Research projects and activities on biodiversity, food composition and sustainable diets in ASEANFOODS

Prapasri Puwastien,
Coordinator of ASEANFOODS
Institute of Nutrition, Mahidol University, Putthamonthon 4, Salaya, Nakorn Pathom 73170, THAILAND

ASEANFOODS includes member countries of Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam. Although biodiversity of foods is apparent in most of the countries, the information presented is based on information from questionnaire survey which was responded from few ASEAN countries. Research projects and activities on biodiversity, food composition and sustainable diets reported by the ASEANFOODS members can be classified into two types based on the activities involved. The first one: analysts are involved in surveys of underutilised fruits and vegetables (Malaysia) particularly indigenous varieties (the Philippines) and locally available products (Thailand), and generation of food composition data for nutrients of interest, including antioxidants, total phenolic compounds and phytochemicals. The objectives of the research were to explore potential food sources for local use and to improve the quality of local products. Extended objectives were to explore under utilised foods or local products for potential commercial development or other economic use . The generated data were published in scientific journals or as reports. The second type of activity, with a multidisciplinary approach, was conducted by two groups of researchers in Thailand. One project has been working with a Karen community and another with a community in the Srinakarindr Dam area at the same province. It is one of the activities for conservation and utilization of indigenous foods of the Plant Genetic Conservation Project, under the Royal initiative of Her Royal Highness Princess Maha Chakri Sirindhorn. For this project type, food scientists and analysts play roles as members of the multidisciplinary research team, involved from the beginning in planning the project, conducting a survey of foods available in a community as well as exploring local methods of food preparation and cooking, sampling and collecting potential foods for nutritional evaluation, and generating a food composition database identifying food sources of main nutrients, minerals, vitamins, phytochemicals and other bioactive compounds. Both types of the project resulted in the food composition data that could provide the scientific evidence for education of community leaders and local people to increase the availability of their nutritious local foods and for the promotion of consumption and conservation of biodiversity and sustainable diets in the community.