GETTING IN TOUCH WITH THE PROJECT INNOVATE

On this first edition, we invite you to get to know a little bit about the background of the project INNOVATE, the profile of its coordinators and the retrospective 2012 of the activities since the beginning of the partnership between Brazil and Germany. This first edition will be a bit more intensive in order to give you a good overview. The next editions will be more compact. We hope you enjoy the newsletter.

What is the Project INNOVATE?

Discover which are the objectives and the research fields of the project.

Section 1

Get to know the INNOVATE Team

This section introduces all the project integrants. On this first edition, we will get to know a little more about the coordinators and managers.

Section 2

Cooperation and Media

Get involved with the institutions and the partners that collaborated with the project and also with the news that have shown up on the media.

Section 4

INNOVATE in Action

Many actions executed! See the Retrospective 2012 in photos.

Section 3

Sharepoint

New material released in the SharePoint regarding Water Resources and Environmental Legislation.

Section 5

Study region: Itaparica reservoir

Dra. Maria do Carmo Sobral coordinated important event by the Capes. (Foto: Guilherme Feijó - ACS/Capes)

Dr. Gunter Gunkell was awarded the Adalbert Seifritz Prize of the technological transfer.
Dear Innovates,

As promised our 1st edition of the Innovate News is released!!!

Many news! Our Brazilian Speaker (coordenadora) Prof. Dr. Maria do Carmo came to Berlin for institutional linkages. Prof. Dr. Edvânia Torres, PD Dr. Marianna Siegmund-Schultz and the PhD student Verena Rodorff participated in the Stakeholders GLUES workshop. INNOVATES actions in the study area: Prof. Dr. Maria do Carmo Sobral met with the recently elected Mayors of the region. INNOVATES in situ: Dr. Arne Cierjacks, Prof. Dr. Jarcilene Cortez and the PhD students Katharina Schulz and Maike Guschal (SP4); Prof. Dr. Martin Kaupenjohann, Dr. Jan Mertens, Dr. Jörn Germer and the PhD student Ruben Cunha (SP2-2); Prof. Dr. Anne V. Zárate and the PhD student Karin Stock (SP2-4); Prof. Dr. Ronaldo Faustino (SP3); Dr. Markus Vernohr and the PhD students Simon Siewert and Peter Fischer (SP5); and Dr. Gustavo Melo and the PhD students Débora Lima, Florian Selge, André Ferreira, Jonas Keitel and Maricela Rodriguez (SP1).

The year 2013 will be very busy. In July, the 65th Annual Meeting of the Brazilian Society for the Progress of Science (SBPC) will take place on UFPE campus, where the INNOVATE project will be represented with an information desk. We count on your participation: the period of paper registration is open now. Check out the news.

We count on your help to send us news and suggestions along the year.

Until next edition!

Marília Castro
Editorial

The beginning of the INNOVATE activities in 2013 was marked by a journey to Berlin headed by the Brazilian speaker (coordenadora) Prof. Dr. Maria do Carmo Sobral and was attended by Prof. Dr. Suzana Montenegro member of SP1. Among the various activities, meetings with the project members, visits to some of the partner institutions, participation in lectures and meetings with German and Brazilian exchange students were realized.

Prof. Dr. Maria do Carmo Sobral, Prof. Dr. Suzana Montenegro and Prof. Dr. Aleixo meeting researchers of the Climatology Institute of the University of Potsdam.

Prof. Dr. Maria do Carmo Sobral and Prof. Dr. Aleixo meeting with PhD candidates Simon Siewert, Peter Fischer and Hélio Lopes at TU Berlin. In the second time with the PhD candidate Rafaella Mattos and Roswitha Paul-Walz, part of the exchange office at TU Berlin.

Photos: Marília Castro
The INNOVATE Project attended International Academic Meeting: Inter and Transdisciplinarity on Teaching, Researching and Extension of the CAPES in Brazil

This international meeting aims to systematize the discussion on theoretical and conceptual aspects that deal with inter and transdisciplinarity as conceptions of knowledge production and practices. It also promotes the articulation between higher education and basic education, through teaching strategies, to develop scientific and technological knowledge.

Prof. Dr. Maria do Carmo Sobral (UFPE) coordinated the important event of CAPES (Coordenacao de Aperfeicoamento de Pessoal de Nível Superior) in Brasilia – Brazil

To discuss the main topics in the area of interdisciplinary evaluation, focusing on the environmental sciences, the area coordinator, Maria do Carmo Sobral, cited the social integration, the diversity of the working team, the scientific work and didactic as central points of the evaluation process. Sobral also has highlighted the importance of the internationalization of the university program: “The Science Without Borders program is a great opportunity. We have to fight for it to keep being able to send our students abroad.”

Further Information:
http://seminarios.capes.gov.br/encontro/programacao.html

Prof. Dr. Johann Köppel (TU Berlin) talks about the INNOVATE project at CAPES

The panel was about experiences in interdisciplinary teaching, research and extension. The mediator Adelaide Faljoni-Alario, Universidade Federal do ABC (Brazil), said that moments like this meeting help to understand how the interdisciplinarity can contribute to different levels of education and to promote the improvement of education. She explained: "Another important challenge is how to develop profiles and disciplinary practices that prepare individuals to face contemporary challenges". In this sense, the German researcher Prof. Dr. Johann Köppel, Technische Universität Berlin, talked about experiences of the INNOVATE project, which do research on water resources in reservoirs at São Francisco River Basin. He said: "We have about 100 Brazilian and Germans cooperating in an interdisciplinary approach. A true project cooperation between scientists of economics, biodiversity, and other areas, to generate research on issues such as soil problems, water quality, climate change, the river future and human use of the river water in a sustainable way."

The Seifriz Prize awards every year successful cooperations between Craft and Science.

PD Dr. Günter Gunkel was awarded the prize „Craft – Science Adalbert Seifriz“

Dipl.-Ing. Michael Scheideler, Scheideler Verfahrenstechnik GmbH, and Dr. Günter Gunkel, Technische Universität Berlin, were awarded the „Adalbert Seifriz Prize“. They developed together a CO₂-Flushing, including a technique for the detection and elimination of water lice and their feces in drinking water pipes. Through the CO₂-Flushing, the water lices are narcotized, what makes them unable to hold on the pipelines, being flushed out with a low flow rate from the pipelines.


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In debate about the new Brazilian Forest Code, at the Environment Committee and the Agriculture Committee of the Federal Brazilian Senate, scientists representatives of the SBPC (Brazilian Society for the Progress of Science) and of the ABC (Brazilian Academy of Sciences) have suggested changes in some points. Prof. Dr. José Antônio Aleixo affirms: “It’s time to converge to a common point. And no common point where only one party wins. We need to find a equilibrium point.”

What is the Project INNOVATE?

The core objective of the project is designing an innovative coupling of substance cycles, evaluated on macro, meso and local scales, and embedded in societal structures. The project covers the São Francisco River catchment up to the Itaparica dam, with empirical research in the surroundings of the Itaparica reservoir under smallholder conditions. Main lessons will be depicted, which are potentially transferrable to other watersheds.

The regional project INNOVATE is a part of the research programme “Sustainable Land Management” (Module A), funded by the German Federal Ministry of Education and Research (BMBF). INNOVATE is one of twelve regional projects which are located in various parts of the world. In close cooperation with their local partners in science and practice, these projects will design strategies for maintaining important ecosystem functions and services. The projects are supported by the Scientific Coordination and Synthesis GLUES (Global Assessment of Land Use Dynamics, Greenhouse Gas Emissions and Ecosystem Services).

Twenty-two, bi-nationally staffed research modules belong to seven sub-projects (SP). The steering group consists of the Brazilian and German SP-leaders, and the coordination team again of German and Brazilian members. A regional stakeholder round table observes the relevance of the project and the feasibility of its results. An international advisory board has a counseling role. The coordinator manages the GLUES interface, supported by respective project members. The MCT (Brazilian Ministry of Science and Technology) heads the Brazilian Sponsor Consortium, forming the direct counterpart to the BMBF/DLR on the German side.

**SP1 Aquatic Ecosystem-Functions**

A reservoir acts as a reactor with the input of nutrients from the watershed as well as by internal input from lake sediments; this leads to an eutrophication of the water body with increased bioproduction, occurrence of undesired species and emission of greenhouse gases, mainly methane. Deficits still exist in an adapted management of reservoirs, especially in nutrient control, and within this research project a transdisciplinary approach will be developed with the key factors oligotrophication, reduction of methane emissions, and excavation of sediments and their re-use for soil amendment. The assessment and localization of methane emissions will be quantified, as well as the significance of submerged and periodically desiccated sediments in the littoral zone.

**SP2 Terrestrial Production**

The overall objectives of SP 2 are the increase of the productivity of the reservoir-water irrigated agro-ecosystems, the quantification of their carbon sequestration potentials and the minimization of GHG emissions. To achieve these goals, new crop rotations including energy crops will be introduced, animal husbandry will be integrated into the farm systems and biochar applied to soils.
SP3 Green Liver System

Eutrophication of water bodies occurs worldwide because of growing industry, agriculture and aquaculture, and can lead to mass development of cyanobacteria. To protect possible consumers from adverse health effects caused by these toxins, it is necessary to know the pathway of the toxins in the natural food web and within aquaculture and terrestrial agro-ecosystems. As the reservoir has multiple functions, an integrated use of the water is necessary, linking aquatic and terrestrial environments. The overall objective is to develop a sustainable purification system, which works in a biphasic way, and to reduce the pollution and eutrophication of the environment by introducing a sustainable aquaculture technology. Reservoir water will be purified for drinking water and spray irrigation, and aquaculture wastewater will be purified before it is send back into the reservoir.

SP4 Biodiversity/Ecosystem Services

This sub-project contains three research modules (RM1-Plant Biodiversity and Carbon-Sequestration, RM2-Animal Biodiversity and Pest Control, RM3-Aquatic Biodiversity and Water Supply) reflecting the three corresponding ecosystem services. Together, the RMs provide an assessment of terrestrial and aquatic biodiversity, based on the particular taxonomic groups under investigation. The overall objectives are on the one hand to optimize the trade-offs between ecosystem services and biodiversity conservation, and on the other hand to recommend innovative land use strategies under the influence of regional climate change. Specifically we aim to explore (A) the impact of land use practices on faunal and floristic diversity patterns in the study area, (B) the potential of Caatinga vegetation for C sequestration, reforestation and biochar production, (C) the relevance of faunal biodiversity to pest control in new crop plantations, and (D) the potential of the reservoir’s margin zone as a buffer system for water supply.

Source: http://www.innovate.tu-berlin.de/v-menue/home/

SP5 Modelling

SP5 models climate and land use change impacts on water resources in the entire basin of the São Francisco River (water quantity and water quality) and the Itaparica reservoir (thus forming the boundary conditions for the small scale investigations as given by the coordination project GLUES). We up-scale the small scale investigations to the river basin scale and interact with the project GLUES on global models and scenarios.

SP6 Economy

SP6 -Economic assessment- aims at an integrated economic valuation of strategies for a sustainable use of the Itaparica reservoir and the landuse in the vicinity of the reservoir and on the scale of the river basin. For this purpose, the agriculturally dominated land use, the water use and their nexus are modelled on the basin and the reservoir scale and the impact of innovative cropping and cleanup measures are estimated on the basis of alternative land use scenarios. The impacts of the land use changes and the effects of the policy options are analyzed and evaluated economically at the reservoir level. As a result, the integration of the assessment in a cost benefit analysis is pursued.

SP7 Decision Support Approach

SP7 coordinates the project internally and externally. The first comprises the interactions between the different sub-projects and research modules, involving the German and Brazilian teams, and between INNOVATE and BMBF/DLR and its coordination project GLUES. The external project coordination comprises the Decision Support Approach, which we base on the concept of Constellation Analysis. Supported by stakeholders, good governance and good practices will be depicted, taking up the expected innovations of our joint research project. We address manifold actors and issues on various levels and within individual scopes and foci.
Get to know the INNOVATE Team

Get to know more about the professional life of our speakers (coordenadores), vice-coordinators and coordinators (project managers). This is a short version of their curriculums. If you are interested, you can go further and check it by yourself on the available links.

Maria do Carmo Sobral

Obtained a degree in Civil Engineering (1974) and a specialization in Environmental Sanitation (1976) at Universidade Federal de Pernambuco (UFPE) in Brazil, a specialization in Urban and Regional Planning at Universität Dortmund in 1986 in Germany, master in Civil Engineering at University of Waterloo in England, doctorate in Environmental Planning at Technische Universität Berlin (TU Berlin) in 1991 in Germany and postdoctorate at the Institute of Environmental Technology at TU Berlin in 2007. From 1983 to today she has been working as an associate professor at UFPE at the Department of Civil Engineering, collaborating with and teaching on many postgraduation programs at UFPE, such as the postgraduation program of Civil Engineering and the PRODEMA (Programa em Desenvolvimento e Meio Ambiente – Program on Development and Environment). In 2006 she started to work in cooperation with the TU Berlin, where in 2007 she was a visiting professor. Amongst her other activities are: coordinator of Environmental Sciences of CAPES (Coordenação de Aperfeiçoamento de Pessoal de Nível Superior – Coordination of Improvement of Higher Education People) since 2012, member of the COMAM (Conselho Municipal de Meio Ambiente do Recife – Town Council for the Environment of Recife) since 2009, vice-coordinator of the Department of Civil Engineering at UFPE since 2009 and held several other positions regarding the State Government administration. She has experience in the areas of Environmental Planning and Management, Environmental Sanitation, Environmental Technology, Urban and Regional Planning, Environmental Impact Assessment, Water Resources Management, Water Quality and Sustainability Indicators.

Link Lattes: [http://lattes.cnpq.br/4167833928991356](http://lattes.cnpq.br/4167833928991356)

Johann Köppel

Obtained a diploma degree in „Landespflege“ (Land Conservation) at TU München (Technische Universität München) in 1983 and a doctorate also at TU München in 1996, with the thesis: „Der Beitrag der Vegetation zum Wasserhaushalt im Nationalpark Berchtesgaden – The contribution of vegetation to water balance at the Berchtesgaden park.“ From 1999 to today he has been working as a full professor and head of the Environmental Assessment and Planning Research Group at TU Berlin (Technische Universität Berlin), where in 1998 he started as a visiting professor. In 2010 he was also a visiting professor at UW (University of Washington). Amongst his other activities are: member of the selection committee for Ph.D. scholarships of the Deutsche Bundesstiftung Umwelt (DBU) since 2002, lead partner of DAAD Partnership Program with Universities in Developing Countries between TU Berlin and TU Oruro (Bolivia) since 2009, dean of TU Berlin’s Faculty VI – School of Planning and Building the Environment – since 2011 vice-president for research TU Berlin (2006 – 2010). Nowadays he is involved in two international research cooperations, the first since 2004 with UW in the USA, regarding Environmental Policy and Planning, and the second since 2009 with UFPE, regarding the INNOVATE Project.

José Antônio Aleixo da Silva

Obtained a degree in Agronomy (1975) and a specialization in Forestry (1975) at Universidade Federal Rural de Pernambuco (UFRPE) in Brazil, master in Forest Science at Universidade Federal de Viçosa (UFV) in 1977 in Brazil, PhD in Biometrics and Forest Management (1986) and postdoctorate in Biometrics and Forest Management (1993) at University of Georgia (UGA) in the United States of America. Since 1976, he has been working as an associate professor at UFRPE at the Department of Forest Science, collaborating with and teaching and advising on the postgraduation program of Civil Engineering at Universidade Federal de Pernambuco (UFPE) and Forestry Science and Applied Statistics and Biometrics of UFRPE and in the professional master programs of Federal Institute of Education, Sciene and Technology of Pernambuco and Technologic Institute of Pernambuco. In 2006, he started working in cooperation with the Technische Universität Berlin (TU Berlin), where he is nowadays a visiting professor and post-doc fellow. Amongst his other activities are: National Secretary of the Sociedade Brasileira para o Progresso da Ciência – Brazilian Society for the Progress of Science – (SBPC), researcher/consultant for the Conselho Nacional de Desenvolvimento Científico e Tecnológico do Brasil – Brazilian National Council for Scientific and Technological Development – (CNPq), member of the Conselho Nacional de Florestas (CONAFLO) - National Council of Forest, member of the Academia Pernambucana de Ciencias – Pernambuco Academy of Science. He has experience in the area of Forest Resources and Forest Engineering, with emphasis on Biometrics, Forest Management and Forest Inventory, acting mainly on the following subjects: scientific reporting, regression analysis, fast growth forest, sampling techniques, experimental designs, and mathematical modeling.

Link Lattes: [http://lattes.cnpq.br/5674098794412714](http://lattes.cnpq.br/5674098794412714)

Günter Gunkel

Obtained a degree in Biology and Chemistry at University of Freiburg in 1974 and a doctorate at University of Freiburg at the Limnological Institute Konstanz, University Konstanz, with the thesis: „Bioaccumulation of a herbicide (Atrazine) in fish under consideration of food intake, feeding level and growth“. In 1980 he finished his postdoctorate also at the Limnological Institute at University of Konstanz about the „Investigation of bioaccumulation processes of a herbicide (Atrazine) in meso-cosmos“. From 1980 to 1989 he was the head of the „Laboratory for Aquatic Science“ at the „Institute of Environmental Technology“ at TU Berlin, where since 1989 became the head of the section „Limnology“ at the „Department of Water Quality Control“. In 1984 he became reader of limnology at Berlin University of Technology with a cumulative habilitation thesis about „Limnology, Fish Biology and Aquatic Ecotoxicology“. From 1998 to 1999 he was a partner of the EU-ALPHA-Programm PAMELA (Programme on Water for a new Environmental Network in Europe and Latin America). From 1996 to 1999 he was a serial short-term lecturer (DAAD) for limnology and management of aquatic ecosystems at the „Instituto de Ingeniaría Civil“ at „Escuela Politecnica National de Quito“ in Ecuador. In 2007 he was a serial short-term lecturer (DAAD) for limnology at the „Departamento de Engenharia Civil“ at UFPE. From 2007 to 2008 he was also a serial short-term lecturer (DAAD) for limnology at the “Instituto Químico” at “Pontificia Universidad Católica de Lima” in Peru. In 2009 he became the supervisor of the German-Bolivian PhD Program in Environmental Sciences between TU Berlin and TU Oruro. Finally in 2013 Günter Gunkel was awarded with the prize „Professor Adalbert Seifriz“, which you’ll be able to read about on the followings sections. He has experience in Ecology, with emphasis in Ecosystems Ecology and Environmental Studies.

Link Lattes: [http://lattes.cnpq.br/4261613140772736](http://lattes.cnpq.br/4261613140772736)
Marianna Sigmund-Schultze

She studied Agricultural Sciences at Rheinische Friedrich-Wilhelms-University Bonn and Georg-August-University Göttingen, where she obtained the diploma degree in 1997 with the thesis on: “Cadre socio-économique et raisons d’élever des ovins en ville: Étude empirique à Bobo-Dioulasso/Burkina Faso” (Socio-economic frame conditions and reasons for keeping sheep in town: Empirical study at Bobo-Dioulasso, Burkina Faso). In between, she completed a course and practical work leading to “Certificat de Spécialisation en Techniques d’Agriculture Biologique” (Certificate in Organic Farming) in 1992 at École d’Agrobiologie de Beaujeu, France. In 2002 she concluded her doctoral studies at the Institute of Tropical Animal Production at Georg-August-University Göttingen with the thesis: “Gains from keeping cattle on fallow-based smallholdings in the Eastern Amazon”. In 2011 she obtained her post-doctoral lecturing qualification in Livestock Farming Systems at the Agricultural Faculty of University of Hohenheim. Her Habilitation thesis dealt with: “The role and valuation of livestock farming in complex systems.” She has been part of many overseas studies since 1983, working in countries such as Algeria, Canada, Burkina Faso, Togo, Brazil, Namibia, South Africa, Thailand, Ethiopia, Bolivia, Israel, Jordan, China, Argentina and Syria. She is the German coordinator (project manager) of the INNOVATE project. Her research expertise and interests are in management, resilience und institutions of smallholder livestock farming; planning of sustainable land use; integrated assessment methods; quantitative and qualitative modeling; inter- and transdisciplinary cooperation.

Link Publications:

http://www.umweltpruefung.tu-berlin.de/v-menue/fachgebiet_umweltpruefung_und_umweltplanung/mitarbeiterinnen/siegmund-schultze_marianna/

Renata Maria Caminha Mendes de Oliveira Carvalho

Obtained a degree in Agronomy at UFRPE (Universidade Federal Rural de Pernambuco) in 1989, a specialization in Environmental Management and Control at UPE (Universidade de Pernambuco) in 1999, a specialization in Methodology of Higher Education at UNICAP-PE (Universidade Católica de Pernambuco) in 2002, a master in Management and Environmental Policy at UFPE (Universidade Federal de Pernambuco) in 2002, doctoral internship at TU Berlin (Technische Universität Berlin) in 2004-2005, doctorate (2009) and postdoctorate (2012) in Civil Engineering at UFPE. From 2011 to today she has been working as a professor at IFPE (Instituto Federal do Educao, Ciência e Tecnologia de Pernambuco) at the Department of Environmental Management, teaching on graduation and master levels (on site and on distance), and she is also the Brazilian coordinator (project manager) of the INNOVATE project. She has experience in Environmental Technology and Water Resources, with emphasis in Environmental Management, acting on the following topics: management and environmental planning, water resources management, sustainability indicators and family farming.

Link Lattes: http://lattes.cnpq.br/4312346687923790
The Kick-Off Seminar was the first important event of the INNOVATE project. It took place from March 26th to 30th 2012 in the technology campus of the MCTI (Ministry of Science, Technology and Innovation) of Northeast. The opening ceremony was attended by the presence of the Consul General of Germany, Thomas Wülfling; representation of the head of the MCTI in the Northeast, Ivon Fittipaldi, the German project speaker (coordinador) Prof. Dr. Johann Köppel, the Mayor of Itacuruba, Romero Magalhães Ledo, José Carlos Dubeux, representing UFRPE; Cristiane Conde, representing the IFPE; Geraldo Eugenio, representing the ITEP, president of the National Institute of Semiarid, Herman Ignacio Salcedo, president of the Pernambuco State Agency for Water and Climates, Marcelo Asfora; Secretary of Environment of Pernambuco, Hélvio Polito Lopes Filho; advisor and International Affairs MCTI / CNPq, Ana Lucia Stival.

35 Brazilian researchers participate in the project, representing the UFRPE, Univasf, IFPE, Department of Water Resources of the State of Pernambuco, ITEP, IPA, Embrapa and City Hall Itacuruba and 35 faculties and PhD students from universities / institutes in Germany: TU-Berlin, University of Hohenheim, IGB Berlin, Potsdam and PIK HTWD.

Have a look at some moments and what happened in the year 2012.

Reception for participating researchers Kick-Off Seminar
Prof. Anísio Brazilian, Rector of UFPB at the opening of the Kick-Off Seminar
Prof. Martin Kaupenjohann in lecture presentation SP 2 in the Kick-Off Seminar

SP4 session during Kickoff-Meeting in March 2012, MCT Recife
Meeting SP2 after the day of fieldwork
Visit the study area SP2 and SP 4.
SP2 on fieldwork in irrigated Apollonius of Sales

German Mission Project INNOVATE visiting APAC headquarters which was welcomed by the chief executive of Pernambuco State Agency for Water and Climate, Marcelo Asfora, teachers and researchers

SP6 in applying tests for validation of questionnaires

Dr. Maria do Carmo Sobral in ceremony autograph book supported by CAPES on Rio + 20. Flanked by Prof. Dr. Arlindo Phillip Jr. and President of Capes Dr. Jorge Guimarães

Participation of members of the Innovate in CAPES’ seminar
Integrator seminar held in Berlin attended by German and Brazilian researchers

Integrator seminar held in Brazil attended by German and Brazilian researchers

Presentation of Project Innovate in Itaparica Round by the Coordinators

Presentation of Project Innovate in the seminar CAPES

Conducting forest inventory in an area of caatinga by SP2

Track recognition in caatinga area held by SP2 and SP4

Meeting in the office of CODEVASF located at the irrigation project of Apollonius Sales
Meeting in the office of CHESF in the city of Petrolândia

Collecting fish pond sediment by SP2 for characterization

Meeting with the Mayor of Itacuruba Romero Ledo and presentation of Project INNOVATE

Recognition of caatinga by the SP4 members

Working meeting of SP2 occurred in the Department of Forest Sciences UFRPE for submission of postdocs work plans
Lecture on Forests fast growing organized seminars for design periodicals in TU Berlin, Germany.

Innovate Project Presentation by SP 1 during an event sponsored by the Pastoral Fisherman Council - Northeast Regional, which occurred in the Orla of Petrolândia City. The meeting brought together about 150 fishermen from the municipalities of Petrolândia, Forest, Sierra Talhada, Belem do Sao Francisco, Cabrobo and Itacuruba.

Visit the IGB SP2 and SP5 for integration and presentation of Moneris Programme.

Despesca pool - out of the effluents SP3 Effluents of the water renovation Tanks of the production of baby fish
Area of the construction of the bed of macrofitas by SP3

Basin to receive water from the bed of macrophyte for reuse by SP3

Visit the area of study with participation of all SPs.

Integration seminar in Berlin

SP3’s visiting on the experimental area

Explanation about sediments retention applied to restoration of micro watersheds of river sources in semiarid. — Itacuruba

Experiments of SP4

SP4 in the Caatinga

SP2 developing the experiments

Fontes: http://innovateproject.wordpress.com/2013/02/13/status-conference-2013/
Cooperation and Media

Section 4

Be part of the biggest scientific event of Latin America

The 65th Annual Meeting of the Brazilian Society for the Progress of Science (SBPC) will take place from July 21st to 26th 2013, on the campus of the Federal University of Pernambuco (UFPE) in Recife, PE. The INNOVATE project will be represented with an information desk. Since 1948, representatives of scientific societies, authorities and managers of the national system of science and technology participate at SBPC meeting. The event brings together thousands of people - scientists, teachers, visitors and students of all levels and disciplines. It is an important forum for the dissemination of scientific advances and for discussion of public policies for science and technology in Brazil.

In this edition the topic will be "Science for the New Brazil". The scientific program is generally composed of lectures, symposiums, roundtables, meetings, special sessions, poster sessions and short courses. During this Annual Meeting, other events take place, such as the Young SBPC (programming focused on students of basic education), the ExpoT&C (displays on science and technology) and SBPC Cultural (presentation of artistic and regional discussions on topics related to culture). Each year, the Annual Meeting of the SBPC is held in a Brazilian state, always in a public university.

Registration and abstract submission are now available. Carefully read and participate:
http://www.sbpccnet.org.br/recife/home/

14/12/12 to 02/04: Registration of the author who will send the summary.

21/02 to 09/04: Submission of the abstract by the author who made the inscription "with" summary and paid the fee until the deadline.

In Petrolândia, PE: Teachers and students from Brazil and Germany working on INNOVATE Project. On February 6, 2013.

Teachers and students from Germany and Brazil are in Petrolândia, PE, participating in the project INNOVATE, sustainable and innovative water and soil management in the basin of the São Francisco River.

This is a project of scientific cooperation between Germany and Brazil that aims to understand the relationship between climate change and forms of land use, water and river basin management. The project aims to help the region to find sustainable alternatives to regional development. The INNOVATE aims to provide knowledge to support future economic and environmental decisions. An additional objective of the project is the training of young researchers in Brazil and Germany.

INNOVATE is a project that combines the analysis of existing data and its own data through field research in different disciplines.

The participants of the INNOVATE project are researchers of the areas of soil, rivers and water, ecosystem, agricultural production system, climate, regional development and social transformations of 12 universities and research institutions in Germany and Brazil.

It is funded by the Ministry of Education and Science of Germany (BMBF) and by the Ministry of Science, Technology and Innovation of Brazil (MCTI).

The results of the project should contribute to the production of authentic knowledge to the region that could serve as a basis for economic social innovations; facilitate scientific grounding for the formulation of policies for sustainable regional development; generate a decision support tool to help producers to plan better their production.
The study site is the Itaparica Reservoir.

The project has a German leader, Prof. Dr. Johann Köppel, a Brazilian leader Prof. Dr. Maria do Carmo Sobral, and coordinators PD Dr. Marianna Siegmund-Schultz and Prof. Dr. Renata Carvalho.

For more information visit: www.innovate.tu-berlin.de

“I greatly appreciate the teachers and students who are in Petrolândia for the development of this important project for educational exchange between Germany and Brazil that will contribute greatly to the development of our region and the municipality of the Itaparica region and of the city of Petrolândia. I want to especially thank the teachers who gave us joy and satisfaction in staying in the Triangle Inn in Petrolândia, PE, presenting us with this important publication on the Blog.” Jair Ferraz.


Source: http://innovateproject.wordpress.com/

Professor at Federal University of Paraíba visits SP3-1 experiment coordinated by Prof. Dr. Stephan Pflugmacher Lima

Visit the Department of Ecological Impact Research and Ecotoxicology at TU Berlin and pilot scale experiments SP3-1. From left to right: Prof. Dr. Aleixo, Prof. Dr. Pflugmacher Lima, Prof. Dr. Carla Soraia and Prof. Dr. Marilia Lyra

Prof. Dr. Carla Soraia Soares de Castro, a biologist with a doctorate in Ecology and Natural Resources at Federal University of São Carlos - SP, Professor of the Department of Environmental Engineering and the Center for Applied Sciences and Education, Federal University of Paraíba (UFPB), Campus-IV Rio Tinto, was visiting the TU Berlin, had made contact to Prof. Dr. Stephan Pflugmacher Lima, who is developing Green Liver Systems for water purification purposes.

During this visit Prof. Dr. Stephan Pflugmacher Lima, coordinator of SP3-1, presented the work developed by his research group, among them a university extension project involving environmental education in schools, and in particular the subproject of the INNOVATE project. “The name green liver alludes to the human liver, because in the process of purifying water by macrophytes. These aquatic plants metabolize the contaminants and these metabolities are used from the plant to grow”, he explained. Within the Innovate project experiments in laboratory scale were set up, with various species of macrophytes to verify which one presents a better efficiency to remove contaminants, as well as biomass production to generate material maybe useful for biodiesel production.

Professor Carla Soraia praised the magnitude of the project and the positive impact that it will have on the semi-arid region of Northeast Brazil, besides the challenge of interdisciplinary work. She was impressed with the proposal of the Green Liver and their results to the environment and public health. "Projects like this need to be disseminated and implemented, they are clean technologies and low cost. We will make an effort to include a lecture by Prof. Pflugmacher in the next Brazilian Congress of Ecology”, she said.
2nd GLUES (Global Assessment of Land Use Dynamics, Greenhouse Gas Emissions and Ecosystem Services) Workshop on Stakeholder Management and Cooperation Strategies

Participation in the workshop with Prof. Dr. Edvânia Torres, PD Dr. Marianna Siegmund-Schultz and the PhD student Verena Rodorff

The workshop on stakeholder integration and management was conducted in Berlin-Schwanenwerder on January 22nd and 23rd 2013.

The workshop brought together all stakeholder managers and project coordinators from the twelve regional projects in Module A for another intense exchange of experiences. Main focus of the exchange, as well as additional inputs by Peter Moll and Ute Zander, was on co-operation strategies with implementation partners. During the first workshop of this series (May 2012), the finding of suitable cooperation partners was identified as one of the key challenges together with the identification of the potential intermediaries and the management of such co-operation. These are an important precondition for developing ‘products’ to be implemented in practice.

The project INNOVATE was present with the participation of the SP7. Prof. Dr. Edvânia Torres, PD Dr. Marianna Siegmund-Schultz and the PhD student Verena Rodorff were the part of the INNOVATE team participating on it.

Source: http://www.fona.de/

INNOVATE visits the offices of IPA and SEMAS

From left to right: Geraldo Magela (IPA), Prof. Dr. Jarcilene de Almeida (UFPE), Prof. Dr. Maria do Carmo Sobral (UFPE), Dr. Arne Cierjacks (TU Berlin)

Prof. Dr. Maria do Carmo Sobral accompanied by Prof. Dr. Jarcilene de Almeida and Prof. Dr. Arne Cierjacks, both part of SP4-1, visited the office of IPA (Institute of Agriculture Research) to discuss and to get to know the support installations for the INNOVATE project. After that, they also visited the office of SEMAS (State Secretary of Environment and Sustainability) to introduce the Project and to articulate future partnerships.
Sharepoint

**Section 5**

In SharePoint you will find a list of electronic addresses and telephone contacts of researchers linked to Innovate, plus articles and papers on the topics of study posted by our researchers to socialize knowledge.

**News from SharePoint**

- **Plano Nacional de Recursos Hídricos – V.1**
  Panorama e estado dos recursos hídricos no Brasil
- **Plano Nacional de Recursos Hídricos – V.2**
  Águas para os futuros cenários até 2020
- **Revitalização da Bacia Hidrográfica do Rio São Francisco**
  Balanço das Atividades 2004 - 2011
- **O Código Florestal e a Ciência: Contribuições para o Diálogo**

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We look forward to the collaboration of everybody, sending news about your SPs to be published in this newsletter. The news should be sent along with photos to innovatenews1@gmail.com until the 15th of each month.

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**Expedient**

**Speakers (Coordenadores):**
Prof. Dra. Maria do Carmo M. Sobral – Brazil
Prof. Dr. Johann Koppel – Germany

**Vice-coordenadores:**
Dr. José A. Aleixo da Silva – Brazil
PD Dr. Günter Gunkel – Germany

**Coordinators (Project Managers):**
Prof. Dra. Renata M. C. M. Carvalho - Brazil
PD Dra. Marianna Siegmund- Schultze – Germany

**Diagramming/Graphic design:**
Igor Almeida/Prof. Dr. Marília Castro

**Editorial/Texts:**
Prof. Dr. Marília Regina Costa Castro
Igor Fernando Marques de Almeida

**Proofreading:**
MSc. Hélio Leandro Lopes/ B.Sc. Sarah Gottwald

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INNOVATE News team working on Newsletter. From left to right: Hélio Lopes, Igor de Almeida, Marília Castro e Sarah Gottwald.