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GTZ IN THAILAND

Newsletter of Thai German Projects by GTZ & Partners

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Dear Readers,

"Copenhagen" is arriving soon. Thailand is in the middle of preparing for this big event this December, where world leaders will agree on new CO2-targets that will directly affect Thailand's future development.

Thailand is increasingly conscious of the need for climate change mitigation. Sustainable development concepts and tools are under way in Thailand to espouse this. Since many years we hear every day terms such as Sufficiency Economy, Cleaner Production, Eco-Efficiency, Sustainable Consumption and Production (SCP), Climate Change (CC), Green Growth, Low Carbon Economy, Clean Development Mechanism (CDM) and most recently Reducing Emissions from Deforestation and Degradation (REDD)

All these terms seem rather bewildering until we realize that these important initiatives share a common goal - whether it be for poverty reduction, or food and energy security - to secure a liveable planet for the next generation.

In the end, the terminology does not matter - all these initiatives boil down or are related to three values of sustainable development: economic, social and environmental. If we consider these values from an integrated and holistic perspective, they all share a core issue - that of conserving humanity's exploitation of a finite global supply of natural resources.

And if sustainable development, in its essence, means to conserve these resources for future generations, how might we contribute to this at an individual level? Perhaps nothing captures this better than the imaginative "Reduce, Reuse, Recycle" (3Rs) slogan. This simple but powerful message is by now lodged in our minds, and is so easy to translate into small but real actions for each of us as we go about our work and daily lives.

Change is never easy, but it certainly starts with an individual commitment. We hope that our Thai-German projects are contributing to overcome these barriers to change.

And please, don't print this out unless you must!

With best regards,

Your Newsletter Team

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GTZ Regional Programme on Commercialization of Biopesticides in SE Asia: Product Performance and a Look into the Future



Providing commercially viable and environmental ly sound solutions for modern crop protection and pest control without using toxic chemicals is

the goal of a regional GTZ initiative of GTZ launched in February 2003, to be completed in December 2009.

Increased consumer awareness and a growing demand for safe foods for export as well as for domestic markets have ushered in drastic changes in agricultural production practices in Southeast Asia. Increasing awareness and regulatory stringency have contributed to renewed interest in biopesticides (for conventional as well as organic production) and should help improve competitiveness of farmers and growers.

Based on field demonstrations of the effectiveness of model products, and armed with appropriate production and marketing concepts, the project set out to convince private sector players to invest in these technologies. Some examples are discussed below.

The lychee fruit borer (*Conopomorpha sinensis*) is a serious pest of lychee, causing serious economic loss to farmers and usually requiring frequent spraying of

chemical insecticides. The introduction and testing of a sex pheromone to control the pest on organic longan and lychee farmers in northern Thailand is a follow-up from another GTZ programme in Indonesia. In this highly successful intervention, a new pheromone for mass trapping of a sister species, the notorious pest cocoa pod borer (*Conopomorpha cramerella*), was tested and subsequently commercialized. Mass trapping using this pheromone now offers 400,000 small-scale Indonesian cocoa farmers the chance to enhance their produce quality without using any synthetic pesticide.

This technology has also enabled organic cocoa farmers in Aceh in northern Sumatra to obtain organic certification, thereby unlocking access to export markets for their produce in Europe. By 2008, about 1,500 organic cocoa farmers were already using the technology, with many new farmers joining the programme since early 2009.

These results challenge the oft-cited notion that environmentally friendly technology is expensive and unaffordable for smallholders. Thanks to a 'South-South' business agreement between an Indian pheromone producer (Pest Control India) and its Indonesian distributor (CV Hetts Bio Lestari) in practice, prices can be kept low, making such new technologies affordable for all farmers. As field trial data with cocoa smallholders in Sulawesi, Indonesia, show, pheromone technology can not just boost yields, but shows a benefit-to-cost ratio similar to synthetic pesticides (Table 1).

Table 1: Crop damage and cost-benefit relationships of different pest control strategies against cocoa pod borer (*Conopomorpha cramerella*) in conventional cocoa plantations of smallholders (1-2 ha) during an 18 mo-period of demonstration trials in Sulawesi, Indonesia. Results of a joint field trial of Mars Inc. and GTZ in Indonesia.

Item	GFP* alone	GFP plus 8 pheromone traps	GFP plus insecticide#
% losses of cocoa [§]	20.0	14.0	12.3
Income	2085 [‡]	2242	2381
Cost of maintenance [†]	269	275	294
Net income	1816	1967	2087
Benefit / cost ratio	6.75 / 1	7.15 / 1	7.10 / 1

^{*}Good farming practice, e.g. early harvesting, field sanitation, pruning etc. Losses in fields without GFP usually amount up to 40% in Sulawesi.

^{*}Ten insecticide sprayings

[§]Cumulative index that accounts for damage in four categories of cocoa pod quality.

[†]Conversion of IDR to US\$ based on exchange rate of August 1, 2007. Values reflect averages (ha⁻¹) of 20-25 farmers.

[‡]Including external labor (fertilizing, pruning, harvesting etc.) and equipment and materials (fertilizer, traps, insecticide etc.)

Another success story is the implementation of biological rodent control using a protozoan parasite (*Sarcocystis singaporensis*), which was the first product produced and promoted in Thailand since the start of the programme in 2003. The product (tradename "Prorodent") now has an estimated market share of about 5% (by value), and has also been registered in Laos and Vietnam. registrations are also pending in Indonesia, Malaysia and the Philippines. The product has proved its effectiveness and price competitiveness in several crops including rice and oil palm) as well as

for urban rodent control. **Table 2** shows an example of its outstanding performance in oil palm under very high pest pressure, clearly outperforming the chemical approach. However, despite these compelling results, estate owners could not be convinced to change their ways, exemplifying the challenges of breaking down misconceptions towards new technologies. This underlines the importance of effective marketing and sound technical advice, to wean farmers away from reliance on synthetic chemicals.

Table 2: Effectiveness and costs for one campaign of chemical (anticoagulant) and biological rodent control (*Sarcocystis singaporensis*) at high crop damage levels in an oil palm estate in southern Thailand. Total plot areas of the trials were 381 ha and 281 ha, respectively.

Field No.	% rat damage to fresh fruit bunches before control	% rat damage to fresh fruit bunches after control	% change		
Chemical rodent control (4.7 US\$ per ha per campaign)					
3	53.3	40.8	- 23.5		
7	29.0	78.6	+ 171.0		
22	57.9	71.8	+ 24.0		
29	86.7	60.0	- 30.8		
31	46.2	80.0	+ 73.2		
41	53.9	33.3	- 38.2		
Average	54.5	60.7	+ 29.3		
Biological rodent control (5.5 US\$ per ha per campaign)					
24	54.6	21.8	- 60.1		
26	48.1	23.9	- 50.3		
28	24.3	26.4	+ 8.6		
30	50.0	17.5	- 65.0		
32	27.7	14.8	- 46.6		
33	22.8	12.9	- 43.4		
Average	37.9	19.6	- 42.8		

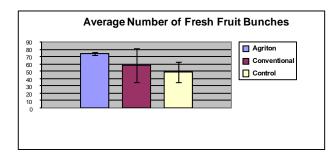
A last example also deals with oil palm estates in Thailand. The GTZ Biopesticides Programme supported trials of a new trunk injection fertilizer technology (tradename "Agriton"), originally developed in Malaysia. Trunk injection involves injecting liquid fertilizer directly into the trunks of palm trees trough tubes, so that 100% of the nutrients are available to the tree (usually, a large portion is lost in the soil). This approach has clear environmental benefits, as yields and total production be significantly increased without requiring more land area. Vichitbhan Co., Ltd., owners of the trial area, were especially impressed by another benefit: treated plots resulted in greatly reduced yield variability (Figure 1) making production under the often difficult climatic conditions in southern Thailand more predictable.

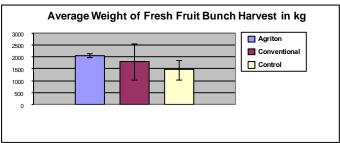


Although the Biopesticides Programme will end in December 2009, ASEAN decided at a recent meeting of its sectoral working group on crops to cooperate with the German Government on harmonization of the regulatory framework for biopesticides. As a result, a joint 3-year programme is currently under preparation. Challenging registration procedures are still a major

hurdle for companies interested in commercialization of these products, and so collaboration among ASEAN's 10 member states will create the framework conditions that will help shape an enabling regulatory environment to boost the distribution and use of environmentally friendly technologies for sustainable agriculture in the region.

Figure 1: Results of a field trial in 2007 conducted in an oil palm estate of Vitchitbhan Co., Ltd. comparing a new trunk injection fertilizer technology (Agriton), introduced by GTZ in Thailand, with a conventional fertilizer regime. Variance indicated by error bars.





TISTR and GTZ Transfer Low Cost Shrimp Farming Technology to Pattani Farmers



Thailand Institute of Scientific and Technological Research (TISTR) and GTZ recently held a joint workshop on "Low Cost Shrimp Farming Technique in Pattani" on Saturday, July 25, 2009. The workshop aimed to transfer improved shrimp pond soil treatment technology to shrimp farmers. The technology was designed to increase the natural food chain for young shrimps, reduce production costs, enhance the competitiveness of SMEs in the shrimp farming sector and help maintain Thailand's status as the world's leading shrimp exporter. More than 70 shrimp farmers from Songkhla and Pattani participated in the workshop and visited the Damrong Farm, which has been involved in this research project and generated successful results for more than 2 years.

The food chain development technology is an effort to create natural nutrients and optimal levels of dissolved oxygen for young shrimps, maintain the fertility of the shrimp pond beds, increase the survival rate and promote the growth and vigor of the vulnerable 45-55 day-old shrimps. This technology provides another way to cut shrimp production costs, particularly feed and

energy costs, and will thereby help keep shrimp farms economically viable.

Applying the shrimp pond soil treatment technology to develop the food chain is the overall objective of the research project. The project provides capacity-building support for shrimp farmers and promotes sustainable shrimp farming. Currently, both international and domestic shrimp markets are highly competitive; to compete and survive in this intense business climate, Thai shrimp farmers have to be ready to innovate in order to reduce production costs and increase productivity.

After this workshop, TISTR, Damrong Farm and GTZ will disseminate this pond soil treatment technology to other farmers in the Southern region in order to promote its wider adoption in other farms. It is anticipated that by 2011, up to 1,500 farms will adopt this technique. After the completion of the project in 2011, the service will be made available commercially by Damrong Farm.



Farm preparation: Raising natural food chain for shrimps

From Producer to Consumer: What German Technical Cooperation Offers to Establish a Successful Organic Farming Business



Successful and sustainable implementation of organic agriculture in any country requires close consideration to all links in the value chain, from producer to the final consumer. Governments have a role in facilitating the creation of such a framework through policy measures which facilitate organic agriculture. Where local certification organizations exist, it is generally easier for smallholder groups to gain certification for export markets, or for local markets. It is important that producers have access to expert advice, because know-how about appropriate production techniques is critical. It is useful for smallholders to form groups in order to make more efficient use of advisory services and to learn from one another's experience. Producer groups need to establish internal quality control systems which are operated by the group itself in order to keep the costs of external certification to a minimum. Marketing is the next important point for ensuring that organic production is profitable for the smallholders.

For more than 10 years GTZ has been an active pioneer in this field in developing countries. Initially, the emphasis was on exporting to a niche market in Europe. In Southeast Asia, including Thailand, GTZ has actively supported organic production and market development. Services have included training of farmers and trainers within certification schemes, introduction of eco-efficiency in production and processing, implementation of new approaches to pest control and bio-fertilization, value chain promotion, market development, feasibility studies and policy advice. For example, GTZ has assisted many longan farmers in Chiang Mai to obtain organic certification; Thai organic longan was subsequently showcased in flagship organic trade fairs in Europe. Based on pheromone lures to control insect pests, environmentally friendly no-residue pest control technologies are currently used in organic longan and lychee orchards, in compliance with organic certification requirements.

To ensure the successful development of both domestic and export organic markets, the various interventions must be linked in order to embrace economic, social and environmental movements. Vertically, linkages must be considered along the whole value chain, in order to eliminate bottlenecks and barriers for the organic stream within the value chains. This includes market development through labelling and certification to transfer of know-how at the farm level, as well market development of consulting services themselves. Horizontally, framework policies and organic business enabling environments, branding and awareness for "going organic" are essential to catalyse the necessary break event points and benefits.

Target groups and services

Main Traget Groups	Themes of Consulting/Training Services
Macro: Departments and Minsitries	 Laws and regulations on organic standards and norms Establishment of accreditation systems Organic promoting policy tools and mechanisms
Meso: Associations, local control systems, export promotion etc.	 Establishment and development of consulting services Establishment of local control systems and infrastructures Development of market strategies
<i>Micro</i> : Smallholders, Farmers, SMEs	 Establishment of producer groups with internal control systems Organic farming techniques and its standard Marketing and cost accounting Matchmaking with business partners, trade facilitation

GTZ Continues to Support CDM Development in Thailand

Within the Programme for Enterprise Competitiveness (TG-PEC) GTZ and its partners will support SMEs to access carbon financing via the Clean Development Mechanism (CDM). Small amounts of carbon emission reductions are usually inefficient for CDM projects, due to high project development costs compared to the return of investment through sales of Certified Emission Reductions (CERs). Therefore GTZ is supporting worldwide the development of Plans of Action (PoAs) which cover a number of individual projects with low emission reduction.

The CDM project under the TG-PEC will support the Thai Ministry of Industry to identify potential projects which would be interested to participate in the PoA. SMEs, particularly from the agro-industrial sector, are invited to approach either the Ministry of Industry or GTZ to request evaluation of the feasibility of their anticipated projects or investments for inclusion in the

CDM/PoA. Ultimately, it is anticipated that the project will result in more SMEs improving their enterprise competitiveness via eco-efficiency (environmental and energy) measures.



Mapping and Matching Innovation in Fruit and Vegetables - Triple Helix Cooperation



A 2-year cooperation project between GTZ and Technology Management Center (TMC) a member of National Science and Technology Development Agency (NSTDA), entitled "Mapping and Matching Innovation in Selected Agro Subsectors" supports four regional stakeholder consortia, and aims to establish three major universities as main drivers of regional innovation in their respective region or selected sectors. One of these consortia is led by Silapakorn University's Faculty of Industrial Engineering, Department of Food Technology and Biology, and the Federation of Thai Industry (FTI), Nakhon Pathom Province, and TMC's Industrial Technology Assistance Program (ITAP) representative. The team conducted a systematic mapping and matching of the innovation process, bringing together the concepts of "technology-push" and market demand to ensure relevance and commercial viability of innovations introduced by the project.

During the mapping phase, a demand survey was conducted, targeting 160 SMEs engaged in food processing, packaging and export of fruit and vegetables in Nakhon Pathom and adjacent provinces. The survey pointed out three major problems for SMEs: 1) residues (chemical and insect) on raw fruit and

vegetables; 2) short product shelf life; and 3) quality control in terms of colour and texture.

Research, technology development and innovation (RTDI) solutions were identified and matched to the SME's needs. Over Bt 1 million funding support were secured from both the Thailand Research Fund and ITAP. More than 10 collaborative research projects have since been undertaken with those SMEs to address the technical challenges faced by fruit and vegetable processors/exporters. By bringing together various stakeholders with a common focus, the project has also greatly strengthened linkages between academia and industry.

Not limited to seeking only technological solutions, the innovation intermediary team has utilized this extended university-industry linkage to address the raw material problem through the purchase agreement model. The Silapakorn University team together with the FTI's Nakhon Pathom Chapter has presented its survey findings to the provincial governor in an effort to gain support from key local government agencies such as the Provincial Agriculture Office. A focus group and brainstorming workshops were also conducted with representatives from processors/exporters-buyers, and grower-sellers as well as the Provincial Agriculture Officer.

With FTI's support, three processor/exporters calculated their projected demand for basil, peppermint, and coriander throughout the year and specified the needed quantities and quality. With the support of the Nakhon Pathom Provincial Agriculture Office, a group of GAP-certified growers in two districts could match their production with the demand of those exporter /processors during different period of the year. Both sides (buyer and seller) discussed their respective requirements, and finally negotiated agreements on schedules, order volumes, guaranteed prices and

specifications. A signing ceremony of the purchase agreement was held on July 7th at Silapakorn University.

The outcome from this process was that the processors/exporters were able to secure good quality produce at the right quality in the right volumes, according to market demand. In addition, by combining their overall volume demand, they can better manage their risk of commitment on the purchase agreement as well as reduce the logistics cost in collecting produce and costs of laboratory residue tests. Meanwhile growers can better plan their crops and production volumes, and secure orders through this purchase agreement, without relying on a single buyer order as occurs under traditional contract farming arrangements.

The Silapakorn University Department of Food Technology and Biology led the regional innovation intermediary team, and acts as a facilitator among the industry (growers/exporters) and government (Municipality, Provincial Agriculture Office, Thailand Research Fund, ITAP etc.). At the systemic level, the linkage among university, industry and government - the triple helix cooperation - has been strengthened through this mapping and matching process - a seed of innovation was sown.



Support to the Innovation Intermediary Teams on the Development of their Regional Innovation Strategy and Action Plan.



As part of capacity development activities for the four innovation intermediary teams supported under the "Mapping and Matching Innovation in Selected Agro Sub Sectors "a joint project between GTZ and TMC/NSTDA, the 4th Methodology Workshop and Roundtable Meeting on "How to do the Regional Innovation Strategy and Action Plan" was held from August 4 -7th. 35 participants consisted of members of

the four regional innovation teams, academics, researchers as well as management from 3 major universities; Prince of Songkhla University, Sialpakorn University and King Mongkut's University of Technology Thonburi, Federation of Thai Industries (Nakhon Pathom Province) and staff of the Industrial Technology Assistance Programme of the Technology Management Centre (TMC) a member of National Science and Technology Development Agency (NSTDA).

The project introduced the "Regional innovation strategies (RIS)" approach promoted within the European Union for the last 15 years with several generations of regional innovation strategies (RITTS, RIS, RIS+, RIS-NAC, Regional Programmes for Innovative Actions under the ERDF) for the European Union. The 3 stages comprise: Stage 0 – Definition; Stage 1 – Analysis; Stage 2 – Strategy definition, evaluation, monitoring and implementation mechanisms, pilot projects. In a bottom-up, participatory, multi-stakeholder approach a region can develop its own strategy in a 2-3 year process.

DEP and GTZ Jointly Boost Thai Agricultural Products Export



Thailand's Department of Export Promotion (DEP) and GTZ signed a Memorandum of Understanding (MOU) to promote export of Thai products. They will jointly implement a pilot project to promote key agricultural products: organic shrimp, certified GLOBALGAP/ ThaiGAP/organic fruits and vegetables, and saa paper by strengthening the competitiveness of Thai exporters and improving distribution and marketing channels of Thai products. The target of this project is to increase exports of agricultural products from 17% to 19% of total exports within 2009.

DEP will collaborate with GTZ to actively promote and support Thai exporters by assisting in their international marketing efforts and strengthening exporters whose products have been significantly improved by GTZ to

meet international standards. The aim is to increase the number of exporters, which will contribute to higher Thai export value and volume in the future. Participating Thai exporters will join in Thailand's exhibitions and international trade fairs, engage in business matching events to strengthen their regional and global networks and open up new channels for trade.

In the past, exports of Thai agricultural products were impacted by inadequate control over chemical residue levels. However, in recent years quality and safety standards have been much more stringently applied across the industry, and today's agricultural products are produced in full compliance with internationally

recognized quality and safety standards. Publicity campaigns will therefore be organized to build awareness and promote the image and 'brand awareness' of Thai products, particularly for agricultural goods.

Such activities will build confidence among importing countries and strengthen the competitiveness of Thai agricultural products export as a whole.

Other project activities include training on agricultural exports and standards to target countries, in-store promotions with leading department stores in Europe and Japan to introduce certified organic shrimp and GLOBALGAP/ThaiGAP certified fruits and vegetables from Thailand.

Good House Keeping (GHK) for Community Enterprises in Thailand



The 'One Tambon, One Product' or 'OTOP' is one of the best known populist policies initiated by the Thai government and promoted for almost a decade to strengthen local economies. Villagers were motivated to form groups by government officers to produce local specialty products. The government provided either long term or free loans for acquiring necessary production facilities as well as raw materials for producing a variety of goods, collectively called OTOP products. To accelerate the policy, training courses for production technology, quality improvement, product design, packaging design and marketing were rendered at no cost to participants. As for the demand side, the government frequently organized trade fairs to promote OTOP products throughout the country. The OTOP policy has been maintained for many years for economic as well as political reasons. But due to its high costs, the policy has been questioned for its effectiveness.

Chainat, a small agricultural province in Thailand's central region, was selected as the location for an initiative to improve OTOP business in the province through the PREMA's Good House Keeping, or GHK programme. Thirteen OTOP groups were invited to a

three-day workshop plus a 1-day network meeting in a hotel in Chainat. Each group was represented by a group leader and one or two other member(s).

On day 1, participants were introduced to the fundamentals of GHK comprising triple-win, (Non-Product-Output) NPO concept and using the concept for their own factory visit to identify strengths and optimization potentials (OPs).On day 2, each group visited own workplaces and made a report of strengths and OPs identified. These OPs were very valuable as they helped express OTOP's current problems.

The GHK cycle was continued step by step with close coaching on day 3. Problem analysis and identification of improvement measures were carried out within each own group supervised by the trainer-team. Show cases of selected participants have been discussed among the whole group and lesson learned has been transferred among the participants. In order to ensure that the GHK will be successfully carried out, all document were copied from every group to be used for follow-up and wrap-up reporting.

The groups were committed and returned to their workplace to implement their respective action plans in about four weeks without further supervision. After this break, a network meeting was organized to follow-up results of the implementation. The group presentations showed that most of them were satisfied with the improvement of their OPs, and believed the training would help OTOP participants better their business.

The ultimate outcome of this workshop lies not only in an improvement in sales of OTOP products, but more importantly, that trained villagers are better equipped with the tools to sustain their business themselves. The GHK module has again proved its versatility and applicability to any type of enterprise.

Preparing Bioplastics Testing Labs in Thailand for International Certification

The fourth strategy of Thailand's National Road Map for the Bioplastics Industry Development specifies the establishment of laboratories for testing and certifying bioplastics products and materials. Compliance with international standards such as DIN CERTCO will guarantee quality and build creditability for these products, thereby laying a foundation for enhancing competitiveness of the industry.

Hence, the National Innovation Agency (NIA) and German Technical Cooperation (GTZ), within its joint-project "Enhancing the Thai Programme for the Promotion of Bioplastics", are supporting the international certification of bioplastics testing labs. The project aims to prepare existing testing labs at the National Metal and Materials Technology Center (MTEC), Thailand Institute of Scientific and Technological Research (TISTR), Department of Science Service (DSS) and Kasetsart University to be certified by DIN CERTCO.

In order to accomplish this, the project arranged assessments of laboratories for the respective partners, conducted by an expert from Fraunhofer UMSICHT from 22-26 July 2009. The laboratories were evaluated for their level of compliance with the DIN CERTCO standard, which focuses on four areas: chemical characterization, biodegradability at laboratory scale, degradation at pilot scale, and ecotoxicity. The assessment results suggested that in the near future, the testing lab at MTEC will be able to provide the



industry with testing services on a commercial scale. In the meantime, MTEC will prepare to apply for DIN CERTCO certification.

Ultimately, the success of the initiative will rest largely on the market demand for exports. TISTR will probably follow MTEC in establishing a testing lab for bioplastics products, but this process may take several years. DSS and KU aim to support other labs by contributing specific components of the test protocols. For example, DSS will be able to provide chemical characterization tests and KU on biodegradation.

ONEP and GTZ Hold a Capacity Building Workshop for Thai Climate Change Negotiation Team



GTZ and the Office of Natural Resources and Environmental Policy and Planning (ONEP) held a capacity-building workshop on "Climate Change Negotiation" on 20-22 July 2009. H.E. Dr. Hanns

Heinrich Schumacher, the German Ambassador, Mrs. Nisakorn Kositratna, Secretary-General of ONEP, Mr. Franz Josef Ellermann, Programme Director of the Thai-German Climate Protection Programme and Mr. Metha Promthep, Deputy Director General of the Department of International Organizations, addressed the workshop during the opening ceremony. The workshop was led by international climate change negotiation specialists from Malaysia, India and the Philippines, who have extensive experiences in the UNFCCC and the Kyoto Protocol negotiations. Training topics focused on developing countries' issues and concerns, particularly Thailand's.

The workshop aimed to enhance the understanding of the Thai Climate Change Negotiation Team on the background, content structure and technical procedures of the next draft of the United Nations Framework Convention on Climate Change (UNFCCC) agreement, as part of their preparations for future international negotiations. The Thai Negotiation Team comprises delegates from public and private agencies and academic institutions.

At least 2 international meetings will be held before the UNFCCC Conference of the Parties 15 (COP 15) in December, 2009 in Copenhagen, Denmark: the Bangkok Climate Change Talks (28 September to 9 October, 2009) and the United Nations Climate Change Negotiations, Barcelona (2 to 6 November 2009).

COP 15 is important because the Parties to the Convention must jointly develop a new international climate change agreement to be implemented after the expiry of the Phase 1 of Kyoto Protocol in 2012. An issue of concern is how the new climate change obligations will affect the social and economic development approaches and progress of participating countries.

For more news and information on climate change, please visit ONEP (www.onep.go.th) or the UNFCCC website: http://unfccc.int.

Trat Community Members Attend TOT Workshop on Participatory Techniques

Under the Climate Protection in Tourism Project, the Designated Areas for Sustainable Tourism Administration (DASTA), GTZ and the Dr. Walter Schoell Foundation held a "Training of Trainers (TOT) Workshop on Participatory Techniques" at Koh Chang, Trat, on 13-15 August 2009. About 30 community members from Koh Chang, Koh Kood and Koh Maak, DASTA staff and GTZ project team members participated in the workshop, led by Dr. Suthee Huntrakul and the training team from the Dr. Walter Schoell Foundation.

The "Participatory Technique" workshop focused on implementing, coaching, facilitating, sharing of lessons-learned, action-planning, monitoring and evaluation techniques. In addition, activities to promote learning

and develop networking were introduced to empower workshop participants to apply the participatory approach in their community works and develop a sustainable community service network.



GTZ, DASTA and a German University Held a Training Workshop on Climate Change and Tourism

On 7-9 September 2009, the Climate Protection in Tourism Project and the University of Applied Sciences of Eberswalde Germany, held a training workshop on "Climate Change and Tourism: Concept, Instruments and Implementation" for 30 representatives of public and private tourism agencies and NGOs. Participants

were invited based on their knowledge and potential to help develop an appropriate and practical training curriculum on climate change and tourism for the Thai tourism industry, which will contribute to sustainable tourism in Thailand.

Energy Efficiency in SMEs Project Tackles Glass Industry



GTZ and the Department of Industrial Works (DIW) jointly implement the "Energy efficiency in SMEs" project to build capacity of energy and environmental personnel in 5 pilot sectors: canned food, glass, ferrous and non-ferrous casting, ceramics, and textiles. The

project selected the glass industry as its first pilot sector and held a workshop on "Energy Efficiency and Environmental Prevention for the Glass Industry: Integrated Approaches and Tools" from 3-4 September, 2009. Mr. Adison Naphavaranonth, DIW Deputy Director-General presided over the workshop which aimed to disseminate German experience on integrated approaches to promote energy efficiency, pollution prevention and control and safety in the glass industry sector.

The workshop provided a forum for glass industry representatives to share their viewpoints and recommend the application of integrated approaches to the Thai glass industry. Workshop outputs will be used in the development of a training manual and a curriculum on "Integrated Process Improvement for the Thai Glass Industry"

Working Group: Cities and Climate Change



On 30-31 July, the first GTZ Working Group on Cities and Climate Change was convened at New Delhi, India. The meeting was organized to discuss how the ongoing

GTZ climate change-related projects in Asia might best be linked and integrated with the initiatives of the city administrators. Participants were from GTZ projects in Thailand, Philippines, Indonesia, India, China and GTZ Headquarters in Eschborn, Germany.

The group highlighted Cities and Climate Change as an innovative theme within GTZ's strategy. An overview of the ongoing activities at GTZ Headquarters and the

outcomes of the last discussion of the GTZ's Transportation, Environment, Energy and Water (TUEWAS) Sector Meeting held in November 2008 were presented. These information provided the working group with background and key issues for further discussion, in order to develop its action plan and policies, and establish areas for cooperation with other GTZ Working Groups.

On the first day, the group was introduced to a comprehensive Climate Information Package, Communication Tools, and the Urbanet Initiative. The group was introduced to the following works:

- ICLEI (Local Governments for Sustainability) that conducted the Greenhouse Gas Footprint Inventories in 50 Asian cities.
- 2. The World Bank's programme on Eco2 Cities,
- UNEP's consumer awareness campaign in Climate Change,
- GTZ's Transportation and Climate Programme, and
- GTZ's HQ summary report on the International Carbon Expo and Urban Research Symposium, held at the end of June 2009 in Marseille, France.

On the second day, Mr. Alfred Eberhardt guided the group through a draft training curriculum for city policy makers. The group practiced one module on Climate Change Urban Action Plan Development. Before the test, Mr Eberhardt introduced the concept and methodology of the training course. After the test-run, the group evaluated its practicality and debated further development and the use of the course module.

At the meeting's final session, the group discussed how GTZ's existing projects can contribute to develop this training curriculum and its future application. The course is expected to be ready for the real test in early 2010, and to be rolled out in final form in India, Indonesia, and Thailand during 2010.



ONEP and GTZ Hold Climate Protection Colloquium: "German and EU Climate Policy and Measures"



GTZ and the Office of Natural Resources and Environmental Policy and Planning (ONEP) held a Climate Protection Colloquium on 18-26 August, 2009. Dr. Georg Maue, Energy and Climate Change Policy Specialist at the German Federal Ministry of Environment, Nature Conservation and Nuclear Safety (BMU), gave an overview of German and EU climate policies and measures to representatives from relevant government agencies and interested persons. The presentation, covering tourism, urban development, energy efficiency, renewable energy, transportation, policy development and financial measures, informed participants on recent policy developments and measures used to promote compliance and participation in schemes to reduce greenhouse gas emissions in the European Union and Germany. Of special interest was the agreement reached by all 27 EU member states on March 2007 to reduce their

greenhouse gas emissions in 2020 by 20% from 1990 levels. Several promotion measures were launched, including revision of EU regulations on greenhouse gas trading, financial support for environmental programs, and promotion of renewable energy. EU is moving steadily towards a low carbon economy and is keen to take the lead in reducing greenhouse gas emissions at a global level. Besides strengthening economic and energy stability and protecting the environment within the EU itself, the measures introduced by the EU have become a model for international negotiation pursuing the common goal.

The German Government has committed to reduce Germany's greenhouse gas emissions in 2020 by 40% from 1990 levels, a reduction of 270 million t/a greenhouse gas emissions. To achieve this, the German Government amended existing legislation and enacted new laws and regulations covering investment fund support, market establishment and promotion, as well as support for research and development.

Dr. Maue cited several initiatives aimed at reducing greenhouse gas emissions: for example, the German State of Mecklenburg-Vorpommern encourages tourists to purchase a wooden cube to reduce the carbon footprints of their trips. Funds raised from the scheme are used to rehabilitate the State's forests. Another example is a new regulation aiming to curb CO₂ emission from vehicles. Vehicle manufacturers must comply with a new emission limit of 120g/km CO₂ within 2012, with a further reduction in the emission limit to

only 95g/km CO₂ by 2020. Failure to comply with the limits will result in financial penalties at a progressive rate.

Besides providing new knowledge, this colloquium offered an ideal opportunity for stakeholders to learn new approaches, which will be beneficial for the development and implementation of policy in Thailand. The activity is a part of the Climate Policy Project which aims to strengthen the capacity on climate change policy development and implementation.



Dr. Georg Maue, Energy and Climate Change Policy Specialist

Invitation to Vote for "Climate Change - Changing My Life" Short Film Award

GTZ, the Goethe Institute, the Thai Public Broadcasting Service (Thai TBS), the Office of Natural Resources and Environmental Policy and Planning (ONEP) and the Thai Film Foundation held a short film competition on "Climate Change – Changing My Life" under the project "ThaiDocs 2009 Short Documentary Award Thailand" to provide an opportunity for creative young people aged 18-25 to show their potential in making short film.

The project also aimed to promote awareness on climate change and its impacts on the quality and way of life, and to encourage public participation in climate change prevention and mitigation. Students nationwide submitted 110 proposals to the committee which has already shortlisted 20 teams.

The selected teams have participated in a three-day workshop conducted by exprerienced film directors from Germany. The 20 short films will be aired on the

ThaiPBS programme "Hot Short Films" at 11:00 p.m. every Thursday during November 2009. The audience will be invited to vote for their favourite documentary by sending an SMS to Thai PBS. In return, voters will have a chance to win gifts from ThaiDocs. For

contestants, the first prize winner will receive Baht 120,000 to produce a feature length documentary on the winning subject, to be screened on Thai PBS and at the Sixth Science Film Festival in 2010.

For further information, please visit: www.thaipbs.or.th/thaidocs and www.goethe.de/bangkok



Energy Utilization Concepts for Residues from Palm Oil Mills



Following extraction of oil from the fruit bunches, every oil palm mill handles Empty Fruit Bunches (EFBs) differently. Since EFB's represent such a large proportion of the total oil palm biomass residues,

there is a clear demand for a broad analysis of all utilization options. Therefore, during 5-14 August 2009, the Sustainable Palm Oil Project assigned an expert team to conduct an analysis of energy utilization concepts for residues from the palm oil mill, especially focusing on EFBs.

The team visited the Department of Agriculture and Department of Alternative Energy Development and Efficiency (DEDE) to gain a better understanding of the wide range of policy support measures available from government, particularly regarding fertilizer and renewable energy issues. The team also visited several palm oil mills and biomass power plants in the South and the East of Thailand to analyse the different uses to which EFBs and other residues are put (e.g. biogas

generation, combustion, composting, fertilizer production, mushroom cultivation and animal fodder). The team then made recommendations to the palm oil mills on the best options for utilization of EFBs and other residues.

Based on the field visits, it was clear that no single technology could suit the diverse needs and constraints of all palm oil mills. The best use option will therefore depend on the precise local situation, applicability of government support policies, and market conditions for bio-energy and organic fertilizer. The use is based on several criteria, including reduction of GHG-emissions, investment costs, employment generation, applied technology in Thailand, and experience with different

technologies and end-use applications. The various options will be analyzed, characterized, calculated and integrated into the project's activities. In this regard, the project will further support and follow-



up the recommendations in pursuit of its ultimate goal of "zero-waste-management" for the oil palm industry.

Development of Thai RSPO Principles and Criteria for Sustainable Palm Oil Production



The Sustainable Palm Oil Project and all stakeholders have together completed their work to develop national

interpretation guidelines for the Thai Roundtable on Sustainable Palm Oil (RSPO) Principles and Criteria on Sustainable Palm Oil Production.

On July 2, 2009, the Thai Oil Palm and Palm Oil Association, Palm Oil Refinery Association, Palm Oil Crushing Mill Association and Biodiesel Producer Association established a Thai National Interpretation Working Group comprising 13 stakeholder representatives, including private companies in the oil palm and palm oil industry, academic institutions, government agencies and NGOs, to brainstorm on the Thai RSPO principles and criteria. The Sustainable Palm Oil Project has translated the RSPO Principles and Criteria into Thai and submitted the documents to the Working Group for revision and development of the final version. For more information, please visit the www.oae.go.th and www.rspo.org websites.

GTZ and Key Stakeholders Promote Sustainable Palm Oil (RSPO) Certification Scheme

Sustainable Palm Oil for Bioenergy, a collaborative project between the Office of Agricultural Economics (OAE) and GTZ, held a lunch reception on 24 August 2009 for members of the National Palm Oil Board. This event was aimed to inform members of the National Palm Oil Board about RSPO, which is an internationally recognized and accepted standard for sustainable palm oil production. The event was graciously presided over by Mr. Chatchai Piyasombatkul, Assistant Minister of the Office of the Prime Minister and Mr. Stefan Duppel, Minister Counselor of the German Embassy, and included a presentation on "RSPO standard: Market Opportunity for Thailand".

Mr. Apichart Jongsakul, OAE Secretary-General, gave an overview of the collaborative project between the Thai and German governments and invited Dr. Vengeta Rao, Secretary General of the Roundtable on Sustainable Palm Oil (RSPO) to give a presentation on "RSPO standard: Market Opportunity for Thailand".



Afterwards, the National Palm Oil Board members engaged in a detailed discussion and inquired about the benefits and the institutionalization of the RSPO standard in Thailand, as part of the effort to develop a supportive policy and regulatory infrastructure for sustainable palm oil production in the country.

Workshop on Life Cycle Assessment and Greenhouse Gas Calculation for Agricultural Products



On 10 September 2009, the Office of Agricultural Economics (OAE) and GTZ organised their first workshop on "The Sustainability of Palm Oil, Biofuels and other Agricultural Products: Greenhouse Gas

Calculation and Life Cycle Assessment of the Production of Palm Oil'. 40 participants from industry,

research and training institutes, non-government organizations as well as policy makers attended. The objectives were to enhance the participants' capacities to improve Life Cycle Assessment (LCA) and greenhouse gas (GHG) calculation for agricultural value chains, in particular the palm oil sector, to build up collaboration and increase awareness of the need to reduce GHG emission among all stakeholders. Furthermore, an overview of GHG-requirements for biofuels regarding international legislations (Europe and US) was presented.

Thai Palm Oil Industry Meets to Develop RSPO National Interpretation Guidelines



From 16 – 18
September 2009, the
Thai Oil Palm and Palm
Oil Association, Palm
Oil Refinery Association,
Palm Oil Crushing Mill
Association, Biodiesel
Producer Association
and GTZ recently
organised the 1st

National Interpretation Working Group for the RSPO (Round Table on Sustainable Palm Oil in Thailand)

for stakeholders in the Thai oil palm and palm oil industries, as well as interested members of the public and media representatives. Attended by over 200 participants, the event was aimed to launch the process of National Interpretation for the RSPO in Thailand, in order to create a common understanding of the RSPO and develop National Interpretation Guidelines for Thailand. This means developing indicators on the basis of the RSPO principles and criteria and to ensure that the indicators and criteria are relevant to the specific conditions of Thai palm oil production.

Through Civil Society Participation, Clean Air in Cities Are Within Reach



The German government recently commissioned GTZ to implement the "Clean Air for Smaller Cities in the ASEAN Region Project". The project, to be implemented in collaboration with the ASEAN Secretariat will provide technical support to smaller and medium-sized cities in this region. The project targets 10 municipalities/cities to develop the "Clean Air Plans", and would like at least 7-10 cities to adopt and implement the plans and sustainably control air pollution.

Achievement of the project's goals will require the active involvement and commitment of relevant agencies, as well as participation and ownership among the city inhabitants themselves. Accordingly, a participatory process will be essential, involving stakeholders from key public sector agencies and civil society in developing each Clean Air Plan. The seven participating ASEAN countries are Cambodia, Indonesia, Lao PDR, Malaysia, Philippines, Thailand and Vietnam.

Through the coordination of the Office of Natural Resources and Environmental Policy and Planning (ONEP), Thailand was selected to host this regional project, and the Ministry of Natural Resources and Environment appointed the Pollution Control Department (PCD) as the Thai project partner. A project office was established at the PCD at the beginning of 2009. In June the project selected Chiang Mai and Nakhon Ratchasima (Korat) as Thailand's 2 pilot municipalities under this project. The choice was based on criteria such as population size (150,000-1.5 million);

increasing population pressure with potentially adverse environmental impacts; a municipal leadership committed to environmental protection; a dynamic private sector, thriving civil society, and civil servants with experience in plan development and implementation.

The project is to be implemented in 4 steps:

- Road Map Analysis situation analysis and participatory action plan development
- Common Vision of Citizen development of common vision, goal and strategies for air quality management by the civil society
- 3. Clean Air Action Plan Development
- 4. Clean Air Plan Implementation.

Project implementation will be based on the priority of the various measures, level of difficulty and existing challenges faced by the cities. To give moral support to the project team and stakeholders, measures that produce quick and tangible results will be implemented first, followed later by more challenging initiatives that will benefit from earlier experience and lessons learned, as well as increased cohesion and confidence of the implementation team and stakeholder community.

On 8 September 2009, the project team presented a draft action plan (roadmap) for a Clean Air Plan to Chiang Mai Municipality and Chiang Mai Air Quality Advisory Council, requesting the establishment of a provincial working group to prepare for the implementation of step 2 in early 2010. In Korat, the project team held a workshop on 9 September 2009 to



introduce the project to civil society representatives and relevant government agencies. Dr.Vijarn Simachaya, director of the Air Quality and Noise Management Bureau, PCD, outlined past and present air quality challenges faced by Korat Municipality, and stressed the importance of implementing air pollution prevention measures now to avoid worsening air quality in the future. A broad cross section of Korat society, including

representatives from civil society groups, temples, academic institutions, community groups, government agencies and private companies participated in the workshop. Commenting on the city's air pollution, they suggested more stringent enforcement of existing laws and regulations. Their many comments will be compiled and analyzed to develop the Korat Road Map towards Clean Air Plan.

GTZ Senior Representative Receives a German Order of Merit for his Work in Thailand



Hagen Dirksen, GTZ's veteran recently received a Federal Cross of Merit from the Federal Republic of Germany by German Ambassador Dr. Hanns Heinrich Schumacher for his long term contribution to the Thai-German relationship. He received the Order for his great efforts as Honorary Consul to Northern Thailand, where he devotes his time to support Germans and Thai citizen, as well as strengthen the German-Thai cooperation in the fields of economics, education and culture.

Asking, how proud he is about the award, he said: "I'm very grateful to the German Government, but also would like to say, that I would not be standing here, if I would not have had excellent Thai partners, colleagues from GTZ and my wife to support me throughout my career. It's Thailand; I was falling in love many years ago. I regard myself very lucky to be able to serve my home country here from Chiang Mai." On the question, what would he recommend to the younger generation of international experts and other citizens who come to work and live in Thailand: "I would not dare to recommend anything, as each person's background and context of being here, are all different. But what I

can say from my experiences, is, equal partnerships based on mutual respect and trust, tolerance, and listening as well as a certain level of cultural adaptability - are important issues, I believe."

Educated in Germany and UK, Hagen joined GTZ in 1977 as an agronomist and rural development specialist. His over 30 years of experiences in technical cooperation in Thailand and in the Asian region makes Mr. Dirksen a very valuable asset for the German Technical Cooperation. He came to Thailand as a senior advisor and team leader of the Thai-German Highland Development Program (TG-HDP) in 1990. The TG-HDP was one of the major internationally donor-assisted projects contributing to a significant decline in opium poppy cultivation and improvement of the livelihoods of hill tribe people in the North of Thailand. He was then involved in many areas of German development cooperation in the region. Hagen Dirksen currently works as GTZ's senior advisor and representative of International Services (GTZ IS) covering mainly South-East Asian countries. He oversees large international cooperation projects which are funded by other sources than the German government (e.g. EU, ADB, National Governments), such as health care reform in Thailand and the Philippines, private sector promotion in Vietnam, trade promotion in Cambodia. Based in Chiang Mai since 20 years, he also is currently involved in Thai-German cooperation issues in the North, such as scientific cooperation and technology transfers between the two countries.



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