

5. Project ideas for international support

Project 1: Formulation of graduate courses to promote capacity building for technology diffusion and transfer in agricultural sector through international collaboration and networking (5 years plan)

This is to formulate graduate courses related to the technology diffusion and transfer in agricultural sector through a consortium of leading international universities, local universities, research centers, and private companies for the purpose of human resource capacity building. This could be achieved using the framework of the Thailand Advanced Institute of Science and Technology (THAIST), an institute dedicated to develop Thai human resources. Please read about a successful story of such a consortium for capacity building in Annex 2.

Requirements for international support

A financial support of 10 million USD is estimated to support the travel expenses of leading experts to teach courses in Thailand and to equip learning materials as well as learning facilities to support approximately 150 students.

Project 2: Establishment of an ASEAN training hub for adaptation technologies in Agriculture. (5 years plan)

This aims to establish a national training center in Thailand as an ASEAN training hub in the context of south-south collaboration, linking with international organizations and experts with the ultimate goal of ensuring the world's food security. The activities of the knowledge and training hub for adaptation technologies may include providing various short training courses for practitioners such as a 3-5 days workshop, a short term research training (3 months), and an advanced research training (6 months). The center will emphasize on multi-disciplinary lessons in related fields. Research projects and internships with farmers and agribusiness parties will provide practical experience and collaboration they need for future success. Areas of emphasis include simulation models for forecasting and early warning, marker assisted selection, risk assessment on GM product, and precision farming skills. Agricultural practitioners should be able to use and develop innovative techniques and gain an access to the top of the line equipments and facilities including both hardware and software. The center would also host an international workshop on adaptation technologies to be applied in the agricultural sector, attracting academics and industry representatives from many countries to share their expertise and experience, with a strong emphasis on the real world applications. This program could also follow the successful model of the Molecular Rice Breeding Program for the Mekong Region (in the box below).

Requirements for international support

Thailand would need a sufficient funding/ grant/ scholarship in the key areas, along with high efficiency training equipments. A subsidy of 35,000 US dollars is estimated for operating a comprehensive hands-on training course on selected technologies for approximately 20 persons/ year. In addition, collaboration with prestigious overseas academic/ research institutes from overseas to design the training courses is imperative. Similarly, collaboration on research and development of adaptation technologies, especially customization of the techniques to meet the country's specific needs, is essential. This can also build a network of researchers/ practitioners/ experts in related fields (such as

simulation, phenotyping-genotyping association, high throughput screening, and precision farming) both domestically and internationally. Consequently, this network will provide training skills and forums to exchange ideas in a self-sustained manner.