

DISCUSSION 2

Mr. Shyamal Kumar Chakraborty wanted to know from Mrs. Kasemsri Homchuen how in its quest for biodiesel from *Jatropha* TISTR is addressing the issue of requiring large tracts of land for *Jatropha* plantations. Mrs. Kasemsri replied that TISTR is working with a university to increase the yield of *Jatropha* so that more bio-oil can be obtained from less area. TISTR is also looking at biodiesel production and refining processes to optimize fuel yields.

Ms. Wang Yan from China referred to the problem-solving aspect of PPP in Mrs. Kasemsri's presentation and desired to know whether the companies approached TISTR seeking solutions to problems or TISTR studied the industry for problems that it could solve. Mrs. Kasemsri responded that it happened both ways, although TISTR preferred the companies to seek solutions to their problems with TISTR.

Mr. Edward Rubesch, Moderator for the session, then passed the question to Mr. Somnuk Sirisoonthorn and Ms. Nataporn Chanwarasuth for their comments.

Mr. Somnuk said MTEC disseminated information about its research through the media and this helped companies to know about the lines of research and approach MTEC with problems related to those lines of research. Another way is through student interns, wherein university students are encouraged to work as interns in companies and thereafter work in MTEC as research interns. These interns communicate about problem areas in the companies and then MTEC researchers work on problem solving. In another programme, MTEC researchers visit factories and seek to know the problems first hand. Under this programme, the factories can then avail MTEC services at half the normal consultancy fee.

Ms. Nataporn stated that BIOTEC too has the same programmes as MTEC. Another method that BIOTEC employs is to work with business associations to encourage member companies to seek solutions to their problems with BIOTEC.

Mrs. Kasemsri added that it is not companies alone that seek solutions, but communities too require the services of S&T organizations for solving problems.

Mr. Somnuk informed about the four-digit number that can be contacted to get experts to answer to technical problems. He said one difficulty is how to find the right expert to entrust the problem with and to ensure continuing attention on it. He said it is important for the institution to know what problems it can solve and what it cannot.

Mr. Chakraborty asked Mrs. Kasemsri how adequate supplies of waste cooking oil were ensured to run the programme of producing biofuel. Mrs. Kasemsri said TISTR runs a campaign for collecting "black oil" from wayside eateries and others who prepare and sell food. A company is tasked to collect this oil on a regular basis.

Speaking on the presentations made by various agencies from Thailand, Mr. Jeong Hyop Lee observed that the availability of facilities and access to services do not necessarily mean the success of an infrastructure, such as a science park. An infrastructure or an agency begins to be successful only when its customers find the facilities/services offered valuable enough to be worthy of payment.

Mr. Lee also raised a question about the appropriateness of placing laboratory services in the core business value chain. He felt that such services should be part of institutional infrastructure. If such technical services, such as calibration and accreditation, are to be located in the core business chain, then those should operate at a higher level, such as leading companies to global standards.

As far as the direction of science, technology and innovation (STI) in Thailand is concerned, Mr. Lee felt that the three measures proposed – raising the gross expenditure on R&D (GERD) to 1 per cent of the gross domestic product (GDP), increasing the number of researchers to 15 per 10,000 population and encouraging the private sector to invest more in R&D – might not be adequate to increase the country's competitiveness, as they are all basically increases in inputs.

While the examples of public-private partnership (PPP) are impressive, these could be just a minor portion of the R&D that the S&T agencies in Thailand carry out, Mr. Lee observed. It is therefore necessary to examine the obstacles that are hindering the development of PPP as the main mode in the country's R&D system. Mr. Lee concluded by pointing out that it is important for policymakers to ask the right questions so that the right answers could be found.

Mr. Ramanathan concluded the session by summarizing the key points from the presentations and discussions.