We need to invest in knowledge wisely to achieve sustained national success. The growth of knowledge is driven by a system with rich interactions between the creators of ideas and technology, and the application of that technology. Recognizing these realities, Thailand is endeavouring to move further towards an innovation-driven economy. But with our limited technological and human resources, how best to approach the challenge?

Clearly, a national innovation ecosystem espousing an open innovation model offers an opportunity to jump-start this process. By encouraging cooperation and collaboration in innovation between centres of excellence both around Asia and globally, Thailand can create new avenues for commercializing innovations (both from overseas and home-grown), and bring new perspectives to the forefront of business leaders, government and the education system.

But innovation is not just about commercialization of new ideas. In our increasingly crowded world, constant innovation and adaptation is essential for sustainable development. Innovation is about people—how to provide sustainable livelihoods for all Thailand’s people, reduce income and knowledge gaps, and provide skills and opportunities which will allow all of Thailand’s people—especially the disadvantaged—to contribute to the nation’s long-term stability, cultural diversity and national competitiveness.

Understanding these realities and challenges, it is my sincere hope that NIA can contribute significantly not just to Thailand’s international competitiveness, but also make a difference to the livelihoods of the poor and disadvantaged in our country.

**Definition:**

**Innovation:** new things derived from the exploitation of knowledge and creativity, leading to enhancement of social and economic value.

**National Innovation Ecosystem:** coordinated implementation mechanisms established at national level, linking all stakeholders to foster and embed innovation widely in the country, at all levels and sectors.
It operates as an autonomous organization, under the supervision and policy guidance of the National Innovation Board, but outside the normal framework of the civil service and state enterprise. NIA undertakes a broad-based and systematic approach to building up the national innovation system, by fostering strategic innovation, which enhances national productivity, encourages economic restructuring and social development as well as promoting national competitiveness.

Innovation is the ability to use knowledge, creativity, and experience in technology or management to develop new products, processes or services to cater to the market’s need, and to increase economic values that will be beneficial to the country’s economy and society. In light of today’s knowledge economy, it is essential to keep up with the global challenges to strengthen the competitiveness of national economic players and to enhance wealth creation in the country. Innovation is an impetus for growth, therefore, it is of foremost importance for Thailand to establish a well designed National Innovation Ecosystem policy framework to provide a sound economic growth base and to inject an understanding of how various sectors might approach innovation.
Vision

“Expert agency in promoting and supporting innovation for national competitiveness”

Mission

“To conduct activities that accelerate innovation in industry, business, government and society in systematic and sustainable ways”

NIA’s mission is to support and develop Thailand’s innovation system, in both the ways of improvement and initiation, to promote economic restructuring and competitive enhancement.

NIA functions as the key engine driving national innovation by coordinating, networking, fostering, and partnering different organizations from various fields such as academia, technology, industry, finance, and investment. Its main focus is on utilizing knowledge management to achieve innovation, particularly to foster “innovation on Cluster Platform” which uses innovation as the principal tool in improving quality of life and driving towards an increasingly competitive economy. In conjunction with its principal strategy of knowledge management, NIA relies on academic and financial support mechanisms to drive and support innovation development.

Operational Framework

- Upgrade the technological and innovative capabilities of enterprises, especially in national strategic industry sectors, by analyzing and assessing the conditions of the industry sector and its innovation potential, including sourcing and applying strategic innovation developed either in-country or overseas.
- Effectively network private enterprises by providing technology advice and financial support as well as creating partnerships for development of the national innovation ecosystem.
- Technically and financially support projects, and assist in commercializing research and development, inventions and patents.
- Support training and upgrading skills and state-of-the-art technology and business management.
- Support innovation and technology awareness, and promotion of innovation culture in all sectors including industry, public organizations, research and within the educational system.
NIA operates under the policy guidance of the National Innovation Board, chaired by the Permanent Secretary of the Ministry of Science and Technology. Whilst having the status of a government agency, NIA’s management is not constrained by the bureaucratic structure.

In accordance with the operational framework adopted by the National Innovation Board, NIA was structured as a small and highly active agency. This unique structure enables NIA to maximize the flexibility and effectiveness of its operation and allows for dynamic human resources development.

NIA has a horizontal administrative structure which promotes staff involvement through a decentralized decision making process. Decisions could be made quickly and staff members remain committed and enthusiastic as they are directly involved in the decision making process. Whilst each staff member often takes several roles in the Agency’s operation, NIA is divided into three departments:

(i) The Innovation Department is primarily responsible for the Innovation Project Development Programme, the Innovation Culture Promotion Programme and the Policy and Evaluation Programme;
(ii) The Administrative Department manages the Finance and Administration Programme, the Human Resources Development Programme and the Corporate Identity Promotion Programme; and
(iii) The Special Project Department oversees the Intellectual Property Management and International Affairs Programme and other special initiatives.
Innovation Strategies for National Competitiveness

Support Mechanism

- Technical support for the initial state of project development
- Financial support:

Good Innovation…Zero Interest provide interest-support for an innovation project up to the maximum of 5 million baht for the duration of the first 3 years.

Technology Capitalization provide grant support (75% of total expenses) up to 5 million baht for the maximum of 3 years.

Innovation Cluster Grant provide full grant support for cluster platform-based innovation project up to 5 million baht for the maximum of 3 years.

Venture Capital provide grant support for joint-ventured innovation project up to 25 million baht for the maximum of 7 years.
NIA works to foster awareness and recognition of the importance of innovation to the national economy and provides capacity-building support for the development of an effective National Innovation Ecosystem. To accelerate innovation capacity, NIA has established 2 strategic programmes: strategic innovation and knowledge-driven innovation.

• Strategic Innovation

The direction of strategic innovation by the National Innovation Agency is based on the concept of “thinking outside the box” by analyzing the technological situation at global level, prediction of trends, strong points, challenges and possible futures for Thailand.

Within the overall strategic innovation programme, NIA has established three strategic areas, namely, Bio-Business, Eco-Industry, and Design and Branding, which hopes to drive sectoral growth in knowledge-based industries, clusters or entire industrial sectors, thereby expanding the national productivity base.

Bio-Business: Biotechnology and Natural Products
To enhance competence in bio-businesses, the main focus is on promoting the development of innovative technologies and commercialization of high value-added products in various areas, including organic farming, probiotics, nature-based cosmetics, enzyme technology, stem cell treatments, rice products, rapid test kits as well as indigenous herbal products, which all help in creating value added for indigenous natural resources.

Eco-Industry: Biomaterials and Biomass
NIA emphasizes the development of alternative energy sources, diversification and renewable sources such as biogas and biomass. Recognizing rising environmental problems also calls for innovation in green technologies such as biodegradable bioplastics and waste management, especially in dealing with garbage, including new ways of reducing and separating garbage as well as recycling of glass, paper, plastic and steel.

Design and Branding: Cultural-Based Creativity and Design Innovation
Combining different areas of knowledge to develop an innovation into a viable commercial product requires design and branding. Design involves the combination of technology, culture, and management to create higher-value products. NIA's projects include design and branding for the ceramic industry in Lampang - “CeraLampang” ceramics, tactical wheeled light armour utility vehicle, “Zevei” - the innovative aromatic white spirit, “Let’s Plant” educational toy, and “Cario” electric car in golf court.
Knowledge-Driven Innovation

The government spends over sixteen billion baht each year for research and development. Even though this has created benefits in the acquisition of new knowledge, researchers and patents, the investment has not been economically beneficial. Research and development has so far failed to increase the level of manufacturing and network connections in order to propel the country into a new economy and knowledge-based society. Innovation projects from research have not been completed due to lack of connections or partnerships between the necessary parties, and the absence of a reasonable monitoring and evaluation system.

NIA connects knowledge among research agencies and manufacturers, marketing, investment and financial institutions, in Thailand and overseas, thus encouraging the commercialization of knowledge in a sustainable way. NIA supports research that meets business needs and encourages development of start-up companies to build knowledge-based industries. NIA will support knowledge-driven innovation projects in companies, clusters or industrial sectors. Knowledge-driven innovation projects initiated by NIA in 2005-2007 include:

- Articulate arm for welding
- Overlaid environment
- Vegetable and fruit carving machine
- Mobile EDC/Gateway through GPRS network
- Intelligent housing system
- Nanosilver sportswears
- Super premium grade rubber sheet
- Anemone fish aquaculture system
- Motorcycle sprocket
- Vacuum blood collection tube
- Dialyzer reprocessing system

Articulated arm for welding

Overlaid environment

Vegetable and fruit carving machine

Mobile EDC/Gateway through GPRS network
NIA has placed great importance on promoting innovation culture and creating awareness of the importance of innovation at all levels of Thai society.

NIA employed various means to create an environment conducive to innovation and learning which include the following activities:

**IMEs**

**IMEs - Innovation Management Course for Executives** - IMEs goal is to develop new management skills, improve vision and business skills, and facilitate the application of innovation and new technologies in individual businesses of participants based on using technology to create new products, processes or services. The course also explains how entrepreneurs may access these resources to benefit their own businesses. This course will help SMEs innovate successfully through accessing R&D support for new ideas, and government institutional and financial support services.

**IMS**

**IMS - Innovation Management School** - IMS is Master’s and Ph.D. Programmes in Business Administration initiated by NIA in cooperation with several universities. The program was specifically designed to produce qualified chief innovation officers (CIOs) and innovation managers with advanced skills in business management of innovation. Graduates will be well-equipped to incorporate innovation into a business strategy and more capable of responding to rapid critical changes in a creative way.

**National Innovation Awards** - recognizes achievements in innovation that benefit the economy and society with the broader aim of strengthening the national innovation culture and awareness at all levels of industry, in the public sector and academia. The Awards were initiated in 2005 and continued for a second consecutive year in 2006. Over 300 innovations were submitted for the Awards in the second year, 242 of which were economic-related innovations whereas 63 were social welfare-related innovations. Past awards include modified rice flour extract for pill tablets, prosthetic leg from recycled nylon pantyhose, “KING” high-Oryzanol rice bran oil and “Yanindha” therapeutic bed.

**The Father of Thai Innovation & National Innovation Day** - on June 20, 2006 the Cabinet approved NIA’s proposal to honour His Majesty the King as the “Father of Thai Innovation” for his achievement in the royal initiative project “Tricking the soil” and to designate the 5th of October of every year as the “National Innovation Day”. The “Tricking-the-soil” project was implemented in Narathiwat by the Pikun Thong Royal Development Study Center and has proved immensely successful. The project focused on improving highly acidic soils, turning useless land into valuable agricultural plantations. The improvement in soil quality as a result of the “Tricking-the-soil” project allowed crops to be grown on previously uncultivable land, which helped improve the livelihoods of million of families. This achievement clearly demonstrated His Majesty’s exceptional vision as an innovator who is able to lead the nation to solutions through research and analysis.

**Top Ten Innovative Business** - provides a ranking of innovative businesses on the basis of outstanding marketing, technology, business model, and public recognition. The ranking honours Thai entrepreneurs who create and utilize innovation within their business and encourages a climate for innovation investment. The top-ranked innovative businesses announced in 2006 include the Nano-silver sportswear, rice starch filler for pharmaceutical tablets and capsules, and pollen extract from sacred lotus flowers - “Lotusia”.

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**Promoting Innovation Culture**
Future national competitiveness is closely tied to national innovative capacity and the ability to exploit new and existing markets, improve value added products, and protect innovation.

A high degree of coordination and consensus will need to be established at national level between public and private sectors, in order to establish a regulatory framework, capacity building measures and market mechanisms which stimulate innovation.

NIA has developed a series of initiatives which aim to enhance its own core competencies with the goal to provide services in several areas. NIA’s experts will work closely with industry, venture capital sources, and entrepreneurs to find the best way to commercialize new technologies. NIA’s own resources, networks, and collaboration with existing innovation clusters will thus be effectively used to facilitate establishment of innovation projects, and also to further enhance innovative capability at enterprise or institutional level.

**Building Up Innovation Systems**

**Innovation Acquisition Service (IAS)** - was initiated to ensure that the country’s drive for innovation can keep pace with accelerating global change. Under this programme, NIA established a linkage with a network of senior specialists in various fields of technology through which highly skilled experts may be brought in to assist Thai entrepreneurs to develop innovation.

**Intellectual Property Management Unit (IPM)** - plays a significant role in channelling R&D outcomes to the private sector to facilitate development of IP-based businesses. IPM offers consulting services in IP protection, valuation, licensing and management to public and private organizations, researchers and technology owners who wish to commercialize their IP assets.

**Innovation Ambassador Programme** - NIA continues to build up a network of innovation experts to work with industries to drive innovation development and increase innovative capability of individual business enterprises. Academics, researchers and experts in various fields of technology are invited to take the role of “innovation ambassadors”, working closely with NIA to facilitate innovative business development by reaching out to the market and industrial sectors.
Stem Cell Treatment
Diabetes has been a growing problem in Thailand. At present over 2.4 million Thais suffer from this chronic and potentially fatal disease. Medical reports reveal that lower limb amputation is required in approximately 40,000 patients annually. Application of stem cells in medical treatment could reduce the cost per patient which used to be in the region of 1,000,000 baht to only about 200,000 baht. Not only would this innovation improve the quality of life for many patients, widespread application of stem cell therapy could save the country up to 32,000 million baht a year in aggregate.

Rice-Starch Baby Powder
Baby powder commonly used after bath to absorb excess moisture is usually made from talc, an inorganic mineral that cannot be degraded by the human body. Excessive deposits of talc in the body may lead to many health problems including respiratory diseases, cancer, and allergies. To resolve this problem modified rice starch was recently introduced to replace talc, thus providing a healthier alternative for Thai consumers. At the same time, this innovation presents a new business opportunity for the Thai rice industry, adding substantial value to the rice business.

Nutritional Yeast Products
The yeast production and yeast products industry totals approximately 60,000 million baht worldwide, owing to the microorganism’s numerous benefits. Beta-glucan and a variety of vitamins can be derived from yeast, including yeast extracts for use in the food industry such as food flavourings, condiments, and vitamin extracts. In addition, yeast cell walls can be used in the animal feed industry. NIA recognizes the yeast industry’s enormous potential for growth and continues to support and promote this industry with the broader aim of propeling the nano-biotechnology business in Thailand.
Photosynthetic Bacteria Agri-Products

Photosynthetic bacteria demonstrate a number of novel capacities including the ability to reduce levels of sulphite (which is toxic to plants) in rice fields and fix nitrogen which plants need for their growth. Furthermore, photosynthetic bacteria could be applied in waste water treatment systems for the food industry and in shrimp/prawn farms. Recognizing the benefits of photosynthetic bacteria, NIA supported the development of pilot-scale production of photosynthetic bacteria for use in agriculture and waste water treatment systems.

Herbal Products

The current level of health awareness in today’s society has created a larger demand for natural and herbal products, increasing market values for cosmetics, dietary supplements, drinks, drugs and massage products made from organic, toxic-free herbs. The Thai government has supported the development of herbal products by designating 12 herbs as “Product Champions” to be developed for added market value, and has assigned NIA to follow up on four of these herbs as part of its bio-business strategic innovation plan.

- **Plaitanoids Super™** is an herbal product resulting from NIA’s cooperation with five leading Thai universities participating in the PERCH project, and with various private businesses to develop “Plai” extract, from the indigenous *Zingiber cassumunar* Roxb. which has bactericidal and muscle-relaxant properties. To date approximately 370 million baht has been invested, with an expected contribution to national revenue in excess of 1,500 million baht over the next three years.

- **Puerarexx™** or White Kwao Kruea extract from *Pueraria mirifica* L., an initiative conducted in cooperation with Chulalongkorn University, is used as an active ingredient in more than 30 cosmetic products for women. Its efficacy is backed up by more than 30 scientific research papers. This project is expected to generate new entrepreneurs and additional national revenue in excess of 1,000 million baht over the next three years.

- **Lotusia™** in cooperation with ICC International Public Co Ltd, this project aimed to produce pollen extract from sacred lotus flowers for use in more than 20 cosmetic products for men and women. The process utilizes nanosphere 100 vitamin A palmitate under the brand name “BSC Pure Care.”
Bioplastics

Due to growing environmental awareness, technological progress and regulatory pressure, there is much research and advancement on alternatives to petroleum-based materials, particularly biodegradable materials from renewable resources. New generations of bioplastics are on the verge of broad market introduction with application in packaging, electronics, automobile and agriculture. Bioplastics hold great promise for implementing the principles of sustainable development and contributing towards achieving the environmental targets of the UN Millennium Development Goals. Studies show that biodegradable bioplastics could add over 150 percent in value to raw cassava and sugarcane feedstocks. NIA endeavored to drive the bioplastics industry in Thailand, providing impetus for change and encouraging private enterprises to embark upon the manufacture of bioplastic products. In addition, NIA was selected by the Economic Restructuring Subcommittee to act as the lead agency in preparing a national action plan for economic restructuring of the new wave industries in the field of bioplastics.

Renewable Energy

In light of predictions that the world's petroleum deposits will be exhausted within the next 100 years, the renewable energy sector has continued to expand. There is particular interest in renewable energy derived from waste materials such as biogas from industrial wastewater treatment systems. NIA has undertaken various activities to create new alternatives in the field of renewable energy, such as the pilot-scale production of electricity from plastic and industrial waste by means of pyrolytic gasification, pilot-scale waste treatment and energy production from plastic waste, and biogas production in palm oil mills.

Bio-Diesel from Jatropha Oil

There is increasing global interest in developing renewable alternatives to oil. Recent hikes in the oil crisis has put this need for innovation into sharper focus. The search for alternative raw materials has led to extraction of bio-diesel from nuts, rape seed, palm, and Jatropha, especially in Europe and America. NIA has promoted Thailand’s ability to develop oil from Jatropha (also known as the “Physic Nut”) as an alternative source of biodiesel. This is based on the results of more than ten years of research by Thai experts. NIA therefore supported innovation development using this alternative energy source which could eventually alleviate the impact of the oil crisis. The “Production of biodiesel from Jatropha oil” project was initiated with the objective of accumulating basic information concerning business investment in biodiesel from Jatropha oil, including cultivation and manufacturing methods, processing and use of biodiesel for agriculture and transportation. The project is a strategic innovation that NIA hopes to serve as a business model in support of biodiesel as a commercially viable industry sector by providing cultivation encouragement, investment support, alternative energy policy establishment, as well as thorough research and development of Jatropha oil. Jatropha oil also serves as an opportunity for Thailand to reduce dependency on imported fossil fuels, and improve the sustainability of Thailand’s agricultural economy.
Nano-Silver Sportswear
Nanotechnology has attracted considerable public attention in recent years and has important potential applications in the textile, pharmaceuticals, cosmetics and biotech industries. NIA began its nanotechnology initiative in textile and has successfully implemented the Nano-silver sportswear project in honour of H.M. the King. The nano-silver sportswear offers unique protection against odours caused by bacteria. This project created substantial additional value for the textile industry and breaks new ground in Thailand’s domestic nanotechnology business.

Anemone Fish Closed Aquaculture System
There is a worldwide trading business in ornamental marine organisms. Particularly popular is clown anemone fish which is sold at a premium price. Unfortunately, most clown anemone fish in the market has been removed illegally from their natural habitats. The development of an anemone fish closed aquaculture system would provide an alternative and sustainable supply of fish stock and reduce the damage caused by illegal fishing to Thailand’s marine ecosystems. The business is expected to generate over 50 million of annual income for Thailand.

National Defence
The insurgency in Thailand’s southern border provinces is a top-priority problem which requires cooperation from all sectors. The conflict has involved many terrorist incidents involving explosives detonated in vehicles, government offices and business premises. This has placed a great burden on those in charge of explosive ordinance disposal (EOD). To enhance their personal safety and improve the efficiency of their work, NIA has sponsored several projects relating to national security, including an innovative bomb suit project, an EOD robot project and an armoured vehicle project. In addition to providing direct assistance to the EOD teams, these projects were intended to help improve morale among the field personnel.

LPG and CNG Composite Cylinders
The key advantages of composite materials include their light weight, strength and durability. Composite materials could be used in the manufacture of CNG and LPG cylinders to replace traditional steel cylinders. These corrosion-resistant, light-weight composite cylinders provide superior substitutes for traditional cylinders which suffer from a short service life and limited corrosion resistance.
InnoBioPlast 2006

Bioplastics is a strategically important innovation which has received substantial attention worldwide. Thailand has the potential to develop a bioplastics industry based on the country’s ample supply of agriculture-based raw materials and proximity to markets. To accomplish this it is imperative that innovation becomes an integral part of the bioplastics industry development in order to accelerate growth, leading to supportive environmental policies, implementation of standards, technology transfer and strategic partnerships among all involved sectors.

A major conference and exhibition on bioplastics-InnoBioPlast 2006 was held during 21-24 September 2006. NIA hosted this event in cooperation with more than twenty government departments and private organizations, including the United Nations Environment Programme (UNEP), the National Metal and Materials Technology Center, the Thai-German Technical Cooperation (GTZ), the Board of Investment (BOI), Thai Bioplastics Industry Association, PTT and Thai Airways, among others. The event highlighted the important role of bioplastics in contributing to environmental protection and farmer livelihoods in both developed and developing countries. The event brought together key players in the global research and business communities, regulators and environmental organizations in order to share the latest technological breakthroughs, promote equitable regulatory frameworks and facilitate new partnerships and incentives to expand the industry. A number of leading organizations in bioplastics concluded an agreement to cooperate on a wide range of activities, from R&D collaborations to business partnerships.

InnoMart

NIA, in cooperation with the Office of the National Research Council of Thailand (NRCT) and the Office of SMEs Promotion (OSMEP), jointly organize the InnoMart exhibition annually. InnoMart showcases R&D results and inventions from a large number of agencies, including the National Research Council of Thailand, innovation projects supported by NIA, and the outcomes from OSMEP’s investments. Combining R&D results which demonstrate high commercialization potential with funding sources for innovative businesses, the event effectively created a climate for investment in innovation and provided Thai entrepreneurs with the opportunity to explore and identify technologies which could be developed into innovative businesses.
Strengthening Thailand’s Organic Agriculture Export Sector

Thailand’s organic exports have a strong potential due to fast growth in international markets, particularly the EU countries. With its comparative advantage in production, Thailand is well-placed to serve the world market, and Thai organic produce such as rice and tropical fruits and vegetables are in high demand. However, Thailand’s food exports have recently declined due to bilateral FTAs and the introduction of EU food safety and traceability legislation which constrain market access, especially for smallholders.

It is clear that training, education and support in certification and marketing (especially for small farmers) are important drivers of sectoral growth. Review and upgrading of Thailand’s regulatory and control systems will help ensure equivalence with EU standards, and assist smallholders in adding value to their production. This will help to stabilize farm incomes, increase agricultural exports and contribute to improved health and environment through reduced dependence on agrochemical inputs.

Whilst the Cabinet has endorsed organic agriculture as a national policy, a number of challenges remain, especially in accessing export markets such as the EU. To strengthen Thailand’s organic export sector, NIA commenced a Technical Assistance Project co-funded by the EU and the International Trade Centre (UNCTAD/WTO) in 2006. The project worked with stakeholders, in partnership with the Ministries of Agriculture and Cooperatives, Commerce and other key agencies, to develop an innovative national model to stimulate Thailand’s organic export sector, enhance coordination between government agencies, and strengthen Thailand’s government control systems and other requirements to prepare for application to the EU’s ‘Third countries list’ (Article 11 of EC Regulation 2092/91). To ensure that Thailand maintains its position as a leading exporter of quality agricultural products, NIA also supported several pilot-scale organic farming projects for asparagus and pomelo fruits, using advanced technologies to ensure compliance with importer quality standards. These projects will serve as guidance for future development of organic farming systems in Thailand.
Innovation Acquisition Service (IAS)
The outstanding performance of the Innovation Acquisition Service (IAS) brings about many new developments in various fields of innovation. In 2006 IAS expert consultation and assistance has led to the implementation of several innovation projects, including:

- **Innovative motor and battery for electric car “Cario”**
  Expert: Prof. Dr. Werner Deleroi and Dr. Juergen Nimeryer

- **Innovative wheel balancing weight**
  Expert: Dr. Manfrad Zimmermann

- **Urban design and development for the tourism industry in Phuket**
  Expert: Dr. Ulrich Roehren

- **Wastewater treatment system for Phuket Municipality**
  Expert: Dr. Eberhard Boehm

- **Renovation of Phuket’s old city (Sino-Portuguese) - towards recognition as a UNESCO World Historical Site**
  Expert: Dr. Wolfgang Geisse

- **Waste management system for Phuket Municipality**
  Expert: Dr. Ulrich Roehren and Dr. Eberhard Boehm

Intellectual Property Management (IPM)
IPM unit provides consulting services in relation to IP protection and management to private companies and technology owners who wish to license their technology to the private sector. IPM has successful concluded several IP licensing projects in various field of technology, such as the technology for production of photosynthetic bacteria. This particular technology was developed by Dr. Napavarn Noparatnaraporn of the Science Faculty, Kasetsart University, and was licensed to Adinop Co., Ltd. for commercial purposes. As part of the project, NIA conducted an IP valuation of the technology based on the present value of revenue derived from the use of technology. Projects undertaken in connection with government departments under the Ministry of Science and Technology, such as the Department of Science Service (DSS), include the transfer of technology for production of lemon powder, goat’s-milk soap, and unique ceramic flowers. In addition, IPM employs numerous means to raise public awareness of IP and commercialization of technology including organization of conferences and seminars on these topics. One of the most successful events is the “Intellectual Property Management and Technology Licensing Workshop” which was held on September 21, 2006 at the Royal Paragon Hall, Siam Paragon, Bangkok. The workshop provided an overview and practical information regarding IP management to entrepreneurs, researchers and technology owners, to raise awareness of the importance of IP and to encourage its commercial exploitation.
K-Commerce: InnoOK™

The internet has enormous potential and capacity for disseminating information and connecting consumers in countries across the world. Utilization of the internet to enable consumers to access product innovation helps to promote achievements in innovation on a broader scale and to showcase the innovative potential of the country. NIA has initiated, designed and developed “innoOK.com” to make product innovations developed in Thailand available globally via e-commerce. The design and structure of the site, including its operation and internal database management, were developed to support different types of data and services provided under the website so as to optimize management and data access. The InnoOK™ website has the following major categories:

- **Inno-Biz**: Presents connection of knowledge to provide new business opportunities.
- **Inno-Product**: Presents product innovation, coupled with relevant knowledge.
- **Inno-Book**: Presents printed publications relating to business development and innovation management.
Publications and Media Coverage

Publications

[Images of various publications and media coverage]

Media Coverage

[Images of news articles and media coverage]

Rubber farmers eye market for new yield

New life for monomers and polymers

Five of the best

Humble materials yield prize-winning products

New rice products launched

[Images of people attending an event]
The National Innovation Agency (NIA) was established by the Ministry of Science and Technology on October 1, 2003, in accordance with a Cabinet resolution of August 26, 2003. It is an autonomous organization supervised by the National Innovation Board. This special organization operates outside the normal framework of the civil service and state enterprises. NIA undertakes a broad-based and systematic approach in building up the “National Innovation Ecosystem”, by fostering strategic innovation, impacting the economic restructuring and social development as well as enhancing national competitiveness.