

## Performance and Achievements

In 2015, a total of 12 training courses were conducted, which drew a total of 186 participants from 52 countries all around the world. Among these various training courses, six were conducted for international participants; the other six were conducted exclusively for Saudi Arabia.

### Training Courses in 2015

No	Sponsor	Program
1.	Co-sponsored Regular Sessions	The 125 <sup>th</sup> Regular Session on Land Policy for Sustainable Rural Development
2.		The 126 <sup>th</sup> Regular Session on Land Taxation and Valuation
3.		The 127 <sup>th</sup> Regular Session on Infrastructure Development and Planning
4.		The 128 <sup>th</sup> Regular Session on Agricultural Development and Policy
5.	ROC Ministry of Foreign Affairs	Seminar on Geographical Information System and Land Management
6.		Seminar on Knowledge-based Economy and City Competitiveness
7.	Saudi Arabian Ministry of Agriculture	Training Course on Shrimp Diseases Management
8.		Training Course on Livestock Disease Diagnosis
9.		Training Course on Agricultural Extension
10.		Training Course on Agricultural Development
11.		Training Course on Organic Agriculture
12.		Training Course on Veterinary Laboratories

### Breakdown of Participants by Country and Region in 2015

No	Region	Country	Participants	
			Person(s)	Subtotal
1.	East Asia & Pacific (14 Countries)	Bangladesh	1	35
2.		Kingdom of Cambodia	1	
3.		Fiji	1	
4.		Indonesia	2	
5.		Malaysia	4	
6.		Union of Myanmar	3	
7.		Nepal	1	
8.		Palau	2	
9.		Papua New Guinea	1	
10.		The Philippines	3	
11.		Solomon Islands	1	
12.		Thailand	5	
13.		Vietnam	5	
14.		R.O.C	5	
15.	West Asia (9 Countries)	Belarus	3	55
16.		Iraq	1	
17.		Jordan	6	
18.		Kyrgyz	1	
19.		Mongolia	5	
20.		Russian Federation	1	
21.		Saudi Arabia	34	
22.		Sultanate of Oman	1	
23.		Turkey	3	
24.	Africa (6 Countries)	Burkina Faso	4	22
25.		Ethiopia	1	
26.		Malawi	1	
27.		Nigeria	8	
28.		Sao Tome & Principe	3	
29.		Swaziland	5	

## Co-sponsored Regular Sessions

### The 125<sup>th</sup> Regular Session on Land Policy for Sustainable Rural Development

This four-week session was conducted from May 15 to June 12 with the 126<sup>th</sup> Regular Session on Land Taxation and Valuation at the same time. Professor Jim Riddell served as the Course Coordinator for this regular session. The faculty was comprised of four international professors and seven local professors.

#### The core subjects of the curriculum included:

- Rural Economy and Development
- Property Ownership and Land Tenure Dynamics
- Managing Local Governance for Sustainable Development
- Taiwan Experience and Field Trip

In addition to lectures and discussions focusing on the issues mentioned above, the participants also contributed to the course by presenting their own country report on the project related to the theme of the training course. Outside the classroom, they were given the opportunity to go on field trips and visit Taoyuan Farmer Association to learn more about farmer loan and agricultural production and promotion; to visit Feng-Chia University GIS Center to learn more about geographical information system management and UAV application; to visit Land Administration Bureau of Taichung City Government to learn more about land registration and land valuation; to visit Green



Visit Green Bamboo Community

Bamboo Community for rural community regeneration, planning and environment preservation; to visit Council of Agriculture to learn more about rural development and farm land policy. Extra-curriculum activities were also arranged, including introduction of Taiwan culture, basic Mandarin lessons and visits to tourist attractions like Sun Moon Lake.



Participant watching UAV demonstration at Feng-Chia University

No	Region	Country	Participants	
			Person(s)	Subtotal
30.	Europe (5 Countries)	The Czech Republic	6	15
31.		Estonia	2	
32.		Hellenic Republic	1	
33.		Latvia	3	
34.		Poland	3	
35.	Latin America & Caribbean (18 Countries)	Argentina	2	59
36.		Belize	2	
37.		Brazil	3	
38.		Chile	4	
39.		Colombia	4	
40.		Dominican Republic	5	
41.		Ecuador	3	
42.		El Salvador	1	
43.		Guatemala	4	
44.		Haiti	2	
45.		Honduras	4	
46.		Nicaragua	4	
47.		Panama	1	
48.		Paraguay	5	
49.		Peru	3	
50.		Saint Lucia	4	
51.		Saint Vintcent and the Grenadines	2	
52.		United Mexican States	6	
Total Participants			186	
Number of Countries			52	

There were 30 participants from 29 countries, including Belarus, Brazil, Cambodia, Chile, Colombia, Czech Republic, Dominican Republic, Estonia, Guatemala, Honduras, Jordan, Malaysia, Mexico, Mongolia, Myanmar, Nicaragua, Nigeria,

Paraguay, Philippines, Peru, Sao Tome & Principe, Saint Lucia, Swaziland, Thailand, Turkey, Vietnam, ROC (Taiwan), and the participants recommended by AARDO from Bangladesh, Nigeria, and Oman.

## The 126<sup>th</sup> Regular Session on Land Taxation and Valuation

This four-week session was also conducted from May 15 to June 12 with the 125<sup>th</sup> Regular Session on Land Policy for Sustainable Rural Development at the same time. Professor Steve Tsui served as Course Coordinator for this regular session. The faculty was comprised of three international professors and three local professors.

### The core subjects of the curriculum included:

- Economics, Taxation Policy and Theory
- Public Finance
- Land Valuation
- Land Taxation and Valuation in Taiwan and Field Trip

Area, Ministry of Finance to learn about national tax administration; to visit Land Administration Bureau of Taichung City Government for land valuation, current assessed land value and online inquiry system; to visit Local Tax Bureau of Taichung City to learn more about local tax collection; to visit Taipei Financial Center Corporation to learn more about government BOT case and urban land use; to visit Fiscal Information Agency, Ministry of Finance for fiscal information system and e-invoice. Extra-curriculum activities were also arranged, including introduction of Taiwan culture, basic Mandarin lessons and visits to tourist attractions like Sun Moon Lake.



Participants at Local Tax Bureau of Taichung City



Visit Fiscal Information Agency, Ministry of Finance

There were 23 participants from 23 countries, including Belarus, Brazil, Chile, Czech Republic, Dominican Republic, Greece, Guatemala, Haiti, Honduras, Jordan, Malaysia, Mexico, Mongolia, Papua New Guinea, Paraguay, Peru, Russia, Saint Lucia, St. Vincent and the Grenadines, Thailand, Turkey, Vietnam and ROC (Taiwan).

## The 127<sup>th</sup> Regular Session on Infrastructure Development and Planning

This four-week session was conducted from October 2 to 30 with the 128<sup>th</sup> Regular Session on Agricultural Development and Policy at the same time. Lincoln Institute of Land Policy Dr. George McCarthy and Professor John Lin served as Course Coordinators for this regular session. The faculty was comprised of four international professors and eight local professors.

In addition to lectures and discussions focusing on the issues mentioned above, the participants also contributed to the course by presenting their own country report on the project related to the theme of the training course. Outside the classroom, they were given the opportunity to go on field trips and

### The core subjects of the curriculum included:

- Land Policy and Urban Development
- Housing and Public Investment
- Transportation Investment
- Infrastructure Planning in Taiwan and Field Trip



Visit Taipei City Government Public Transportation Office



Visit Taipei City Government Public Transportation Office to learn more about public transport planning, using YouBike as an example for promoting public transport; to visit Taoyuan Metro Cooperation for Taoyuan Metro system and its traffic control center; to visit Yonghe Residential Youth Housing, arranged by Urban & Rural Development of



Participant at Taoyuan Metro Cooperation with MRT Demo Car

New Taipei City to learn more about housing policy and public housing; to visit The Quest for Tea company to learn more about setting up tourism factories in industrial area and tea marketing; to visit Tao-Mi Eco-Village, arranged by Soil and Water Conservation Bureau to learn more about rural regeneration and environmental protection. The Center also arranged extra-curriculum activities outside the classroom, including introduction of Taiwan culture, basic Mandarin lessons and visits to major tourist attractions.

There were 24 participants from 23 countries, including Burkina Faso, Chile, Colombia, Czech Republic, Dominican Republic, Estonia, Jordan, Honduras, Malaysia, Mexico, Mongolia, Nicaragua, Nigeria, The Philippines, Poland, Saint Lucia, Sao Tome & Principe, Saudi Arabia, Swaziland, Thailand, Vietnam and ROC (Taiwan).



## The 128<sup>th</sup> Regular Session on Agricultural Development and Policy

This four-week session was also conducted from October 2 to 30 with the 127<sup>th</sup> Regular Session on Infrastructure Development and Planning at the same time. Professor Jong-Wen Wann served as Course Coordinator for this regular session. The faculty was comprised of three international professors and ten local professors.

### The core subjects of the curriculum included:

- Rural Development
- International Marketing and Global Market
- Agricultural Resources and Technology Policy
- Taiwan Experience and Field Trip

In addition to lectures and discussions focusing on the issues mentioned above, the participants also contributed to the course by presenting their own country report on the project related to the theme of the training course. Outside the classroom, they were given the opportunity to go on field trips to Council of Agriculture to learn more about agricultural development and policy at central level; visit to Taoyuan District Agricultural Research and Extension Station



Participants tasting plum wine at Sinyi Township Farmers Association

to learn more about organic farming experience; to visit Taiwan Seed Improvement and Propagation Station to learn more about agricultural research and technology; to visit The Quest for Tea company to learn more about setting up tourism factories in industrial area and tea marketing; to visit Sinyi Township Farmers' Association to learn more about organization and function of farmers' associations, plum production and marketing. The center also arranged extra-curriculum activities outside

the classroom, including introduction of Taiwan culture, basic Mandarin lessons and visits to major tourist attractions.



Visit Seed Improvement and Propagation Station

There were 25 participants from 23 countries, including Brazil, Burkina Faso, Chile, Czech Republic, Ecuador, Fiji, Jordan, Latvia, Mexico, Mongolia, Nicaragua, Nigeria, Palau, Paraguay, Peru, The Philippines, St. Vincent and the Grenadines, Sao Tome & Principe, Swaziland, Turkey, ROC (Taiwan), and the participants recommended by AARDO from Iraq, Jordan, Malawi and Nigeria.

## Projects Sponsored by the ROC Government

The Center conducted two training courses, which were sponsored by the Ministry of Foreign Affairs. They are conducted simultaneously from March 11 to 24. The Seminar on Geographical Information System and Land Management had a total of 27 participants from 26 countries around the world. The Seminar on Knowledge-based Economy and City Competitiveness had a total of 25 participants from 25 countries around the world. These two training courses typically consist of lectures delivered at the Center, which are complimented with field trips to government agencies and organizations to learn first-hand about their work and

achievements as well as exchange with responsible official's knowledge and working experiences. Focus has also been made on the arrangement of country paper presentations for the participants to present a report on a specific project, wherein local lecturers were also invited to participate in the discussions and offer their comments, thus promoting valuable experience and international exchanges. Some cultural visits were integrated into the course, including Sun Moon Lake, Shuli Snake Kiln Ceramics Cultural Park, Chiang Kai-shek Memorial Hall and Taipei EYE for the participant to appreciate Taiwan's natural beauty and rich culture.

and in the areas pertaining to the theme of the training course. The participants' presentation proceeded in three half-days. Aside from the lectures, the Center arranged a series of field trips for the participants to visit government agencies and research institutions involved with geographical information systems, including: (1) Feng Chia University GIS Center for UAV application, for getting knowledge related to education of spatial and geographical information system and the Center's research work and achievements; (2) National Land Surveying and Mapping Center for knowing about its organization, function and its archives of maps and

documents; (3) Soil and Water Conservation Bureau for observing the application of GIS in mud slide monitoring and other disaster prevention and management; (4) Taiwan GIS Center for learning more about its mission and function, and meeting face-to-face with private companies that is dedicated to GIS applications; (5) Ministry of the Interior's Information Center for learning about Taiwan's experience in establishing national land information and management.

There were 27 participants from 26 countries, including Argentina, Belarus, Belize, Burkina Faso, Czech Republic, Dominican Republic, Ecuador, Guatemala, Honduras, Indonesia, Latvia, Malaysia, Mexico, Nigeria, Palau, Panama, Paraguay, Poland, Saudi Arabia, Solomon Islands, Swaziland, Thailand, and Vietnam. There are also participants nominated by Global Spatial Data Infrastructure Association (GSDI) member countries, which are recommended and sponsored by Ministry of the Interior. They are from Colombia, Ethiopia, Nepal, and Nigeria.

### 1. Geographical Information System and Land Management



Participants at National Land Surveying and Mapping Center

The seminar essentially focuses on geographical information system and its application, including issues of GIS's Applications in Urban Development, Land Administration, Disaster Monitoring, Land Cadastre, etc.

Four professors from local universities were invited to give lectures. Every participant was required to give his/her presentation which has relevance to his work



Visit Information Center, MOI



## 2. Knowledge-based Economy and City Competitiveness

The content evolved around the theme of knowledge-based economy and city competitiveness and included the following topics: Information Technology and Wise City, City Competitiveness and Marketing, Intelligent Transportation System and City Competitiveness and Sustainable Development in a City Context.

Four professors from local universities and research institutes were invited to give lectures and preside over country presentation. Every participant was required to give his/her presentation which has relevance to his work and in the areas pertaining to the theme of the training course. The participants' presentation proceeded in three half-days. In addition, the participants went on field trips, which are listed as follows: (1) Department of Urban and Rural Development, Taoyuan City Government to learn about urban planning through Lao-jie River renovation project; (2) Port of Taichung, Taiwan International Ports Corporation to learn about the development of Free Trade Zone Area and import/export

trading; (3) Central Branch, Land Department, Ministry of the Interior to learn about the development of High Speed Rail Taichung station and zone expropriation; (4) National Development Council to learn how it coordinates the implementation of major policies for economic, social, industrial, manpower, land and political governance; (5) Angel Life Pavilion of Taipei Expo Park to learn about how to apply high technology into daily life and visit Lin An Tai Historical House and Museum; (6) Department of Economic Development of Taipei City Government to learn how it develops its technology corridor, planning for bio-technology industry and consulting of small and medium enterprise for R&D service.

There were 22 participants from 22 countries, including Argentina, Brazil, Burkina Faso, Colombia, Czech Republic, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Indonesia, Jordan, Kyrgyz, Latvia, Mexico, Mongolia, Myanmar, Nicaragua, Nigeria, Paraguay, Poland, Saint Lucia, Swaziland, Thailand, and Vietnam.



Participant at HSR Taichung Station



Visit National Development Council

## Projects Commissioned by the Other Countries

### Training Projects Commissioned by the Ministry of Agriculture, Kingdom of Saudi Arabia

This was the tenth year that the Kingdom of Saudi Arabia commissioned the Center to conduct training courses related to technology exchange and bilateral cooperation regarding agricultural aspect. The six courses were conducted this year as following: (1) Shrimp Diseases Management (2) Livestock Disease Diagnosis (3) Agricultural Extension (4) Agriculture Development (5) Organic Agriculture (6) Veterinary Laboratories.

The first three courses were conducted from April 12 through 25. The other three courses were from November 8 through 21. All six courses were 12 days in length. The Center accommodated 29 officials from the Ministry of Agriculture, Kingdom of Saudi Arabia. The courses comprised classroom lectures, laboratory practice and official visits. From classroom lectures and

laboratory practicum, it was hoped that the participants were able to absorb the knowledge and experience shared by lecturers and researchers. These in turn were hoped to become useful reference for the participants and help throw some light on related issues facing their country in the respective areas.

The Center also arranged for the participants to visit a number of government agencies and research institutes. These visits offered the participants an opportunity to gain some first-hand knowledge on the development in Taiwan in these areas and exchange ideas and views with researchers and officials that hosted these visits.

## 1. Shrimp Diseases Management

The training course was designed by Dr. Tzyy-Ing Chen, Researcher and Chief of Tungkang Biotechnology Research Center (TBRC), Fisheries Research Institute (FRI), Council of Agriculture (COA). It was composed of two portions: the first portion was mainly conducted at TBRC, including the following components: biosecurity in marine shrimp culture, SPF marine shrimp hatchery technology, SPF marine shrimp grow out technology, utilization of probiotic bacteria, herb medicines and antibacterial agents in disease control of marine shrimp, PCR



Visit Tungkang Biotechnology Research Center

The official visit included the shrimp farms, research institutes and biotechnology research centers to gain some first-hand knowledge of and insight of Taiwan's experience in field work, its current project and cases. These visits included Shrimp Farms at Pingtung County to learn inland shrimp farm management and biofloc technology; Aquatic Animal Germplasm Center, Eastern Marine Biology Research Center (EMBRC) to learn aquatic animal germplasm center; Aquaculture Biotech Research Department, Hualien Factory, Taiwan Fertilizer Corporation for shrimp culture with deep sea water; Aquaculture Department, King Car Biotech Corporation to learn bio-secured environment.



Visit Aquaculture Department, King Car Biotech Cooperation

diagnostic technology in disease of marine shrimp. Some shrimp disease researcher and experts were invited to lecture on the topics mentioned above.

## 2. Livestock Disease Diagnosis

The training course was designed by Shiow-Lian Jeng, Deputy Director General of Animal Health Research Institute (AHRI), COA. It consisted of two major portions: the first portion, mainly taking place at AHRI, focusing on animal disease diagnose. It dealt with the following subjects: rabies diagnosis, animal necropsy, virological, serological and PCR diagnostic for poultry disease, bovine ephemeral fever diagnosis and prevention, Bovine diseases- diagnosis and prevention of FMD.



Participants at Animal Drugs Inspection Branch, AHRI

surveillance; AHRI aquatic laboratory located in Ping-tung Agricultural Biotechnology Park for industry clusters in PABP; College of Veterinary Medicine of NCHU to learn disease monitoring in ruminant animals; Taichung Branch Bureau of Animal and Plant Health Inspection and Quarantine (TCBAHIQ) for practice and management of laboratory for animal quarantine inspection; Animal Drugs Inspection Branch of Animal Health Research Institute for animal drugs assay system in Taiwan, and School of Veterinary Medicine, National Taiwan University for Zoonoses Research center of NTU.



Visit Taichung Branch, BAPHIQ

The official visit included National Chung Shin University (NCHU) for famer market; National Pingtung University of Science and Technology, Department of Veterinary Medicine for poultry disease



### 3. Agricultural Extension

The course was designed by Ms. Zou-Nan Chou, Deputy Director-General of Farmers' Services Department, COA. It consisted with numerous official field trips, includes visiting agricultural extension departments, farmer associations and agriculture product publicity and manufacturing (P&M) teams.

The official visit included Council of Agriculture (COA), for learning organizations

tea product; Flying Cow Ranch for learning leisure agriculture development strategy, operation and management technique; Taichung District Agricultural Research and Extension Station (TDARES), COA for agricultural research development and transfer; Changhua County Farmers' Association for agricultural extension in a county level; Tianwei Township Farmers' Association for learning its P&M Team and floral marketing; NCHU for NCHU organic



Participants at Taiwan Orchid Plantation

related to Taiwan agriculture extension, services for famers, human resources training program and young farmers counselling strategy; Taoyuan City Farmers' Association for learning farmers' association and on site administration work; Bade District Vegetable Production and Marketing Team for meeting Shenong Agriculture Award winning farmer- Mr. Chuan-Tien Li and learning marketing strategies he uses for vegetable product; Shang-Hao Tea Company for meeting Mr. Chun-Jung Liao, case of young farmers that revitalized agriculture in



Visit Longtan District Tea Industry & Young Farmers Union

farmer market; Taiwan Orchid Plantation for orchid plantation technique; Tsou-Ma-Lai Farm for leisure farm operation; Tainan District Agricultural Research and Extension Station, COA for agricultural experiment research and extension; Kaohsiung District Agricultural Research and Extension Station for tropical fruit trees sustainable development strategy; Meinong District Farmers' Association for case of young farmers in agriculture P&M team, and Yanchao District Farmers' Association for operation of fruit P&M.

### 4. Agricultural Development

The course was designed by Dr. Tzu-Yu Fu, Chief of Planning Division, COA. It consisted of two major portions: the first portion was conducted at the Center and Taiwan Agricultural Research Institute (TARI), and the second portion was composed of field trips. The first portion was devoted to agriculture sustainable development policy, innovative technology, agriculture environment control and new cultivation technology, Taiwan plant genetic

vegetable and fruit tree; Loga Solar Cooperation for LED plant factory and solar series product; Yung-juang Grow Seedling Station for vegetable and fruit seed industry; Aogu Wetland and Forest Park for wetland conservation and ecotourism; Green Produces Technology Cooperation for learning intelligent agricultural alliance and ICT application; Kuan-Hsing Tea Farm and Sung-Ming Organic Tea Farm for agricultural field of ecological monitoring network, and



Participants at Fengshan Branch of TARI

resources conservation, vegetable plant factory technology, management of seed bank, agriculture ICT, telemetry in agricultural research institute and GIS application in agricultural monitoring, agriculture ecosystem and village tourism.

The official visit included the following agriculture development associations and research institutes: Fengshan Tropical Horticultural Experiment Branch, TARI, COA for quality fruit tree industry; Yungling Shanlin Organic Agriculture Park for quality



Visit YunglingShanlin Organic Agriculture Park

Chu-Nan Seashore Windbreak Forest for learning ecology and marine leisure area development.



## 5. Organic Agriculture

The training course was designed by Ms. Dong-Chong Hsiou, Deputy Director General of International Affairs Department, COA. It was composed of two portions. The first portion was mainly conducted at the Center, including the following components: international development and digitalization of organic farming in Taiwan, nutrient management, diseases control, market and regulation, insect control, development profile in Taiwan.



Visit Organic Papaya of Nungyu Organic Farm

The official visit, the second portion, included following research institutes to gain some knowledge and insights into Taiwan's organic farming status, its current research and real cases. These visits included Taiwan Banana Research Institute for organic banana production management; Fengshan Tropical Horticultural Experiment Branch (FTHEB) for grafting technique of organic leaf vegetable; The World Vegetable Center



Participant at Organic Vegetable of Town-South Farm

(AVRDC) for production technologies of organic farming; Nungyu Organic Farm for disease and pest controls of organic papaya; Yang Ge Organic Farm for water management of organic melon; Wang Kuo-Chou Farm for post-harvest handling of organic red pitaya, and Town-South Organic Vegetable Farm for soil management and nutrient supply of organic vegetable.

## 6. Veterinary Laboratories

The course was designed by Dr. Chien Tu, Fish Health Laboratory, Biological Research Division, Animal Health Research Institute (AHRI). It consisted of two major portions: the first portion was conducted at AHRI, and the second portion was composed



Visit Animal Hospital of National Pingtung University

of field trips. The first portion was devoted to biosafety and biosecurity management, quality management in veterinary testing laboratories, laboratory accreditation and quality control, manufacture and examination of live goat pox vaccine, production of bovine ephemeral fever inactivated vaccine, virological, serological and PCR diagnostic techniques for poultry disease.

The official visit included the following veterinary laboratory related universities, associations and research institutes: Department of Veterinary Medicine, National Pingtung University of Science and Technology for understanding poultry

disease surveillance and laboratory management; Pingtung Agricultural Biotechnology Park for introduction on industry clusters in PABP; Kaohsiung Branch Bureau of Animal and Plant Health Inspection and Quarantine, COA for quarantine of immigration animals and plants in Kaohsiung International Airport; Kaohsiung City Animal Protection Office for animals disease diagnosis and monitoring; Taichung Branch Bureau of Animal and Plant Health Inspection and Quarantine, COA for practice and management of laboratory for animal quarantine inspection; Agricultural Chemicals and Toxic Substances Research Institute, COA for role of veterinarians in the



Participant at Kaohsiung City Animal Protection Office

tests of applied toxicology; Animal Drugs Inspection Branch, AHRI for animal drugs assay system in Taiwan, and School of Veterinary Medicine, NTU for understanding Zoonoses Research Center.