

5th October
The National Innovation Day

X Outstanding Awards for Innovation in honour of King Rama IX, the Father of Thai Innovation

Joint Presentation of the

- National Innovation Awards for Economic Contribution
- National Innovation Awards for Social Contribution
- Rice Innovation Awards
- Thailand Innovation Awards
- Design Innovation Contest
- Total Innovation Management Awards
- UAV Startup 2018
- Startup of the Year Awards
- Social Innovation Business Plan Contest 2018
- Media Innovation Awards









Presentation of the National Innovation Awards 2018

www.nia.or.th/niaward

PUBLICATION OF THE NATION



# The Father of Thai Innovation

# 5 October, National Innovation Day

His Majesty the late King Bhumibol Adulyadej spent much of his life travelling to remote locations all over Thailand to observe and improve the livelihood of his subjects. Over the years he initiated countless development projects to eradicate rural poverty, facilitate access to medicine and improve the advancement and dissemination of knowledge and education.

In 1981, during one of his visits to Narathiwat in southern Thailand, His Majesty noticed that annual flooding was destroying large areas of agricultural land adjacent to a large peat swamp forest. Even though the water drained, the land could not be used for cultivation due to the high content of pyrite in the underlying layer of bluish-grey mud being oxidized, making the soil strongly acidic. To address this, His Majesty initiated a project to convert the peat swamp area into productive agricultural land whilst minimizing the impact on the environment and the wetland ecosystem.

# "Klaeng Din" The Royal Soil Improvement Project

In 1984, His Majesty took action to solve the problem of soil acidification. He showed that good water management and an irrigation system were essential to the success of the project - several times per year, simulating the dry and rainy season conditions were applied to accelerate the reaction of pyrite and a constant cycle of soaking and draining by fresh water removing sulphite from the soil - so-called "Tricking the Soil".

Also, the ground level was graded and an arrangement of dykes set up so that acidified water drained off the affected land. Dikes at the perimeters of each plot stored or released water from inside the field, ensuring that the water table stayed above the mud layer to prevent the release of even more acid into the soil. Using lime in combination with soil flooding or mixed with topsoil was another solution that helped improve the soil quality.

The Soil Improvement Project gradually advanced with new findings gained through painstaking research. His Majesty the King closely followed the progress of the project and personally advised the team "to use successful experiments as a guideline but make sure to remember the failed ones so that the same mistakes would not be repeated."

On a visit to the Pikun Thong Royal Development Center on 5th October 1992, His Majesty noted that "the experiments have confirmed that the technique works very well. The results are very important because they are unique and have not been published elsewhere. The same technique can be applied to other areas where there is a soil acidity problem."

By royal appointment, the technique was applied in other provinces such as Nakorn Nayok, which suffers from similar problems. To acknowledge the tremendous contribution by His Majesty the King, The National Innovation Agency (Public Organization) or NIA under the Ministry of Science and Technology wishes to honor His Majesty as the "Father of Thai Innovation" and seeks "Klaeng Din Project" as a National Innovation Project, since the technique has improved the condition of over 7 million rai, or 1.12 million hectares of land in

Thailand. Also to bestow recognition upon all Thailand innovators, NIA would also like to nominate 5 October as "National Innovation Day".

His Majesty the late King Bhumibol Adulyadej's patience and vision has created an elegant solution to a serious problem affecting the daily lives of millions of people. With plentiful natural resources, families no longer need to migrate to urban areas. Peace, prosperity, happiness and simplicity - key elements of the Thai way of life - are maintained in harmony.

King Bhumibol is truly the Father of Thai Innovation.





His Majesty the late King Bhumibol Adulyadej established the Pikun Thong Royal Development Center in Narathiwat to conduct innovative research into the process of soil acidification and to develop a way to improve the soil so that it would once again support crop production.



# National Innovation Awards for Economic Contribution 2018 & National Innovation Awards for Social Contribution 2018

### "Innovation: Making creativity into value reality."

Innovation is key for the improvement of national competitiveness. Thailand's ability to create "innovation drive" is therefore a decisive factor in the country's economic growth and development.

The National Innovation Awards for Economic Contribution 2018 & National Innovation Awards for Social Contribution 2018 have been organized for 14 years with the objective of honoring those who have produced or created innovations that contribute to the national economy and society and which serve as key mechanisms in driving and promoting innovation through a combination of creativity and knowledge, as well as to raise awareness of innovation among Thai society that will induce a culture of innovation in organizations. This year, the awards presentation ceremony will take place on National Innovation Day, October 5, 2018 at the BITEC, Bangkok.

#### National Innovation Awards for Economic Contribution 2018

#### **Judging Criteria**

Projects must be suitable for practical use or commercial application. The key criteria for selection of the winners are:

- Degree of Novelty: Winning projects must be considered innovative at the international, national or corporate level.
- Management Process: Winning projects must be able to maximize the effectiveness of operations and management, and must apply knowledge, as well as exploiting locally available materials and resources
- · Benefits: The innovations must create national economic benefits.

#### **Prestigious Awards**

- Winners will be presented with "The Father of Thai Innovation" trophy, with an inscription of their name and project name, a cash prize and certificate.
- Winners will receive the following benefits:
  - Widespread media publicity
  - Projects will be published in the National Innovation Agency's various media
  - Winners are authorized to use the emblem of the National Innovation Agency along with their innovation for a period of three years.

#### National Innovation Awards for Social Contribution 2018

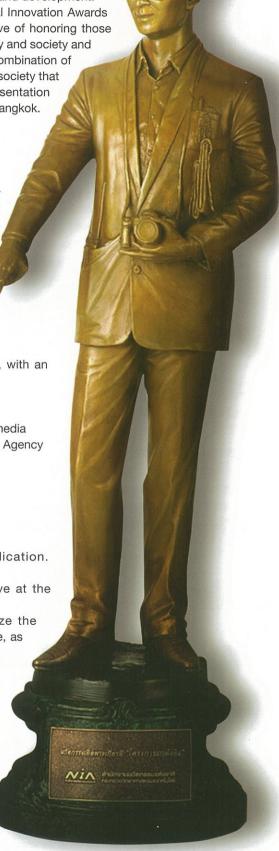
#### **Judging Criteria**

Projects must be suitable for practical use or commercial application. The key criteria for selection of the winners are:

- Degree of Novelty: Winning projects must be considered innovative at the international, national or corporate level.
- Management Process: Winning projects must be able to maximize the
  effectiveness of operations and management, and must apply knowledge, as
  well as exploiting locally available materials and resources.
- · Benefits: The innovations must create social and environmental impacts.

#### **Prestigious Awards**

- Winners will be presented with "The Father of Thai Innovation" trophy, with an inscription of their name and project name, a cash prize and certificate.
- Winners will receive the following benefits:
- Widespread media publicity
- Projects will be published in the National Innovation Agency's various media.
- Winners are authorized to use the emblem of the National Innovation Agency along with their innovation for a period of three years.



#### **Rice Innovation Awards**

The Thai Rice Foundation under the Royal Patronage has collaborated with the National Innovation Agency (Public Organization) to organize the annual Rice Innovation Awards which this year are in their 12th consecutive year. The awards aim to select and recognize innovative products derived from Thai rice and manufacturing processes related to Thai rice that offer strong potential for commercial application and that bring benefits to national social and economic development. The announcement and presentation of the awards help facilitate awareness and development of innovative learning technologies and Thai rice innovations, as well as boosting the morale and prestige of innovators to drive innovation within the sector. This year, 2018, the competition is divided into two categories - Rice Innovation Awards in the Industrial Level and the Community Enterprise Level.

**Judging Criteria** 

Judging is based on five criteria:

- 1. Innovation
- 2. Creativity
- 3. Added value to Thai Rice
- 4. Potential for commercial development
- 5. Contribution to society, economy and environment

#### Prestigious Awards (for each category)

Awards worth Bt300,000 in total

Winner

- · Royal Trophy conferred by HRH Princess Maha Chakri Sirindhorn with an Bt80,000 monetary prize
- 1st Runner-Up Bt40,000 monetary prize 2nd Runner-Up • Bt20,000 monetary prize
- Merit Awards Bt10,000 monetary prizes (2 awards)

# รางวัลบวัตกรรมข้าวไทย

มูลนิธิข้าวไทย ในพระบรมราชูปถัมภ์ และสำนักงาน นวัตกรรมแห่งชาติ (องค์การมหาชน) กำหนดจัดการประกวด รางวัลนวัตกรรมข้าวไทยเป็นประจำทุกปี ซึ่งในปีนี้เป็นปีที่ 12 ติดต่อกัน เพื่อคัดเลือกนวัตกรรมผลิตภัณฑ์ข้าวไทย รวมทั้งกระบวนการผลิต ที่เป็นนวัตกรรมเกี่ยวข้องกับข้าวไทยที่มีศักยภาพส่เชิงพาณิชย์ อันจะ ก่อให้เกิดประโยชน์ทั้งในด้านเศรษฐกิจและสังคมของประเทศ เพื่อส่งเสริม ให้เกิดการพัฒนานวัตกรรมข้าวไทย ซึ่งรวมทั้งผลิตภัณฑ์ และกระบวนการ ผลิต โดยการประกาศเกียรติคุณและมอบรางวัล และยังส่งผลให้เกิด ความตื่นตัวและการพัฒนาใผ่รู้ด้านเทคโนโลยีและนวัตกรรมข้าวไทย รวมทั้งเป็นขวัญกำลังใจและยกย่องผู้ค้นคิดและผลักดันนวัตกรรมข้าวไทย จนบรรลุผล ซึ่งในปี 2561 ได้แบ่งประเภทการให้รางวัลออกเป็น 2 ประเภท ได้แก่ รางวัลนวัตกรรมข้าวไทยในระดับอุตสาหกรรม และรางวัลนวัตกรรม ข้าวไทยในระดับวิสาหกิจชุมชน

#### เกณฑ์การตัดสินผลงาน

การตัดสินรางวัลคาศัยหลักเกณฑ์การพิจารณา 5 ด้าน ได้แก่

- 1.ความเป็นนวัตกรรมของผลงาน
- 2. ความคิดสร้างสรรค์
- 3. การสร้างมูลค่าเพิ่มแก่ข้าวไทย
- 4. ศักยภาพในการพัฒนาสู่เชิงพาณิชย์
- 5. ผลประโยชน์ที่ได้รับทางสังคม เศรษฐกิจ และสิ่งแวดล้อม

# เกียรติยศแห่งรางวัล (ทั้ง 2 ประเภทรางวัล)

รางวัลทั้งหมดมูลค่ากว่า 300,000 บาท

รางวัลที่ 1

• โล่พระราชทานจากสมเด็จพระเทพรัตนราชสดาฯ สยามบรมราชกุมารี และเงินรางวัล 80,000 บาท

รางวัลที่ 2

• เงินรางวัล 40.000 บาท

• เงินรางวัล 20.000 บาท

รางวัลชมเชย • เงินรางวัล 10,000 บาท (2 รางวัล)

## Rice Innovation Awards 2018 in the Industrial Level





Innovation:

KD Care: Ready-to-eat Low-Protein Thai Pathumthani Fragrant Rice Mr. Ravipol Krisadaphong, Mr. Vinyoo Pichponhsa, Mr. Hideo Saito

Innovator: Thai Nutrition Technology Co., Ltd.

**Academic Support:** 

An internal corporate research project

Tel: 02-036 9888

Patent/Petty Patent:

Innovation:

A national innovation of a ready-to-eat

low-protein rice product. Thai pathumthani fragrant rice, which has a protein content of 5 - 8 percent, is subject to digest protein by an enzymatic process and then dried. The resulting rice, with a protein content of less than 1.19 g / 100 g,

is packaged in retort cups and sterilized as ready-to-eat rice. This rice product is beneficial to patients with kidney disease who are able to consume more protein from meat if the protein content of the rice is reduced. The patients need essential amino acids that are only available in good-quality meat.