

Dear Readers,

In last months all project activities within Thai-German bilateral, regional or trilateral development cooperation in and around Thailand have faced little delays, but keep to progress steadily - despite of the current political situation.

Highlights are the successful Lao-Thai-German trilateral cooperation in the area of water resources management, and the start of a new global project between Germany, Thailand, Mexico and Peru in the area of efficiency and Greenhouse Gas mitigation in water and waste water utilities.

Moreover, we would like to encourage you to visit our section on upcoming training activities organized by GIZ in various fields serving sustainable development. <http://training.thai-german-cooperation.info/>

If you have questions, please do not hesitate to contact the Newsletter Team or the author of the article.

We hope you enjoy reading this edition.

Best regards,

The newsletter team

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# Nam Xong Sub-River Basin Becomes a Model for River Basin Management in Lao PDR

By Jarukan Rassiri Trilateral Cooperation Programme (Thailand)



The Nam Xong basin has become a learning venue for integrated sub-river basin management and community-based water quality protection in Lao PDR. Launched in March 2012, the Nam Xong Sub-River Basin Management project comes under Lao-Thai-German cooperation and has Thailand as the main provider of technical expertise, in partnership with Germany. The project is supported by Thailand International Development Cooperation Agency (TICA) and BMZ.

## Nam Xong Problems: current situation

The Nam Xong basin covers an area of 180,434 hectares. It is a sub-river of the Nam Ngum basin, one of the significant natural resources for economic development and eco-systems in Lao PDR. The Nam Xong runs through the popular tourist destination of Vang Vieng as well as areas that are strategically important for national development. Ninety per cent of the population in the basin currently relies on income from agricultural farming, fisheries and tourism operations, all occupations based on water resources. In the recent past, the Nam Xong has been threatened by an increasing population, rapid industrial expansion and tourism development, which have negatively affected the quality and quantity of water resources and the health of the people. This situation led to related officials and communities designing initiatives to implement integrated water resource management to protect the basin and the livelihoods of its people.



## Project Objective and Partners

The project aims to improve water resource management in the Nam Xong Sub-Basin through capacity-building of local authorities and community representatives as well as through the introduction and implementation of practical water protection regulations and technical solutions for the water users that focus on community participation and multi-stakeholder cooperation. The project target groups are the local authorities, community water users, farmers, fishermen, tourism operators and households in the sub-basin. The Department of Water Resources (DWR) and the District Department of Natural Resources and Environment (DoNRE) in Kasy, Vang Vieng and Hin-heup districts are the main implementing agencies in Lao PDR. The Thai Department of Water Resources provides technical support and GIZ implements the project jointly with its partners.



## Implementation Approach and Results

Participation of the local authority and community was secured during the project appraisal and development phase. This allowed for a bottom-up approach to implementation that responds to the needs of each district. At the same time, the three districts work together as members of the same sub-basin through various capacity-building and integrated water resource management measures with Lao DWR serving as facilitator. At the village level, model villages were selected to implement intensive awareness-raising activities and promotion of Nam Xong water quality protection.



After two years of implementation, the project produced two important results.

1. A Nam Xong sub-basin task force, consisting of local authority and community representatives, has been set up with increased capacity in integrated water resources management and public participation engagement. The task force monitors and follows up Nam Xong management in coordination with relevant stakeholders.

2. Nam Xong water quality management regulations have been developed based on the revision of existing regulations, the Nam Xong profile study and intensive stakeholder consultation. The regulations are effective in all districts in the sub-basin, with each district team tasked with conducting awareness-raising activities and disseminating the regulations. Appropriate technical solutions (e.g. simple water treatment, eco-fishing, bio-fertilizer usage etc.) are also developed and promoted to the water users in different areas as options for them to continue their livelihood activities while complying with the new regulations.

“ The simple grease trap installed was very effective. In the past, we discharged the kitchen waste water to water sources directly and this caused the public water sources to be smelly and dirty. Now our kitchen waste water is cleaner. We can also the reduce amount of waste water to public sources.

Mr. Chantalangsee Kaewdongsaeng, villager





## Model Villages

Model villages are also selected for intensive awareness-raising activities and promotion of the Nam Xong regulations and technical solutions.

**Huay Hindam sub-basin, Nasungthong Village, Kasy district**, is one of the richest upstream forests and boasts great biological diversity. However, to meet their cultivation needs, the largest group of residents, the Kha Mu tribe, has deforested much of the area for plantations. As no upstream forest protection measures are in place, regulations mutually agreed among the community are needed. Knowledge and awareness of the importance of upstream forest and how to co-exist with the natural resources has been disseminated and the local community invited to jointly draft the upstream forest protection regulations and apply some of the technical solutions.



**Phudindaeng village, Vang Vieng District**, is a mixed agricultural and residential area, with two active schools forming the centre and link of the community. Interview and study results show that water quality in this area is deteriorating, due to the lack of community participation in water quality protection and the threats from increasing and excessive water consumption. The village has thus implemented various awareness-raising activities on water protection regulations and technical solutions and utilized students as the entry point. Students have been trained to take part in simple water quality monitoring to alert and increase community awareness. Community leaders and the head of each family have also been trained in water consumption and conservation.

**Hintid village, Hinheup district** is located on the Nam Xong river bank. People use the river as a transportation route and as a source of income from fishing and agricultural and animal farming. Households discharge waste water directly to the river, and this affects the health of people and animals in the area. A simple village waste water treatment demonstration unit has been built by the villagers and various awareness-raising activities have been organised. The unit has a capacity for 10 households and



it is the first pilot wastewater treatment unit in Lao PDR built through community participation, where the village provided the workforce and some materials, with additional materials and technical support from the project. The village has become a learning model and is ready to disseminate the experiences to other villages.

### Project Closure and Way Forward

To exchange and disseminate the lessons-learned from Nam Xong, the Department of Water Resources, TICA and GIZ jointly organized a seminar on “River Basin Management: a Case Study of Nam Xong Sub-River Basin” and the “Project Closing Ceremony” followed by a project site visit, from 24-26 March 2014. The event brought together the community, officials, experts and development practitioners to discuss and share their experiences in integrated river basin management, and explore the way forward to sustain as well as scale up the results from Nam Xong sub-river basin to other basins in Lao PDR.

The Director General of Department of Water Resources, Lao PDR, expressed determination to sustain the results of the project and referred to the Lao government’s commitment on its water resources agenda. Some major recommendations and suggestions from the panel of experts and stakeholders centred on how to sustain regular follow up on the enforcement of the water quality management regulations as well as awareness-raising activities and cooperation with a larger group of stakeholders, such as the tourism and industry businesses. Through Nam Xong water quality is now no longer deteriorating, there are emerging challenges in relation to water quantity which could not be tackled during the project. The protection of the water sources areas, river banks, natural landscapes and biodiversity of the Nam Xong Sub-river Basin should be continually promoted and supported by the government, with a sustainable funding mechanism developed at the next stage. The possible establishment of a sub-river basin organization was also discussed. Model villages and the community are also seeking ways to continue and scale up their activities, and the districts have already drafted short-term and mid-term plans on how to continue after the project ends.



▲ Director-General of Lao DWR, Deputy Director-General of TICA and the Country Director of GIZ Thailand hands certificates of merit to the model villages

# GIZ Cooperates with DEDE on Solar Photovoltaics and Biogas

By Gisa Holzhausen    Project Development Programme Southeast Asia (PDP)



## Solar Photovoltaics

On 16 July 2013, the National Energy Policy Commission (NEPC) approved a policy package that increases Thailand's target for installed Photovoltaic (PV) capacity by 1,000 MW to a total of 3,000 MW. However, the regulations and the implementation process are partially unclear. GIZ therefore hired a German consulting agency, eclareon GmbH, to conduct interviews with Thai companies that have already applied for a license to analyse the regulatory framework conditions. First results were presented on 2 December 2013 at the seminar **“Removing Administrative Barriers for Solar PV Rooftop”**, which was organized by GIZ with the support of the Energy Research Institute (ERI). The final results will be published as a guidebook for solar installers in Thailand.

To inform German service and technology suppliers about upcoming business opportunities in the region as a result of the policy changes, the PDP organized an information workshop on **“Grid-connected PV in Thailand and Indonesia”** in Berlin, Germany on 4 March 2014. Mrs. Kulwaree Buranasajjawaraporn, Department of Alternative Energy Development and Efficiency (DEDE), Ministry of Energy as well as Mr. Thomas Chrometzka, Director Renewable Energy, GIZ Thailand, presented and shared the information on market development and the challenges of solar PV in Thailand.

Later this year GIZ will support the German-Thai Chamber of Commerce in organizing a business trip related to Solar PV that will bring German companies to explore opportunities and potential in Thailand for developing partnerships and cooperation in this field.



## Biogas

In a similar manner, GIZ is cooperating with DEDE in the area of biogas. This follows on from the Thai government raising its biogas targets from 600 to 3600MW until 2021 in 2013. Under the new scheme, biogas plants of a combined capacity of 3,000MW running on energy crops (mainly Napier Grass) will be built within the next 8-10 years. In addition, 1,200 tons of Compressed Biogas (CBG) will be produced daily. DEDE has now expressed an interest in PDP providing a platform for exchange of experiences between Thai and German companies, especially because Germany has a long history in successfully developing biogas markets and technology. Sustainability, quality and safety concerns need to be discussed and measures should be put in place to ensure that the market can develop safely and successfully in Thailand.

**“ Biogas plants of a combined capacity of 3,000MW running on energy crops (mainly Napier Grass) will be built within the next 8-10 years and 1,200 tons of Compressed Biogas (CBG) will be produced daily.**

During a workshop on “Energy from Biomass and Biogas – Market opportunities in Thailand and the Philippines” held in Berlin on 12 February, the PDP informed German companies about the new developments. GIZ invited Ms. Jariya Budnard, DEDE, and Dr. Pruk Aggarangsi, Energy Research and Development Institute of Chiang Mai University to present the Thai case. During their stay, the two experts from Thailand also visited a biogas and biogas upgrading plant that is operated by Berlin Municipal Waste Management.

As a next step, GIZ will organize training with a particular focus on safety and quality concerns for Thai biogas companies, industry and ministry representatives. German company representatives and industry experts will share their long-standing experience on system planning, operation and maintenance, thus enhancing the capacities of Thai companies and leading to better and safer installations. The training is planned for June 2014.

**More information** at: <http://www.thai-german-cooperation.info/renewables-sea.html>



# Contract Farming as Strategy to Secure Raw Materials for Agriculture and Energy Sectors

By Poomsanti Wairith GIZ Training Hub



At the beginning of March, a group of 17 development practitioners and government officials from Cambodia, Germany, Indonesia, Laos, Myanmar, Thailand, Timor-Leste and Vietnam came together in Suphanburi province for a 4-day training seminar on contract farming. Suphanburi is the perfect location to showcase successful cases of contract farming schemes in Thailand. Sugarcane and rice production in this area is ranked among the highest yield locations in the country, thanks to an effective irrigation system, farmer experience and mechanized farming practices. The training seminar was facilitated by Dr. Yotsawin Kukeawkasem, an agricultural economist and expert, and Margret Will, a consultant and the author of the GIZ Contract Farming Handbook.

**“ A contract farming scheme can help companies to reduce a number of operational problems and is an efficient tool for supply chain management. ”**





Contract farming scheme is defined as forward agreements specifying the obligations of farmers and buyers in business. Legally, farming contracts entail the sellers' (farmers') obligation to supply the volumes and qualities specified, and the buyers' (processors'/traders') obligation to take the goods and realise payment as agreed. Furthermore, the buyers normally provide embedded services such as upfront delivery of inputs (e.g. seeds, fertilizers, and plant protection products), pre-financing of input delivery on credit, and other non-financial services (e.g. extension, training, transport and logistics), (*Margret Will, June 2013, Contract Farming Handbook*).

With growing concerns over food and energy security, contract farming has become a crucial strategy globally for supporting companies to sustain sufficient raw materials for production in the agriculture and energy industries. Contract farming schemes, if successfully implemented, can help companies reduce a number of operational problems such as land access, transaction costs, quality and quantity controls, and so forth. In addition, the scheme is an efficient tool for supply chain management when interactions with smallholders in the agriculture and energy businesses are required on an ongoing basis. In Thailand, the sugar industry has been very successful in implementing the contract farming model.

Throughout the 4-day training, participants discussed the concept of contract farming as an inclusive business model, analysed success factors and learned how to promote the model in their respective contexts. In addition to class discussions on practical frameworks and case studies, the class was split into two groups for field excursions to see successful contract farming cases in practice - a sugar value chain and a rice seed production. On the last day of the training, the group developed contract farming models for participants from the Cambodian government (rice paddy for export) and from Timor-Leste (poultry farm). This was a fruitful and a very interesting exercise.

At the end of the training, participants gave positive feedback, providing reasons why the content was relevant to their current roles in their respective organizations. Moreover, the real life case studies and excursions simulated practical learning experiences that participants can immediately apply to their current work. As a result of this success, the GIZ Training Hub team is planning to again offer this training, with some modifications, to accommodate broader groups of stakeholders such as private companies and NGOs later this year. In addition, the hub will conceptualize a training of trainers (ToT) for interested persons in the region.

For this training, GIZ Training Services in Bangkok successfully collaborated with the GIZ Sector Project Agricultural Policy and Food Security, the GIZ SNRD Working Group Agriculture and the GIZ Project ASEAN Biocontrol for Sustainable Agrifood Systems.

GIZ Training Services in Bangkok aims to be your learning partner offering training courses that are practical, relevant and useful to both GIZ and non-GIZ professionals.

**More information at:**

<http://thai-german-cooperation.info/training.html>

# Introducing “BB-Mekong”–A New Approach in Resolving Skilled Labour Deprivation

By Nalina Hiranprueck    Effective In-Company Vocational Training in the Mekong Region



## EFFECTIVE IN-COMPANY VOCATIONAL TRAINING MEKONG REGION



Implemented by:  
**giz** Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ) GmbH

“ The role of private sector is crucial to workforce development – as evident in the successful model of the German dual vocational system. ”

### Why “Effective In-Company Vocational Training in the Mekong Region” (BB-Mekong)?

The Mekong Region labour market is facing an increasing lack of technicians and skilled workforce, a situation that will inevitably worsen unless efforts are made to align the labour market supply and demand. Attempts in the field of educational reforms, particularly in terms of promotion of dual vocational education, have been given to change the existing scenario but the discrepancy between supply and demand of skilled labour still prevails as a public-oriented approach is not usually tailored to accommodate specific demands of the private sector.

The project “Effective In-Company Vocational Training in the Mekong Region” or “BB-Mekong” aims to promote the German Dual Vocational Education System, **stressing the role of the private sector in workforce development** as an approach to tackle the skilled labour deprivation in the region. Through the promotion of cooperation between vocational schools and companies and **the demand-oriented establishment of effective in-company training systems** supplementing the in-school education, students graduating from the vocational schools will possess skills that not only increase their employability, but also better match the demands of the industrial sector.



## What is BB-Mekong doing?

One of the project main objectives is to develop **Regional Minimum Standards for “In-Company-Trainers” in the Mekong Region** because qualified and competent trainers in companies play a crucial role in the quality of knowledge transfer and training conducted there.

In this regard, the project plans to organize activities and workshops with all the relevant stakeholders from both the public and private sectors to identify expected competencies concerning In-Company-Trainers, and with assistance from experts, develop a system to standardize In-Company-Trainers in the region. ***This includes the development of regulations, training curricula and a certification concept for In-Company-Trainers as well as for trainers of In-Company-Trainers.***

Through these methods, which involve related stakeholders and ensures they are continuously contributing in providing inputs, reviews and comments, it is expected that the product, , namely the In-Company-Trainers, would not only be fully accepted by the public, but also become sustainably anchored in the workforce development system of the region.

The first workshop to identify expected competencies of In-Company-Trainers is scheduled to be held at the beginning of September 2014.



### Recent Activity

The project was approached by the Office of Vocational Education Commission of Thailand (OVEC) and the Thailand Professional Qualification Institute (TPQI) to coordinate with the Federal Institute for Vocational Education and Training (BiBB) in organising a study visit to Germany from 9th - 14th February 2014. The event was tailored specifically to provide the participants with inputs on **the concept of the German Dual System and the involvement of the private sector in the system and the development of occupational standards and curricula for mechatronics**. Participants came from OVEC and TPQI, as well as from Vietnam with the aim of creating a regional platform for standard development in mechatronics. After the study visit TPQI organized a workshop from 9th -11th April 2014 and invited relevant stakeholders to give inputs and participate in the process of occupational standard development

# Supporting Air Quality Monitoring in ASEAN-Cities

## Clean Air for Smaller Cities in ASEAN

Asian cities, for example Beijing, are constantly in the news as they continue to face serious air pollution due to emissions mainly from the local transportation and industry sectors. But it is not only the mega-cities that are facing the challenge of air pollution; smaller cities in Southeast Asia are also lacking effective solutions and overall reliable data on emissions as a basic condition for developing solutions consistent with the city's needs.

The regional project "Clean Air for Smaller Cities" (CASC) aims to support twelve selected cities in eight ASEAN countries in identifying their main air pollution sources and in developing a Clean Air Plan. As part of their activities, CASC provides five portable fine dust monitors on loan to partner cities to carry out PM10 and PM2.5 measurements at selected hot-spots. In addition, training courses on air quality monitoring for different stakeholders are conducted and monitoring schedules developed in order to assist in the application of the equipment and build capacity in local government, NGOs and universities. The findings will be included in the cities' Clean Air Plans as a guide to effectively reducing emissions from the main source of pollution.



**“ The findings will be included in the cities' Clean Air Plans as a guide on how to effectively reduce emissions from the main source of pollution. ”**

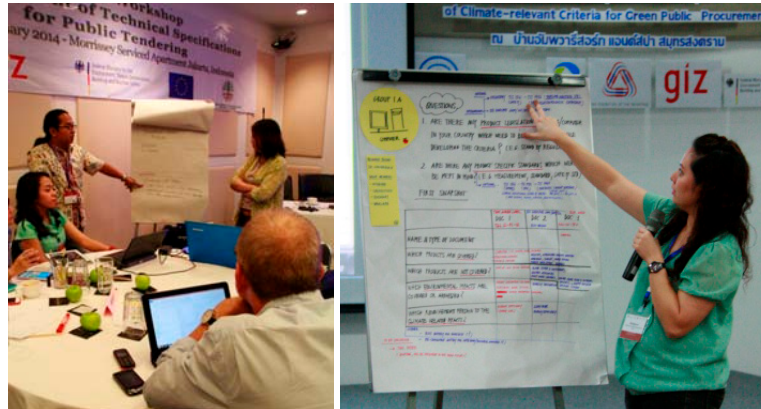
The monitoring equipment is lent to the project's partner cities. Up to now, the cities of Surakarta (Indonesia) and Vientiane (Lao PDR) have been able to apply the portable fine dust monitors in cooperation with their local universities. Other cities will soon join.

For more information, contact  
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# Workshops to Develop Criteria for Green Public Procurement and Technical Specification for Public Tendering

By Thomas Lehmann Sustainable Consumption and Production for Low Carbon Economy-Low Emissions Public Procurement and Eco-Labeling (SCP4LCE)



From 19-21 February 2014, the Pollution Control Department (PCD), Ministry of Natural Resources and Environment, in cooperation with GIZ organized a technical workshop on the “Development of Climate-Relevant Criteria for Green Public Procurement (GPP)” with the support of experts from the German Oeko-Institute. The workshop provided in-depth knowledge on a methodological concept for criteria development, the so-called “Product Sustainability Assessment” (PROSA) and also examples of development of climate-friendly criteria like fluorescent lamps and printers. After the technical input session, participants were divided into working groups and started to develop climate friendly criteria for 2 new products, namely computers and uninterruptible power supply (UPS), via hands-on training by the experts. The next step will be to finalise the developed climate-friendly criteria for computers and UPS during a stakeholder meeting and then integrate them with the GPP.

In total 25 participants from PCD and partner organizations (TEI, TGO and FTI) attended the workshop and acquired important knowledge for development of the criteria. All are now capable of supporting their organizations in developing climate-relevant criteria for new products.

In addition, PCD and GIZ in collaboration with the EU-Switch-Asia projects on SCP in Thailand, Malaysia, Indonesia and the Philippines and the Ministry of Environment of Indonesia jointly organised a Regional Workshop on “Development of Technical Specification for Public Tendering” in Jakarta from 24-26 February 2014. This was also supported by experts from the Oeko-Institute. During the workshop, experiences on GPP implementation from the participating countries and EU public tender documents were shared and discussed. In addition, participants were divided into working groups based on country. Each group gained hands-on training by developing tender documents for GPP for 2 products - computer and fluorescent lamps - focusing on the development of core criteria, excellent criteria, integration of life cycle based criteria and a points award system for the evaluation of GPP tender documents of those products.

The workshop was very successful with more than 53 participants from GPP relevant ministries from Indonesia, Malaysia, the Philippines and Thailand attending. Strong interest was shown by the participants for a training of trainer programme for GPP implementation and this has been tentatively scheduled for October 2014.

# Technical Workshop in Khon Kaen

By Falk Momber and Poom Pinthep

Improved Management of Extreme Events through Ecosystem-based Adaptation  
in Watersheds (ECOSWat)

“ Hydrological models are useful for identifying ecosystem-based measures for flood water retention and water storage. ”

On 9-10 January and again on 16-17 February, GIZ organized technical workshops at Khon Kaen University. Experts from Karlsruhe Institute for Technology (KIT) and Khon Kaen University (KKU) discussed hydrological information management and capacity development at the university level for ecosystem-based adaptation. The workshops offered an opportunity for intense dialogue and discussion among the experts.

The key topic of these workshops was a detailed elaboration of the management, organisation, indexation and documentation of data.

The German and Thai experts further exchanged information on and experiences with different hydrological models which, based on the data, will be used to identify ecosystem-based measures for flood water retention and water storage.

Last but not least, a dialogue on curriculum and capacity development led to a first capacity baseline and framework for the content of “**summer schools**”. The focus will be on ecological hydraulic engineering, watershed management and ecosystem-based adaptation, and the training is scheduled for the end of 2014.



# Result Based Monitoring and Evaluation Workshops in Nakhon Si Thammarat, Khon Kaen and Bangkok

By Falk Momber and Poom Pinthep

Improved Management of Extreme Events through Ecosystem-based Adaptation in Watersheds (ECOSWat)



GlZ and its main project partner, the Department for Water Resources (DWR 4 Khon Kaen, DWR 8 Nakhon Si Thammarat, DWR Bureau of International Cooperation) organized a series of Result-Based Monitoring and Evaluation (RBM&E) workshops conducted by international expert Marco Sprong.

Training workshops on RBM&E were organized at all ECOSWat project sites, namely in Bangkok and Khon Kaen in January and in Nakhon Si Thammarat in February. All relevant project partners (DWR, Royal Irrigation Department, Khon Kaen University, Walailak University, River Basin Commission, and Civil Society) were invited to and participated in the workshop. The participants worked together on elaborating a tool for RBM&E.

The workshops are part of the project's capacity development strategy. Professional project management is a key factor in achieving sustainability and the project partners are very much involved in the project management. Thus in addition to transferring knowledge about the core topic (EbA), another target is to build capacity in project management. The main objective of the workshop was to introduce the ECOSWat project partners to RBM&E as a project management tool and to set up a joint RBM&E System.



# Dialogue Policy Forum on Ecosystem-based Adaptation

By Roland Treitler    Improved Management of  
Extreme Events through Ecosystem-based Adaptation in Watersheds (ECOSWat)



On 22 April 2014 the Department for Water Resources (DWR) of MONRE and GIZ organized the opening session of the new Policy Dialogue Forum for Ecosystem-based Adaptation in water management. During their opening speeches the German Ambassador Mr. Rolf Schulze, GIZ Country Director Mr. David Oberhuber, the Deputy Permanent Secretary to the Ministry of Natural Resources and Environment, Khun Surapol Pattanee, and the Acting Director General of the Department of Water Resources Khun Niwatchai Khampee, spoke of the long and very successful cooperation between Thailand and Germany and stressed the importance of the topics in the Dialogue Forum.

The current project “Improved Management of Extreme Events through Ecosystem-based Adaptation in Watersheds – ECOSWat” is financed by the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety through a EUR 2.8 million fund and will run until mid-2016. One of the project’s goals is to establish a broad Policy Dialogue Forum to discuss innovative approaches to the adaptation strategies for climate change as well as for water management. The participation of more than 100 people demonstrates the importance of and interest in these topics. This forum will be organized regularly and the participants will discuss diverse details of the above-mentioned topics. The Dialogue Policy Forum is a platform for exchanging information and ideas, for networking as well as for capacity building.





# Low-cost Housing (LCH) in the Philippines

By Ruth Erlbeck and Ralph Trosse

Integrated Resource Management in Asian Cities: The Urban Nexus



As one of the partner cities in the regional Integrated Urban Development Project (NEXUS), Naga City has started implementing the first LCH project in its Del Rosario district. The area comprises 5200 m<sup>2</sup> provided by the City Government of Naga. It is an in-fill area where 48 housing units are to be built by Habitat for Humanity with financing from the Home Development Mutual Mortgage Fund for low-income dwellers on the basis of a tripartite agreement between Naga City, the Home Development Mutual Mortgage Fund and Habitat for Humanity. Naga City is providing the basic infrastructure (site development) comprising the construction of roads, surface drainage, water and energy.

Naga City has asked the GIZ Nexus Project to support this project by ensuring better housing quality in accordance with the National Building Code and improved sanitation, thus ensuring more resilient and sustainable houses.

“ With support from GIZ Nexus Project, the quality of housing units is being improved. This work makes the foundations more earthquake resistant, economizes on septic tanks, and protects the roof against lifting during heavy winds or typhoons. ”

GIZ Nexus Project has responded to this request by sending two short-term experts (building engineers) from Germany and Ethiopia to the construction site. Since mid-January 2014 three “quarto complexes” making up 12 housing units have been completed; the remaining 36 housing units are scheduled for completion by the end of July 2014.

The housing units have a size of 21 m<sup>2</sup> and cost 150,000 pesos each. Additionally, 400 hours of the future home owners have to be contributed, adding another 104,000 pesos to the costs of the housing unit.

Amendments have been introduced that make the foundations more earthquake resistant, economize on septic tanks by building one central septic tank instead of 48 single septic tanks and reduce unnecessary structural elements (columns), thus protecting the roof against uplift during strong winds or typhoons.

Apart from implementing on-job-training on the construction site for the Habitat for Humanity staff and the semi-skilled construction labourers, the GIZ building engineers are providing practical training at

BICOL State College of Applied Sciences and Technology (BISCAST) for the teachers and the students. This training consists of practical engineering in the areas of construction site management, detailed cost estimation and cost calculation for better monitoring and evaluation, modular construction system and improved hollow block production, improved roofing, cross ventilation and climatically adjusted designing and construction. The training is conducted in BISCAST as well as on the construction site.

Documentation of all training aspects will be completed and distributed by April 2014. BISCAST is aiming to become the leading training centre in innovative resilient low cost housing technology not only for the BICOL Region but for the whole of the Philippines.

The changes in the housing designs are drawn by the students and the teachers of BISCAST and later approved by the Chief Engineer of Naga City.



# Nexus Projects on the Rise

By Ruth Erlbeck    Integrated Resource Management in Asian Cities: The Urban Nexus



Nexus demonstration projects in the different Nexus partner cities have continued to grow over the last few months with more than 9 different Nexus project ideas developed and respective studies elaborated for the implementation of projects. Financing has been partially earmarked while one project is already being implemented.

**“ Nexus demonstration projects ”  
in partner cities continue to grow.  
More than 9 Nexus project ideas have been developed  
and one project is being implemented.**

**Among the upcoming Nexus initiatives are**

1.

waste water collection through innovative vacuum sewer collection systems combined with innovative waste water processing (biogas utilization and reuse of residues as fertilizer and night soil for urban agriculture) in Da Nang and Weifang.

2.

energy and budget savings through the replacement of obsolete water pumps with new ones with a rate of return within 5-6 months in Korat.

3.

integrated resilient low-cost housing including modern and economic basic infrastructure provision (waste water, surface drainage, energy) for the urban poor (all-inclusive urban development, pro-poor policies) in Naga City and Santa Rosa.

4.

Additional activities include the reuse of treated urban waste water for energy and fertilizer/night soil for urban greening and urban agriculture in Chiang Mai.

5.

thermo-technical retrofitting of public and residential apartment buildings combined with innovative waste water heat-recovery appliances and introduction of the “compact” city model with economic modern infrastructure for new development areas and satellite cities in Ulaanbaatar and its surroundings (Tuul District). These projects have been elaborated with the support of the Nexus Task Forces established in the Nexus partner cities, and serve to screen the Nexus projects as preliminary practice for future investment projects of the cities to be screened through “Nexus” glasses.

In cooperation with the prestigious Fraunhofer Gesellschaft and its institutes representing international state-of-the-art in applied research in the different disciplines, city profiling in Ulaanbaatar, Da Nang and Korat has been implemented. More Nexus cities will follow and will have their performance analysed, and simultaneously develop an instrument for self-evaluation in such different areas as good governance, business model, provision of urban services and sustainability achievements, strategies and visions and all inclusive policies.

The next bi-annual regional Nexus Workshop is envisaged for the end of June 2014 in Da Nang, one of the most active Nexus partner cities.



# ASEAN Sustainable Agrifood Systems (ASEAN Biocontrol) Project Partners Meeting Highlights Achievements and Discusses 2<sup>nd</sup> Phase Project Prospects

By Pouchamarn Wongsanga and Duangruetai Surasakjinda  
ASEAN Sustainable Agrifood Systems (ASEAN Biocontrol)

The Fourth Project Partner Meeting (PPM) of the ASEAN Sustainable Agrifood Systems (ASEAN Biocontrol) Project, the 4th Project Steering Committee Meeting and the 5th Meeting of the ASEAN BCA Expert Groups on Application and Regulation took place from 11-13 March 2014 in Phnom Penh, Cambodia. More than 50 participants from ten ASEAN Member States and other partners attended the meeting. Mr. Adelbert Eberhardt, Country Director, GIZ Office Phnom Penh and Mrs. Birgit Strube, First Secretary, Deputy Head of Cooperation, Embassy of the Federal Republic of Germany, Phnom Penh represented GIZ and BMZ respectively and delivered the remarks. The meeting was opened by Dr. Hean Vanhan, Deputy Director General of the General Directorate of Agriculture on behalf of H. E. So Khan Rithykun, Director-General of the General Directorate of Agriculture, and Director of the National IPM Programme, Ministry of Agriculture, Forestry and Fisheries (MAFF), Cambodia. The PPM highlighted the project's achievements and discussed the project's future prospects in facilitating effective implementation of the 2nd Project Phase.

Back-to-back with the PCM, the 5th ASEAN BCA Expert Groups on Application and Regulation, and the 4th Project Steering Committee Meeting convened on 12 March 2014. The ASEAN BCA Expert Groups Meeting deliberated the final draft of the ASEAN Guidelines on the Regulation, Use and Trade of Biological Control Agents (BCA) prior to its submission for consideration and endorsement by the ASEAN Sectoral Working Group on Crops (ASWGC). The Project Steering Committee Meeting meanwhile considered and approved a number of key issues for project implementation.

On the last day of the meeting, MAFF organized a field trip for participants to Kandal province to visit the demonstration plots of cucumber and tomato farmers under Cambodia's National Integrated Pest Management (IPM) Programme. The farmers applied

Trichoderma, which is a biological control agent to control pests. The results were more satisfactory than in the plots using only chemical pesticides.

The objectives of the meetings were fulfilled with active deliberation and fruitful outcomes as well as follow-up actions for project implementation. The ASEAN Guidelines on the BCA will be submitted for endorsement to the 21st Meeting of the ASWGC in May 2014 in Cambodia. The events received special attention from the local media and were attended by a dozen reporters. The meetings were successfully organized by German International Cooperation (GIZ) in close collaboration with the Ministry of Agriculture, Forestry and Fisheries (MAFF) of Cambodia.

**“ Farmers applying biological pest control achieved better and more satisfactory results than those using chemical pesticides.”**



# First Result Monitoring after Implemented SGF Standard Auditing on Pilot Plants

By: Napaporn Rattanamettha and Marieke Krull  
ASEAN Biocontrol for Sustainable Agrifood Systems

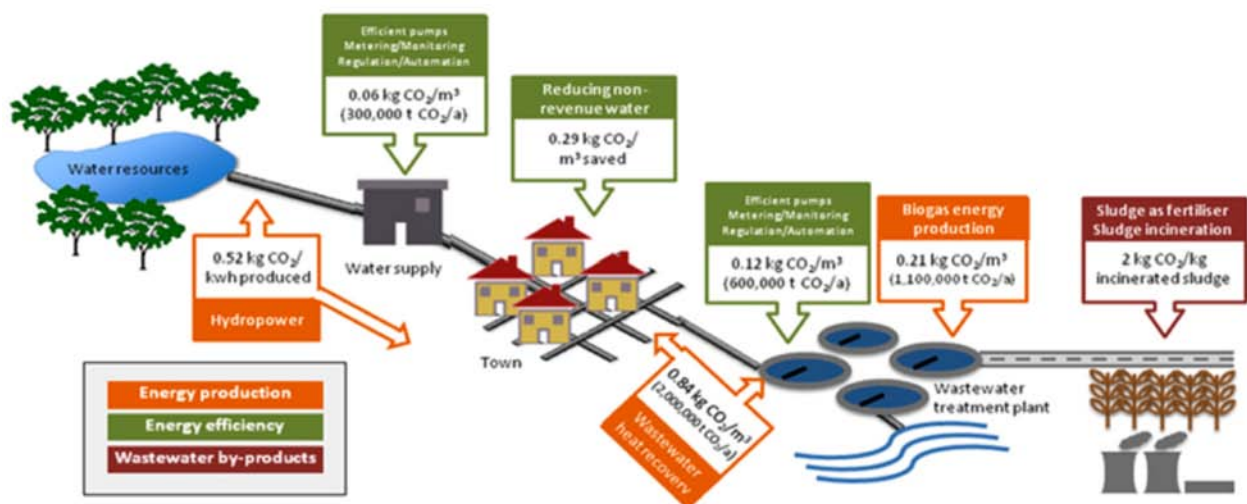
With the aim of improving the production processes of fruit juice in Thailand, the Improvement of Thai Fruit Juice Industry Project, a partnership which is implemented by GLZ and SGF (Sure Global Fair), conducted several auditions during the period 11 to 19 February 2014. The objective was to provide support to 6 factories to reach the SGF-standard along with plant hygiene and HACCP (hazard analysis and critical control points) so as to improve the quality of fruit juice products and be able to access the international markets, especially those in the EU. Pre-auditions had been held at 6 pilot plants starting in December 2013 and provided advice on improved fruit juice processing. These were followed by first-result monitoring actions to supervise progress made. During these auditions, 18 fruit juice samples from 6 factories were collected and will be dispatched for testing both at Thai laboratories (National Food Institute, Thailand Institute of Scientific and Technological Research, Central Lab Thai and SGS laboratory) and at the International laboratory at Germany, which in an agreement with the SGF project, provides for a free testing service and is aimed at better food safety and authenticity of Thai fruit juice.



“ Aiming at more food safety and authenticity of Thai fruit juice, Thai and International laboratories (Germany) provide a free testing service for fruit juice samples from Thai pilot plants. ”



# Water and Wastewater Companies for Climate Mitigation



At the very heart of climate change mitigation is the need to reduce greenhouse gas emissions. Water and wastewater companies are typically energy intensive, spending between 10% and 35% of their total operational costs on energy. However, they incur high water and energy losses as part of their operations. This indicates excellent opportunities for improving energy efficiency and greatly reducing greenhouse gas (GHG) emissions by updating these companies' technologies with more energy-efficient systems, as well as recovering energy, nutrients and other materials from wastewater. Investments in energy efficiency and production can also be extremely cost effective. If well planned, these investments have pay-back times of only a few years. Meeting the carbon challenge would thus generate a double benefit: reducing companies' operating costs while reducing the carbon footprint for themselves as well as their local governments.

The Water and Wastewater Companies for Climate Mitigation (WaCCliM) project is designed to work across local, national and international levels, and proposes engaging with national governments, water and wastewater utility associations around three pilot utilities in Mexico, Peru and Thailand. The project runs from January 2014 to January 2019. It is a joint initiative between the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and the International Water Association (IWA), acting on behalf of the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB). Main implementing partner in Thailand is the Wastewater Management Authority (WMA) at the Ministry of Natural Resources and Environment (MNRE).





## Thai-German and ASEAN-German Cooperation on Facebook

To connect more easily with stakeholders and promote their programmes to a wider audience, some projects have started to use Facebook to communicate with their target groups. This allows not just for timely updating of project activities but also provides useful information such as good practices and case studies on issues related to the projects. The Facebook pages also serve as an interactive platform for knowledge and exchange of ideas among the projects and Facebook followers while creating networking opportunities for further cooperation among the stakeholders. You are invited to visit the Facebook pages of the following projects:

**Sustainable Consumption and Production, SCP Policy:**

<https://www.facebook.com/ScpPolicyThailand>

**Improved Flood and Drought Prevention through Ecosystem-Based Adaptation in Watersheds:**

<https://www.facebook.com/giz.ecoswat>

**Transport and Climate Change in ASEAN:**

<https://www.facebook.com/TransportClimateASEAN>

**Enhancing the Economics of Biodiversity and Ecosystem Services in Thailand/ South East Asia:**

<https://www.facebook.com/ecobest.giz>

**Thai-German Programme on Energy Efficiency Development Plan:**

<https://www.facebook.com/TGPEEDP>



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Pictures are taken by members of the programme

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## Sustainable Consumption and Production

- Effective in - company vocational training in the Mekong Region (Funded by Federal Ministry for Economic Cooperation and Development - BMZ)
- The German - Thai Dual Excellence Education (Funded by the German Federal Foreign Office)
- Sustainable Consumption and Production, SCP Policy (Funded by European Union - EU)
- Sustainable Consumption and Production for Low Carbon Economy - Low Emissions Public Procurement and Eco - Labeling (Funded by Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety - BMUB)
- Greening Supply Chain in the Thai Auto and Automotive Parts Industries (EU/BMUB)

## Environmental and Climate Protection

- Strategic Alignment and Implementation of the Climate Change Policy in Thailand (BMUB)
- Improved Management of Extreme Events through Ecosystem-based Adaptation in Watersheds (BMUB)
- The Enhancing the Economics of Biodiversity and Ecosystem Services in Thailand/ South East Asia (ECO - BEST) (EU)
- Carbon Neutral Water Utility and Waste Water Project (BMUB)
- Global Initiative Disaster Risk Management (BMZ)

## Energy Efficiency and Renewable Energy

- Thai - German Programme on Energy Efficiency Development Plan: TGP - EEDP (BMUB)
- Renewable Energy Project Development Programme in South - East Asia (Funded by Federal Ministry of Economic Affairs and Energy - BMWi)

## Agriculture and Food Security

- ASEAN Biocontrol for Sustainable Agrifood Systems (BMZ)

## Sustainable Urban Development and Transport

- Clean Air for Smaller Cities in ASEAN (BMZ)
- Sustainable Port Development in ASEAN (BMZ)
- Energy - Efficiency in Transport in ASEAN (BMZ)
- Integrated Resource Management in Asian Cities: The Urban Nexus (BMZ)

## Regional Integration and South-South-Cooperation

- Trilateral Cooperation Programme with Thailand and Malaysia (BMZ, TICA, MFA, Malaysia)
- Alliance for Financial Inclusion (Funded by Bill and Melinda Gates Foundation)