

## 陸、照片



圖 1. 全體與會者合影。



圖 2. 4 位講者及亞太糧肥中心郭博士夫婦。



圖 3. 研討會於 BP International Makiling Hotel, Los Baños, Laguna 舉行。



圖 4. PACCAAR 及 FFTC 代表開幕致詞。



圖 5. 出國人員擔任講師情形。



圖 6. 討論會各組討論情形。



圖 7. 討論會各組報告討論結果情形。



圖 8. 拜會農業部農業研究局。



圖 9. 農業部農業研究局一樓研發技術  
商品化中心



圖 10. 農業部農業研究局一樓研發技術商品化中心外觀

## 附件一、研討會議程

**Seminar-Workshop on  
Strengthening Agricultural Technology Transfer and Commercialization:  
Using Technology Foresight in Setting Research  
and Development (R&D) Priorities**

December 2-5, 2013

BP International Makiling Hotel, Los Baños, Laguna

### PROGRAM

TIME	ACTIVITY
<b>Dec 2/Monday</b>	<i>Arrival of foreign speakers/resource persons and participants</i>
<b>Dec 3/Tuesday</b>	
8:00-8:30 AM	<b>Registration</b>
<p><b>OPENING CEREMONIES</b></p> <p><i>Master of Ceremonies:</i> <i>Dr. Lilian G. Bondoc</i> Assistant Director, PCMD and ISP Coordinator PCAARRD</p>	
8:30-9:00 AM	<p><b>Welcome Remarks</b> <i>Dr. Patricio S. Faylon</i> Executive Director Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCAARRD)</p> <p><b>Welcome Remarks</b> <i>Dr. George Kuo</i> Consultant Food and Fertilizer Technology Center for the Asian and Pacific Region (FFTC)</p>
9:00- 9:15	<i>Group photo</i>
9:15-10:00	<p><b>Changes in Agricultural Environment and its Implications on Technology Transfer</b> <i>Dr. Samson C.S. Tsou</i> Former Chair of the Board AVRDC - The World Vegetable Center</p>

10:00-10:15	Coffee break
10:15-11:00	<p><b>Taiwan Agricultural Technology Foresight and its Applications</b></p> <p><i>Dr. Samson C.S. Tsou</i></p> <p>Former Chair of the Board</p> <p>AVRDC - The World Vegetable Center</p>
11:00-11:45	<p><b>Commercialization of Agricultural R&amp;D Outputs in Taiwan</b></p> <p><i>Dr. Hung-Hsi Lee</i></p> <p>Deputy Director General</p> <p>Department of Science and Technology</p> <p>Council of Agriculture</p> <p>Taiwan</p>
11:45 AM-1:00 PM	Lunch break
1:00-1:45	<p><b>Commercialization of Agricultural R&amp;D Outputs in Taiwan</b></p> <p>Dr. Hung-Hsi Lee</p> <p>Deputy Director General</p> <p>Department of Science and Technology</p> <p>Council of Agriculture</p> <p>Taiwan</p>
1:45-2:30	<p><b>From Technology Innovation through Multi-disciplinary Cooperation to a Commercialization of Bio-methanol Production by a Unique Gasification</b></p> <p>Dr. Hitoshi Nakagawa</p> <p>Japan International Research Center for Agricultural Sciences (JIRCAS)</p>
2:30-2:45	Coffee break
2:45-3:30	<p><b>Challenges of JIRCAS from R&amp;D to Commercialization in Asia - Case Studies</b></p> <p>Dr. Hitoshi Nakagawa</p> <p>Japan International Research Center for Agricultural Sciences (JIRCAS)</p>
3:30-4:15	<p><b>PCAARRD's Technology Transfer Program</b></p> <p>Dr. Melvin B. Carlos</p> <p>Director</p> <p>Technology Transfer and Promotion Division (TTPD)</p> <p>PCAARRD</p>

TIME	ACTIVITY
4:15-5:00	<p><b>Technology Foresight in the Philippines: Issues, Trends, and Experiences</b>  <i>Mr. Glen A. Imbang</i>            Professor            Technology Management Center            University of the Philippines (UP) Diliman</p>
5:00-7:00	<i>Cocktails and welcome dinner hosted by PCAARRD</i>
<b>Dec 4/Wednesday</b>	
9:00- 9:15 AM	<p><b>Mechanics of the Group Discussions/Workshop</b>  <i>Dr. Leah J. Buendia</i>            Director, PCMD            PCAARRD</p>
9:15-12:00 NN	<p><b>Group Discussion of PCAARRD's Technology Foresight Team</b></p> <p><b>Group Discussion by Sector</b></p> <p><u>Facilitators:</u></p> <p><b>Crops: Dr. Jocelyn E. Eusebio</b>  <i>Director</i>            Crops Research Division (CRD)</p> <p><b>Livestock: Dr. Edwin C. Villar</b>  <i>Director</i>            Livestock Research Division (LRD)</p> <p><b>Forestry: Dr. Feliciano G. Calora, Jr.</b>  <i>Director</i>            Forestry and Environment Research Division (FERD)</p> <p><b>Inland Aquatic Resources: Dr. Dalisay dG. Fernandez</b>  <i>Director</i>            Inland Aquatic Resources Division (IARD)</p> <p><b>Marine Resources: Ms. Ester C. Zaragoza</b>  <i>Officer-in-Charge</i>            Marine Resources Division (MRD)</p>
12:00 NN-1:00 PM	Lunch break

<b>TIME</b>	<b>ACTIVITY</b>
1:00-2:30	<b>Continuation of group discussions</b>
2:30-2:45	Coffee break
2:45-4:25	<b>Presentation of Outputs</b> <i>(20 minutes per group, including 5-minute open forum)</i>
4:25-4:35	<b>Closing Remarks</b> <i>Dr. Danilo C. Cardenas</i> Deputy Executive Director for Administration, Resource Management, and Support Services (ARMSS) PCAARRD
5:00-7:00	Appreciation dinner hosted by FFTC



## 附件二、出國人員簡報內容摘要

### **Commercialization of Agricultural R & D Results in Taiwan**

**Lee, Hung-Hsi**

**Department of Science and Technology, Council of Agriculture,  
Executive Yuan, Taiwan**

Taiwan mainly built research capacity in public sectors. In the past, the results of agricultural R & D from public sectors were regarded as public properties and should be gratuitously provided for agribusiness and farmers. However, facing the challenges in a global knowledge-based economy in the late 1990s, our government introduced the spirit of the Bayh-Dole Act from the USA and promulgated the Fundamental Science and Technology Act in 1999. From then on, Council of Agriculture (abbreviated as COA) has paid more attention to improve and strengthen technology management, protection and application of intellectual property rights in Taiwan agriculture, and started to transfer or license public R&D results non-gratuitously. Some technologies, which don't need to be manufactured by agribusiness and could be utilized directly by farmers, are still free charge to extend to farmers.

In order to encourage the public sectors to make more effort to release research capacity to the industry and help to develop agricultural science and technology industry, many policies and strategies were implemented by COA to facilitate the commercialization and industrialization of public R & D results. Those strategic mechanisms could be classified into eight categories including comprehensive legal system, multi-disciplinary agribusiness-integrated R & D, innovative business models, multiple R & D results promotion, intensive agribusiness incubation, advanced talent development, appropriate finance and outstanding award.

After having given great efforts for more than ten years, COA has had lots of achievements which can be shown from four aspects of R & D results output, commercialization, business operation and industrialization.

Facing more and more international competition, our government approved the National Intellectual Property Strategy Program in October this year to organize and integrate IP of universities and research institutes, to protect, create value and circulate IP rights, and provide back support for enterprises. Meanwhile, in order to strengthen technology transfer from agricultural research laboratories to agricultural industry and to serve as a bridge between them, COA is ready to establish a new organization- Agricultural Technology Research Institute in 2014. COA will also put more effort on 10 target potential industries, such as animal vaccines and

bio-pesticides, by strengthening internationalization in invention and technology transfer. Based on past R & D results and current technology advantages, COA believes that agricultural industry would be transformed and upgraded, and more innovative technologies and products would be created and manufactured in Taiwan to satisfy requirements around the world.

### 附件三、研討會國外講者及拜會對象清單

單位	人員	職稱
Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development, Department of Science And Technology (PCAARRD-DOST)	Dr. Danilo C. Cardenas	Deputy Executive Director for Administration, Resource Management, and Support Services
	Leah J. Buendia, Ph.D.	Director Policy Coordination and Monitoring Division
	Melvin B. Carlos, Ph.D	Director Technology Transfer and Promotion Division
	Daisy Espiritu-Cabral	Science Research Specialist Forestry and environment Research Division
	Jocelyn E. Euseblo, Ph.D.	Director Crops Research Division
Bureau of Agricultural Research, Department of Agriculture (DA-BAR)	Mr. Patrick Raymund A. Lesaca	Applied Communication Division
	Mara Shyn M. Valdeabella	Executive Assistant for Communications, Office of the Director
日本獨立行政法人 國際農林水產業科學研究中心 (JIRCAS)	中川 仁博士 (Dr. Melvin B. Carlos)	執行顧問兼稽核
Technology Management Center, University of the Philippines (UP) Diliman	Mr. Glen A. Imbang	Professor