

#### Thai-German Programme for Enterprise Competitiveness

Issue #1 - April – June 2007

#### MESSAGE FROM THE GTZ COUNTRY DIRECTOR

Welcome to our first e-newsletter, following on from the launch of the pilot edition (print version) at the end of last year. Our quarterly e-newsletter will keep you updated on the activities of the Thai-German Programme for Enterprise Competitiveness (T-G PEC) and the GTZ (German Technical Cooperation) in Thailand, promoting small and medium-sized enterprises (SMEs) using a market development approach.

The programme takes account of the advanced development of the Thai economy. Thai SMEs need innovative improvements to keep up with the globalized competition. As standards become higher for Thai products and as markets demand more environmentally friendly production processes, new competitiveness strategies need to be implemented to create further added value through business and financial services and eco-efficiency (ecological and economical).

In its first phase (2004 – 2008), the PEC and its partners are focusing on the Thai agro-industry sector, which represents 60% of Thailand's labour force and which exports more than Baht 100,000 million per annum. Because this is such a large sector GTZ and its partners want to achieve a visible impact, the PEC will initially focus on five sub-sectors: palm oil, shrimp, tapioca, fruit and vegetables (e.g. longan, tangerine) and mulberry (Saa) paper.

During the first quarter of this year we have used internal and external communication to disseminate the achieved results in order to get a higher outreach, making our target groups aware of the benefits which have been gained so far: e.g. higher productivity through innovation, better market access through eco-standards, better access to financial sources and reduced production costs. Currently the programme is working on its strategies for the second phase (2008-2012).

The main features in this issue are:

- · EurepGAP, Shrimp pond soil treatment,
- · Profitable Environmental Management,
- Services for Improving Financial Access,
- $\cdot$  Sustainable Industrial Estate Development,
- · Community-Based Solid Waste Management,
- · Community-Based Disaster Risk Management

We do hope you will find our newsletter interesting and would like to take this chance to thank all of our Thai partners for their continued support.

#### MATRIX OF THE PROGRAMME

Project	Services, Expertises
	Agricultural Sub-Sector
Promotion of Northern Agro-Industry Clusters (PNAC)	Financial Services, Business Development Services
	Fruit and Vegetables, Longan, Tangerine, Saa-Paper
Promotion of the Palm Oil Value Chain	Financial Services, Business Development Services
	Palm Oil
Advisory Services for the Development of the Thai Quality Infrastructure (MSTQ)	Financial Services, Certification
	Fruit and Vegetable, Shrimp
Service for Improving Financial Access (SIFA)	Financial Services, Business Development Services
	Tangerine, Longan, Palm Oil
Promotion of Thai Marine Shrimp	Eco-Efficiency, Organic Market & Production, Certification
	Shrimp
Energy and Eco Efficiency in Agro Industry (E3Agro)	Energy Efficiency, Renewable Energy, Biomass
	Palm Oil, Shrimp, Tapioca
Risk Management for Handling Hazardous Materials by SMEs in the Bangpoo Area (CRM)	Chemicals Risk Management, Eco-Efficiency, Certification
	Cross-sectoral
Management Information System for Industrial	Management Information System, Eco-Efficiency
Pollution Prevention and Control (MIS)	Palm Oil, Tapioca
Promotion of Environmental Friendly Saa-Paper	Profitable Environmental Management, Eco-Efficiency, Business Development Services, Certification
	Saa-Paper
Promotion of Thai Bioplastics	Eco-Efficiency, R&D, Business Development Services, Certification
	Tapioca

Juergen Koch

### EurepGAP STANDARD COULD HELP THAI FRESH FRUIT AND VEGETABLE FARMERS SELL TO EU

By gaining certification to the EurepGAP standard, a transnational scheme for Good Agricultural Practice (GAP), Thailand's local farmers can benefit from better opportunities to export fresh fruit and vegetables (FFV) to Europe.

A well-functioning quality infrastructure is essential in order to increase Thai companies' competitiveness and performance within the global food industry as well as to break down technical barriers to trade and to achieve objectives in the fields of environment, health and consumer protection.

Thailand is the 6th largest agricultural exporter in the world. Currently, the main market for Thai FFV exports is China, accounting for 58% of vegetable and 32% of fruit exports in 2005. Thai exports to the EU account for only 12% of vegetable and 6% of fruit exports, and exports to the US for only 6% of total FFV exports.





Even though FFV is one of the major Thai export revenue earners, it is facing increasing competition from countries such as Vietnam, China and other regional producers. Because Thailand cannot compete with these countries based on labour costs, one of the more viable strategies is to position itself as a producer of high quality agricultural products enabling Thailand to increase and maintain its market share in those countries, especially within the EU where the markets are particularly attractive. These countries, however, require strict adherence to high standards in terms of food safety, environment and working conditions.

GTZ has joined with the Thai government, the Thai Chamber of Commerce, and the Thai Fruit and Vegetable Producers Association to promote food safety in the FFV market, in order to sustainably develop a high-quality infrastructure which enables small commercial farmers to achieve higher food safety, environmental and social standards (in particular EurepGAP). The strategy of the intervention is to transfer international experience to Thailand in the field of EurepGAP's Option 2 or group certification. The impact of this will be to reduce both the costs of certification as well as the costs associated with EurepGAP compliance. When costs are reduced, more farmers and exporters will have better access to higher value markets.

We have started with the pilot project to support small scale farmers in obtaining the EurepGAP certifications by working with 5 fruit and vegetable exporters who have existing customers in Europe as well as the farmers who deliver their produce to these exporters. GTZ experts have provided consultation and training to six groups of farmers (10-20 farmers per group) with a fully functioning and effectively managed, internal Quality Management Systems (QMS) that will ensure compliance to EurepGAP standard certification according to Option 2. The process has been closely monitored throughout the 6 month period and will be completed in August 2007.

In addition, the EurepGAP "train the trainer" course has been conducted for 30 participants from both public and private sectors between 23-27 October 2007. 8 participants have passed the exam as certified EurepGAP trainers. The Thai translation and development of training manuals was completed and these have been published on the EurepGAP website.

Through the combined efforts of both public and private sectors in supporting and developing the service market for group certification, a significant portion of the 600,000 FFV farmers can be reached. This cooperation will lead to the kind of outreach that will positively impact on a large number of the 600,000 farmers who are currently producing fresh fruit and vegetables in Thailand.

#### **INCREASING SHRIMP PRODUCTIVITY WITH SHRIMP POND SOIL TREATMENT PROCESS**



Thailand has been engaged in intensive shrimp farming since 1980. The majority of shrimp farms are located in the Southern Region, concentrated in Songkla, Surat Thani, Pattani; the Eastern Region in Chantaburi, Rayong, and Chonburi; and the Central Region in Samut Sakhon and Samut Songkram. These regions account for 45%, 40%, and 15% respectively of the total output in 2003. The value of exported shrimp is over THB 70,000 million, or 8.9% of Thailand's total agricultural export value, accounting for 1.1% of the country's GDP. In total, approximately 350,000 rais (1 rai = 1,600 m<sup>2</sup>) of land was used for shrimp farming in 2006, with an annual production of 360,000 tons. As many as one million people are estimated to be employed in the shrimp subsector.

In the past several years, the world's largest producer and exporter of shrimp has been Thailand which has now lost its dominant position to China, Indonesia, and Vietnam. According to the 2005 Global Shrimp Outlook, Vietnam and Indonesia will become the main competitors of Thailand because they have a lot of rich land available for shrimp farming and can quickly escalate their outputs in terms of production area and yield per rai. The most intense competition is likely to come from Vietnam due to its lowest production costs and its focus on standardization, organic shrimp farming, product variety, and marketing.

A major problem for the Thai shrimp industry is environmental degradation, particularly deterioration of soil quality, leading to the abandonment of a large number of shrimp ponds and a decrease in productivity. Most shrimp farmers have overlooked the importance of soil condition for shrimp farming. This situation has put many small shrimp farms out of business. It is projected that in the next 10-20 years, only a few thousand larger farms will survive. To remain the world's leading shrimp producer, Thailand has to increase the productivity of the existing farms and restore the abandoned production areas.

For these reasons the GTZ, which has been involved in enhancing the competitiveness of SMEs in the shrimp sub-sector through its expertise in ecoefficiency, sustainable farming, technology transfer, value chain management and marketing/business linkages, has joined hands with the Thailand Institute of Scientific and Technological Research (TISTR) to carry out a pilot test on the improvement of shrimp pond beds. A 21 step shrimp pond soil treatment method designed by TISTR was introduced to 11 selected shrimp farms – six in the East and five in the South.

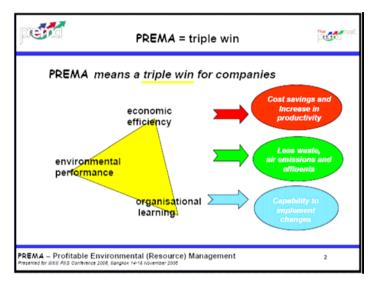


The treatment will improve the pond environment suitable for promoting the growth of shrimps, especially during the first 45-55 days of their lives. Through this process, the survival rate of 45-55 day-old shrimps and shrimp farm productivity in terms of number of shrimps per kg, yield per rai, and shrimp price, will increase. This pilot will run on two crops – the first crop from January to May 2007 and the second one from July to November 2007. For the first crop, one of the participating shrimp farms in Songkla has shown signs of success – the survival rate of baby shrimps has increased by 47%. The GTZ is planning to move to the second phase of this intervention in order to make it a service available to shrimp farmers throughout the country.



# PROFITABLE ENVIRONMENTAL MANAGEMENT (PREMA) INCREASES COMPETITIVENESS OF THAI AGRO-INDUSTRY

Efficient use of resources benefits the enterprise as well as the environment: this is the basic idea behind PREMA. Since 1996, on behalf of the German Ministry for Economic Co-operation and Development (BMZ) the GTZ has developed an integrated concept for the promotion of environmental management, suitable especially for micro, small and medium sized businesses (SMEs): "Profitable Environmental Management" (PREMA®) is implemented by change agents in selected developing countries as well as in Germany as market-oriented consultancy services to SMEs.

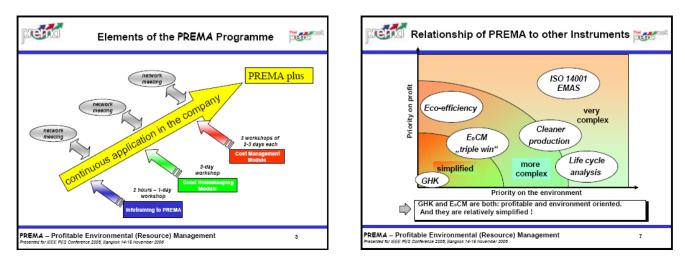


Most of the SMEs are interested in a systematic approach to improvements which is based in their core interest - profit - and allows for the realisation of a "triple win": cost savings, better environmental performance through the reduction of non-product output, as well as organisational development through structured learning processes. The resulting organisational and technical improvements in the production process of SMEs are based on changes in human behaviour as well as the management system and can lead to continuous improvements and eventually to ISO certification. By implementing PREMA, SMEs are able to save up to 10-30% of their operation costs while reducing their environmental impact.

While SMEs were easily able to undertake good housekeeping (GHK)-type measures which show quick results with little effort, measures requiring greater investment and longer payback periods were only undertaken at a later stage of the process of economic-environmental-organisational change (cycle of change) and under conditions of political and economic stability. Barriers regarding information, technology and finance may be overcome by the SMEs themselves by tapping the problem-solving capacities in the companies throughout a systematic change process. PREMA makes production processes and management more profitable and more environmentally sound.

#### **PREMA®** in Thailand

PREMA® was first introduced to Thailand in 2002 by The Industrial Estate Authority of Thailand (IEAT) in cooperation with the GTZ for Promotion of Eco-Industrial Estate (EIE) Principles during the project phase between 2001 – 2004. They aimed to "reduce environmental impact and enhance business and social performance using the EIE principles and later expand to become the Eco-Industrial Network and develop a stable and lasting industrial estate network for the nation". Today T-G PEC continues to promote PREMA as one of several eco-efficiency instruments for resource-efficient management to its selected sub-sector.



### NATIONAL STAKEHOLDER DIALOGUE MEETING ON "COMMUNITY BASED SOLID WASTE MANAGEMENT"



With the aim of considering effective measures, strategies and policy guidelines towards promoting public participation and awareness in Municipal Solid Waste Management (MSWM), the concept of Community Based solid Waste Management or CBM was introduced and discussed during a one-day national stakeholder workshop held at the Rama Garden Hotel, Bangkok on March 21, 2007.

Jointly organized by the Department of Environmental Quality Promotion (DEQP) and GTZ, more than 150 participants from central and local government institutions, non-governmental organizations and the private sector actively participated in the event.

As a major intervention measure of the Thai-German partnership on solid waste management, the CBM training help approach was developed over a period of more than 2 years of intensive testing and piloting at Phitsanulok Municipality. The training then was implemented in more than 30 municipalities and communities in the provinces Chiang Mai, Lamphun and Krabi.

Directed towards economically sound, environmental safe and socially acceptable waste management practices the CBM training helps to improve sanitation and waste management at household and community level. It helps to reduce waste amounts, to increase recycling rates and eventually to improve the cost effectiveness for waste handling.

The CBM training uses a knowledge-based and interactive learning approach to develop mutual understanding and consensus among the participants.

Based on the findings of an impact assessment study recently conducted by an external consultant, the CBM training approach has proven to be effective. As a major achievement of CBM a 20-30 % reduction of waste to be disposed could be observed only a few months after the training was introduced. The reduction of waste can clearly be attributed to a deeper understanding and awareness among all stakeholders involved to produce less waste and to separate waste for reuse and recycling. This again has lead to reduce amount of waste to be collected by the local authorities thus reducing the cost for waste collection and disposal. At the same time additional income was generated from collecting and processing recyclable material from waste.

Following intensive discussion and debate between the participants of the stakeholder workshop the following

main conclusions were made:

- 1. Public participation and awareness is considered to be essential to attain effective and efficient solid waste management.
- 2. In Thailand public participation and awareness in SWM is not yet widely applied and lacking a conceptual basis.
- 3. The national policy on public participation and awareness is weak and need to be streamlined and integrated into the national and local SWM planning.
- 4. CBM is regarded as a potential tool to enhance public participation and awareness and shall be adopted and disseminated at national and local level.
- 5. A national focal point or clearing house to coordinate and promote public participation and awareness in SWM shall be identified and developed.
- 6. A strategy for the national dissemination of CBM shall be further developed by DEQP.

#### SIFA PROJECT LEARNING FROM SOUTH AFRICAN FINMARK TRUST



In early March 2007, the GTZ senior advisor from the Services for Improving Financial Access (SIFA) Project joined the UK's Department for International Development (DFID) team to conduct the annual review of the Making Financial Markets Work for the Poor Programme (FinMark Trust – www.finmarktrust.org.za). FinMark Trust is a cutting-edge financial services programme based in Southern Africa which aims to improve poor people's access to financial services through facilitating and disseminating rigorous and independent consumer research on poor people's unique needs and characteristics. Over the past 5 years, FinMark Trust has contributed significantly to the opening of 2+ million cost-effective savings/transactional accounts for poor people in South Africa – a tremendous achievement.

As FinMark Trust's demand-side research is independent and respected, South Africa's governmental policy planners as well as financial institution practitioners have come to rely heavily on the programme's research. This credibility has led to "pro-poor" and "access to finance" policy changes from the legal and regulatory bodies that govern South Africa's financial sector. The financial institutions have also seen the "profitable commercial possibilities" of using FinMark Trust's research/data to develop tailor-made financial service products to address the needs of the 20+ million people living at lower-income tiers.



In 2006, FinMark Trust conducted a new "demand-side" research survey on small businesses' ability to access to finance in South Africa's economically most active province. They studied in depth the nature, characteristics, and financial needs of small businesses. The findings surprised the government, notably on the real size and structure of small businesses. They learned that the number of small business is much greater than assumed but their size (in terms of hired employees) is much smaller. The findings have led to a "re-focusing" of the government's small business development policies.

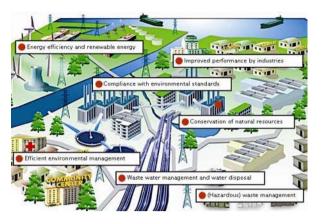




Thailand can benefit from this enterprise research service approach too. By fully understanding the actual structures and financial needs of Thai small and medium-sized enterprises (SMEs), the Royal Thai Government as well as Thai financial institutions can substantially improve SMEs' access to finance in the Kingdom, thereby fostering enterprise growth and providing more employment opportunities for Thai citizens.

GTZ and its Thai partners are investigating the possibility of adopting the FinMark Trust's "demand-side" SME survey approach. With a national SME financial access survey, both government policy planners and financial market participants can achieve the dual objectives of (i) understanding Thai SMEs through robust analyses and (ii) utilizing the understanding/data to expand financial access to the "unbanked" segments of the SME marketplace. GTZ looks forward to working with its Thai partners to achieve this result.

# GTZ presents integrated concepts for Sustainable Industrial Cluster Development at the 7th APRSCP, 25 - 27 April 2007 in Hanoi, Vietnam



Under the theme "Sustaining Asia Pacific Development" of the 7th Asia Pacific Roundtable for Sustainable Consumption and Production (APRSCP). GTZ will conduct a workshop on "New Developments in Eco-Industrial Development". State-of-the-art methodologies and instruments in the field of sustainable industrial estate development in Asia, including China, India, Thailand, Indonesia, Malaysia, the Philippines, will be discussed. Industrial estate or park planning strategies have changed considerably over the past 30 years to respond to new market demands and changing land-use needs. Industrial parks are increasingly being developed to full urban standards in terms of energy, water, drainage and effluent

treatment, which are key factors for investors when it comes to selecting a specific location. Today, modern industrial parks of all types (chemical parks, science and technology parks, supplier parks, commercial parks, etc.) are usually designed to provide a maximum of services in a productive, safe and environmentally sound manner. Industrial parks can thus be developed like urban communities, with features not only for production technology but also for social and communal services, commercial and service areas, incubators for business start-ups and other features that benefit each individual company. They not only meet environmental and safety standards, but are often at the forefront of setting them for other sectors of industry and commerce. GTZ integrates the above aspects in its approach to provide an integrated development scenario for the development of new estates and the expansion or redevelopment of existing ones. The APRSCP's mission is to foster dialog among industry, government, academia, and non-government organizations in the region to address pollution problems and solutions. For further information, see: http://www.7aprscp.com/



#### FRUIT AND VEGETABLES UPGRADED FOR MORE EXPORT TO EU

GTZ recently signed a MOU with the Board of Trade of Thailand for the "Improved Food Safety Standards in the Fresh Fruit and Vegetables Sector" Project. Its purpose is to support Thai fresh fruits and vegetables farmers in implementing an appropriate Quality Management Systems tailor made to the EurepGAP. EurepGAP is considered the best way to access the European market. However, the high cost of certification is still a major drawback for achieving more market access for small scale farmers. The project has commenced with a pilot project to support the farmers in getting the EurepGAP certifications. GTZ experts have provided consultation and conducted the trainings for farmers to ensure compliance to EurepGAP Option 2.

ORGANIC PRODUCTS FROM THAILAND ARE PROMOTED AT BIOFACH 2007 Promotion of organic products and sustainable value chains are main fields of the Thai-German Programme for Enterprise Competitiveness. The aim is to achieve higher market share for international certified (e.g. Naturland, IFOAM) organic products. Participation in the world's largest fair for organic products, the BioFach, is one of the activities of the programme to establish business relationships between producers, processors and their international clients and partners. Special attention is given to: longan, shrimp, saa-paper and bioplastics. In addition to the fair, the Thai delegation gained insights into the practise of organic agro-industry in the region of Nuremberg, Germany. To present the organic products at the Biofach 2007, GTZ Thailand has coordinated with Department of Fisheries, Office of Agricultural Economics



(Ministry of Agriculture and Cooperatives), the Thai National Innovation Agency and GreenNet Cooperative. A Thai shrimp farm was presented at the exhibition area around Naturland, a large German certification association for organic products.



# GTZ and TISTR EXTEND THEIR LONG-LASTING COOPERATION FOR SME PROMOTION

Since 2002, the Thailand Institute of Scientific and Technological Research (TISTR) and GTZ have a long-standing cooperation promoting the competitiveness of SMEs. The 2-year joint Project "Enhancing the Competitiveness of SMEs in Selected Fruit and Vegetable Sub-sectors through the Promotion of Technological Advisory Services" ended in January 2007 with great success. To obtain a greater impact and wider outreach to the technological advisory service market in the fruit and vegetable sub-sector, TISTR and GTZ signed a new MOU on "The Development of Technological Research for SMEs in the Agro-Industry Sector". This MOU is valid from January 2007 until January 2009.

The support areas include 1) short term technical assistance to strengthen the function of the above-mentioned commercial technological research unit; 2) capacity building of service providers in the applied technological research market for SMEs through networking within and outside TISTR; and 3) strengthening core competencies of TISTR through the establishment and strengthening of cooperative relationships with selected German and European applied technological research institutes.



#### THAI SAA-PAPER EXPORTERS VISIT PAPERWORLD IN FRANKFURT

GTZ, together with Department of Environmental Quality Promotion organised a trip for Thai Saa-Paper exporters to exhibit their products at the PaperWorld Fair 2007, the leading international trade fair for paper production and products held in Frankfurt, Germany. In addition to displaying Saa-paper products to approximately 66,000 visitors and meeting with potential trade partners, the Thai entrepreneurs also gained new ideas for product improvement and adaptation to new market trends. They also gained access to useful information from market experts. After the fair in Frankfurt, the group visited Berlin to observe the local production of handmade paper for an exchange of technical know-how. The Thai group also met with retailers and importers, and visited design studios.



# MOU SIGNING FOR COOPERATION ON COMMUNITY CAPACITY STRENGTHENING IN DISASTER RISK MANAGEMENT

The Department of Disaster Prevention and Mitigation (DDPM) has signed a Memorandum of Understanding with eight disaster management-related Thai agencies for the establishment of a cooperation network for strengthening local communities for disaster preparedness, prevention, mitigation and emergency response under the Community-Based Disaster Risk Management (CBDRM) approach. This cooperation network was supported by the DDPM-GTZ Technical Cooperation Project "Advisory Assistance to DDPM in Disaster Risk Management" (Tsunami Technical Assistance) with the major goals of decentralizing CBDRM to local authorities under the professional umbrella of DDPM; building up the field practitioner team consisting of DPM provincial office and MOU-signed agencies to disseminate CBDRM practical steps for at-risk communities all over Thailand, and directly following up/monitoring CBDRM activities for sustainable safety of local people in disaster prone areas.

#### GTZ JOINING WITH PREMANET FOR TRAINING OF CONSULTANT

Burghard Rauschelbach (standing third left), Director of Eco-Efficiency Component, welcomed Chaiwat Sinsuwong (standing fourth left), committee of the Office of Knowledge Management and Development and other participants from government and private sectors as well as NGOs at the recent Training of Consultants (ToC) in PRofitable Environmental MAnagement (PREMA) jointly organised by GTZ and Thai PREMANET. The training, provided in the framework of T-G PEC, is aimed at developing resource persons for the dissemination PREMA know-how and concepts to enhance the competitiveness of Thai enterprises. During the five-day training, the participants deal with real cases, including site visits, analysis and evaluation sessions.



# RESEARCH REPORTS AND CURRENT STUDIES FOR ECO-EFFICIENCY

# Market-study on the import of Thai Saa-Paper to Europe

This study explores the market potential of saa-paper products with a special focus on environmentally friendly saa-paper. It describes the different market segments, their sales potential and how to access them. (by Prof. Thomas Roeb, FH Bonn-Rhein-Sieg, Cologne)

#### Thai organic competitiveness

This report reflects recent fairs in Singapore and Nuremberg (BioFach) and gives an overview about the development of the market for organic products. (by Vitoon Ruenglertpanyakul, Greennet-Earthnet Foundation, Bangkok)

# Organic Agriculture in Thailand - An overview.

This study is a comprehensive presentation of the situation in Thailand, and provides an insight into the strengths and weaknesses of the Thai movement for organic agriculture. (by Chanuan Ratanawaraha, Bangkok)

# Chemicals risk management as a factor of competitiveness

This research demonstrates in how far measures of occupational health and safety, improvement of the handling of chemicals and awareness of resource-efficiency are contributing to a sustainable competitiveness. The focus is on the agro-industry and selected value chains of agricultural products. (by Prof. Chalermchai Chaikittiporn and Dr. Sara Arphon, Faculty of Public Health, Mahidol University, Bangkok; Prof. Bongaerts, University of Freiberg and Dr. Damerow, University of Bonn)

# Clean Development Mechanism (CDM) Potential in the Agro-Industry of Thailand

Considering CDM as a market mechanism (emission trading) to reduce Greenhouse gas emissions: these studies concentrate on the Thai CDM potential in the bio-plastics industry and in selected agro-industrial sectors (palm oil, tapioca, shrimp, and others), and shall also give guidance for SMEs in the agro-industry. (by Magnus Staudte and others, ENVIMA, Bangkok)

# **UPCOMING EVENTS**

**10 May 2007**: MOU signing ceremony between Earth-Safe, ACT (Organic Agriculture Certification of Thailand), Mae Jo University (Chiang Mai) and GTZ for the promotion of organic agro-industry at Central World, Bangkok.

**10-12 May 2007**: National Safety Week with GTZ presentation on chemicals risk management as a competitiveness factor in the agro-industry at Impact Arena, Muang Thong Thani.

**5 July 2007**: Eco-Efficiency Forum: "Organic Thailand - from niche market to natural mainstream? Visions and reality for agro-industrial SMEs" (for further information see: <u>www.ecoefficiency.info</u>).

**14-17 October 2007**: ANUGA, International Food Fair, Cologne. In cooperation with the DEP (Department of Export Promotion). Partner country this year is Thailand.



