



สำนักงานที่ปรึกษาการเกษตรต่างประเทศ  
ประจำกรุงวอชิงตัน ดี.ซี.

Office of Agricultural Affairs - Royal Thai Embassy - Washington DC

**Agricultural Ministers to Update "Gene Bank"  
to Maximize Thai Rice Varieties to Full Potential**



On October 9, 2023 Mr. Thammanat Prompao, Minister of Agriculture and Cooperatives (MOAC) and Mr. Anucha Nakasai, Deputy Minister visited the National Rice Seed Operations and Collection Center (NRCT) or Gene Bank in Pathum Thani province. Mr. Prayoon Insakul, Permanent Secretary of MOAC and concerned executives were also in attendance. The Center is located at the Pathum Thani Rice Research Center of the Rice Department.

Established in 1981 with funding from the Japanese Government, the National Rice Seed Operations and Collection Center or Gene Bank is the first rice research center in Thailand. Its duties are to develop and improve rice production, collect and conserve Thai rice genetic resources, gather information on the history and characteristics of rice varieties and conduct research and study on conservation and utilization of rice genetics. Services also include providing information and rice seeds. The Center revives 2,000 rice germplasms annually. During

2018-2023, a total of 2,388 germplasms, 5 grams of each were given away to 106 recipients. A total of 1,239 germplasms were sent for storage at Svalbard Global Seed Vault in Norway. Currently, there are approximately 24,000 rice germplasms preserved including 18,000 indigenous, 2,000 high quality, 100 certified, 3,000 foreign and 1,000 wild rice germplasms. The Gene Bank facilities are consisted of 1) Short-term conservation room (temperature 15°C, relative humidity less than 60%) which rice can be stored for about 3 - 5 years and 2) Medium-term conservation room (temperature 5°C, relative humidity less than 60%) which rice can be stored for approximately 20 years.

The Gene Bank maintains and conserves genetic diversities of plants or animals possessing distinctive genetic characteristics. An example of the beneficial traits is disease resistance of both indigenous and nearly extinct varieties which will be useful in the future. Gene Bank has been established at the Pathum Thai Rice Research Center for a long time. The facilities are outdated and not functional to its full potential. Research and innovation are needed to increase the country's competitiveness, particularly for export. It is necessary to update the Center to become modernized and operational at its full capacity. Higher yield and increased incomes for farmers are expected.

Pathum Thani Province has an agricultural area of 353,308.17 rai (approx. 143,000 acres) or 36.66% of the total area. Major productions are rice, tree fruits, perennial plants, vegetables, ornamental plants, field crops, herbs and fisheries. Farming is conducted within irrigation areas only. Pathum Thani 1 rice variety is praised for its aromatic fragrance and considered the most important crop of the province with GI (Geography Indication) certification. It was bred and selected at the Pathum Thani Rice Research Center. The distinct physical characteristics of the rice grown in Pathum Thani are straw-colored rice husks, long and slender grains with small germs, white and glossy seeds. Once cooked, the texture becomes soft and slightly glutinous with tender aroma.

**Source:** <https://www.thairath.co.th/agriculture/agricultural-policy/2731631>

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