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#### Newsletter of Bangkok-based projects by GIZ and partners Issue # 24 January – March 2013

#### www.thai-german-cooperation.info

Dear readers,

Among the new projects launched during 2012 were three related to sustainable consumption and production (SCP). These SCP projects cover policy support, green supply chains in the automotive industry as well as green public procurement and eco-labeling. Implementation of the projects is proceeding as planned thanks to the good cooperation from our partners. SCP is today a major area of Thai-German cooperation.

The theme of this edition is renewable energy and energy efficiency, the area in which GIZ is cooperating with the Department of Alternative Energy Development and Efficiency (DEDE) and the Energy Policy and Planning Office (EPPO) in the Ministry of Energy. Energy is one of the major areas of this cooperation.

As usual, you will also be updated about the progress of GIZ's other projects. We hope the information will be useful for you.



With best regards, The newsletter team

News & Features	
Special Feature	
Page 1 – 2	Project Development Programme South-East Asia (PDP-SEA) -Renewable Energy
Page 3 – 4	Thai-German Programme on Energy Efficiency Development Plan (TGP-EEDP)
Special Interview	
Page 5 - 6	Dr. Prasert Sinsukprasert, Director of Work Plan Division, Department of Alternative Energy Development and Efficiency
Page 7 - 8	Mr. Suthep Liumsirijarern, Director-General, Energy Policy and Planning Office (EPPO)
Tips &Tricks	
Page 9	Do you know?
Roundup	
Page 10 - 12	Hagen Dirksen Retires from GIZ after 40 years Service, but He is still around and Very Much Needed
Page 13	TGP-EEDP Project Hold a Planning Workshop for Programme Activities
	ASEAN Biocontrol for Sustainable Agrifood Systems Project Holds Meeting in Bali
Page 14	Study Tour for CEDAC to Learn Best Practices in Organic Rice and Vegetable Production in Thailand
Page 15	Smallholder Groups Join the RSPO Certificate Award Ceremony
	GIZ Holds a Training Workshop on "Climate Protection and Tourism in Protected Areas Planning and Project Development"
Page 16	GIZ and DASTA Disseminate Experience on Low Carbon Destination Management
	Study Trip on Green Procurement Allows for Exchange of Good Practices between Thailand and Germany
Page 17 - 19	ECO-BEST Disseminates Ecological Economics Knowledge to Forest Rangers
Page 19	ECO-BEST's Tha Dee Sub-River Basin Concept Expanded to Trang Watershed
9	

# Special Feature

#### Project Development Programme South-East Asia (PDP-SEA) -Renewable Energy





The world is full of energy, from the light of nature to the force of beings. As the world grows bigger, daily routines require greater energy consumption, in both direct and indirect ways. This soaring energy demand is inverse to the earth's resources and thus the search for alternatives is becoming increasingly essential. As a major South-East Asian business hub, Thailand has a highly dynamic economy and consumes a considerable amount of energy for its domestic activities. To try and secure its national energy supply and reduce its dependency on foreign sources, the

Thai government has launched the Alternative Energy Development Plan (AEDP) 2012 - 2021. The aim is to have renewable energies account for a 25-per-cent share of the energy supply chain by 2021.

Within this scenario, the Project Development Programme South-East Asia, which is supported by the Federal Ministry of Economics and Technology (BMWi), is entering its second phase in Thailand with a focus on biomass and solar power development (January 2013 – December 2014).

#### **Objectives**

The project aims to support the Thai Ministry of Energy through close cooperation with the Department of Alternative Energy Development and Efficiency (DEDE) to reach its 10-year plan target through transfer of know-how, capacity building and advisory services. The goal is to reinforce the development of renewable energies in Thailand,

especially biomass and solar power, and to integrate public participation with overall energy management by raising awareness throughout the private sector, financial institutions and local communities of the potential and opportunities for renewable energy development in Thailand.

#### Work Plan and Project Activities







In its second phase, the Project Development Programme South-East Asia is heading towards the promotion of small- and medium-scale solar power development in Thailand and the implementation of a pilot small-scale biomass power plant project.

The second phase consists of the continuity of activities to promote biomass power in Thailand. The area of Baan Fhang Sub-District in Khon Kaen Province has been chosen as the pilot site for a communitybased small-scale biomass power plant with the capacity of 1MW. The programme will be operated in close cooperation with German project development and technological expertise as well as with Thai investors and project developers in the biomass field to ensure the progress of this pilot project in line with the feasibility study conducted during the first phase. As local acceptance is considered one of the most essential components for implementation flow, the programme aims to integrate the community-based concept through special community participation and shareholding in the project to ensure both the achievement and sustainability of the power plant operation.

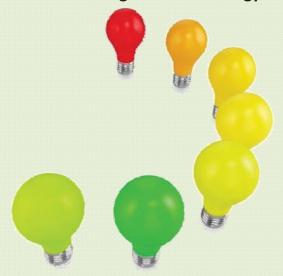
It is anticipated that this pilot community-based biomass power plant project will later serve as a learning centre for those interested in developing biomass power projects and that it will become a study case for both the financial and governmental sectors in developing a suitable scheme and support mechanism to stimulate the expansion of small-scale biomass power plants in Thailand.

As one of the main alternative resources in Thailand, the share of solar power is targeted to reach 2,000 MW by 2021. It has been supported and promoted by the Thai government and has also attracted the interest of various investors and project developers where the demand for Power Purchase Agreement (PPA) is over the limit. However, the participation of households and medium-sized investors has yet to be enabled and there is also a need to achieve greater acceptance for financing the feed-in tariff.

The programme will cooperate with DEDE on enforcing the implementation progress of solar projects through information workshops to familiarize Thai companies with German methodology in the field of solar energy with the aim of identifying knowhow and market potential for roof-top projects.

Moreover, solar thermal applications for hot water and solar cooling shall be supported through enhanced know-how transfer as well as by identifying and developing large-scale solar hot water and solar cooling demonstration plants.

#### Thai-German Programme on Energy Efficiency Development Plan (TGP-EEDP)

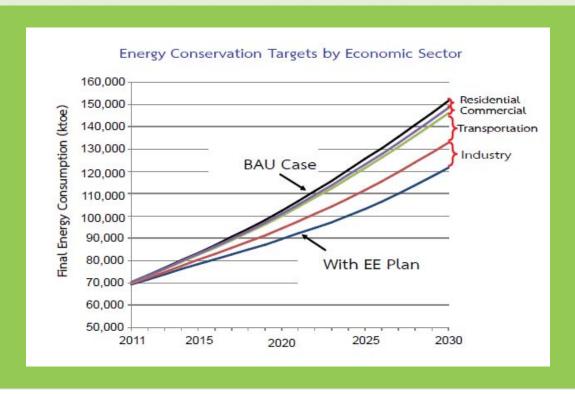


Energy demand in Thailand is continuously increasing. But with limited domestic energy resources, more than half of the national energy demand has to depend on energy imports and thus the share of energy import dependency is also growing.

Energy efficiency (EE) plays a significant role in strengthening energy security, alleviating household expenditure, reducing production and service costs and decreasing imports and trade deficits while increasing the competitive edge. EE also helps reduce pollution and greenhouse gases (GHG), which cause global warming and climate change.

For the Thai government, energy efficiency has been considered an important policy since the enforcement of the Energy Conservation Promotion Act, B.E. 2535 (1992). Five-year plans to allocate funding support from the Energy Conservation Promotion Fund for energy conservation activities have been consecutively developed, with Phase 4 now underway.

At the Asia-Pacific Economic Cooperation (APEC) Summit in 2007, Thai government leaders ratified the collaboration in energy conservation promotion to meet the agreed target in 2030. In response to this, the Energy Policy and Planning Office (EPPO) under the Ministry of Energy (MOEN) developed a 20-year Energy Efficiency Development Plan (2011 - 2030) to provide a national policy framework and guidelines on energy conservation implementation in the long term. In general, the Energy Efficiency Development Plan (EEDP) defines a target of the Royal Thai Government to reduce energy intensity (energy consumption/GDP) by 25% (compared with that in 2010), or the equivalent to reducing final energy consumption by 23.5% in 2030.





#### **Objectives**

Under the Thai- German Programme on Energy Efficiency Development Plan or TGP-EEDP, GIZ has been commissioned by the German Federal Ministry for Environment, Nature Conservation and Nuclear Safety (BMU) to contribute to the further development of the EEDP plan and to support its in implementation. The 3-year project officially started in May 2012 and runs until April 2015. Project partners of TGP-EEDP include the Energy Policy and Planning Office (EPPO) and the Thailand Greenhouse

Gas Management Organization (TGO). Project implementing partners include the Joint Graduate School for Energy and Environment (JGSEE) and the Wuppertal Institute for Climate, Environment and Energy (WI).

The TGP-EEDP Project aims to promote an increase in energy efficiency in the industrial and building sectors.

#### **Work Plan and Project Activities**

The EEDP was used as background information to design the project. The work plan of the project was designed into 4 work packages: Baseline, Standards, Incentive Instruments and Integration with Climate Policy. Some of the project interventions will address the following:

- Pre-evaluate desirable and undesirable effects of the EEDP as well as enhanced data management and data evaluation;
- Enhance energy efficiency standards in the industrial, power utility and building sectors, such as identifying specific energy consumption for use as benchmarking and potentially some kind of cap and trade system, energy efficiency as a binding commitment of utilities and the further integration of the building energy code for construction permits;
- Enhance incentive schemes for the private sector to promote and invest in energy efficiency measures, such as a newly designed subsidy or standard offer programme (SOP) and strengthened service provider support by ESCOs;
- Integrate energy efficiency policy and monitoring mechanisms with climate scheme relevant instruments.

Results and experiences from Thailand will be disseminated as demonstration cases for South East Asian countries and will strengthen the international dialogue on possible emission reduction strategies in developing countries.

## Special Interview

## Dr. Prasert Sinsukprasert, Director of Work Plan Division Department of Alternative Energy Development and Efficiency

1. What are the justifications for the collaborative project between the Department of Alternative Energy Development and Efficiency (DEDE) and GIZ? When will the project commence?

Thailand has an outstanding record in alternative energy development and efficiency promotion. Clear evidence of this can be found in governmental policy and renewable energy targets under the Alternative Energy Development Plan (AEDP) 2012, which targets 25% renewable and alternative energy consumption by 2021 and the Energy Efficiency Development Plan (EEDP), which aims to reduce energy intensity by 25% in 20 years. The DEDE has implemented several initiatives to accomplish the AEDP targets, particularly in the areas of renewable energy technology development and application, energy efficiency development and promotion. Moreover, the DEDE has focused on networking, public participation and technology transfer from both domestic and international sources.

Collaboration with international agencies and organizations in alternative energy development and promotion is thus key to achieving the targets. Collaborations between DEDE and GIZ have been fruitful, with past collaborative projects contributing to considerable progress in renewable energy development. Examples include personnel capacity building in the area of solar energy, strengthening energy conservation and renewable energy development in the agricultural industry.

The current collaborative project with GIZ is an initiative to achieve the targets by promoting renewable energy consumption. The project will strengthen personnel capacity, risk management, knowledge in renewable energy investment and application of energy efficient technology through



outstanding record in alternative energy development and efficiency promotion."

technology transfer from Germany, a country widely recognised for its renewable energy competency and modernity. Lessons learned and case studies will be reviewed and applied in the implementation of government policies. Project activities will expand renewable energy and energy efficiency markets, leading to cooperative projects between the Thai and German private sectors. This is another excellent cooperative opportunity for DEDE and GIZ. Hopefully, the project will commence in early 2013.

## 2. What is the DEDE's main role in the collaborative project with GIZ? On which areas will the project focus?

Most cooperative implementation with GIZ will focus on strengthening capacity in renewable energy production and consumption and application of energy efficient technology among community members and business operators. The DEDE will focus on solar hot water utilization, community biomass power plants, statistics of renewable energy projects in Thailand and biogas network development in this project.

#### 3. How practical is the policy in your opinion?

In the roadmap development, the Ministry of Energy has developed strategies to promote the renewable and alternative energy share to 25% of Thailand's total energy consumption in 10 years (2012 - 2021). The goal is to become a low carbon society. The DEDE has implemented several initiatives and measures to promote renewable energy consumption based on

the framework. Examples are the "Adder" tariff, increasing the power purchase price for renewable power, incentive measures to promote investment including low-interest loans, joint ventures, subsidies and tax benefits. Thailand clearly has a substantial policy to promote renewable energy.

#### 4. What will Thailand gain from this project?

Key project benefits include learning about renewable energy technologies, efficient energy consumption, promotion of the private sector's investment and business expansion, personnel capacity building, sharing of Germany's experiences in renewable energy promotion which have contributed to energy security, cost savings, energy efficiency, low-carbon society and increased income.

#### 5. What is the current status and trend in Thailand's energy consumption?

As of October 2012, renewable energy comprised 9.7% of Thailand's total energy consumption. The trend of renewable energy ratio is upward, indicating

that DEDE's implementation is likely to achieve the AEDP targets.

Category	Unit	AEDP Target (2012-2021)	Renewable Energy
		(2012-2021)	Consumption As of October 2012
1. Wind Energy	MW	1,200	110.93
2. Solar Energy			220.50
2.1 Electricity generation	MW	2,000	351.64
2.2 Hot water production	ktoe	100	4
3. Hydro Energy	MW	1,608	96.50
4. New Energy	MW	3	-
5. Bio-mass			
5.1 Electricity generation	MW	3,630	1,959.95
5.2 Thermal generation	ktoe	8,200	4,502.00
6. Bio-gas			
6.1 Electricity generation	MW	600	172.85
6.2 Thermal generation	ktoe	1,000	447.00
7. Municipal Solid Waste			
7.1 Electricity generation	MW	160	42.72
7.2 Thermal generation	ktoe	35	78.00
8. Ethanol	ml/day	9	1.30
9. Bio-diesel	ml/day	5.97	2.50
10. New fuel for diesel replacement	ml/day	25	-
Renewable Energy Ratio		25%	9.70%

#### Mr. Suthep Liumsirijarern, Director-General, Energy Policy and Planning Office (EPPO)

## 1. Can you please give us your perspective on the importance of the Energy Efficiency Plan to the National Energy strategy?



The energy efficiency policy is one of the strategic approaches of the National Energy Strategy so the policy should very much rely on systematic and strategic planning. In addition, the energy efficiency policy has to be suitable and practical for policy implementation in the Thai context. The Energy Efficiency Development Plan (EEDP) has to correspond with the National Energy Strategy and consider both the upstream and downstream sides. In accordance with the planning for the National Energy

Strategy, policy makers should comprehensively analyze the energy efficiency policy and its implementation in regard to five dimensions. The first and foremost dimension is " national energy security", for which the policy makers need to apply a long-term perspective to ensure sufficient energy supply and firmly implant the most efficient approaches to energy using both the production and consumption sides. Secondly, the political dimension has to be taken into account, since the politics of policy-making by the government and related stakeholders play significant roles in driving national policy and planning as well as in its implementation. The third is an analysis of policy impact on society and the environment. The fourth dimension is the consideration of policy in economic terms and the national GDP growth rate. It has to note that an appropriate energy price structure should also be set appropriately and rationally in line with this expected growth. Finally, technology is one of the key dimensions in planning and setting a national policy scheme. Above all, integrated planning using these dimensions will bring about a more comprehensive policy and lead the country to more efficient and sustainable development approaches.

#### 2.In your opinion, what are the challenges of the 20-year Energy Efficiency Development Plan (EEDP)?

An action plan or policy implementing of the 20-year Energy Efficiency Development Plan (EEDP) is the real challenge. Although the Plan has been officially announced, most people in the energy fields do not believe that the plan will be successful or achievable unless we can show them significantly reliable energy savings results from implemented energy efficient measures and projects. Therefore, monitoring, reporting and verification will be key assessments of the EEDP. In my opinion, the evaluating procedure is the most important and urgent topic that needs be developed and strengthened as a priority. Currently, have several on-going energy efficient programmes and projects. However, generally, these programmes/projects are not being well evaluated or reported through globally standardized monitoring and verifying systems. The fact is that lacking a reliable monitoring system will obstruct the further improvement and development of an energy

efficiency policy. In brief, the management of a monitoring and evaluating system for energy efficiency is the most important task. It is the one to which we should pay a great deal of attention and on which we should start working now. At the same time, the second priority is capacity building to motivate Thai stakeholders to continuously think and then take action and finally improve, in order to achieve the ultimate goal of sustainable development. This international cooperation between Thai and Germany definitely can provide a good opportunity and a big challenge to support the EEDP and its implementation. I mainly emphasize the importance of management and evaluation system and particularly like the knowledge transfer from Germany. I certainly will provide full support to this Thai-German Programme on Energy Efficiency Development Plan (TGP-EEDP).

## 3.Can you elaborate on the reasons why the EPPO is keen to cooperate with GIZ on an international collaborative project as a key partner of the TGP-EEDP?

From my point of view, Germany is considered one of the most advanced countries and is very successful in energy management both in energy efficiency (EE) and renewable energy (RE) fields. This will be a great opportunities for EPPO to work and cooperate with GIZ so that we can exchange know-how and experiences at both the policy-making and implementation levels. We do believe that GIZ can give us full support and transfer suitable advisory expertise to the TGP-EEDP and to our country, too

#### 4. What are Thailand's expectations from this project?

Neither the EPPO nor Thailand expects to utilize "Super Technology". We prefer to acquire appropriate technology that Thais can apply and operate practically to the Thai context. What Technology means in my understanding is not just equipment or machinery. Technology can be expanded into the thinking approaches, working methodology, management concept, techniques, innovations and other systems. I think that if we can apply the knowhow concept to develop the thinking and analytical skills, the EEDP in general can move on rather quickly and effectively. With the EPPO and GIZ working and operating closely, learning and imitating processes as well as knowledge transfer can be developed firmly and after that, this standard, technology and knowhow will be disseminated to other related stakeholders as well.

In my view, technology is not the main problem of this country. The main problem lies in the social and environmental dimension since its impacts have widespread effects on many people in both direct and indirect ways. Therefore, we have to comprehensively analyze this issue to gain a clear understanding. When we look at a problem, we need an in-depth analysis to find out the appropriate solution for the right

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development of our country, and when you are dealing with a different thinking system and mindsets, this is difficult. Some may argue that we can instill a lot of knowledge or feed a tremendous amount of data regarding human resource improvement. However if the recipients of this information or data are not capable or well-trained enough, then they might not be able to apply, develop or expand from lesson learned. Then, it will be wasteful. In my opinion, I would expect GIZ, as the German-based organization working on international cooperation, to support our organization (EPPO) mainly on knowledge transfer, capacity building and analytical thinking. I would like GIZ to emphasize broader-view planning, strategic analysis and integrated thinking for sustainable development for the country.

#### 5. How will the EPPO support and cooperate with GIZ in this project?

Fortunately, besides being the responsible governmental agency for energy policy and planning by law, the EPPO also serves as a secretary to the National Energy Policy Council, which is chaired by the Prime Minister. Moreover, EPPO is authorized to allocate the Energy Conservation Promotion Fund (ENCON Fund) to support the implementation of EE

measures or projects according to the plans and policies. I am thus confident that the EPPO should be able to support and work as the main partner with GIZ under TGP-EEDP in order to achieve its objective of promoting the increase of energy efficiency by supporting the implementation of the Thai Energy Efficiency Development Plan (EEDP).

## Tips & Tricks

Turning off the tap while brushing your teeth in the morning and before bedtimes can save up to 8 gallons of water a day. This is a saving of 240 gallons per month.

If you replace 25% of your light bulbs with fluorescents, you can save about 20% on your lighting bill.

If left on 24 and 7 days/week for one year, the same computer will consume 1,270 kilowatt hours/day hours of electricity—that's enough to release 1,715 pounds of carbon dioxide into the atmosphere and the equivalent of driving 1,886 miles in the average car!

Running a faucet for 5 minutes

uses up enough energy to run a 60 watt light bulb for 14 hours.

A modern refrigerator uses less than half the electricity of a fridge that is 12 years old.

More than 1/5 of the world's primary energy is used for transport, followed by industry, construction and agricultures. Much is in the form of gasoline, of which nearly 792.5 million gallons is burned every day.





If the energy efficiency of commercial and industrial buildings improved by 10%, it would equal a reduction in greenhouse gas emissions equal to taking 30 million cars off the road.

Ref. http://www.benefits-of-recycling.com/interestingrecyclingfacts/

http://www.dosomething.org/actnow/tipsandtools/11-facts-about-energy

http://www.cosn.org/initiatives/greencomputing/interestingfacts/tabid/4639/default.aspx

http://facts.randomhistory.com/energy-facts.html

http://torontogreen.ca/index.php/facts-about-energy-conservation-conservationmenu-109.html

## Roundup

## Hagen Dirksen Retires from GIZ after 40 years Service, but He is still around and Very Much Needed

After almost 40 years service with GIZ (formerly GIWA, GTZ, i.e. German Development Cooperation), Hagen Dirksen retired on December 31, 2012. He joined the organization in 1972, and his first assignment took him to Bangladesh. In 1977, he became project adviser to the Thai-German Land Settlement Promotion Project (TG-LPP) in partnership with the Department of Public Welfare. From 1989 to 1998, Hagen acted as Senior Adviser and Team Leader the well-known Thai-German Highland Development Programme (TG-HDP) in northern Thailand, a project run in partnership with the Office of the Narcotics Control Board (ONCB) and 20 implementing agencies from 6 ministries. In addition to being based in Bangladesh and Thailand, he also spent several years in Sri Lanka.

Since the start of this millennium, Hagen has been involved in project acquisition and management tasks for GIZ International Services, and has overseen many projects funded by other international donors (e.g. the Asian Development Bank, European Union, Swiss Development Cooperation) in diverse fields, such as institutional development, health sector reform, rural and urban development, vocational education, small and medium enterprise (SME) development, environment and biodiversity and sustainable consumption and production.

Hagen has retired, but of course he has not stopped working. He remains active as a freelance consultant to GIZ and continues to serve as the German Honorary Consul for northern Thailand, a position he has held since 2000.







To know him better, let us look at who and what else 'HAGEN DIRKSEN' is.



## Hospitality

As a representative of GIZ and the German Government, Hagen's home in Chiang Mai has become a hospitable haven for many well-known guests and members of charity organizations, as Hagen's wife, Wanphen Sakdathorn, is owner of the luxury OASIS Baan Saen Doi Spa Resort (www.oasisluxury.net) and Saenkham Terrace Restaurant (www.saenkhamterrace.com).



## Appreciation

Hagen appreciates culture, craftsmanship and fine art and is a collector of paintings, especially by Vietnamese and local artists. Both he and Wanphen are active in diverse, art, cultural and charity activities in northern and other parts of Thailand. Hagen received the 5<sup>th</sup> class of the Most Nobel Order of the Crown of Thailand in 1983 and the Federal Cross of Merit of Germany in 2009 for his long term contributions to Thai-German relationship.



## Golf

These days, Hagen can be found more often than not on the golf course -playing to a handicap of 17. He is also up for a more energetic challenge at tennis, which makes one wonder why he retired.



### Education

Hagen studied international agriculture in Germany and also holds a post-graduate Diploma in Agricultural Economics (Marketing) and a Master Degree in Tropical Agricultural Development (Agric. Economics) from England.



## North Germany

Hagen grew up in Oldenburg and Bremen, north Germany, but his military service (2 years), schooling and advanced education took him to many other parts of then West Germany. He left Germany for the first time in 1972 and, apart from his postgraduate studies in Germany and England (1974-1977), has lived and worked in Asia ever since.



## Deutscher Hilfsverein

Hagen is a board member of the "German Help", a non-profit organization, which helps individuals who face critical problems in Thailand. <a href="https://www.dhv-thailand.de">www.dhv-thailand.de</a>



## International Perspective

Hagen sees himself as a cosmopolitan individual living in Thailand. He is well-known for his German directness and functionality, combined with Thai gentleness and an open, worldly mind-set.



## Right place, taste and time

Creating the right impression is always important to Hagen, especially in the positions he has held. His diplomatic approach and appropriate manner are a credit to himself and those he represents.



## K-Knowledge

Hagen dislikes half measures when it comes to gaining knowledge. Whether in private or at work, he takes on the task of learning and doing something thoroughly. He would rather admit to not knowing something than give an incomplete answer.



## Sanook

Hagen has a good sense of humour and the ability to laugh at himself. His vast knowledge and experiences have helped him to socialize, entertain and put fun into most situations.



## Eating

Hagen is not particular fussy; he likes to eat most things. Thai and Italian food are high on the list, with chocolate and ice cream among his favourite deserts.



### N-Nature

Finally, friends and colleagues describe him most of all as being a very respectful and professional person. Despite his high social status, he treats people from all levels with the same respect.

More can be seen about GIZ and Hagen on youtube: <a href="http://www.youtube.com/watch?v=70i2a0BHH0w">http://www.youtube.com/watch?v=70i2a0BHH0w</a>

#### **TGP-EEDP Project Hold a Planning Workshop for Programme Activities**

On October 29-30, 2012, the Thai- German Programme on Energy Efficiency Development Plan or TGP-EEDP organized a workshop to provide opportunities for participants from key partners and EE stakeholders to learn about ideas for input and support from this project to their current and upcoming work as well as to identify demands for support and cooperation opportunities. A second objective of the workshop was to identify fields of cooperation among relevant stakeholders.

One of the first tasks of TGP-EEDP is to analyse the existing energy data and management of energy data

so that these can be used for baseline development and measurement, reporting and verification (MRV) purposes when introducing new energy efficiency policies.

A local consultant will work together with the Wuppertal Institute on this task. The main purpose of the study is to review and analyze whether the available energy data are sufficient for use in the further implementation of the National Energy Efficiency Plan.

### ASEAN Biocontrol for Sustainable Agrifood Systems Project Holds Meeting in Bali



The ASEAN Biocontrol for Sustainable Agrifood Systems Project organized its second project partner meeting in Indonesia from November 20 - 22, 2012. The meeting was hosted by the Directorate General of Horticulture, Ministry of Agriculture, Indonesia. The objectives of the meeting were to provide an update of what has been achieved over the last six months, establish two regional Expert Groups (for regulation and application of biocontrol agents or BCAs) and to develop regional guidelines on BCA application, use and trade as well as to seek strategic guidance in the 2nd Steering Committee Meeting.

Participants were treated to a special field trip organized and supported by the Indonesian Directorate General of Horticulture. The group visited the Jatiluwih Organic Red Rice Association of Farmers to learn about the production of fragrant red rice, which has received "Organik Indonesia" certification. The red rice plants are claimed to be naturally resistant to infestations of disease and parasites and can grow up to 1.6 metres in height. The Jatiluwih red rice is rich in vitamins, minerals, folate and dietary fibre.

## Study Tour for CEDAC to Learn Best Practices in Organic Rice and Vegetable Production in Thailand



The ASEAN Biocontrol for Sustainable Agrifood Systems project arranged a study tour for 12 participants from the Cambodian Center for Study and Development in Agriculture (CEDAC) from December 2 - 7, 2012 to learn best practices in organic rice and vegetable production in Thailand.

CEDAC, a leading Cambodian non-governmental organization (NGO) in the field of agricultural and rural development, has been working to build the capacity and knowledge of rural farmers in ecologically-sound agriculture. Founded in August 1997 with operational support from the French NGO GRET, CEDAC is renowned for its farmer-led extension services, agricultural innovation training, organizational management support and information dissemination. Ongoing cooperation activities with GIZ Cambodia are supporting CEDAC in the production of organic rice and organic vegetables.

The study tour visited two major organic rice production areas in Thailand's Northeast as well as organic vegetable centres in the Western provinces.

Participants learned how organic production organizations work with small scale farmers, the community approach, organic production techniques, GAP, Internal Control System, external audit, certification schemes, traceability system, IPM, organic fertilizer production, biocontrol production and application, post harvesting and processing techniques, milling, vacuum packaging, storage, CO2 treatment, transport, retailing and marketing activities.

This study tour also provided greater opportunities for CEDAC to implement their learning on best practices from Thailand and expand activities that support organic farming and build the capacity of small scale farmers and farmer's organizations so that they play a more important role in supplying healthy food for Cambodian society as a whole.

#### **Smallholder Groups Join the RSPO Certificate Award Ceremony**



Representatives of 4 sustainable palm oil smallholder groups participating in GIZ's Sustainable Palm Oil Production for Bio-Energy Project received sustainable palm oil production certificates during the 10th Annual Roundtable Meeting on Sustainable Palm Oil (RT10) held on October 31, 2012 in Singapore. The event was attended by 900 participants from 33 countries around the world. The 4 smallholder groups are the Sustainable Oil Palm Smallholders Production (Univanich-Plaipraya) Community Enterprise Group, the Nuakhlong-Khaopanom Sustainable Oil Palm Smallholders Production Community Enterprise Network, the Sustainable Oil Palm Smallholders Production (Suksomboon) Community Enterprise Group (Chonburi) and the Suratthani Sustainable Oil Palm Smallholders Production Community Enterprise Network. Due to their sustainable production and compliance with economic, social and environmental standards, they are the world's first RSPO certified independent smallholder groups.

## GIZ Holds a Training Workshop on "Climate Protection and Tourism in Protected Areas Planning and Project Development"





GIZ, Designated Areas for Sustainable Tourism Administration (Public Organization) – DASTA, the Department of Natural Parks, Wildlife and Plant Conservation – DNP and the Faculty of Forestry, Kasetsart University jointly held the second training workshop on "Climate Protection and Tourism in Protected Areas Planning and Project Development" at the Training Center II, Khao Yai National Park, Nakhon Nayok from November 28 - 30, 2012. The

workshop aimed to disseminate knowledge of the tourism and climate change curriculum to DNP's planners, officials and staff in charge of project development and management planning of protected areas. The Climate Protection in Tourism Project anticipated that DNP could integrate the knowledge and lessons-learned with the tourism management plans of the national parks and protected areas, thus contributing to climate friendly tourism and climate change mitigation.

#### GIZ and DASTA Disseminate Experience on Low Carbon Destination Management



The Climate Protection in Tourism project, which is being implemented under a cooperative agreement between GIZ and the Designated Area for Sustainable Tourism Administration (Public Organisation) or DASTA joined with the Green Leaf Foundation, the Tourism Authority of Thailand, the Trat Travel Association, Payao University and Maejo University in organizing workshops on low carbon destination management in Trat, Chiang Rai, Loei and Bangkok. The workshops served as a platform for Thai and German experts to share knowledge and experience of low carbon destination management and also for network building to promote low carbon destinations. Guidelines on low carbon destination management in Thailand were promoted and distributed during the workshops in all four provinces.

Accommodation holds a 21% share of carbon dioxide emissions of all activities from every 1 tourist per one vacation and the workshop thus focused on energy efficiency in hotels and resorts based on the "energy triple jump" principle. This consists of three steps

- 1) Decrease of unnecessary energy consumption;
- 2) Optimization of energy efficiency; and
- 3) Sustainable use of renewable energies.

In addition, the participation of all stakeholders including policy makers and marketing for low carbon destination was discussed. Package tours should make tourists feel that it is worth taking part in low carbon tourism.

## Study Trip on Green Procurement Allows for Exchange of Good Practices between Thailand and Germany

From October 27 until November 4, 2012, the Sustainable Consumption and Production for Low Carbon Economy – Low Emission Public Procurement and Eco-Labeling (SCP4LCE) project organised a study trip on green procurement to Germany. The trip provided participants from the Pollution Control

Department (PCD), the Thai Environment Institute (TEI), the Thai Greenhouse Organisation (TGO) and the Federation of Thai Industries (FTI) as well as members of the GIZ project team with an opportunity to learn about the current situation in Germany with regard to Green Public Procurement (GPP) and the market



acceptance of the Blauer Engel label, which is one of Germany's best known and most widely accepted green labels. The Blauer Engel label is a good example of the successful labeling, which the project would like to adapt in implementing good practices for the Thai eco labeling system.

The team had the chance to gain a complete picture of the "Blauer Engel" certification process, the development of climate relevant criteria, verification of requirements along with the costs of labeling and the marketing of the label. In addition, a workshop was organised for the Thai group to discuss with German experts from Oeko-Institut Freiburg about the next steps in the process and listen to suggestions about improving the current situation in Thailand. As a result of the workshop, criteria for the selection of product groups to start implementation of climate

friendly aspects were developed. Product groups were also suggested, among them refrigerators, air conditioners, paper, printers, copy machines, fluorescent lamps and passenger cars. Following a final decision, additional criteria for these product groups will be discussed and implemented.



The project's progress has attracted interest in the Southeast Asian region. Indonesia, Singapore and China have expressed interest in exchange of information regarding GPP and Eco Labeling and it is expected that other countries will follow soon. A first regional networking event is planned for March 2013 in Singapore with Singaporean-German Chamber of Industry and Commerce (AHK) as host and *UNEP* acting as co-host.

#### **ECO-BEST Disseminates Ecological Economics Knowledge to Forest Rangers**

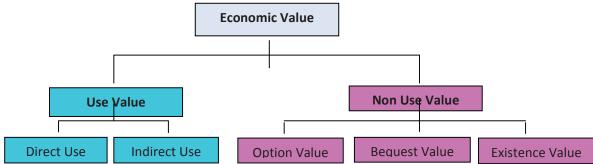
To strengthen the capacity of personnel from the Department of National Park, Wildlife and Plant Conservation (DNP) and other relevant government agencies in ecological economics, GIZ, through the Enhancing the Economics of Biodiversity and Ecosystem Services in Thailand/South East Asia (ECOBEST) project invited Associate Professor Udomsak Seenprachawong of the National Institute of Development Administration (NIDA) to conduct a training course on "Basic Principle of Economics for Protected Area and Buffer Zone Management". Training was held on three occasions between October and December 2012 with the focus on the following subject areas:

- Indirect benefits of protected areas. For example, natural control mechanisms water flow, disaster prevention and wildlife habitats are classified as **public resources** because a consumer cannot prevent others from consuming the goods/services provided by protected areas (Non-excludable). Moreover, consumption of the goods/services by an individual does not reduce satisfaction of others (Non-rival). Agencies overseeing protected areas do not produce the goods/services, but manage them. The producer is nature. **DNP and its personnel, therefore, can be considered as consumers of protected areas.**
- "Price" does not mean "value". Economical value of ecological services does not have a market price because consumers do not have to buy goods/services from nature. Moreover, with nature, the producer does not invest or hire someone to produce the

goods/services for mankind. Assessment of economical value of ecological services cannot be based on market value.

- There is no clear market for ecological services. Therefore, proper value assessment of ecological services must be based on **consumer surplus** or **consumer satisfaction.**
- Consumers have diverse backgrounds, understanding and experiences. Notably, their lifestyles depend on different ecological services. This is the reason why consumer satisfaction of ecological services differs from one individual to another.

Therefore, defining the scope of the area or the type of ecological services is a prerequisite to value assessment of ecological services. Once completed, assessment design using suitable economic instruments then follows. The assessment must also take into account limited time and budget. Dr. Udomsak explained that economists classify value assessment of ecological services/natural resources into 2 groups: use value (direct and indirect use) and non use value (option value, bequest value and existence value as listed in the following diagram:



Participants learned that, in economics terms, direct use means direct utilization at the location, the resources may be at the source or taken from there. In this sense, tourism can be classified as direct resource use. However, in ecological terms, tourism is classified as indirect use. In economic terms, indirect use means that consumers utilize the ecosystems or resources when they are not at the source. Examples are good air quality contributed by nearby tree groves and forest carbon sequestration, where vegetation soaks up CO<sub>2</sub> and stores it in the biomass, reducing greenhouse gas emissions into the atmosphere. In the economics sense, non use value equals consumers' satisfaction when the ecosystems or resources are not utilized. Examples are pleasure from knowing that elephants roam freely in the forests and pleasure from knowing that future generations can study or find peacocks in Mae Wong Forest. In another words, people are satisfied that they can protect their natural heritage for future generations.

Dr. Udomsak added that there are 2 types of economic assessment: direct analysis through market price, including yield comparison, cost of illness analysis, rehabilitation cost analysis and cost analysis of prevention. Direct analysis is not suitable for assessment of ecological services or other resources, the market price of which is unavailable. For example:

What is the price of tsunami mitigation by mangrove forests? What is the price of powdery sand from coral nibbling and excretion by parrotfish? Therefore to properly assess the values of mangrove forests or parrotfish on human livelihood,



indirect analysis must be used. This can be through consumers' willingness to pay for services of mangrove forests and powdery sand beach. Examples of the methods are hidden cost assessment, travel cost analysis, scenario simulation and alternative behaviour trial. Each assessment method has a different level of difficulty. The time and budget requirement of each method is also different.

The training course provided opportunities for participants to share comments and learn to think and work as a team. Besides knowledge and enjoyment, they can apply lessons-learned into practice. Participants were interested in the training course and recommended that the project offer the course to other agencies at the ministerial and local levels.

#### ECO-BEST's Tha Dee Sub-River Basin Concept Expanded to Trang Watershed

On December 17, 2012, the Enhancing the Economics Ecosystem Biodiversity and Services Thailand/South-East Asia (ECO-BEST) Project joined a meeting at Southern College of Technology (S-Tech) to review the integrated water management of the Trang Watershed in Nakhon Si Thammarat and Trang provinces. Participants presented integrated watershed management concepts and measures to mitigate droughts and floods along both banks of the Trang River, which originates in Yong Waterfall National Park, Thung Song District. ECO-BEST project staff presented the Economics of Ecosystem and Biodiversity (TEEB) concept and principle, focusing on promoting public awareness and an acceptance that consumers or beneficiaries of ecosystems and biodiversity must pay for their preservation.

Project and local governmental offices have jointly assessed the ecological value of the Tha Dee Sub-river Basin to identify suitable economic instruments that will gain acceptance and support from stakeholders. The aim is to encourage beneficiaries and people who depend on the richness of the Basin to share the maintenance costs of the Tha Dee watershed and river banks. Stakeholders will be involved in the design of the financial and burden-sharing mechanisms. Most importantly, to ensure equity and transparency, they will appoint a responsible person/agency to oversee the management of the Tha Dee Sub-river Basin economic instruments. Participants showed great interest in the project approach and indicated they would incorporate this approach with management strategies of the Trang Watershed.

#### **TDRI Jointly Conducts Financial Analysis of Thailand's Protected Areas**



The Enhancing the Economics of Biodiversity and Ecosystem Services in Thailand/South East Asia (ECOBEST) appointed the Thailand Development Research Institute (TDRI) to assess the status and sufficiency of Thailand's protected area and buffer zone financing. The target area was the UNESCO World Heritage-listed Dong Phayayen-Khao Yai Forest Complex, which comprises 5 protected areas in 6 provinces: Nakhon Nayok, Saraburi, Nakhon Ratchasima, Prachin Buri, Sa Kaeo and Buri Ram.

From November 25 - 28, 2012, the project team along with Ms. Prinyarat Laengcharoen, a researcher with TDRI's Natural Resources and Environment Programme, conducted a field trip to interview government officials, members of the project steering committee, private conservationists and residents of Sa Kaeo, Buri Ram and Nakhon Ratchasima. Preliminary results showed

that besides the annual budget allocated to national parks and wildlife sanctuaries, national parks earn a portion of national park revenues. The amount depends on the total fees collected by the parks as well as proposals to spend the annual revenues. Dong Yai Wildlife Sanctuary does not have this budget. Some protected areas receive field equipment and supplies for wildlife surveys and forest patrols from international organizations, among them the Wildlife Conservation Society, FREELAND Foundation and the World Wildlife Fund. Other supporters include the Foundation for Khao Yai National Park Protection, a national NGO, and local organizations such as Provincial and Tambon Administrative Organizations, the Pang Sida Conservation Club, the Buriram Bird Club, the Buriram Environmental Teacher Group, the Guar Conservation Group and Red Bull Beverage Co. Ltd.

The size of the Forest Complex and scope of work are overwhelming for park officials and conservation group members, however, and the two most serious concerns and major threats to the forest complex are illegal Siamese Rosewood logging and wildlife poaching. Today, these illegal activities are no longer related to subsistence logging or poaching but rather are a part of an international trade that involves migrant workers. The saddest aspect of such crimes is the involvement of Thai youths, who commit the offences in order to buy narcotic drugs, a silent danger affecting many local villages.





### "AID & INTERNATIONAL DEVELOPMENT FORUM"

will be held during 30 - 31 January 2013 at Impact Exhibition Center, Bangkok. GIZ booth is at No.222 in Hall 2.

## "Management for being global Leader in Green business – MLG" training course

during 8 March – 8 June 2013 (on Fridays, and every other Saturday).

For more information, please see

http://www.nstdaacademy.com/partnership/

mlg or Tel: 02-642-5001

Email: executive.edu@nstda.or.th

The course is organised by GIZ and National Science and Technology Development Agency (NSTDA).



21

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Pictures are taken by members of the programme

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- Energy-Efficiency in Transport in ASEAN
- Sustainable Urban Transport Project in Asia
- Clean Air for Smaller Cities
- Sustainable Port Development
- ASEAN Biocontrol for Sustainable Agri-food Systems
- **ASEAN Food Standards**
- Integrated Urban Resource Planning (Nexus of Water, Energy and Food Supply)
- Trilateral Cooperation Programme with Thailand and Malaysia
- Strengthening Capacity of Supreme Audit Institutions in ASEAN

Programme and projects funded by Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

- Climate Policy Project
- Climate Protection in Tourism
- Mobilisation of national mitigation measures (NAMAs) to replace F-gases in refrigeration and insulation foam production
- Sustainable Palm Oil for Bioenergy
- Improved Flood and Drought Prevention through Ecosystem-Based Adaptation in Watershed
- Energy Efficiency Policy Master Plan
- Strategic Environmental Dialogue between Thailand and Germany

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- Enhancing the Economics of Biodiversity and Ecosystem Services in Thailand/ South-East Asia (ECO-BEST)
- Sustainable Consumption and Production Policy Project
- Greening Supply Chain in the Thai Auto and Automotive Parts Industries
- Green Public Procurement and Eco-Labeling Project

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