

Research Project for ASEAN Biomass R&D Strategy (Part 2)

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A research project called “ASEAN Biomass R&D Strategy” sponsored by JST (Japan Science and Technology Agency) was inaugurated in 2004, in order to address the global warming issue by the strategic approach to the full utilization of huge amounts of biomass resources existing in ASEAN countries. In an all-Japan framework, the following research organizations have since been engaged in the surveillance studies on the utilization of various biomass sources from municipal wastes to plantation related products in collaboration with their ASEAN counterparts.

1. Responsible for the survey works on ASEAN biomass resource reserves and species, social systems, environmental impact assessment and so on are Japan International Research Center for Agricultural Sciences (JIRCAS), National Agriculture and Bio-oriented Research Organization (NARO), National Institute for Rural Engineering (NIRE), Forestry and Forest Products Research Institute (FFPRI), and National Food Research Institute (NFRI).
- 2-1. As for the biomass conversion technology, Biomass Technology Research Center (BTRC) deals with the large scale conversion processes directed to large biomass sources such as plantation by-products to give products such as liquid fuels and commodity chemicals of relatively high prices and at the same time with high demands in collaboration with Research Institute for Innovation in Sustainable Chemistry, while JIRCAS is investigating the small to medium sized biomass conversion systems mainly directed to the recovery of such products as heat, electricity, gas, and value-added materials.
- 2-2. Comprehensive investigations on some promising biomass sources are conducted by University of Tokyo (UT), NARO, FFPRI, and NFRI for rice, sugarcane, wood, and palm related biomass resources respectively in view of establishing so-called biomass finery.
3. In order to evaluate the environmental, economical, and social effects of biomass utilization, Research Center for Life Cycle Assessment, Central Research Institute of Electric Power Industry (CRIEPI), NIRE, and Mitsubishi Corporation (MC) are engaged in the biomass LCA, the regional energy supply analysis, the economical assessment of biomass utilization in a rural area, and the economical viability assessment for biomass respectively.
4. The collaboration with research organizations in ASEAN countries has been strengthened through the above mentioned survey works and the international workshops such as this.