Eastern Europe and Switzerland), financed by SDC, four UAS projects have been funded.

Further, the DC Office participated together with other Swiss research institutions to the external evaluation of research activities promoted by the Swiss Agency for Development and Cooperation.

Annual report 2010 (January–September)

A last call for proposals, the sixth, has been organized during spring 2010. Within the deadline of 2nd April 25 proposals were submitted and 3 were funded. In June an external evaluation has been commissioned to KEK-CDC Consultants, a company specialised in consulting public administrations and non-profit organizations, with particular skills in international cooperation, humanitarian aid, integration, vocational education, labor markets, welfare policy, social pedagogy, and public management. KEK performed already in 2006 an evaluation of the first phases of the KFH-DC activities. The final report is available on the internet page of KFH: www.kfh.ch/dc.

Some of the UAS research found again broad recognition internationally, such as the research on post-disaster housing and community reconstruction by Jennifer Duyne Barenstein and Daniel Pittet (World Habitat Research Centre at SUPSI) which resulted in a contribution to a handbook of the Worldbank on this topic. And the handbook of social work in the Russian penal system, which was one of the results of a research project of the FHNW, by Elena Wilhelm.

Annual report 2011

The 4th Information Day took place in Bellinzona on the 11th March 2011. Around 70 participants attended the event. The research policy in development and cooperation has been illustrated by SDC and KFPE invited speakers. On 17th November 2010, within a meeting with DSC and KFH it was decided to continue the financial support of the KFH programme until the end of 2013. The 7th Call for proposals was launched on May 2011. Within the deadline of 10th October 34 proposals were submitted and 8 were funded.

Annual report 2012

The 5th Information Day took place in Zurich on the 7th December 2012, focusing on the partnership between the UAS and NGOs for joint activities in development and cooperation. The last call for proposals, the 8th, was launched on January 2012. Within the deadline of 2nd March 24 proposals were submitted and 9 of them were funded. This was the last call for proposals within the program, a new instrument for funding research in development and cooperation has been launched jointly by the SNF and SDC, www.r4d.ch

Annual report 2013

The main activity of the last year of the program is related to the conclusion of all ongoing projects and the preparation of the present publication. A total of 186 projects have been submitted during the last 8 calls for proposals, 44 of them have been funded. The KFH DC Office would like to express a special thank to the Swiss Agency for Development and Cooperation for the great support. The definition of the new tasks of the KFH Development and Cooperation Office after 2013 is in progress.



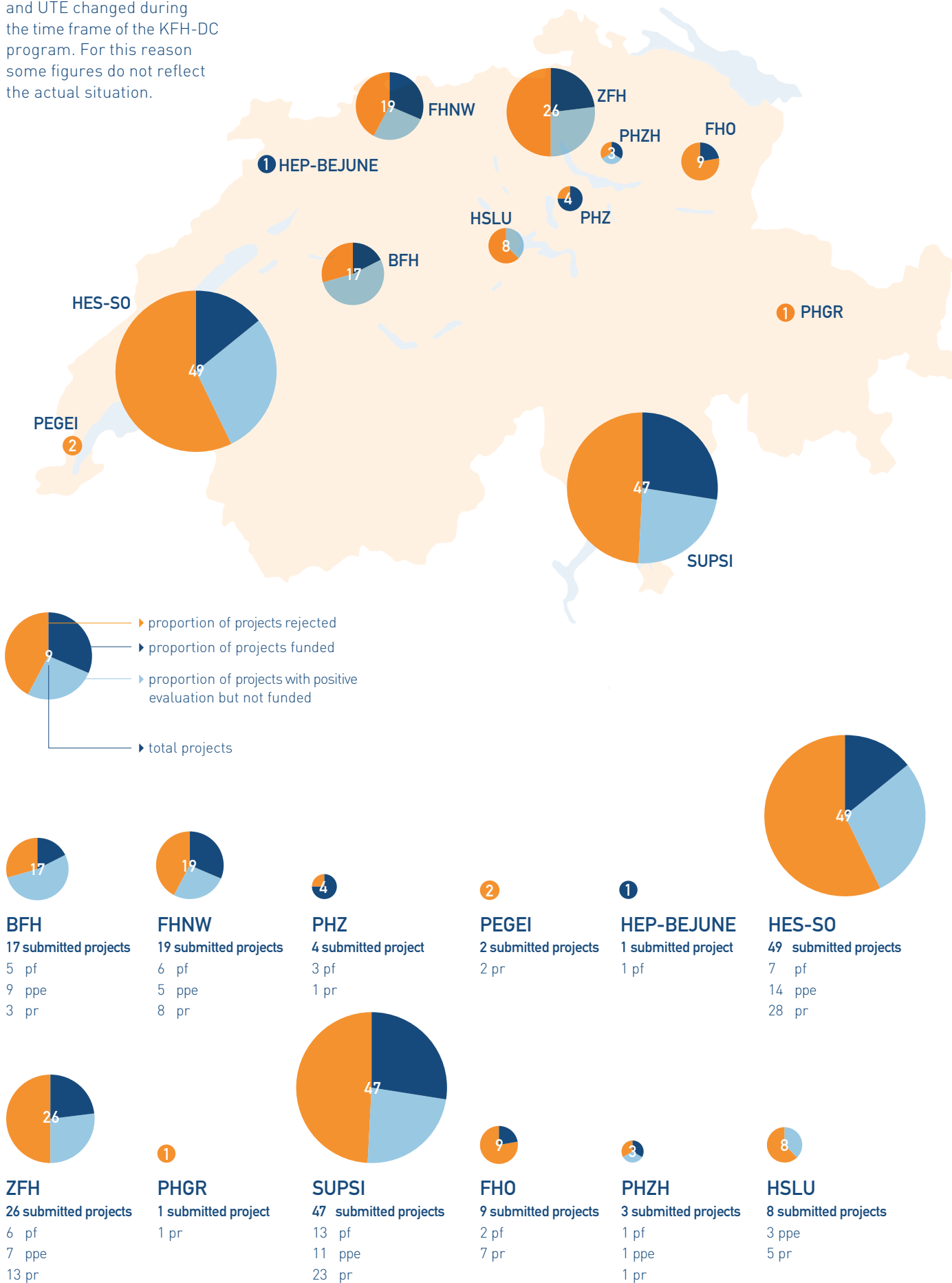
Projects: statistical data



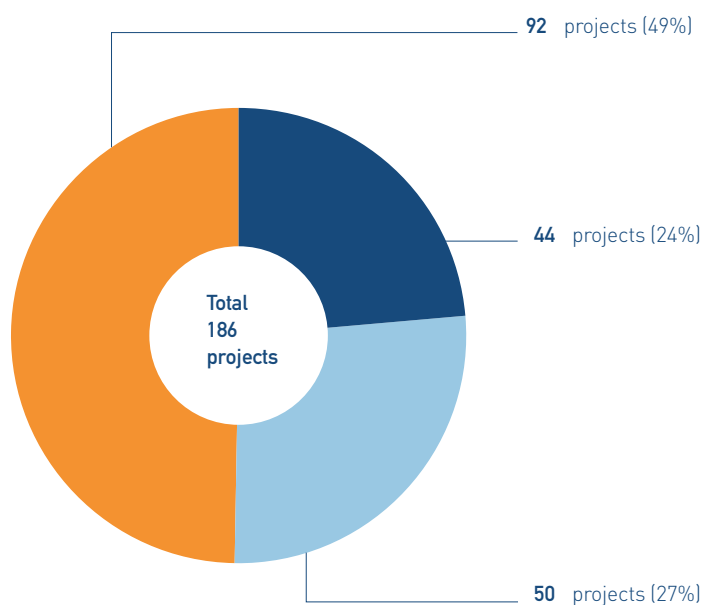
Applied research as a crucial tool
for development and cooperation.
(Armenia, 2005)

Projects by institution

The classification of UAS and UTE changed during the time frame of the KFH-DC program. For this reason some figures do not reflect the actual situation.

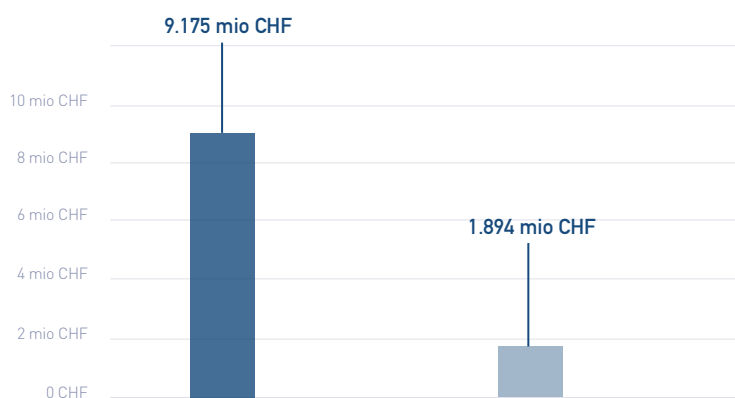


Quality of the projects



- Projects funded
- Projects with positive evaluation but not funded
- Projects rejected

Budget*

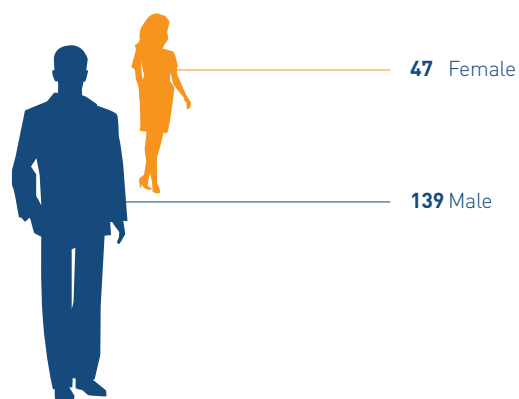


- Total requested funding for 186 submitted projects
- Total approved funding for 44 accepted project

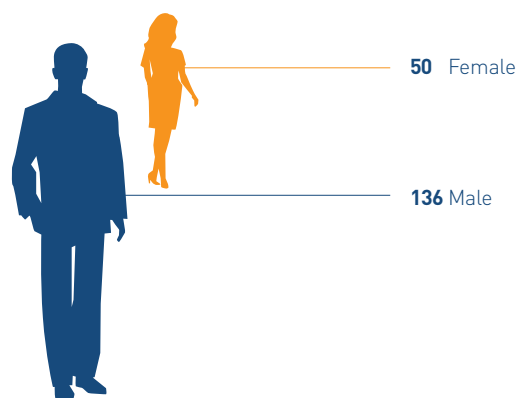
*The KFH fundings represent maximal 50% of the total costs of the projects.

Gender

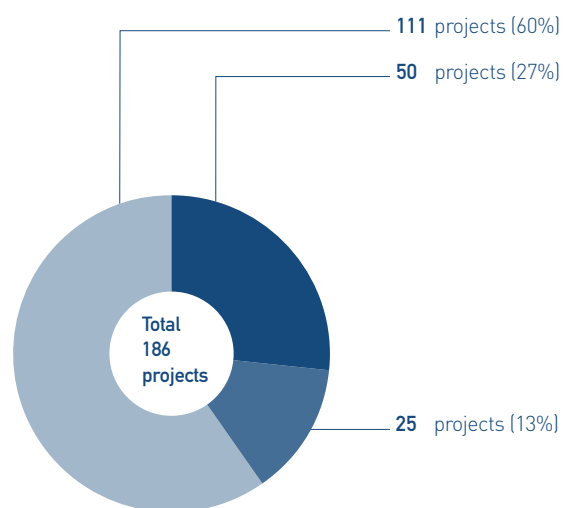
Gender Applicant – Switzerland



Gender Partner – DC Country

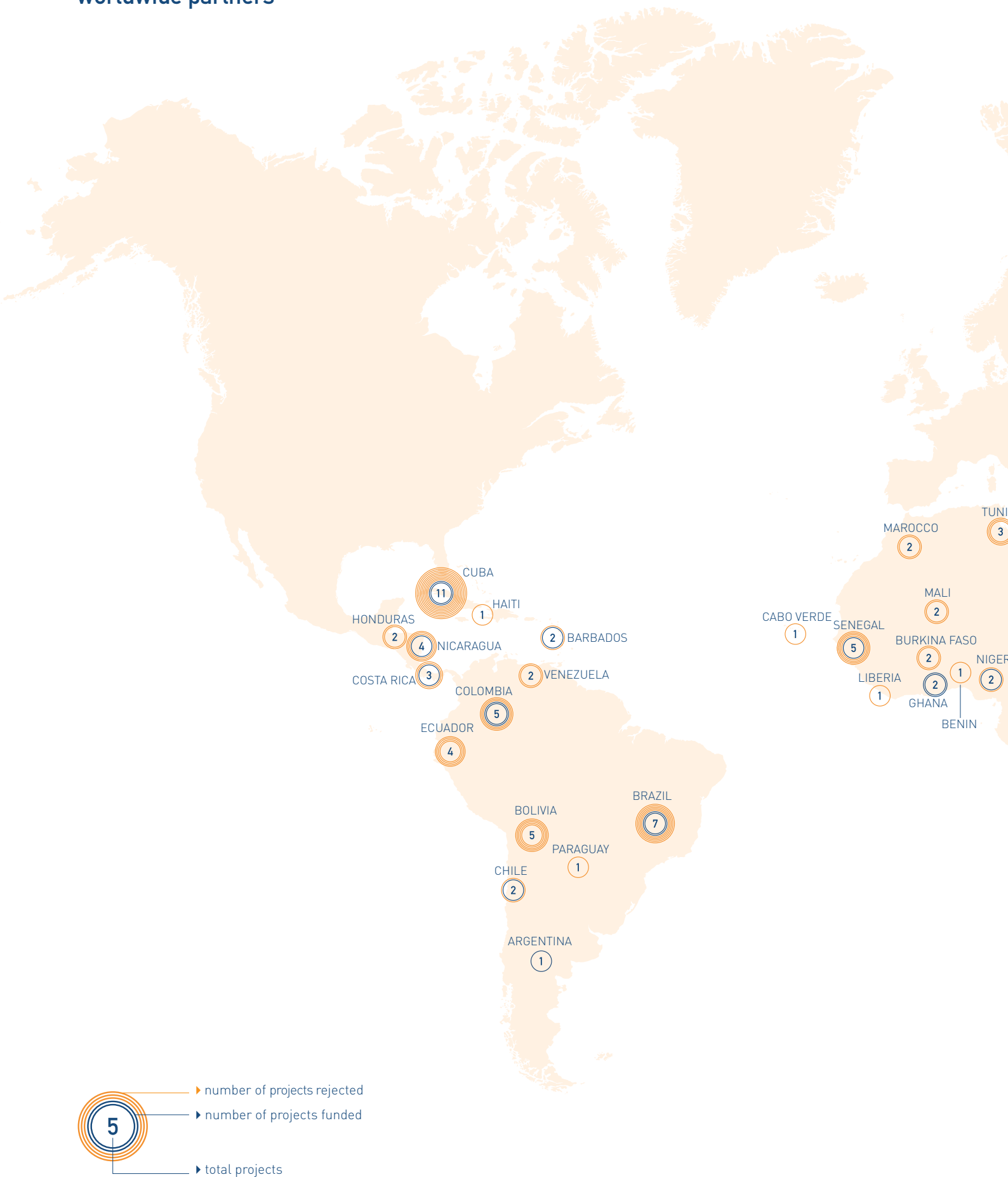


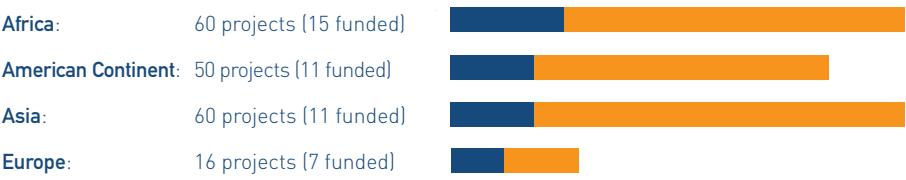
Type of project



- Preliminary phase projects, max 30'000 CHF
- Single / Individual projects, max 40'000 CHF
- Research projects, max 80'000 CHF

Projects' origin: worldwide partners





Relevance compared with the Millennium development goals

The Millennium Development Goals (MDGs) are eight international development goals that all 192 United Nations member states and at least 23 international organizations have agreed to achieve by the year 2015. They include eradicating extreme poverty, reducing child mortality rates, fighting disease epidemics such as AIDS, and developing a global partnership for development. In 2001, recognizing the need to assist impoverished nations more aggressively, UN member states adopted the targets. The aim of MDGs is to encourage development by improving social and economic conditions in the world's poorest countries. They derive from earlier international development targets, and were officially established at the Millennium Summit in 2000, where all world leaders present adopted the United Nations Millennium Declaration, from which the eight goals were promoted.



1 Eradicate extreme poverty and hunger

- Target 1A: Halve the proportion of people living on less than \$1 a day
- Target 1B: Achieve Decent Employment for Women, Men, and Young People
- Target 1C: Halve the proportion of people who suffer from hunger



6 Combat HIV/AIDS, malaria, and other diseases

- Target 6A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS
- Target 6B: Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it
- Target 6C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases



2 Achieve universal primary education

- Target 2A: By 2015, all children can complete a full course of primary schooling, girls and boys



7 Ensure environmental sustainability

- Target 7A: Integrate the principles of sustainable development into country policies and programmes; reverse loss of environmental resources
- Target 7B: Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss
- Target 7C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation
- Target 7D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum-dwellers



3 Promote gender equality and empower women

- Target 3A: Eliminate gender disparity in primary and secondary education preferably by 2005, and at all levels by 2015



4 Reduce Child Mortality Rate

- Target 4A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate



8 Develop a global partnership for development

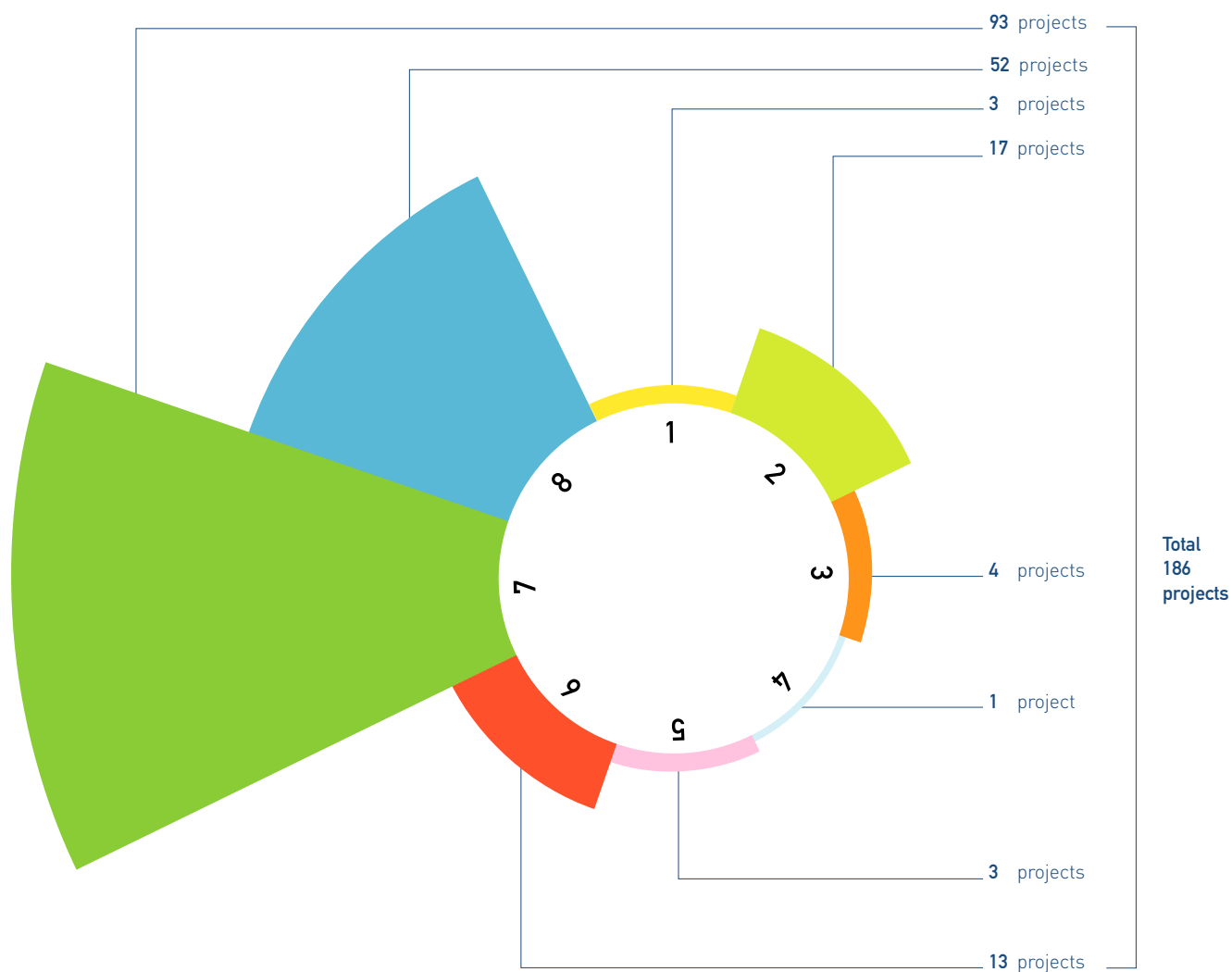
- Target 8A: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system
- Target 8B: Address the Special Needs of the Least Developed Countries (LDC)
- Target 8C: Address the special needs of landlocked developing countries and small island developing States
- Target 8D: Deal comprehensively with the debt problems of developing countries in order to make debt sustainable in the long term
- Target 8E: In cooperation with pharmaceutical companies, provide access to affordable, essential drugs in developing countries
- Target 8F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications



5 Improve maternal health

- Target 5A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio
- Target 5B: Achieve, by 2015, universal access to reproductive health

Projects by MDGs



Most of projects could be classified in a major MDG, only 12 projects were not classified

OECD List: eligible Countries

The DAC List is reviewed every three years. Countries are divided into income groups based on Gross National Income (GNI) per capita as reported by the World Bank, with the Least Developed Countries (LDCs), as defined by the United Nations, separately identified. Countries that have exceeded the high-income threshold for three consecutive years at the time of the review are removed from the List. In line with this review process, the Development Assistance Committee approved in October 2011 the List of Recipients of Official Development Assistance (ODA). www.oecd.org/dac/stats/daclist

Least Developed Countries	Other Low Income Countries (per capita GNI < \$1'005 in 2010)	Lower Middle Income Countries and Territories (per capita GNI \$1'006-\$3'975 in 2010)	Upper Middle Income Countries and Territories (per capita GNI \$3'976-\$12'275 in 2010)
Afghanistan	Kenya	Armenia	Albania
Angola	Korea, Dem. Rep.	Belize	Algeria
Bangladesh	Kyrgyz Rep.	Bolivia	*Anguilla
Benin	South Sudan	Cameroon	Antigua and Barbuda
Bhutan	Tajikistan	Cape Verde	Argentina
Burkina Faso	Zimbabwe	Congo, Rep.	Azerbaijan
Burundi		Côte d'Ivoire	Belarus
Cambodia		Egypt	Bosnia and Herzegovina
Central African Rep.		El Salvador	Botswana
Chad		Fiji	Brazil
Comoros		Georgia	Chile
Congo, Dem. Rep.		Ghana	China
Djibouti		Guatemala	Colombia
Equatorial Guinea		Guyana	Cook Islands
Eritrea		Honduras	Costa Rica
Ethiopia		India	Cuba
Gambia		Indonesia	Dominica
Guinea		Iraq	Dominican Republic
Guinea-Bissau		Kosovo ¹	Ecuador
Haiti		Marshall Islands	Former Yugoslav Republic of Macedonia
Kiribati		Micronesia, Federated States	Gabon
Laos		Moldova	Grenada
Lesotho		Mongolia	Iran
Liberia		Morocco	Jamaica
Madagascar		Nicaragua	Jordan
Malawi		Nigeria	Kazakhstan
Mali		Pakistan	Lebanon
Mauritania		Papua New Guinea	Libya
Mozambique		Paraguay	Malaysia
Myanmar		Philippines	Maldives
Nepal		Sri Lanka	Mauritius
Niger		Swaziland	Mexico
Rwanda		Syria	Montenegro
Samoa		*Tokelau	*Montserrat
São Tomé and Príncipe		Tonga	Namibia
Senegal		Turkmenistan	Nauru
Sierra Leone		Ukraine	Niue
Solomon Islands		Uzbekistan	Palau
Somalia		Vietnam	Panama
Sudan		West Bank and Gaza Strip	Peru
Tanzania			Serbia
Timor-Leste			Seychelles
Togo			South Africa
Tuvalu			*St. Helena
Uganda			St. Kitts-Nevis
Vanuatu			St. Lucia
Yemen			St. Vincent and Grenadines
Zambia			Suriname
			Thailand
			Tunisia
			Turkey
			Uruguay
			Venezuela
			*Wallis and Futuna

*Territory

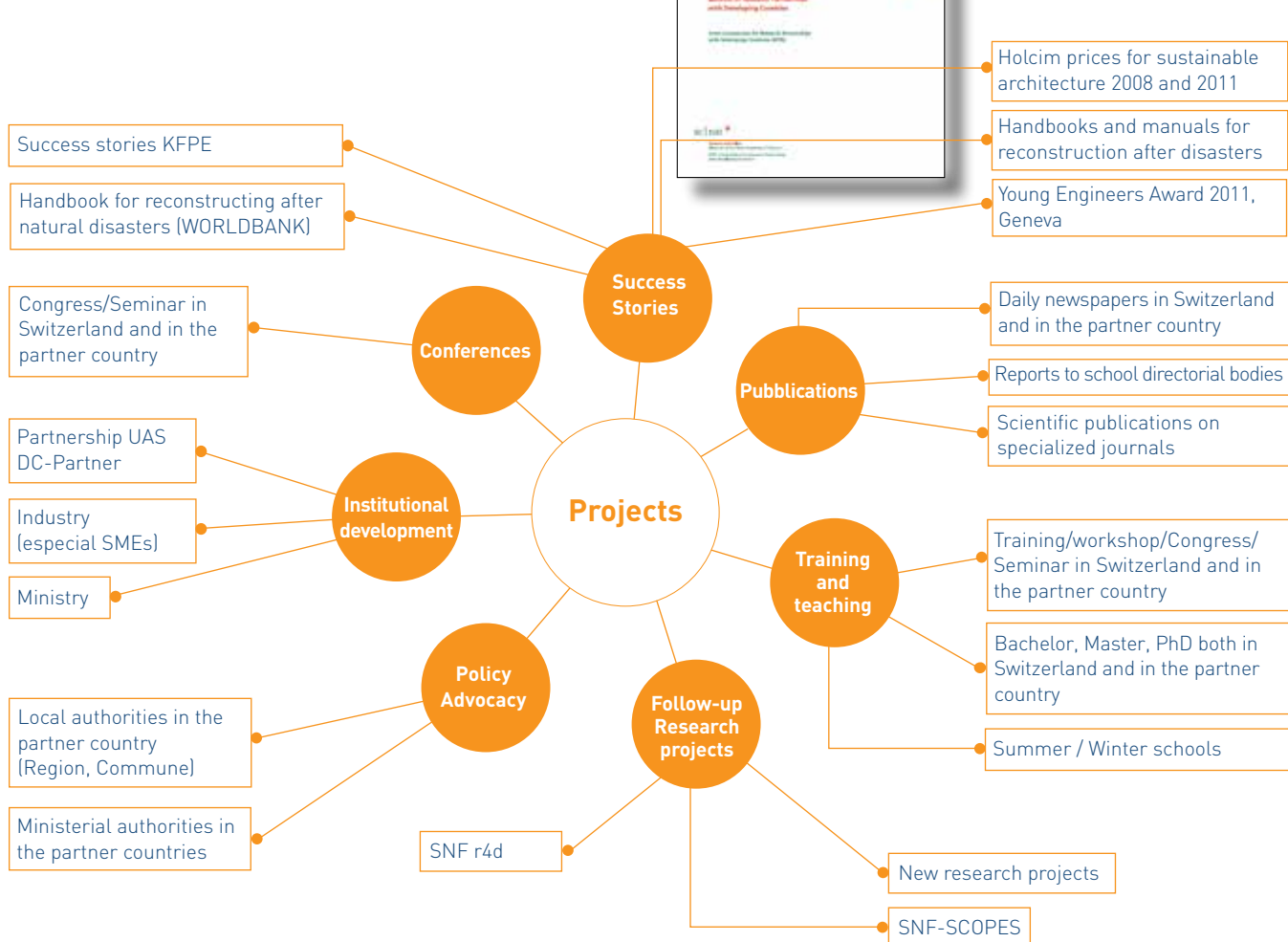
(1) This is without prejudice to the status of Kosovo under international law.

Projects by science area



Synopsis of projects' outputs

This synopsis illustrates the variety of outputs triggered by the funded projects. A concrete example is represented by the KFPE publication "Cooperating for Success", presenting 12 successful projects (2 are from UAS).







List of funded projects

All projects can be downloaded from www.kfh.ch/dc

Partnership as a commitment
for development and cooperation.
(Tajikistan, 2006)

Applied Research Partnerships with Developing and Transition Countries

Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Resource-Conserving Agriculture

Thematic focus

Agriculture, Resource conserving, mixed crops, undersowing

Year

2007

Project location

Chisinau, Balti, Moldova



Swiss Institution

Hans Ramseier
Swiss College of Agriculture (SCA), Zollikofen

Partner Institution

Boris Boincean
Scientific-Practical Center "Selectia" Balti
Valentin Crismaru, Chisinau

Description

Moldova is the poorest country in Europe and has barely recovered after the collapse of the Soviet Union. Farmers are battling with low produce prices and exorbitant costs for production goods (fertilizer, plant protection and fuels). It is particularly difficult for family farms, which should have received assistance when the country was privatized. A consequence of the continuing crisis is a wide-scale rural exodus. The aim of the project „Resource Conserving Agriculture“ is to develop an agricultural production system which will yield satisfactory harvests using a minimum of fertilizers and plant protection, and where farmers can produce the energy they need themselves.

Scientific experiments and strip trials on farms have attempted weed control through leguminous undersowing, and by using nodule bacteria of the legumes to produce nitrogen for the farming system. By mixing "Gold of Pleasure" (Camelina sativa) an age-old oil plant with traditional crops, will also be used to provide the fuel needed on the farm. Participating institutions from Moldova as well as researchers from Switzerland can benefit from collaborating in research.

Development relevance

The aims of the project are included in the Millennium Development Goal 7.A: "Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources". Not only can natural resources be conserved, but CO2 emissions can also be reduced through undersowing plants and mixed crops.

The Millennium Goal 1.B is also central to our project: "Achieve full and productive employment and decent work for all, including women and young people". Higher incomes, particularly in rural areas, can reverse the effects of the rural exodus.



Countryside close to Chisinau. Much of the land is not farmed (fallow) because prices of produce are low, production costs high, and opportunities limited. The blue areas indicate fallow land



Infrastructures, machines, and equipment are in poor condition

Applied Research Partnerships with Developing and Transition Countries

Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Improving basic education through teacher activity and training

Thematic focus

Basic education, teachers, social inequalities

Year

2007

Project location

Brazil



Swiss Institution

Abdeljalil Akkari
Haute Ecole Pédagogique BEJUNE
Ch. de la Cible 45, 2503 Bienne

Partner Institution

Souza e Silva Rossana
Universidade Federal de Uberlândia
Av. João Naves de Ávila, 2121
Campus Santa Mônica Uberlândia - MG

Description

During the past few years, Brazil has been able to put into practice wide-ranging and successful educational reforms. There has been a dramatic expansion in basic education and in bringing new groups of the population into schools. However, Brazil is still a long way from reaching the educational quality necessary for a fairer society that will be better adapted to meeting the needs of economic globalization and the Information Age. There is a lot of research on basic education but most of this research looks at quantity rather than quality.

This project emphasizes that a central tenet in addressing quality in basic education is to hear teacher's voices in the field.

Development relevance

Brazilian economy has changed intensely over the last years and the country is now the tenth world largest economy. Access to basic education is nearly universal. However, serious problems related to quality, equity and inappropriate use of resources remain. Some of these problems are related to the fact that Brazil started to develop its teacher training institutions very late, and did not build strong pub-

lic educational institutions. As Switzerland experienced a qualitative shift in teacher training during the last decade, we discussed during the project the possibility of transfer of knowledge of the Swiss experience of teacher training to Brazil. In particular, we consider that the practical training of basic education teachers in Switzerland is relevant for the Brazilian context.



Schools in rural area are isolated and children have long distance to cover to attend basic education



Public schools in Brazil had better infrastructure during the last years but teacher's salaries remain low

Applied Research Partnerships with Developing and Transition Countries
 Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Geology, mineralogy and geochemistry of ochers in Rajasthan (India)

Thematic focus

Painting raw materials, colouring earths

Year

2007

Project location

Jaipur, Chittourgarh, Bhilwara, Udaipur - Rajasthan, India



Swiss Institution

Giovanni Cavallo, geologist
 Institute of Materials and Constructions, University of Applied Sciences and Arts of Southern Switzerland (SUPSI)
 CH-6952 Canobbio (TI, Switzerland)

Partner Institution

Manoj Pandit, geologist
 University of Rajasthan, Dept. of Geology
 302004 Jaipur (India)

Description

A precise and systematic knowledge of the materials used in the ancient and modern artistic objects represents the first step before projecting any conservation work. Earth sciences provide several analytical techniques for a better understanding of the origin, composition and even provenance of the raw materials used as pigments and for determining physical and chemical properties as durability, stability, compatibility; all these properties depend on the purity of the raw material. Earthy pigments and particularly ochres have been widely used from ancient times to date for decorating bodies, caves, religious temples and architectural surfaces.

The use of these materials is primarily related to their easy availability in all the countries and in different geological contexts being products of weathering of host rocks. Rajasthan State in the NW of India is one of the most important locales in the production and export of ochres and clay pigments.

The project provided a well-needed fill up in the knowledge and in identifying and selecting appropriate type for restoration works in terms of stability and compatibility. In addition, the study would also open new fields for Indian researchers, being the application of geological sciences to cultural heritage conservation a new opportunity.

Development relevance

The cooperation between Indian and Swiss partners is principally developed on the basis of a mutual enrichment of competencies and applied oriented horizons. The experience of the Indian partner on geology and of the Swiss partner on materials used for decorating architectural surfaces found a common interchange and the basis for a long-term cooperation is grown up.

The study will be very useful for people working in the field of conservation and restoration of cultural heritage both in India and Switzerland. The information acquired will be used as teaching material during the lectures held at BA and MA courses.



Mine of clay-rich hematite (red ochers) at Sawa (Rajasthan)



People working in a mine of white clay (kaolinitic clay) at Sawa (Rajasthan)

Applied Research Partnerships with Developing and Transition Countries

Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Coastal livelihoods and post-tsunami resettlement in Sri Lanka

Thematic focus

Post-disaster reconstruction, resettlement, livelihoods

Year

2007

Project location

Hambantota and Ampara District, Sri Lanka



Swiss Institution

Jennifer Duyne Barenstein
World Habitat Research Centre
University of Applied Sciences and Arts
of Southern Switzerland (SUPSI)

Partner Institution

Madduma Bandara and P. Wickramagamage
Centre for Environmental Studies, Department of Geography
Peradeniya University, Kandy, Sri Lanka

Description

Following the Indian Ocean tsunami of 2004 all affected countries expressed their determination to reduce the vulnerability of affected populations by relocating them to a safe distance from the sea. In particular in the case of Sri Lanka this resulted in the resettlement of thousands of people. With the aim of gaining a better understanding of spatial, ecological and social factors affecting the relocation outcome the project addressed the following research question:

- What impact did relocation have on people's livelihoods?
- What is the influence of age, gender and occupation on relocation outcomes?
- How do spatial factors such as distance of the relocation

site from the place of origin, services and markets affect people's coping capacity?

- How did relocation affect communities' social capital and cohesion?

The research aimed at seeking answers to these questions through empirical research in a sample of twenty relocated villages in Hambantota and Ampara district. It was found that in most cases people enjoyed better housing conditions than prior to relocation. The research findings confirmed, however, that resettlement in most cases had a negative impact on livelihoods, access to food, education and on social cohesion.

Development relevance

There is a growing recognition that resettlement often has negative social impacts and accordingly should be avoided as much as possible. However, due to the increased frequency and intensity of natural disasters resettlement is often unavoidable. This calls for the need to better understand how the potential negative impacts of resettlement can be minimized or mitigated.

The research aimed at contributing to enhance knowledge on the factors that determine positive or negative outcomes of relocation. Such knowledge is of crucial importance for an informed management of resettlement and for preventing avoidable human suffering.



A graduate student from Peradeniya University conducting a household survey



A signboard advertising a resettlement site in Hambantota district

Applied Research Partnerships with Developing and Transition Countries

Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Assessing the environmental impact of building technologies in Kutch District, Gujarat, India. A training-cum research project

Thematic focus

Building technologies, environmental impact

Year

2007

Project location

Kutch District, Gujarat State, India



Swiss Institution

Daniel Pittet
World Habitat Research Centre
University of Applied Sciences and Arts
of Southern Switzerland (SUPSI)

Partner Institution

Tejas Kotak Hunnarshala
Neelkant Chhaya, CEPT University
Ahmadabad

Description

The housing sector is generating worldwide substantial environmental impacts. It contributes to about half of the total energy consumption of high income countries and is responsible of a major share of greenhouse gas emissions also in development and transition (D&T) nations. Scientific data on environmental impacts of building technologies in D&T countries are rather limited and it is difficult to make informed choices aiming at reducing such impacts. The study aims at filling a gap in the assessment and of such impacts in India and in D&T countries in general. It is based on a detailed analysis of various walling technologies (traditional, modern and alternative).

The impacts have been assessed including the production chain of materials, their transportation on site, all construction procedures as well as the maintenance activities over fifty years, whereas the impacts due to demolition of the structures at the end of their life cycle have been evaluated through qualitative analysis. Environmental impacts are represented through indicators such as the total energy consumption, the share of non renewable energies (NRE), the amount of CO₂ emissions and water consumption. Various phases of production processes are represented separately in order to inform on their respective quantitative relevance.

Development relevance

This project is particularly relevant in terms of environmental sustainability because the housing sector contributes highly to environmental damages and knowledge on alternative technologies is essential for reducing such impacts. The project has also a strong partnership component in research implementation as well as in educational activities. Besides, theoretical training is completed by the involve-

ment of students in research activities and participate directly to improve the education level and research capacity in both countries. Indirectly, since the results demonstrate that traditional technologies present lower environmental impacts, a major use of those would increase local people's role in housing sector and participate to reduce poverty.



Local production of bricks



Construction of a house

Applied Research Partnerships with Developing and Transition Countries
 Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Dhajji, a traditional earthquake resistant building technique: Scientific verification through lab testing and development of training material

Thematic focus

Earthquake, construction, local seismic culture

Year

2008

Project location

Kashmir mountains, Pakistan



Swiss Institution

Tom Schacher
 Swiss University for Applied Sciences and Arts
 of Southern Switzerland (SUPSI)

Partner Institution

Qaisar Ali
 NWFP University of Engineering and Technology
 Peshawar, Pakistan

Description

Objectives

- Lab verification of earthquake resistance of dhajji structures.
- Preparation of scientific documentation.
- Preparation of training material for technicians and artisans.

Results

- Lab tests and numerical modelling have been done.
- Results will be presented at the 9th US and 10th Canadian Conference on EQ engineering in 2010.
- Construction manual has been prepared and is about to be printed by the National Disaster Management Authority, UN-Habitat and UNDP in Pakistan.
- PowerPoint lessons for training have been prepared and will be made available on a relevant website.

Development relevance

GOAL 7: ENSURE ENVIRONMENTAL SUSTAINABILITY,

Target 1: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources: The traditional Dhajji building method has been officially accepted by the government as an appropriate technique for dwellings in remote areas, a serious achievement for a country striving for modernity.

Target 4:

Achieve a significant improvement in the lives of [...] (slum) dwellers: The Dhajji techniques allows for a great number of disadvantaged people from remote areas to live in a safe and comfortable house.



Reduced scale model of a Dhajji house on the shake table of the Earthquake Engineering Centre of the NWFP University of Engineering and Technology Peshawar, Pakistan



Highly illustrated 40 page construction manual for the training of technicians and artisans

Project title

Thematic focus

Year

2008

Olten, Switzerland and Vologda, Russia



Elena Wilhelm, Project Leader Switzerland
School of Social Work FHNW

Olga Kurenkova, Project Leader Russia
Vologda Institute of Law and Economics

«Towards Social Integration» is a national and international project involving the Chair of Social Work and Social Psychology at the Federal State University «Vologda Institute for Law and Economics of the Federal Penal Service» (VIPE) and the School of Social Work at the University of Applied Sciences Northwestern Switzerland (HSA FHNW). The project continues the cooperation between the Swiss Agency for Development and Cooperation (SDC) and VIPE, which was handed over to the FHNW School of Social Work in 2008. Concretely, project work spans the social, economic, and educational spheres. In social terms, the project strives to humanise the Russian penal system by professionalising the social work undertaken within the country's prison

service. The systematic survey, collection, and discussion of knowledge and procedures aimed at enhancing the reintegration potential of prison inmates serves as a basis for developing a process-oriented methods handbook for social work in the Russian penal system. The first chapter of the prospective handbook have already been co-written by the Russian and Swiss team. Also, a common conceptual and theoretical basis has been elaborated as a foundation for joint project work.

The collaborative research project offered a platform for cooperation and the opportunity for formal and regular interaction with the Russian university. Informal relations with another Russian university (in Ryazan) have been established and the involvement of professional practice has proved a great success in both Russia and Switzerland. In Switzerland, the University of Basel's Institute for Eastern

European History, the Federal Ministry of Justice, and the Association for Probation Services in Eastern Europe have contacted us and sought cooperation. Further steps will be undertaken: The principal aim is to deepen the discourse between academic staff, practitioners, and students. New Project Leader will be Prof. Sigrid Schilling.
Contact: sigrid.schilling@fhnw.ch | +41 62 311 96 74.



Final Meeting.
Switzerland,
April 2009



Working on
the Concept for the
Handbook.
Switzerland, April
2009

Applied Research Partnerships with Developing and Transition Countries

Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Empowerment of social services and the role of social research in Bosnia and Herzegovina

Thematic focus

Inter- & transdisciplinary cooperation, social planning

Year

2008

Project location

Tuzla, Bosnia and Herzegovina



Swiss Institution

Barbara Schürch
University of Applied Sciences Northwestern
Switzerland UASNW

Partner Institution

Esmina Avdibegovic
University Tuzla

Description

The overall objective of this preliminary project was to establish a research partnership between the Department of Social Work of the University of Applied Sciences Northwestern Switzerland (UASNW), the University of Tuzla (Faculty of Philosophy/Dept. Social Work, Faculty of Medicine, Faculty of Special Education and Rehabilitation), the NGO Vive Žene Center for Therapy and Rehabilitation (as a representative of the NGO sector), and the state (Ministry of Justice and the Ministry of Labor and Social Policy, Tuzla Canton) in order to develop a joint research project design that focuses on a relevant theme and in addition serves as an example of an inter-disciplinary and trans-disciplinary

cooperation process, illustrating the cycle of practice, research, and policy.

In the context of this preliminary phase, a project team has been formed, the topic 'juvenile delinquency' as an urgent issue of the Bosnian society has been defined and a research design has been jointly developed.

Through this project all project stakeholders, i.e., the representatives of the social field, acquire experience with an inter- and trans-disciplinary analyzing, planning, and implementation process.

Development relevance

In Bosnia and Herzegovina, the context of the post-war situation and the transition from a socialist state to a federal democratic republic has created new challenges for the institutions and organizations working in the social field. This preliminary project and the planned main project are contributing to build up and strengthen the capacity of all stakeholders to generate findings in application oriented

research and in facilitating and promoting the transfer of knowledge between practice and research as well as between state and civil society. A multidimensional approach and the integration and participation of all interest groups in the social planning process foster solutions that are context based and needs-oriented.



Meeting with the
Rector of the
University Tuzla



Presentation of current
research projects of
all partners

Applied Research Partnerships with Developing and Transition Countries
 Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Community-Based Natural Resource Management: The Role of Communities, Tanzania.

Thematic focus

Integrated Conservation and Development Projects

Year

2008

Project location

Inyonga Division, Mpanda District, Rukwa region, Tanzania



Swiss Institution

Yves Hausser
 hepia, Filière Gestion de la nature
 150 route de Presinge
 CH-1254 Jussy, Geneva

Partner Institution

George C. Kajembe
 Sokoine University of Agriculture (SUA)
 Morogoro Box 3013

Description

The objective of the project was to acquire a better understanding of the complex interactions which determine the success or failure of participatory management of natural resources in Tanzania.

Focused on a complex of protected areas located in Western Tanzania, the project combined literature surveys, field case studies implemented by swiss and tanzanian students and "à la carte" training for the partners in an effort of capacity building.

Results confirmed the importance of natural resource to local communities and government and the potential this sector may play in poverty reduction.

Results equally demonstrated that several factors were hin

dering the realisation of CBNRM policies, among them the sector-based approach, the poor governance of the natural resource sectors and associated corruption, and the lack of coordination between stakeholders.

Results highlight the potential opportunities that conflict may represent as a basis of negotiated institutional arrangements for the sustainable management of natural resources. Last, the results call for a change in the approach of cooperation institutions, leaving the control attitude towards a bridge-builder and gate-keeper role.

This project emphasizes that a central tenet in addressing quality in basic education is to hear teacher's voices in the field.

Development relevance

The project was relevant to the MDG 7, ensure environmental sustainability. The project provided a better knowledge about biodiversity management and use in different types of protected areas and the findings suggest some possible improvements in the management systems. The project was thus in line with both national (PRSP) and international prio

rities in terms of development relevance.

Develop a global partnership for development :

The project promoted exchanges of experiences, knowledge and know-how, and lessons learned during the implementation of the applied research project in partnership with Tanzanian institutions.



Student of UASWS with a Village Game Scout checking the proper functioning of a camera trap



Wildlife monitoring training provided to Village game Scouts by Prof. Fischer C.

Applied Research Partnerships with Developing and Transition Countries
 Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Cities without Slums-Actions for Intervention in Slum Areas in Mozambique in the Context of Settlement Upgrading

Thematic focus

Slum Upgrading, Participatory Planning Process

Year

2008

Project location

Ilha de Moçambique, Nampula Province, Mozambique



Swiss Institution

Thomas R. Matta
 IRAP: Institute for Spatial Development
 University of Applied Science Rapperswil
 Oberseestrasse 10, CH-8640 Rapperswil

Partner Institution

Arlindo Dgedge
 IMPFA: Physical Planning Institute and Environment
 Training Centre, under the Ministry for the Coordination
 of Environmental Affairs

Description

The main goals of the project are to define a participatory land-use process by which local stakeholders, with the emphasis on the local community, design City Development Strategies that define their vision for their city, analyze its economic prospects, and identify priorities for action and investment.

In addition the objectives are: define methodologies of improving security of tenure for slum dwellers, upgrade slums and improve housing strategies, strategies for creating jobs, identify the availability of cadastre mapping and property data for individual properties and define alternatives to slum formation; based on interaction with the local stakeholders.

A teaching module will be elaborated with the emphasis on the importance of the use of GIS for data gathering, the research of economic opportunities within the slums and the elaboration of detailed maps and implementations plans.

Development relevance

The slum environment in Mozambique is recognized as a major problem for the sustainable development of the country. The Government of Mozambique, in order to provide continuity to its strategy of combating poverty which is the result of the MDG, elaborated an Action Plan for the Reduction of Absolute Poverty (PARPA) 2001-2005.

This project focused on Target 11 of Goal 7 "Ensure environmental sustainability" and by 2020 to have "achieved a significant improvement in the lives of at least 100 million Slum dwellers".



Inception workshop
 Ilha de Mocambique
 (August 2009)



Community proposal
 evaluation during the
 workshop (August 2009)

Applied Research Partnerships with Developing and Transition Countries
 Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Impact of Open Innovation Models to achieve a Sustainable Value Chain: A Sino-Swiss Applied Research

Thematic focus

Open Innovation, Sustainable Innovation, Crowd Sourcing

Year

2008

Project location

Hangzhou, China



Swiss Institution

Joellë Mastelic
 HES-SO Valais-Wallis

Partner Institution

Ning Cai
 Zhejiang University, Hangzhou, China

Description

"Made in China": does it really mean a less qualitative product for a European consumer? What if this consumer could directly communicate its needs in term of sustainable products to the Chinese producer in order to develop a sustainable innovation together?

The goal of this applied research project is to propose an online open innovation platform to Chinese producers exporting to Europe. On this platform, www.atizo.com, producers will be able to communicate directly with an European community to receive creative ideas on how to diminish the environmental impact of their products.

Our Swiss partner, Atizo, is a start-up with an active community of about 25'000 innovators. They have already been certified by the KTI in Switzerland.

Research projects on open innovation have mainly been focused on a national level. This applied research project intends to better understand the motivation and barriers in an international and intercultural environment.

The environmental aspect is also key in this project: small steps and case studies are really important to prove the feasibility of such an open way of considering R&D between China and Europe.

Development relevance

Europe has become in 2008 the biggest export market for China. Europe has an influence and a responsibility on the goods that are produced by the Chinese manufacturers for the European market and on how they are produced. The multinational companies are increasing their regulation and requirements toward China. The Chinese producers are answering on a reactive way to these new regulations.

Introducing an open innovation approach could possibly help existing companies or ventures to find new opportunities to produce more sustainable goods in a proactive way and contribute to a balanced global development. Crowd sourcing helps developing innovative solutions in a shorter period of time, while been closer to the market needs.



Visit before the opening of the Swiss Pavilion in Shanghai



Applied Research Partnerships with Developing and Transition Countries
 Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Groundwater vulnerability assessment in La Habana city area, Cuba

Thematic focus

Groundwater vulnerability, GIS, drinking water

Year

2008

Project location

La Habana City, Cuba



Swiss Institution

Sebastian Pera
 Institute of Earth Sciences, Canobbio
 University of Applied Sciences and Arts
 of Southern Switzerland (SUPSI)

Partner Institution

Rosa María Valcarce
 Politécnico José Antonio Echeverría
 La Habana

Description

The assessment of groundwater vulnerability is crucial for sustainable management of water resources. Aquifers in general and karst aquifers specially, could be extremely vulnerable to pollution. Once polluted quality restoration is difficult, often impossible, and may have negative social and/or economic consequences. As water from karst aquifers are an important sources of drinking water in Cuba (80% of groundwater comes from karst aquifers) the assessment of their vulnerability to pollution is a necessary step in order to setting up land-use restrictions for maintaining its quality.

By using the EPIK, multimaparameter method developed by Federal Agency for the Environment, Forest and Landscape (SAEFL), groundwater vulnerability maps were developed for aquifers providing drinking water to La Habana city and nearby areas. The produced maps constitutes a management tool for local policy makers.

Development relevance

The project is directly linked to goal 7 "to ensure environmental sustainability". Produced maps help to sustainable management of groundwater resources as both: a natural asset and foodstuff. Providing also the scientific basis for long-term water quality protection. Goals 4, 5 and 6 concerning population health and child mortality are also related since facilitating access to safe water reduces the

incidence of water related deceases. Implementation of the project paid particular attention to gender and cultural issues in order to ensure an equilibrated participation from all involved partners.



Emergency drinking
water distribution in
La Habana



Effluent disposal in
Ariguanabo river

Applied Research Partnerships with Developing and Transition Countries

Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Caribbean Water Monitor: Small island states, water resources and climate change

Thematic focus

Water monitor climate change

Year

2008

Project location

Barbados and Trinidad, Caribbeans



Swiss Institution

Marcus Hoffmann
Istituto Scienze della Terra, University of Applied Sciences
and Arts of Southern Switzerland (SUPSI)

Partner Institution

Adrian Trotman
Caribbean Institute for Meteorology and Hydrology CIMH
Bridgetown

Description

The objectives of the project were the preparation of drought-relevant base documentation, the development of operative web-based tools and drought information material for Barbados and Trinidad & Tobago, as well as the conduction of training activities and two capacity building workshops on both islands. In a first working step, the available data of the both island states have been collected, elaborated and validated. On this data stock, trend analyses were conducted to identify possible data trends which are due to climate change, referring them to a standard reference period (e.g. 20 or 30 year averages). This elaboration is done using mainly the free and open-source statistics package R.

The two of the most suitable parameter to measure drought trends in general are the Standard Precipitation Index (SPI) and the Deviation from Normal (DfN). Their purpose is to assign a single numeric value to the recent precipitation relative to the historical measured quantity and to indicate deviations from long term conditions. The developed WEB-based tool manages the available data using the open source PostgreSQL database, calculates both parameters and displays them for all measuring stations separately. Finally a built-in GRASS interface has been developed with the scope to produce interactively a set of contour maps of Barbados, interpolating the SPI's extracted for a defined time period.

Development relevance

In the Caribbean the water availability is connected to a general climate set-up of dry and wet seasons. Water shortages can occur historically rather in the dry season, which lasts roughly from January to May. Climate change can potentially alter these patterns. According to the current fourth assessment report by the Intergovernmental Panel on Climate Change (IPCC), the

rather small islands of the Caribbean are particularly vulnerable to extreme weather events and the consequences of predicted predicted climate change (IPCC 2007a). Both workshops addressed a technical-scientific audience and an end-user/decision maker audience for the use of the developed WEB-application.



Workshop held at CIMH in Husbands, S. James Barbados on the 10th of May 2010



Participants of the Workshop at the 12th of May 2010 at the Ministry of Agriculture, Land and Marine Resources, Centeno, Trinidad

Applied Research Partnerships with Developing and Transition Countries

Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Development of nutritionally balanced diets for Nile tilapia using lowcost ingredients for sustainable rural aquaculture development

Thematic focus

Aquaculture, rural development, protein supply

Year

2008

Project location

Kampala, Uganda



Swiss Institution

Andreas Graber
Zurich University of Applied Sciences (ZHAW)
IUNR, Waedenswil

Partner Institution

Margaret Aanyu
Aquaculture Research and Development Center (ARDC)
Kajjansi (Kampala), Uganda

Description

Nile Tilapia is a prominent fish species in global aquaculture, and in Uganda, it is the main farmed fish species. As prices for commercial fish feeds are on the rise, many farmers in rural Uganda had to resort to unprocessed farm by-products, resulting in a decrease in fish production and leading to poor nutrition. This project evaluated the potential of 18 locally available feedstuffs that could be used by small-scale farmers to produce their own fish feeds on farm. In Uganda, the diets will be used in pond aquaculture where fish feed on naturally available insect larvae, thus the feed is optimized for this situation and partially complete. Four diets were formulated (compressed sinking pellets), containing 30% crude protein.

In Switzerland, Tilapia can be raised in closed artificial recirculating aquaculture systems, therefore the feeds have to be complete diets. Using waste heat from biogas installations, Swiss farmers could become fish farmers. Five diets were formulated using potato protein as the main protein source, and their performance was evaluated against a control diet based on fish meal in a triplicate feeding experiment during five weeks. Surprisingly, four of the five diets resulted in a better growth rate and feed conversion than the control diet. In addition to being free of any fish by-products, the vegetarian diets resulted also in lower feed costs.

Development relevance

The United Nations Millenium Development Goals met by this project are:

Goal 1, Eradicate extreme poverty and hunger: The new feedstuffs allow fish farmers to produce at lower costs and improve their income. Improved business and marketing concepts ensure an effective and profitable market access and promotes entrepreneurship within local communities.

Goal 8, Develop a global partnership for development: ARDC provides the Ugandan government with the "state of the art" in aquaculture and is the main partner in co-developing the future policy in agricultural development. Strategies for poverty and famine mitigation based on scientific results are a high value asset for governmental decision makers and provide the basis for good governance practice.



Many farmers in Uganda lack the capital to run aquaculture as a serious business. Further, they are not trained fish farmers, but feed the fish the same feeds as used for ruminants. By applying these in the form of powder, they pollute the water, and fish grow very slowly



Sample of the test diets developed during the study. In order to achieve a direct transfer into the fish, leading to good growth and low water pollution, professional fish feeds have to be pelletized (or even better: extruded)

Applied Research Partnerships with Developing and Transition Countries

Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

From the Geosciences to the Material Culture in Shekhawati region (India)

Thematic focus

Architectural surfaces, conservation of cultural heritage

Year

2009

Project location

Shekhawati region, Rajasthan, India



Swiss Institution

Giovanni Cavallo, geologist
Institute of Materials and Constructions, University of Applied Sciences and Arts of Southern Switzerland (SUPSI)
CH-6952 Canobbio (TI, Switzerland)

Partner Institution

Manoj Pandit, geologist
University of Rajasthan, Dept. of Geology
302004 Jaipur (India)

Description

Rajasthan, especially the Shekhawati region, has a tradition of "fresco lustro" wall paintings decorating the large mansions called 'havelis' in the local language, funeral monuments, temples, step-wells, reservoirs and caravan-serai, expression of the architecture, art and culture of the past tradition. Nowadays these historical buildings with external and interior wall paintings of great value suffer the total absence of maintenance and sometimes the adoption of extravagant conservation criteria (inadequate and synthetic painting materials, adoption of techniques far from the tradition).

Shekhawati region offer an ideal setting for the developed project which envisages a comprehensive approach from geosciences to the material culture, i.e. from the natural environment to final application. The paintings, used for decoration of the façade are like the pages of a book of history unfolding the scenes of ancient socio - religious texts with visible influence of the modern Europe. The stimuli to undertake this research comes from the observation that this rich cultural heritage is at the brink of passing into oblivion and urgently needs elaborate scientific investigations to propose guidelines for the intervention to preserve the wall paintings.

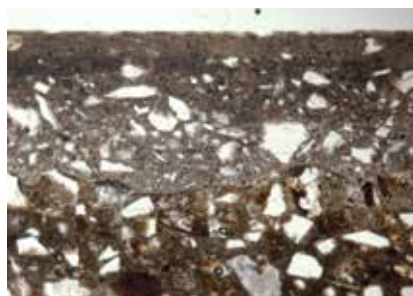
Development relevance

The project is an application-oriented research where geosciences and material culture would be integrated on a common platform: the cultural heritage conservation and the preservation of legacy of Indian cultural identity. The collaboration between Indian and Swiss researchers and students represents an additional value. Swiss partner had

the opportunity to interact with new artistic techniques and decay processes typical of a dry climate and Indian partner consolidated the application of analytical techniques to other parallel fields. Two workshops in India and Switzerland helped to share the experience involving scientists, students, conservators, art historians, architects.



Decoration of the ceiling (interior). Sarduhl Singh Chhatra dated 1750 in Parasrampura (Shekhawati region)



Petrographic examination (N/I) of a typical stratigraphy displaying a plaster (loi in the local language), a mar-morino layer (shimla) and a final limewash. Sample from Harlaka step-well in Mandawa (Shekhawati region)

Applied Research Partnerships with Developing and Transition Countries

Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Renaissance of Havana's Arterias; Cuba

Thematic focus

Study to increase the bus network and corridor productivity

Year

2009

Project location

La Habana/Cuba



Swiss Institution

Rosmarie Müller
Peter Hotz HSR/IRAP

Partner Institution

Jessie Madrazo B. Ing.Civil VIAL/CUJAE

Description

- preliminary study to increase the bus network and corridor productivity; improvement of pedestrians' accessibility and enhancement of security at bus stops ...
- ... in harmony with urban developments and environmental requirements
- methodology / information for improved involvement of decision makers
- further development of methodology "Sensitivity maps and Mapping"
- development of measures related to low-cost culture
- further step to implement mobility targets as formulated in SeDUT

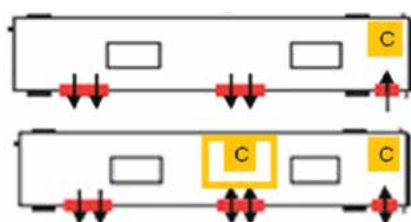
- methodological and expert support in the diagnosis and drafting / preparation of strategies and measures related to solutions in corridors with high requirements BUS/MIV/ NMIV with framework of overall mobility
- continuation of cooperation HSR/CUJAE with increased involvement of local stakeholders (pilot study main street Cotorro/ master diploma thesis of JMB assisted by us);
- support of training for engineers and architects (tutors of doctor-thesis-works)

Development relevance

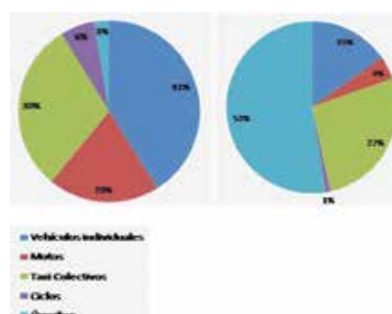
- catalog of measures of concrete improvements to improve operation of bus > guarantee of mobility > better productivity > less costs
- methods of expert and building / organizational implementation
- stepping up of interdisciplinary approach (urban development – transport & traffic – environment)

– implementation

- stepping up of interdisciplinary approach (urban development – transport & traffic – environment – implementation)
- improved decision-making culture with declining resources (staff and finances)



Organisation of bus-stops today and tomorrow



Modal-split of movements and vehicles

Applied Research Partnerships with Developing and Transition Countries

Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Enabling Health Journalism

Thematic focus

Health Journalism, Health Communication, Kenya

Year

2009

Project location

Kilifi, Mombasa, Nairobi; Kenya



Swiss Institution

Michael Schanne
Institute of Applied Media Studies
Zurich University of Applied Sciences

Partner Institution

Justa Wawira
Kenya Medical Research Institute (KEMRI)
Centre for Geographic Medicine Research
Coast, (CGMR-C), Kilifi

Description

The study had to identify the most relevant subjects of future research in the area of health journalism and its link to behavior change. 26 explorative interviews were held with media people, researchers, public health officials, and field-workers in contact to ordinary people in September 2009.

Thus many health relevant actors (women) seem to receive only few health information which at the same time is difficult to understand.

The results show that health information is a major factor in influencing personal discussions, but that current health journalism has major shortcomings. Especially for ordinary people in rural areas - those most vulnerable to diseases - radio (with very few health formats) and public meetings are the main channels for health information.

Development relevance

Especially in Africa, the deplorable health status of the majority of people hinders serious economic and social development. Consequently, improving health is targeted by various Millenium Development Goals.

HIV/AIDS, malaria, tuberculosis and diarrhoeal diseases cause most deaths in African countries.

One of the most important steps towards better health is an individual changing its health-related behaviour. This change is contingent upon a range of different factors. Health information, being it provided by mass media or communication campaigns, plays a specific role for inter-personal discussion which is believed to be one important trigger to actually change behaviour towards health promotion.



Radio, a most important source of health information for people in remote areas



Radio, a most important source of health information for people in remote areas

Applied Research Partnerships with Developing and Transition Countries

Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Concepts of Citizenship among Primary School Students in Kosovo Project founded by the KFH Development and coordination office

Thematic focus

Education, Democracy, Citizenship

Year

2009

Project location

Prishtina, Kosovo



Swiss Institution

Sabina Braendli
Zurich University of Teacher Education

Partner Institution

Dukagjin Pupovci
Kosova Education Center, Prishtina, Kosovo

Description

The creation of democratic mindsets in a post-socialist, post-war society is a long-lasting process. Kosovo, being the youngest nation in Europe, is facing the special challenge of having to develop a new, viable, multi-ethnic, national identity within quite a short period of time.

The project will be laying foundations for empirically analyzing subjective concepts of citizenship, which are of crucial importance in this context. Representing both a starting point and a target variable in any process of citizenship education, concepts of citizenship are highly relevant to appropriate educational planning and curriculum making in Kosovo itself, but also to the international research community in the field of citizenship education.

The objective of the preliminary project to be carried out in cooperation with Kosova Education Center (KEC) and the University of Prishtina is to close the research gap mentioned above. In two Workshops in Prishtina a common basis of shared perspectives on research questions and methods has been established. Thereby two relevant results of the pretests are first a shift to secondary school students and second the involvement of teachers perspective. The pretests also showed that a specific adaptation of the instruments focusing on the local context is crucial for the full project.

Development relevance

Universal education

Education for Democratic Citizenship is one important aspect of universal education.

Gender equality

Knowledge about different concepts of Citizenship between girls and boys are basic to eliminate Gender disparity in primary and secondary education.

Global partnership

The establishment of research capacity in social science and teacher education addresses a special need of Kosovo.



KEC (NGO) as mediator, coordinator, door-opener, guarantor for liability and quality



High interest of methodological and theoretical knowledge by the members of Faculty of Education

Applied Research Partnerships with Developing and Transition Countries

Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Shallow landslide vulnerability assessment

Thematic focus

Landslide, risk, vulnerability

Year

2009

Project location

Hagian Province, Vietnam



Swiss Institution

Massimiliano Cannata
Institute of Earth Sciences, University of Applied
Sciences and Arts of Southern Switzerland (SUPSI)
Via Trevano, Canobbio

Partner Institution

Truong Xuan Luan
Hanoi University of Mining and Geology
Hanoi, Vietnam

Description

The overall objective of this project is to enhance the capacity of developing communities resilient to shallow landslide disaster. To pursue this objective this project conduct research on the capabilities of mathematical models to estimate where shallow landslides may occur and what area is involved. In particular this project is going to couple TRIGRS and DFWALK, two widely used models respectively capable to estimate instabilities areas and runoff extents, in a geographical framework capable to produce "real time" maps that can be disseminated through the internet and that represent the areas likely exposed to risk. This result can support the realization of early warning systems, capable

to timely inform government, agencies and population about existing landslide risks in order to take appropriate measures and limit the loss of lives and damages.

The expected result of this project is the realization of a Web site capable to provide dynamic information on shallow landslide risk relative to a pilot area, to be replicated in the future on larger extents and different areas.

Development relevance

With reference to the UN Millennium Development Goals, the topic of this project is closely related to the target 7.A: "Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources". This project is also in full agreement with the UN/ISDR (International Strategy for Disaster Reduction) as outlined in the Road map toward the implementation

of the United Nations Millennium Declaration (Secretary-General Report to GA A/56/326): developing early warning systems, vulnerability mapping, technological transfer and training; supporting interdisciplinary and intersectoral partnerships, improved scientific research on the causes of natural disaster; encouraging governments to incorporate disaster risk reduction into national planning procedures.



Hagiang province
pilot study area



Schema of the Web
system for shallow
landslide analysis

Applied Research Partnerships with Developing and Transition Countries

Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Is resettlement a viable strategy to mitigate the risk of natural hazards? Issues and experiences from the city of Santa Fe, Argentina

Thematic focus

Resettlement, post-disaster, disaster mitigation

Year

2009

Project location

Santa Fe, Argentina



Swiss Institution

Jennifer Duyne
World Habitat Research Centre, University of Applied Sciences and Arts of Southern Switzerland (SUPSI)

Partner Institution

Maria-Luisa d'Angelo
Geography Department Universidad Nacional del Litoral

Description

One of the most visible consequences of rapid urbanization in low- and middle-income countries is the increasing number of informal settlements on fragile lands that are highly prone to natural disasters. There is a close link between poverty, land tenure security, housing and vulnerability to natural disasters. Due to lack of access to safe land, poor people often settle on highly vulnerable marginal lands. Disaster risks and lack of tenure security discourage people and local authorities from investing in safe housing and infrastructure, with the result that the poor regularly lose what little they have. These factors explain why governments and international agencies are increasingly

considering resettlement of vulnerable urban communities as a strategy towards reducing the risk of natural hazards, in particular within the framework of post-disaster reconstruction. This is the case of the highly flood-prone city of Santa Fe, Argentina, which following the severe floods of 2003 has started considering the resettlement of vulnerable neighbourhoods as part of a comprehensive disaster risk reduction (DRR) strategy. Resettlement, however, is a complex process. Though sometimes desirable and unavoidable, its challenges and social consequences are often underestimated.

Development relevance

Resettlement risks can be mitigated through a comprehensive understanding of the socio-economic, spatial and ecological determinants of successful relocation and through participatory planning processes. The project aimed to contribute to a better understanding of factors affecting the viability of resettlement as a strategy to mitigate the risk of natural hazards with reference to Santa Fe by assessing the

attitudes and experiences of different categories of stakeholders. The research findings were shared with communities, the municipal authorities, civil society organizations and academia in Santa Fe and served to trigger a debate about the opportunities and challenges of resettlement as a risk mitigation strategy.



The research team



The Salado River which is exposing the city of Santa Fe to the risk of floods

Applied Research Partnerships with Developing and Transition Countries
 Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Nondisabled Children's Attitudes Towards Disabled Children in Tanzania

Thematic focus

Disability-based Attitudes, Middle Childhood, Tanzania

Year

2009

Project location

Arusha, Tanzania



Swiss Institution

Luciano Gasser, Teacher Training
 University of Central Switzerland, Lucerne,
 Institute for School and Diversity

Partner Institution

Benny Mussa
 Patandi Teachers' College, Arusha Tanzania

Description

The goal of the present study is to investigate nondisabled children's attitudes towards mentally disabled and hearing impaired children in Tanzania. The sample includes 160 9- and 13-year-old children from inclusive and noninclusive primary school classes. Individual interviews on different components of children's attitudes (evaluative, emotional, cognitive and behavioral) will be conducted. Results will provide important knowledge about the impact of socio-cultural context on children's competencies to deal with diversity in primary school classes. They therefore will constitute an important basis for (inclusive) school development as well as for teacher education in Tanzania.

The research project is imbedded within a partnership between Patandi Teachers' College (PTC) and Teacher Training University of Central Switzerland (PHZ). Moreover, it is conceptually and methodologically related to a larger research project, funded by the Swiss National Science Foundation ('Development of social and moral competencies within inclusive and noninclusive classes'). Having relevant knowledge and expertise regarding the 'Swiss case', we are interested to broaden our knowledge on inclusive education across cultures.

Development relevance

Our research project is in concert with the Millenium Developmental Goals 2 'Achieve universal primary education' as well as with international commitments to inclusive education (e.g., UN Convention on the Rights of Persons with Disabilities, 2006). Inclusive Education has become a major subject in Tanzanian education policies. Despite this, many disabled children are excluded from school.

One of the main barriers may be negative attitudes towards disabled children. As the peer group is the main context where inclusion of disabled children takes place, it is crucial to learn more about attitudinal challenges in Tanzania. In this respect, our research project may provide important knowledge for the development of policies to realize inclusive education in Tanzania.



Inclusive School in Tanzania



Children with special needs in inclusive schools at PTC

Applied Research Partnerships with Developing and Transition Countries

Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Enhancement of aquaculture productivity, profitability and marketing for improved nutrition and income in Uganda and Switzerland

Thematic focus

Aquaculture, livelihood improvement, protein supply

Year

2009

Project location

Kampala, Uganda



Swiss Institution

Andreas Graber
Zurich University of Applied Sciences (ZHAW)
IUNR, Waedenswil

Partner Institution

Margaret Aanyu
Aquaculture Research and Development Center (ARDC)
Kajjansi (Kampala), Uganda

Description

Nile tilapia is a prominent fish species in global aquaculture and in Uganda it is the main farmed fish species. About 70% of the fish farmers in Uganda are small holder farmers producing for their household with about 80% of the rural communities relying on fish as the main protein source.

However, as prices for commercial fish feeds are on the rise, many small-holder farmers were unable to afford them and resorted to using unprocessed farm by-products, resulting in low fish production, leading to poor nutrition. Thus, one major challenge facing fish farming in Uganda is the lack of cost-effective and efficient feeds for the semi-intensive production of Nile tilapia. In this project, we will evaluate the

effectiveness of the formulated feeds and improve the feed quality to ensure that these diets lead to optimal Nile tilapia growth and are cost-effective. The final goal is to have a complete business concept for farmers developed for semi-intensive pond systems in Uganda.

In Switzerland, plant-protein based diets will be evaluated and improved for rearing tilapia in intensive recirculating aquaculture systems using waste heat from industry. Thus, Nile tilapia could be established as a new form of agriculture to generate income for Swiss farmers, increasing domestic production of high quality fish.

This project is the continuation of the R1-project P0810_22.

Development relevance

This project meets several UN Millenium Development Goals, the most important is to eradicate extreme poverty and hunger (Target 1). The new feedstuffs allow fish farmers to improve their business in terms of production and marketing and promotes entrepreneurship within local communities (Target 1b). ARDC is the main partner of the Ugandan government in setting the future policy in agricul-

tural development (Target 8, develop a global partnership for development).

Locally available fish is one of the possible measures to mitigate child mortality and can improve the resistance of children towards diseases (Goal 4). Standardised recommendations on pond design and good production practice ensure minimal discharge of pollutants (Goal 7).



A sample of fish feeds made on farm by a catfish producing company. These large balls are hand-made out of low-cost locally available ingredients. To feed, they are thrown into the pond, where they slowly dissolve



People are key players to achieve good farm management and finally create a profitable business. ARDC provides professional image 2 training for fish farmers

Applied Research Partnerships with Developing and Transition Countries

Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Influence of different contexts of socialization on the development of juvenile delinquency in postwar Bosnia and Herzegovina. Recommendations for prevention and intervention.

Thematic focus

Inter- and trans-disciplinary cooperation, social planning, social work, juvenile delinquency

Year

2009

Project location

Tuzla, Canton Tuzla, Bosnia and Herzegovina



Swiss Institution

Barbara Schürch
University of Applied Sciences Northwestern Switzerland
School of Social Work, Basel

Partner Institution

Esmina Avdibegovic
University of Tuzla: Department of Social Work Faculty
of Medicine, Faculty of Education and Rehabilitation

Description

The aim of this research project is to analyze the influence of different contexts of socialization (refugees, displaced, local, care institutions, family situations) on the development of juvenile delinquency in postwar Bosnia and Herzegovina (BiH). The project team is consisting of representatives of the University of Tuzla (Faculty of Philos./Dept. Social Work, Faculty of Medicine, Faculty of Special Educ. and Rehab.), the NGO Vive Zene, the Ministry of Labor and Social Policy of Tuzla Canton, and the University of Applied Sciences of Northwestern Switzerland (UASNW). The investigation on the topic 'juvenile delinquency' addresses an urgent problem of the postwar and transition context and will be investigated

from the perspective of the different disciplines represented by the stakeholders. The results of this study will lead to recommendations for prevention and interventions and be useful to persons in charge of social policy and social planning, the state institutions, and private players in this field. At the same time, this project will serve as an example of a cooperative and collective learning process in the field of social planning which foster the transfer of knowledge between different interest groups, in particular between state and civil society. Based on the project experience a model that promotes the transfer of experience and knowledge between state, research and NGO sector will be developed.

Development relevance

Through our project we try to enhance the capacity of the social policy and of the players in the social field. Therefore the contribution of the swiss research group is on the structural level. The multidimensional approach and the integration and participation of all interest groups in the social planning process boosts solutions that are context based, needs oriented and therefore sustainable.

The project demonstrates a way to create innovation in the social field of countries in transition.



Tuzla



Joint development of project design

Applied Research Partnerships with Developing and Transition Countries

Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Site-specific agricultural development as a new paradigm for small-scale tropical fruit growers in Colombia

Thematic focus

Site-specific agriculture, bio-inspired systems, crop modeling

Year

2009

Project location

Cali and south-west of Colombia



Swiss Institution

Andres Perez-Urbe
HEIG-VD/HES-SO, Yverdon-les-Bains, reds.heig-vd.ch

Partner Institution

Andrew Jarvis
International Center for Tropical Agriculture (CIAT)
Cali, Colombia

Description

Tropical fruit growers have little reliable information on the factors that affect the development and yield of their crops and there is a dearth of information on the proper conditions to grow and manage them (so far, this criterion resides in the mind of a handful of experts and practitioners), yet native tropical fruit could be an affordable alternative for developing countries, as they have high regional demand and are potentially exportable to developed countries at interesting prices. Site-specific agriculture appears as a promising approach for helping fruit growers. However, the technologies generally applied can be expensive (e.g., distributed sensors, telemetry systems, etc.). The basic premises of our work are: (a) every time a farmer plants and harvests a crop, there

is an experiment (i.e., an unrepeatable experience), and (b) by compiling the information on what the farmer did, and by characterizing (modeling) the conditions of a large number of these experiments, it should be possible to deduce optimum practices for specific conditions. Thus, we propose to use bio-inspired modeling techniques, like neural-networks and self-organizing systems to exploit fruit-grower data to model crop yield. So far, we have modeled Lulo (*Solanum quitoense*) crops from the south-west of Colombia as a proof-of-concept of the approach, and we are currently working on a Graphical User Interface integrating the bio-inspired approaches.

Development relevance

HEIG-VD and CIAT share a commitment to contributing positively to the lives of rural communities through this project. In CIAT it is believed that there is significant potential in site-specific agriculture for contributing to income generation for poor growers in the tropics, it is also believed that an interaction with farmers is mandatory in order to accomplish this task, especially by disseminating the results provided

by the models. Likewise, it is expected to receive feedback from growers in an attempt to fine-tune our methodologies in phases such as providing and transferring results to farmers. The research described here is conducted in a multidisciplinary framework, integrating computer science engineers, agronomists, biologists, geographers, statisticians as well as small growers.



Lulo (*Solanum quitoense*)



Fruit grower measuring precipitation

Applied Research Partnerships with Developing and Transition Countries
 Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Identification, Research and Development of Agricultural Waste Products that can be deployed as Building Material for Affordable Housing

Thematic focus

Environmental sustainability, Interculturality, Methodology

Year

2010

Project location

Enugu, eastern Nigeria & Zaria, northern Nigeria



Swiss Institution

Charles O. Job
 Berner FH, Pestalozzistrasse 20, P.O. Box 1058,
 CH-3401 Burgdorf

Partner Institution

Masud Abdulkarim
 Department of Architecture, Ahmadu Bello University
 Zaria, Nigeria

Description

The need for affordable housing has stimulated extensive research aimed at finding cheaper and more readily available building materials. Such research has often focused on waste recycling. In Nigeria, abundant plant-based agricultural wastes from the cultivation of rice, maize and cassava crops are often incinerated or simply left to rot. Natural fibers from these and other materials offer a cheap and sustainable resource which can be readily utilised to achieve a reduction in construction costs. Alternative materials will not only help reduce the amount of CO₂ and other toxic gases released into the environment resulting from the production of materials like cement, but also reduce the dependence on

imported, expensive building materials.

The project is an ideal research catalyst and an educational vehicle with which to address a range of academic, environmental and socio-cultural issues pertinent not only to Nigeria, but also to many developing economies.

These include:

- Environmental pollution
- Agricultural waste recycling
- Sustainable resource management
- Provision of affordable housing

These core themes are intended as the firm basis of a long-term dialogue that will go beyond academic research.

Development relevance

Fostering entrepreneurship: The research goal of establishing production workshops within the institutions in Nigeria, which would then be in a position to educate and encourage local production of affordable building materials, will help reduce the present dependence on imported, non-sustainable materials. The direct involvement of the local community through an educational institution will

help engage both rural and urban audiences, promote economic modernisation and diversification; reducing poverty by offering an extensive labor market and a higher income earning opportunity.



Cement blocks are the predominant building materials. Cheaper alternatives will be researched and produced



Typical, low-tech production workshop for affordable composite materials. Such facilities will be located in the Universities for research and production

Applied Research Partnerships with Developing and Transition Countries

Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Understanding and enhancing the transfer of knowledge about sustainable agricultural production to Ethiopian smallholder farmers

Thematic focus

Sustainable agriculture, smallholder farmers, Africa

Year

2010

Project location

Ethiopia, Addis Ababa



Swiss Institution

Jan Grenz
Swiss College of Agriculture
Zollikofen

Partner Institution

Getachew Tikubet
Yeha Natural Resource Management Institute
P.O. Box 3893, Addis Ababa

Description

Ethiopian farmers, most of whom are smallholders, face the challenge of supplying a population growing by 2.7% a year from fragile land and water resources threatened by soil erosion and other degradation. Knowledge and technology for a sustainable intensification exist. Through improved soil fertility management, water conservation, pest control, plant breeding, animal feeding and disease management, farms could become more productive and resilient. We hypothesise that two bottlenecks that impede improvements are the difficulty of translating the principles of sustainable agriculture to the farm level, and lack of access of farmers to practically relevant knowledge on sustainable produc-

tion practices. What fosters, what impedes the transfer of knowledge on sustainable agriculture to Ethiopian farmers? What criteria should be used to assess the practical viability of new production practices? What are motivation and scope of Ethiopian farmers to sustainably intensify production? Our study aims at answering these and other questions through literature and field research. Tools for sustainability assessment and communication at farm level will be provided. In this project, long-term practical experience of the Ethiopian partner in farmer training and of the Swiss partner in farm sustainability assessment are joined.

Development relevance

In Ethiopia, 84% of the population live in rural areas, 80% of the labour force are employed in agriculture. Agricultural development in Ethiopia serves, above all, the Millennium Development Goal 1, "Reduce poverty and hunger" (www.un.org/millenniumgoals). Growth in the agricultural sector is critical for hunger and poverty reduction, as was recognized in the World Bank's 2008 World Development Report.

Economic growth generated by agriculture is cited there to be at least twice as effective in reducing poverty as growth generated by other sectors. Our project will serve Ethiopia by elucidating how knowledge on sustainable agriculture is best made available to smallholders, and by providing a farmer-oriented tool that directly supports the targeted adoption of improved production practices by farmers.



Land degradation in the Worken region, Ethiopia. Photo by Mathias Pineau



Extension officer and farmer inspecting a silage pit during a farm sustainability assessment, Kenya. Photo by Christian Thalmann

Applied Research Partnerships with Developing and Transition Countries

Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Collaborative Research on Success Factors in the Design and Use of E-Learning scenarios in Nepal

Thematic focus

E-Learning, health education, dermatology

Year

2010

Project location

Kathmandu, Kathmandu Valley, Nepal



Swiss Institution

Sebastian Linxen
School of Business
University of Applied Sciences Northwestern Switzerland

Partner Institution

Anil K. Jha
Nepal Medical College
Kathmandu University, Kathmandu

Description

Education and health are important factors in the life of individual people and of a country's population. However, there are huge differences between Developed Countries and Less or Least Developed Countries (LDC) like Nepal. An effective health system depends, inter alia, on the level of medical education. Today e-learning is a crucial part of medical education in Western countries. It can positively impact on the quality of teaching and learning in medicine and, consequently, on the knowledge and skills of physicians and on the overall health care system. In order to improve the medical education in LDCs the implementation of e-learning products is reasonable. However, during the development and implementation

of such products different factors of the target country like cultural-, organizational-, pedagogical- and technical issues need to be taken into account. At present there is little known about these aspects in LDC and their impact on learning and teaching. The objective of this project aims at researching and identifying success factors of the use and design of an e-learning program in Nepal. The e-learning platform Dermatology Online with Interactive Technology (DOIT) will be used and researched in a Nepalese context of medical education to identify these factors. The results will serve as a basis for the use and development of e-learning products in medical education and other disciplines.

Development relevance

The current research project aims, inter alia, at researching and improving the medical education as part of the overall health care system in Nepal. Several of the Millennium Development Goals include an improvement of health related topics. By adapting the current e-learning platform to the needs of the target group in Nepal and by adding new topics relevant to local needs such as Tuberculosis or Leprosy, the

project clearly supports the goals included in the Millennium Development Goal 6.C.

Furthermore the identification of success factors in the design and use of medical e-learning in Nepal will improve the development and implementation process of LCD related e-learning products not only in the area of medical education but also in further relevant disciplines.



Dermatology lecture at the Nepal Medical College. Photo by Günter Burg



Screenshot of a typical cyberlecture in DOIT

Applied Research Partnerships with Developing and Transition Countries
 Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Development of building blocks made of laterite and agricultural residues as an environmentally friendly alternative to cement blocks

Thematic focus

Material Science

Year

2011

Project location

Kumasi, Ghana



Swiss Institution

Maurice Brunner
 Bern University of Applied Sciences Architecture
 Wood and Civil Engineering

Partner Institution

Beatrice Darko Obiri
 Council for Scientific and Industrial Research
 Forestry Research Institute of Ghana (CSIR-FORIG)
 Kumasi, Ghana

Description

Recent research indicates that kaolin and other soils can be stabilized into strong bricks by adding small amounts of the chemical NaOH solution. The resulting geo-polymerization process promises to revolutionise brick-making in tropical countries. The project is concerned with research on applying the new technology to laterite soils, which are readily available in Africa and other tropical areas.

As a further innovation, the project will research the addition of agricultural residues, heretofore a nuisance, in order to improve the heat insulation of the bricks.

Development relevance

Millennium Development Goal 7: Ensure environmental sustainability

The production of building materials from locally available natural and renewable materials promotes economic independence and environmental sustainability. The replacement of cement blocks with laterite bricks will contribute to reduction of CO2 emissions.

Millennium Development Goal 8: Develop a global partnership for development

This research will help develop a partnership between the involved Swiss and Ghanaian research institutions and prepare further common research projects. The developed products will strengthen the Ghanaian agriculture and construction industry, bringing jobs.



Laterite sampling



Sawdust residue

Applied Research Partnerships with Developing and Transition Countries
 Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Combat water shortage by supporting land use improvement in forest areas in Indonesia

Thematic focus

Measuring influence of agroforestry on groundwater

Year

2011

Project location

Java, Indonesia



Swiss Institution

Marcus Hoffmann and Sebastian Pera Ibarguren
 Istituto Scienze della Terra, DACD, University of Applied
 Sciences and Arts of Southern Switzerland [SUPSI]

Partner Institution

Oka Karyanto
 Faculty of Forestry, University Gadjah Mada, Yogyakarta
 Java, Indonesia

Description

A worldwide increasing demand of drinking water and unreliable water quality are main issues that urge sustainable groundwater use and therefore require a coherent groundwater policy, especially in highly populated areas like the island of Java in Indonesia. In this proposed preliminary project the Institute of Earth Science (IST) intends to launch a collaboration with the Faculty of Forestry, University Gadjah Mada (UGM), the oldest and largest state university in Indonesia, with the goal to study the effect of deforestation and agroforestry on the groundwater composition in terms of its use as drinking water.

In a preliminary phase, for which this proposal applies, the involved institutions (IST and UGM) will prepare and schedule the details of an action plan, especially defining the exact places of measurements (for example Java and Kalimantan) and the intended time schedule. The preliminary project will be coordinated with the Ministry of Forestry (Government of Indonesia) on a one-day workshop at UGM. Furthermore a one week field trip to a location candidate for the intended measurements is planned where instruments, provided by UGM, will be tested.

Development relevance

The proposed project takes account of the Millennium Development Goals declaration of the United Nations, Target 7.A: Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources.

Since Indonesia is a place where deforestation and agroforestry are growing fast, this fact is supposed to create a

huge deficiency of drinking water. As an attempt of providing strategic input to tactical decision-making within the groundwater management objective, the establishment of an administering protocol through the provision of regional groundwater database with spatial orientation is the main subject of this project.



Well providing drinking water to the supply network in the urban areas of Semarang (Central Java)



Drinking water supply sponsored by local TV-broadcast company at the edges of the volcano Mount Merapi

Applied Research Partnerships with Developing and Transition Countries
 Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Promotion of small waterbodies networks in the biodiversity hotspot Cerrado (Brazil), for their services to rural activities and to biodiversity

Thematic focus

Water resource, biodiversity, ecosystem services

Year

2011

Project location

Cerrado (State of Goiás), Brazil



Swiss Institution

Beat Oertli, University of Applied Sciences
 Western Switzerland. Address: 150 route de Presinge
 CH- 1254 Jussy, Switzerland

Partner Institution

Paulo de Marco Junior
 Universidade Federal de Goiás (UFG), Instituto de Ciências
 Biológicas, Departamento de Ecologia

Description

Small waterbodies are presently still widespread and numerous in the Brazilian Cerrado, even if under pressure of a growing agriculture. Ponds and small lakes are mostly artificial as a result of traditional rural activities (animal farming, small farm holdings, fishing). Each farm has its own network composed of several ponds. They provide a crucial water resource to rural activities. Ponds are undoubtedly also critical for maintaining the regional aquatic and terrestrial biodiversity in this world biodiversity hotspot.

Objectives

- Identify the socio-economic values of small waterbodies in the Cerrado.
- Identify the ecological value of these waterbodies considering their biodiversity and the ecological services they provide.
- Identify the threats on the small waterbodies and their provided services.
- Propose a strategy for promotion of small waterbodies networks, targeted to local (farmers, private owners, schools) and regional (e.g. state water agency, municipalities) stakeholders.

Development relevance

Ponds are used by rural activities and by animals (cattle, horses, wildlife). They satisfy also domestic use and irrigation of small production of vegetables and fruits. They may also be used for fish production consumed by farmers, providing also an additional income, or to a lower extend for angling.

The outcomes of the applied project have aims beneficial for the environment and the society:

- Conservation of biodiversity linked to small waterbodies in the Brazilian Cerrado (one of the 34 world biodiversity hotspot),
- Promote the ecosystems services (of small waterbodies) to the rural communities.



Ponds provide a crucial water resource, for example for cattle



Ponds host also an exceptional biodiversity as birds, but also dragonflies, amphibians, aquatic plants

Applied Research Partnerships with Developing and Transition Countries

Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Building Citizenship on Skills. An applied research on peace building skills and social and emotional learning skills

Thematic focus

Education, social and emotional learning, peace building

Year

2011

Project location

Managua, Nicaragua



Swiss Institution

Lorenza Kyburz & Davide Antognazza
University of Applied Sciences and Arts of Southern
Switzerland (SUPSI), CH-6600 Locarno (TI, Switzerland)

Partner Institution

Soren Chamorro
IMLK, Universidad Politecnica
de Nicaragua, Costado sur de Villa Rubén Darío
Apartado 3595, Managua Nicaragua

Description

Because the history of war and confrontation to which Nicaragua has been subjected, the shift towards a Culture of Peace is urgent and necessary. Although there is a law addressed to the integration of human rights into the curriculum of primary and secondary education, there is still much work to do on a series of values linked to the Culture of Peace, such as environmental education, gender, communication and development among others. In Switzerland, awareness is growing on the importance of social and emotional learning skills for the future lives of children and young people. According to the present research on this topic, the introduction of such contents in school education shows positive results both for the

academic performance of pupils and for their attitude towards others and the society in general. The project aims to a sharing of expertise on these two related areas, both central for the development of a positive and active citizenship. By introducing social and emotional learning skills and peace building skills in school education, we want to propose a concrete way to use the educational system in order to increase a more active and positive attitude towards citizenship, to build a more caring society and to reduce aggression and disruption.

Development relevance

The project belongs to the aims of Millennium Development Goal number 8: "Develop a global partnership for development". We focus on the basic importance of school education for the development of citizenship. The school system has to be sensitive to some crucial themes, like peace building and social and emotional learning, which represent the roots for the change we want to promote in our societies, in or-

der to achieve a better life standard everywhere in the world. Moreover, since the two institutions play a significant role by fostering and regulating public education in the society, this project is although to see as a contribution to Millennium Development Goal number 2: "Achieve universal primary education".



A workshop with teachers on Social and Emotional Learning skills



A workshop with teachers on Peace Building Skills

Applied Research Partnerships with Developing and Transition Countries

Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Images of Intercultural Education and their Implications for Teacher Training

Thematic focus

Teacher Training; Inclusion; Cultural Diversity

Year

2011

Project location

Serbia and Switzerland



Swiss Institution

Bruno Leutwyler
Institute for International Cooperation in Education (IZB)
University of Teacher Education Central Switzerland PHZ

Partner Institution

Danijela Petrovic
Institute of Psychology and Center for Teacher Education
University of Belgrade

Description

The European Training Foundation identified teachers' attitudes towards social and educational inclusion as a major issue for the entire Western Balkan region, but as an especially strong challenge for Serbia. This challenge reflects the fact that Serbia has undergone various transitions: from a socialist country (with a strong emphasis on "homogeneity" and "uniformity") to an era of war (with its strong focus on ethnicity) and later on to the post-war constellation (with a stronger focus on the recognition of plurality). The educational system is prompted, nowadays, to deal with new legislative frameworks and to prepare future generations for a just, democratic and pluralistic society.

As central actors in education, teachers play a key role in this task. Their individual beliefs about integration, diversity, and plurality regulate to a large extent how respective policy reforms are implemented and to what extent they reach the daily teaching. However, only very sparse knowledge about these beliefs is available. The present project uncovers these beliefs and proposes methods and instruments to connect systematically and consciously different individuals' belief systems with the normative implications of the officially taught concepts and the demands of legislations and curricula.

Development relevance

Intercultural education, as it is in the focus of the present project, deals with the special needs of minority children in school. In doing so, it incorporates the challenge that in both countries of the project, in Serbia as well as in Switzerland, different ethnic groups have limited opportunities to success in education. Against this background, preparing teachers for dealing effectively with the special needs

of marginalized groups is an important step for accomplishing quality Education For All (EFA). The present project contributes, in this sense, to the EFA-goal 6 "improve the quality of education" which, in turn, contributes to the global pursuit of the eight Millennium Development Goals (MDGs), especially MDG 2 on universal primary education and MDG 3 on gender equality in education.



Preparing teachers to deal productively with cultural diversity in schools as a main challenge for teacher training



The research team working together on the proposal and the methodology

Applied Research Partnerships with Developing and Transition Countries
 Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Revealing New Opportunities for Fruit growers in Colombia in a Collaborative Site-specific Agricultural Setup

Thematic focus

Site-specific agriculture, bio-inspired systems, crop modeling

Year

2011

Project location

Cali and south-west of Colombia



Swiss Institution

Andr  s Perez-Uribe, C. Pe  a-Reyes, H.F. Satizabal & M. Barreto
 HEIG-VD/HES-SO, Yverdon-les-Bains

Partner Institution

Daniel Jimenez & Andrew Jarvis
 International Center for Tropical Agriculture (CIAT)
 Cali, Colombia

Description

Tropical fruit growers have little reliable information on the factors that affect the development and yield of their crops and there is a dearth of information on the proper conditions to grow and manage them (so far, this criterion resides in the mind of a handful of experts and practitioners), yet native tropical fruit could be an affordable alternative for developing countries, as they have high regional demand and are potentially exportable to developed countries at interesting prices. One way for farmers to improve the management of their fields is for them to learn from their multiple experiences over a wide range of conditions and management. This approach is being implemented in a collaborative program, "Site-specific

Agriculture based on Farmers Experiences" (SSAFE) [www.frutisistio.org] in Colombia (2010-2013), in which potentially thousands of farmers are being encouraged to share their experiences, with the objective of modeling their crops by means of machine learning and statistical techniques, in order to produce specific recommendations about what to plant, as well as techniques for boosting both yields, quality and sustainability. This project has the objective of revealing new opportunities for small-scale farmers by further exploiting the data they are providing. In particular, by introducing a Fuzzy Logic approach and by integrating the temporal context of the crops.

Development relevance

Just as biotechnology has opened up immense new opportunities for genetic improvement of crops, advances in modern information technology makes it possible to revolutionise the incorporation of improved management practices in agriculture, which contributes to 10.3% of the GDP of Colombia, contributes to 21% of national employment, and rural areas have the highest levels of poverty in the country.

National analyses of the fruit industry in Colombia have identified enormous unrealized potential for income generation and poverty alleviation through the increase of land devoted to fruit production, and through productivity enhancements in existing fruit production systems. Cultivating fruit trees is a viable pathway to cover not only the food missing in the diet of rural people, but also to increase farmer's incomes.



Avocado (*Copturus aguacatae*)



SSAFE program fieldwork data collection

Applied Research Partnerships with Developing and Transition Countries

Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Psychosocial support and professional integration of young African refugees in urban context

Thematic focus

Young refugees, professional integration, urban context

Year

2011

Project location

Switzerland (Geneva), Senegal (Dakar), Ivory Coast (Abidjan)



Swiss Institution

Théogène-Octave Gakuba
University of Applied Sciences of Western Switzerland (HES-SO), Haute Ecole de Travail Social de Genève

Partner Institution

Sofonnou Abdon
Council for the Dev. of Social Science Research in Africa

Description

The project builds on a comparative approach to study a hot topic focussing on the psychosocial support and professional integration of young African refugees (18-25 years) in the cities of Dakar, Abidjan and Geneva. These young people, in most cases have experienced traumatic situations of war and face psychological and sociocultural difficulties that might affect their physical and mental health. Some are separated from their families and are psychologically affected by events experienced during the pre-migration period, especially when it is difficult for them to find a host family which could provide them necessary support. Others are unable to access training and health care in the host countries hin-

dering their process of socio-professional integration. The project addresses a need for production of scientific knowledge and application of professional practices on a topic less studied in Africa (Ivory Coast, Senegal) and in Switzerland. The results of the research will be a vital contribution for social workers, health and education personnel. Identified approaches and methods will be used by socio-educational institutions dealing with young refugees in general and especially young African refugees living in the three targeted countries.

Development relevance

The project aims to meet certain Millennium Development Goals such as:

- The fight against poverty by addressing the physical and mental well-being of youth to actively participate in the development of their country;
- Providing education for all and promoting gender equity by allowing young refugee girls largely excluded from

- education, access to education and professional training;
- Establishing a development partnership between Switzerland and developing countries (Ivory Coast, Senegal) through research and training.



Young Mauritanian refugees in Dakar
(photo Gakuba)



Home for refugees in Geneva
(photo Gakuba)

Applied Research Partnerships with Developing and Transition Countries
 Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Shortcomings of agricultural knowledge transfer in Kenya – and ways to improve it

Thematic focus

Media and Communication Agriculture

Year

2011

Project location

Nairobi and rural areas in Kenya



Swiss Institution

Christoph Spurk
 ZHAW Zurich University of Applied Sciences
 IAM Institute of Applied Media Studies

Partner Institution

Murej Mak'Ochieng
 Dean of Faculty of Media and Communication
 Multimedia University College of Kenya (MMU)

Description

Experiences from Kenya show that applicable agricultural knowledge is available but hardly used by peasants and households. The research project assumes that a distorted communication process between knowledge generators, intermediaries and knowledge users is partly responsible for this failure. It will therefore investigate the elements involved in this process. The project aims at identifying the reasons why the transfer of applicable agricultural knowledge in Kenya often fails, and at elaborating a set of evidencebased recommendations on how to improve communication for knowledge transfer.

Thus, it consists of:

(1) Identifying the current status of supply of applicable knowl-

edge from agricultural research institutions as well as their shortcomings in transfer/communication.

(2) Exploring the current status on public and semi-public communication about the topic of agricultural research applications: reporting in main mass media (newspaper, radio, TV) and communication in other media (specialized media, Internet, mobile phones, social media, Newsletters)

(3) Exploring information needs of potential knowledge users and their media and communication use patterns.

This will be done with a sample of around 900 small farmers' households in Kenya.

Development relevance

The project is highly relevant for Kenya's efforts in achieving the Millennium Development Goals. It affects the first MDG (eradicate extreme poverty and hunger) directly as it will contribute to improving agricultural knowledge transfer to individual users and thus fights poverty; and it affects other MDGs indirectly.

The project will dedicate its efforts to one of the main desiderata in media effects research: The reasons and triggers for initia-

ting behaviour change or taking up of innovation. These are still fairly unknown. Yet, there is strong evidence that the interface between media messages and personal communication is of high relevance.



Focus group discussion with small holder farmers in Western Kenya, Machakos District



It was lively discussed what kind of information small scale farmers need, when and in what way

Applied Research Partnerships with Developing and Transition Countries

Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Improving agriculture productivity with information system

Thematic focus

Agriculture, Information system, Software Engineering

Year

2012

Project location

Kanpur, India



Swiss Institution

Philippe Dugerdil
Geneva School of Business Administration
University of Applied Sciences of Western Switzerland

Partner Institution

Prabhakar Venkata Tadinada
Computer Science and Engineering Department
Indian Institute of Technology, Kanpur India

Description

Agricultural knowledge has tremendously progressed for the past several decades. Yet all the farmers do not have equal access to this knowledge, especially in large decentralized countries like India. However, such knowledge as well as its diffusion plays a key role in the improvement of agricultural productivity, which is required to fight hunger. Indeed, a team from the Indian Institute of Technology in Kanpur led by Prof TV Prabhakar has developed a system called Agropedia which provides online information to farmers and gives them virtual access to agricultural engineers to solve specific problems. Because of the results of Agropedia, the Indian Council of Agriculture Research plans to launch its services

all over the country from next year. Agropedia may also be distributed to other countries like Philippines and Brasil and it is likely that some modules will be deployed in Africa. Because of these extensions, Agropedia maintenance becomes a huge concern. Indeed, for these extensions to be a success it should be possible for new IT development resources to be added to the project and become productive rapidly, which is impossible today. The software engineering techniques that will be developed jointly in this project, and which rest on the expertise developed by Geneva, will make it possible and will assure the sustainability of Agropedia in the long term.

Development relevance

Agropedia is likely to develop into a platform of great significance for agriculture knowledge management and extension and as a major ICT tool for farmer enablement. The proposed project will strengthen the Agropedia platform and make it more amenable for its widespread usage and adoption, thereby contributing to fight hunger in transition countries. Indeed the problem of the distribution

of agricultural knowledge has been widely documented in the literature, as well as the role of ICT in this process. Agropedia is a tangible answer to these problems. In short our proposal is likely to have a significant impact on the hunger problem because it will allow Agropedia to scale up smoothly to all regions in India as well as, hopefully, to several transition countries.



The rice field was photographed in Kerala, south of Cochin



The building is the computer science department of IIT Kanpur

Applied Research Partnerships with Developing and Transition Countries

Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Development of efficient phytochemical and activity-guided selection methods for the sustainable production of Maqui Berries in Chile

Thematic focus

Preservation of wild plants and sustainable agriculture

Year

2012

Project location

Chile



Swiss Institution

Evelyn Wolfram
Zürcher Hochschule für angewandte Wissenschaften
Institut für Biotechnologie, CH-8820 Wädenswil

Partner Institution

Hermine Vogel and Benita González López
Universidad de Talca, Facultad de Ciencias Agrarias
Región del Maule, Chile

Description

Aristotelia chilensis is a wild growing shrub in central to southern Chile and western Argentina, which is known for producing tasty and antioxidant rich berries, locally called „Maqui“. For the nutraceutical supplements industry, the high antho-cyanin content and antioxidant activity of the berry is in high demand and the exploitation of the wild resources in Chile has grown extensively. The Universidad de Talca has started a project, financed by FONDEF, Chile, which aims at the selection, domestication and cultivation of Maqui on an agroindustrial scale in order to provide industry with sustainably produced Maqui berries with standardized quality characteristics.

The assessment of the phytochemical content and variation of the berries in dependence to genotype, culture and post-harvest conditions is the basis for selection and agricultural management techniques. The Phytopharmacy research group of the ZHAW Wädenswil has strong competencies in the field of modern, standardized and hyphenated High Performance Thin Layer Chromatography (HPTLC) screening methods for comparison of phytochemical fingerprints of medicinal and aromatic plants.

In this respect, the cooperation between the two research groups provides for a great scientific and sustainable benefit to the ongoing research of Universidad de Talca.

Development relevance

The following UN Millenium Development goals are met:

- Goal 3 Gender equality:
The cooperation involves exclusively female researchers: 2 scientist and a PhD student. The PhD student will come for scientific exchange to Switzerland.
- Goal 7 Ensure environmental sustainability:
the projects involves multiple aspects for preservation and

sustainability of natural resources and safeguard of biodiversity in natural habitats of *Aristotelia chilensis*

- Goal 8 Contribution to Global Partnership:
The project addresses the topic of Access and Benefit Sharing (Convention on Biological Diversity) for Maqui Berry, before industry from Western Countries take exclusivity



Wild habitats of the typical Chilean shrub *Aristotelia chilensis* are threatened by over-exploitation of the wild population due to high demand of Maqui Berry in the nutraceutical industry. (Photo UTalca)



Plantation Experiments supported by a Chilean National funds Project at Universidad de Talca, Chile. (Photo UTalca)

Applied Research Partnerships with Developing and Transition Countries

Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Autonomous energy production from biomass wastes and improvement of the environmental situation in Java

Thematic focus

Renewable energy, biogas research, ecology

Year

2012

Project location

Java, Indonesia



Swiss Institution

Rolf Warthmann
ZHAW Zurich University of Applied Sciences
Institute for Biotechnology / Center of Environmental
Biotechnology, Wädenswil, Switzerland

Partner Institution

Munti Yuhana
Bogor Agricultural University Faculty of Fisheries
and Marine Sciences Bogor 16680, West Java, Indonesia

Description

Indonesia has a huge potential of biogas energy which is not used. From about 685 MW of bioenergy (calculated mainly with agricultural wastes) only a very small quantity is actually used so far. The focus of the Indonesian Center for Agricultural Engineering Research and Development was until now mainly to vulgarize small biogas plants on small farms with Chinese biogas technology showing capacities of less than 20 m3. Because of low biogas production, electricity still has to be produced by diesel engines, if no local provider of electricity is available. Access to electrical energy is something everyone is entitled to, and furthermore a vital condition to create more prosperity.

The aim of this project is to identify together with the local partners the regional potential of organic wastes and waste waters additional to animal manures suitable for biogas production and to identify possible locations for medium size plants on sites with small and medium size food industries producing biogenic wastes. In the current research project, biogas plants will be developed and adapted to the specific application and subsequently constructed in a second phase of the project. The project, i.e. this preliminary study presented here, is intended to be a first step in a long-term co-operation between Indonesia and Switzerland.

Development relevance

The proposed project in rural biogas production addresses several MDG's: Improving environmental sustainability by saving CO2 and CH4 emissions and water resources, improving health and hygiene as well as creating employment. Creation of global partnership addressing special problems of the partner country, and making the benefits of new technologies available for the partner country.



Dr. Munti Yuhana and colleagues are looking forward to a fruitful research collaboration between Bogor Agricultural University and Zurich University of Applied Sciences in Wädenswil



Photo about a rural biogas plant using agricultural waste for biogas production and nutrients recycling

Applied Research Partnerships with Developing and Transition Countries
 Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Hydrogeological investigation of the Nubian Sandstone Aquifer System in Northern Chad, baseline study for sustainable management

Thematic focus

Groundwater resources sustainable management

Year

2012

Project location

Chad



Swiss Institution

Sebastian Pera
 University of Applied Sciences and Arts of Southern
 Switzerland (SUPSI)
 Université de Neuchâtel

Partner Institution

Koina Rodoumta
 University of N'Djaména
 Ministry of Water and Hydraulics of the Chad Republic

Description

In the area of North-Eastern Chad there are several lakes and areas of shallow groundwater with palm tree plantations and a high biodiversity. A severe water table decline could generate environmental and agricultural problems as already observed in the Kufra oasis, threatening food security. To develop a controlled and regulated exploitation, a conceptual model of the dynamics of the Nubian Sandstone Aquifer System (NSAS) must be developed. Additionally, without a state of the art situation regarding existing and functionality of water points, it is difficult for the Chadian Water Authority to identify the requirements in terms of water supply for the population living in Northern Chad.

Acquiring high-precision altimetric water points data, hydraulic gradients definition and physico-chemical and isotopic signatures from approximately 200 water points spread in the Nubian Aquifer System of Northern Chad will enable the design a simple semi-quantitative conceptual model on the character of the fossil underground water and will give significant insights on the development of the system in terms of exploitation.

Development relevance

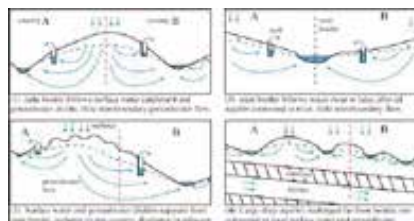
As stated in the Millennium Development Goals, redefined in Johannesburg in 2002, by 2015 the proportion of people that do not have access to drinkable water or that do not possess the means to acquire it, has to be reduced by half. To meet this goal, the Chadian Director Plan for Water and Sanitation defines 3 strategic axis: 1) improvement of knowledge on water resources through research and monitoring networks 2) building national

capacities to ensure the sustainable exploitation of water resources, and 3) strengthening of the legislation related to the exploitation of water resources.

In 1999 Chad Joined the Authority of the Nubian Sandstone Aquifer System, created to enhance cooperation in managing its water resources.



NSAS distribution across Chad, Libya, Egypt and Sudan



Transboundary issues on groundwater management

Applied Research Partnerships with Developing and Transition Countries
 Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Promoting sustainable production methods and socio-environmental certifications among small-scale cocoa farmers in Ghana

Thematic focus

Certifications and sustainable production in the cocoa sector

Year

2012

Project location

Kumasi, Ghana



Swiss Institution

Ingrid Fromm
 School of Agricultural, Forest and Food Sciences
 Bern University of Applied Sciences

Partner Institution

Robert Aidoo
 Kwame Nkrumah University of Science and Technology
 (KNUST)

Description

Cocoa is one of Ghana's main export products. There are about 2 million cocoa farmers in Ghana; most of the cocoa is produced on small farms of 3-4 hectares. Small-scale cocoa farmers often benefit the least from the global cocoa industry.

Private certification initiatives, such as organic and fair trade labels guarantee that farmers and producers are paid better prices. The aim of this project is to promote the adoption of sustainable farming methods and socio-environmental certifications among small-scale farmers to secure a better income.

The research project will focus on current production me-

thods, factors determining the adoption of sustainable farming methods as well as innovation and the use of labels and certification at the farm level. Capitalizing on the expertise of the staff of the Bern University of Applied Sciences, School of Agricultural, Forest and Food Sciences (HAFL) and the Department of Agricultural Economics, Agribusiness and Extension from the Kwame Nkrumah University of Science and Technology (KNUST), a participatory approach will be applied in farmer training, using the new knowledge base emanating from the research.

Development relevance

Cocoa plays a key role in the socio-economic development of Ghana by employing more than 50% of farmers and contributing more than 60% of the country's foreign exchange earnings. When farmers are able to produce more sustainably and are able to certify their cocoa beans, it will improve the competitiveness of Ghana's cocoa on the international market.

Consequently, the value of Ghana's cocoa will improve further

leading to more foreign exchange earnings to fuel social and economic development. The project envisions capacity building for farmers to improve productivity and farm income as well as food security at the household level.



Interview Sheanut Farmers' Association



Interview with farmers

Applied Research Partnerships with Developing and Transition Countries
 Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Woods and Friends: Street soccer, peer education approach and a free instant messaging application to communicate effectively

Thematic focus

Street soccer, peer education, prevention

Year

2012

Project location

Masiphumelele, Cape Town, South Africa



Swiss Institution

Wilma Minoggio, Paola Solcà and Igor Sertori
 University of Applied Sciences and Arts of Southern
 Switzerland (SUPSI)
 Department of Business and Social Sciences

Partner Institution

Merle Mcombring-Hodges
 Cape Peninsula University of Technology
 Faculty of Education and Social Sciences

Description

The project aims to prevent drug and alcohol abuse and the spread of HIV/AIDS through counseling and the promotion of citizenship values using a Peer Education approach. Street soccer will be used as a hook to gather the intended age group (10-13 years –Senior Primary School grades) in the Township of Masiphumelele. The novelty of this project lies in using a free instant messaging application (Mxit) as the vehicle to deliver messages amongst peers. Mxit is the largest social messaging network in South Africa and on the entire Continent. This pioneering model is intended to be replicable in developing countries since it capitalizes on the overall wide use of social messaging networks amongst new

generations, and sidesteps a major obstacle to the spread of social media in developing countries; namely Internet access and the comparative high cost of a PC.

Development relevance

Relevance in terms of Millennium Development Goals (UN declaration): According to the 'Gini Coefficient' South Africa ranks very high: that means that the inequality among incomes is the highest in the world. Poor education, HIV/AIDS, apartheid heritage, chronic delay in welfare resources and addiction problems are among the most important causes of poverty. Therefore the belief that enhancing citi-

zen awareness, delivering HIV and substance abuse prevention through peer-education is going assist the process of eradicating poverty. The relevance for development of this project has a potential to be reproduced in other countries, especially in Africa and South America.



Into the narrow
 avenues of
 the informal settle-
 ment in
 Masiphumelele



Mobile phone
 company's box
 in Masiphumelele

Applied Research Partnerships with Developing and Transition Countries
 Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Improving Education of Health Workers in disadvantaged areas of South Africa by means of Social and Mobile Media

Thematic focus

Health & nursing education, social mobile media

Year

2012

Project location

KwaZulu-Natal, South Africa and Basel, Switzerland



Swiss Institution

Christoph Pimmer
 University of Applied Sciences and Arts
 Northwestern Switzerland (FHNW)

Partner Institution

Jennifer Chipps
 School of Nursing and Public Health, College of Health Sciences
 University of KwaZulu-Natal

Description

On a global level more than one billion people who live in low resource settings do not receive adequate healthcare. In these contexts, caregivers and healthcare professionals often work in isolation and have poor access to post-basic education, to continuing education and to up-to-date evidence-based information. This is particularly true for South Africa, a nation which is dramatically affected by the spread of HIV/Aids: 63'000 children get infected yearly, childmortality and maternal mortality have risen, and life expectancy has fallen from 62 to 52 years in the last fifteen years. The lack of adequate healthcare leads to severe societal and economic problems. This research intends to gain new in-

sights and provide guidance on how social & mobile media can facilitate information access and education of health-care workers in low resource settings. The project aims at exploring and improving the access to information and education of nurses and midwives, who work in disadvantaged communities in South Africa. The three Millennium Development Goals centred on "child-health", "maternal health" as well as "HIV" stand in the focus of this project. It is planned to research how the potential of 26 million mobile phone users and of the increasing number of social network accounts in SA can contribute to achieving these goals and improving the situation.

Development relevance

South Africa's socio-economic development is dramatically affected by the spread of HIV/Aids with high rates of child and maternal mortality. While effective health care would be needed to improve the situation, health workers and in particular nurses and midwives in rural areas lack access to health information and education. The increasing number of mobile phones and the rising popularity of social networking sites and tools can be

harnessed to improve access to evidence-based information and education. In developing and researching new educational approaches, South Africa can act as a role model and facilitator for Africa and beyond.



Mobile phone usage among health professionals and students



Benedictine Hospital, Nongoma

Applied Research Partnerships with Developing and Transition Countries
 Swiss Universities of Applied Sciences and Universities of Teacher Education

Project title

Predictors of HIV-protective behaviours in adolescents and young adults in Costa Rica

Thematic focus

HIV/AIDS; protective behaviour; young adults; prevention

Year

2012

Project location

Costa Rica



Swiss Institution

Daniel Gredig
 University of Applied Sciences Northwestern Switzerland
 School of Social Work (HSA FHNW) Olten, Switzerland

Partner Institution

Ana Josefina Güell Duran
 Universidad Libre de Costa Rica (ULICORI)
 Escuela de Trabajo Social San José, Costa Rica

Description

In the light of scarce and reluctant HIV prevention efforts in Costa Rica, this cooperative HIV research project aims to establish predictors for HIV-protective behaviours among young men and women aged between 15 and 25 years. Underpinned by the theoretical framework of the extended Information-Motivation-Behavioural Skills- Model (IMB Mo-del), the research project will explore the following questions:

- What HIV prevention information, motivation, behavioural skills and resources do men and women aged between 15 and 24 in Costa Rica possess and which factors are barriers to condom use?

- Does a contextualised, extended IMB Model predict condom use in this population?
- Are variables predicting condom use different in subpopulations, such as in men vs. women, adolescents vs. young adults, in men having sex with men, migrants or in rural vs. urban contexts?

A mixed methods design will be used combining a qualitative exploratory investigation with a subsequent, standardized quantitative survey.

Findings will contribute to underpin the development of sound prevention offers for adolescents and young adults in Costa Rica.

Development relevance

This project's outcomes make a contribution to Millennium Development Goal (MDG) 6: "Combat HIV/AIDS, Malaria and Other Diseases". Costa Rica's response to the HIV epidemic has been tardy, fragmentary and prevention stands on thin scientific grounds. Costa Rica has scarcely been advancing its HIV/AIDS research.

The country therefore urgently needs a social research

base in order to develop and implement targeted prevention that is appropriate for the country's particular circumstances (culturally relevant intervention) and contributes to a move in direction of MDG 6.



Seminar room at ULICORI, San José: Preparing the cooperative research project



Edificio tres, ULICORI, San José





Annexes

Gender issues as a need in research and development, not only as a feature.
(India, 2009)

UAS and UTE

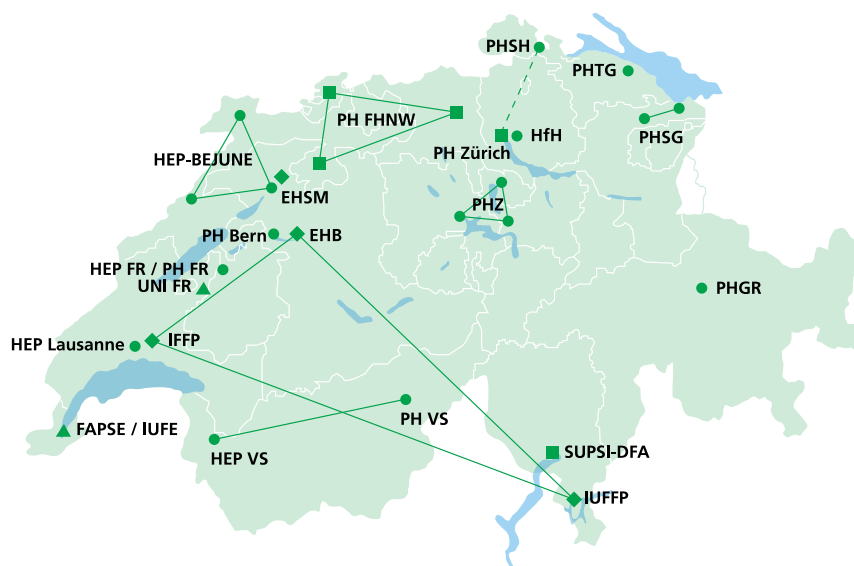
Swiss Universities of Applied Sciences and Arts

Switzerland's UAS sector is comprised of seven public UAS and two private UAS. The seven public UAS received approval from the Federal Council in 1998. Each of these public UAS is run by one or more Cantons. The two private UAS were approved by the Federal Council in 2005 (Kalaidos) and 2008 (Roches-Gruyère).



Swiss Universities of Teacher Education

The universities of teacher education have three missions: teaching, research and development, and further education and services. In his quality as Swiss Conference of Rectors of Universities of Teacher Education, COHEP coordinates and supports in the further development of teaching institutions in the performance fields of teaching theory, research, further education and services.



- University of Teacher Education
- Integrated in Uas
- ▲ Integrated in Uas
- ◆ Other teaching institutions

List of acronyms

Acronym	Meaning
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aR&D	Applied Research and Development
ASP	Alta Scuola Pedagogica
BFH	Berner Fachhochschule
CFP	Call for proposals
COHEP	Swiss Conference of Rectors of Universities of Teacher Education
CRUS	Rector's Conference of the Swiss Universities
DC	Development and Cooperation
D&T	Development & Transitional (countries)
DEZA	Direktion für Entwicklung und Zusammenarbeit
ETHZ/EPFL	Swiss Federal Institutes of Technology (Zürich and Lausanne)
FH	Fachhochschule
FHNW	Fachhochschulen Nordwestschweiz
FHO	Fachhochschule Ostschweiz
HEP	Haute École Pédagogique
HEP-BEJUNE	Haute École Pédagogique Berne Jura Neuchâtel
HES	Haute École Spécialisée
HSLU	Hochschule Luzern
HES-SO	Haute École Spécialisée de Suisse Occidentale
KFH	Rector's Conference of the Swiss Universities of Applied Sciences and Arts
KFH-DC	Rector's Conference of the Swiss Universities of Applied Sciences and Arts – Development and Cooperation
MDGs	Millenium Development Goals
NGO	Non-governmental Organization
PEGEI	Politique, économie, gestion de l'éducation et éducation internationale c/o Université de Genève, en collaboration avec COHEP
OPET	Federal Office for Professional Training and Technology

Acronym Meaning

PH	Pädagogische Hochschule
PHZH	Pädagogische Hochschule Zürich
PHZ	Pädagogische Hochschule Zentralschweiz
SCNAT	Swiss Academy of Sciences
SCOPES	Scientific co-operation between Eastern Europe and Switzerland
SDC	Swiss Agency for Development and Cooperation
SER	State Secretariat for Education and Research
SNSF	Swiss National Science Foundation
SUP	Scuola universitaria professionale
SUPSI	Scuola universitaria professionale della Svizzera italiana
UAS	University of Applied Sciences
UN	United Nations
UTE	University of Teacher Education
ZFH	Zürcher Fachhochschule
ZHAW	Zürcher Hochschule für Angewandte Wissenschaften
ZHdK	Zürcher Hochschule der Künste

Selected web links

Rector's Conference of the Swiss Universities
of Applied Sciences and Arts
www.kfh.ch

Swiss Conference of Rectors of Universities
of Teacher Education
www.cohep.ch

Swiss Agency for Development and Cooperation
www.deza.admin.ch

State Secretariat for Education and Research
www.sbf.admin.ch

Federal Office for Professional Education
and Technology
www.bbt.admin.ch

Swiss National Science Foundation
www.snf.ch

Commission for Research Partnerships with
Developing Countries
www.kfpe.ch

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