Asian Productivity Organization

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PROJECTNOTIFICATION

10 May 2011

1. Project Code 11-AG-17-GE-OSM-B

2. Title Multicountry Observational Study Mission on the

Development of Biotechnology Business Models for

SMEs in Agribusiness

3. **Duration** 7–11 November 2011 (five days)

4. Venue Taipei, Republic of China

5. Implementing Organization

China Productivity Center (CPC)

2F, No. 79, Sec. 1, Xintai 5th Rd., Xizhi District,

New Taipei City 221, Taiwan

Republic of China

Phone: (886-2) 2698-5886 Fax: (886-2) 2698-2976 Website: www.cpc.org.tw

6. Number of Overseas Participants Up to 18 qualified participants from India, Indonesia, Islamic Republic of Iran, Japan, Republic of Korea, Malaysia, Pakistan, Philippines, Singapore, Thailand,

and Vietnam

(see 12. Qualifications of Participants)

7. Number of Local Participants

Up to six qualified participants

(see 12. Qualifications of Participants)

8. Closing Date for Nominations

12 August 2011

9. Objectives

- a) To gain a detailed understanding of successful agricultural biotechnology enterprises, especially SMEs, by reviewing the interplay between their business models, the technology development process, and the facilitating policy, market, and financial factors;
- b) To learn firsthand how different business models have been adopted by the most promising biotechnology-based agribusiness SMEs through direct exposure to successful examples in the host country;

- c) To learn about the critical success factors for SMEs in agricultural biotechnology and methods to ensure their development, implementation, and sustainability; and
- d) To understand the complex ecosystem in which agricultural biotechnology companies operate with respect to "freedom to operate," investment, and public—private partnerships.

10. Background

The agricultural biotechnology industry is relatively new, but its potential impact on agriculture and food-nutrition security is huge. Biotechnology is applied by many companies, particularly in medicine, industry, and agriculture. Some players started by applying advanced biotechnology to nonfood products such as cotton and flowers. Others applied more traditional biotechnology approaches such as cloning, brewing, and tissue culture for agricultural use. Often the source of many agricultural biotechnology innovations is SMEs. This technology has, however, yielded the most economic benefit to multinational companies involved in commercial seed production, animal vaccines, biopesticides, and genetically modified organisms. There is a need to expand the benefits of biotechnology among agribusiness SMEs, but accomplishing this will require the adoption of appropriate biotechnology-based business models by SMEs. There is no standard model for SME success.

A business model is a combination of a firm's structure and its strategies for accomplishing its short- and long-term business goals. No two firms will have exactly the same business model. A good business model is flexible enough to be continuously adapted to internal and external conditions. On the path to success, many agricultural biotechnology firms have adopted several different business models to operate successfully under changing national and international business conditions. Such models can be broadly divided into the platform, product, vertical, and hybrid or dual models based on the value chain structure of the industry.

For successful agricultural biotechnology business, Asian SMEs are confronted with several challenges such as limited funding, high regulatory costs, legal hurdles in the regulatory process, nonconducive economic and policy environment, and low capacity to absorb risk. The Republic of China has been successful in capacity building in agricultural biotechnology SMEs by creating conducive economic and policy environments to capitalize on technology created through active R&D programs, among others. This study mission is being organized to learn about the business models employed by biotechnology-based agribusiness SMEs in the Republic of China.

11. Scope and Methodology

The study mission will consist mainly of field studies of agricultural biotechnology facilities, especially SMEs, in the host country, along with lead presentations by resource speakers.

The tentative main topics to be covered are:

- a) The agricultural biotechnology industry in the Asia-Pacific: key features, trends, issues, and opportunities;
- b) Business models used by SMEs in agricultural biotechnology: an overview;
- c) Analyses of agricultural biotechnology multinational companies and learning from their success and failures;

- d) Stages in taking biotechnology products from concept to reality and the marketplace: principles and techniques;
- e) Policy and institutional settings for creating an enabling environment for successful SMEs in agricultural biotechnology: experience in the Republic of China;
- f) The Republic of China's regulatory framework to stimulate biotechnology-based agribusiness SMEs;
- g) Risk management by agricultural biotechnology-based SMEs for sustainable business;
- h) Key features of a successful business model for SMEs in agricultural biotechnology; and
- i) Individual country case studies: SWOT analysis and innovation strategies.

12. **Qualifications of Participants**

The participants are expected to possess the following qualifications:

(a) Age: Preferably between 35 and 50 years.

Education: University degree or equivalent qualification from a recognized (b)

institution.

Officials or researchers in government/government-owned Present Position: (c)

> corporations or private firms involved in biotechnology-based agribusiness; researchers and consultants in government and private organizations including academia involved biotechnology R&D; officials of government and industry associations engaged in promoting and agribusiness; biotechnology-based or entrepreneurs

managers of agricultural biotechnology firms.

At least five years of experience in the subject area. Experience: (d)

(e) Language

All proceedings of the study mission are conducted in English Proficiency:

> and participants are frequently required to make oral and written presentations. They should be proficient in both spoken and written English. Those who are not proficient in English

need not apply.

(f) Health: Physically and mentally fit to attend an intensive study mission

> requiring participants to complete a number of individual and group activities and strenuous fieldwork (it is therefore recommended that member countries refrain from nominating

candidates likely to suffer from physical and mental strain).

Participants must attend all five days of the study mission to (g) Attendance:

qualify for the certificate of attendance.

13. Financial Arrangements

- To be borne by the APO: a)
- i) All assignment costs of overseas resource persons.

ii) Round-trip economy-class international airfare by the most direct route between the international airport nearest to the participant's place of work and Taipei for participants from Bangladesh, Cambodia, Fiji, Lao PDR, Mongolia, and Nepal and for participants from SMEs and nonprofit organizations from other APO member countries. As far as practicable, all participants are strongly encouraged to purchase and use discount tickets. Please note that the arrangements for the purchase of air tickets should be in accordance with the "Guide on Purchases of Air tickets for APO Participants," which will be sent to the selected participants and is available on the APO website and from APO Liaison Officers in member countries

b) To be borne by participants or participating countries:

- i) For participants from profit-making organizations, except SMEs, from APO member countries other than Bangladesh, Cambodia, Fiji, Lao PDR, Mongolia, and Nepal
- 1) Round-trip international airfare between the member country and Taipei.
- 2) Participating country expenses of US\$50 per participant, payable to the APO in convertible currency.
- ii) For all participants
- 1) Participants should be fully insured against accident and illness (including hospitalization and death) for a principal sum equivalent to US\$10,000.00 for the entire duration of the project and travel and must submit to the APO Secretariat a copy of the comprehensive travel insurance certificate before participation.

Such insurance should be valid in the Republic of China. This insurance requirement is **in addition to** existing government insurance coverage in some member countries. If any participant is unable to insure himself/herself as stipulated above, he/she should secure this insurance in the host country at the commencement of the project and pay the premium himself/herself, if necessary, from the per diem allowance provided. Neither the APO nor the implementing organizations will be responsible for any eventuality arising from accident or illness.

- 2) All expenses related to visa fees and airport taxes.
- Any expenses incurred by participants for stopovers on the way to and from the project venue as well as for extra stay at the project venue before and/or after the official project period on account of early arrival or late departure, for example, due to either limited available flights or any other reason whatsoever.

c) To be borne by the host country (Republic of China)

- i) Hotel accommodation and per diem allowances for up to six days for up to 18 overseas participants at the rate to be specified later.
- ii) All local implementation costs.

14. Actions by Member Countries

Nominations

- (a) Each member country is requested to nominate three or more candidates for selection in the order of preference. Please ensure that candidates nominated meet the qualifications specified above.
- (b) Please note that when a candidate is nominated it does not follow that he/she is considered selected. Selection is at the discretion of the Screening Committee. A basic criterion for selection is the homogeneity of the participants in terms of qualifications and work experience. Nonselection therefore does not mean that the candidates concerned are not competent. Sometimes candidates are not selected because they are overqualified for the given project.
- (c) APO Liaison Officers/NPOs are reminded to make clear in their search for the most appropriate participants that only the APO Liaison Officer/NPO in their country may send nominations to the APO Secretariat. This should eliminate the mistake of various government/public institutions making nominations directly to the APO Secretariat.

Required Documents

- (d) Each nomination should be accompanied by the documents listed below. A nomination lacking any of these documents may not be considered:
- i) Two copies of the candidate's biodata on the APO biodata form together with passport-sized photograph. The biodata form can be downloaded from the APO website. Downloading information is also available from www.apo-tokyo.org. We encourage submitting the biodata form to the APO Secretariat in electronic form as an attachment to a cover e-mail message from the APO Director, Alternate Director, or Liaison Officer. The nomination documents should be sent to the Agriculture Department, APO Secretariat (e-mail: agr@apo-tokyo.org, fax: 81-3-5226-3954).
- ii) The APO Medical and Insurance Declaration/Certification Form. Every candidate must complete and submit a copy of the APO Medical and Insurance Declaration/Certification Form with his/her biodata at the time of nomination. Please note that self-declaration is sufficient for candidates without any of health conditions or illnesses enumerated on the reverse side of the medical form. However, for all others, medical certification by a recognized physician on the reverse side of the medical form is required.
- (e) For reasons of expediency or because of time constraints due to approaching nomination deadlines, member countries sometimes send their candidates' biodata forms and medical certificates by fax to the APO Secretariat. While this action is very much appreciated, member countries are requested to mail the originals of the documents to the APO Secretariat as well. They are needed for making clear, clean copies for the host country, especially with regard to the candidates' photos. If the documents are submitted electronically as mentioned in (d)-i) and ii), there is no need to send the original by postal mail. If a digital photograph of a nominee is not attached to the electronic biodata form, a hard-copy photograph should be sent to the APO Secretariat by postal mail. Please specify the candidate's name and the project code on the reverse side of the photograph.

Nomination Deadline

- (f) Member countries are requested to abide by the *nomination deadline of 12 August 2011*. The APO Secretariat may not consider late nominations as they have in the past resulted in considerable difficulties to the implementing organization in its preparatory work for the project.
- (g) For member countries where nominations are required to be approved by higher government authorities and hence require a longer time, the APO Liaison Officers/NPOs are urged to send in the names of nominees on or before the deadline, indicating that government approval will follow.

Others

- (h) The most qualified participant(s) from each member country will be chosen and notified through the APO Liaison Officer/NPO. Should some candidates fail to qualify or be unable to participate after selection, or should some member countries fail to nominate any candidate, their slots may be filled by alternates from the same or another member country on a merit basis.
- (i) Member countries are requested to inform the selected participants that they are not to bring family members or to engage in any private business activities during the entire duration of the project. Further, if they become unable to attend the program, they should be requested to inform the APO promptly of their inability to participate and the reason for last-minute withdrawal through the APO Liaison Officer/NPOs in member countries.
- (j) Each selected candidate is required to arrive at the venue one day before the start of the official project. Also, all candidates are expected to return home upon completion of the official project because they are visiting the host country for the specific purpose of attending this APO project.

15. Country Case Study Preparation

The participants are required to prepare a short discussion paper prior to departure for the project venue for sharing their/country experience in *biotechnology business models for agribusiness SMEs* during the study mission. In preparing the discussion papers, they are expected to follow the "Guidelines for Preparation of Discussion Papers" to be provided later.

16. Other Conditions

Other conditions for participation are given in the APO Guide for Participants, which is available from APO Liaison Officers/NPOs in member countries and on the APO homepage (URL: www.apo-tokyo.org) and will also be sent to the selected participants.

Ryuichiro Yamazaki

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Secretary-General