New association to foster work of international agricultural research centers

Nine institutes to collaborate for flexible, rapid response to poverty and malnutrition

The new Association of International Research and Development Centers for Agriculture (AIRCA) was launched on 2 March 2012 at the headquarters of the Food and Agriculture Organization of the United Nations (FAO) in Rome, Italy under the auspices of the Global Forum for Agricultural Research (GFAR). Chaired by Trevor Nicholls, CABI Director General, with AVRDC Director General Dyno Keatinge as Vice-Chair, the new association will serve as a platform for the nine founding member institutes to make a vigorous, combined impact on the elimination of global poverty and malnutrition.

With their global reach and well-developed networks of country partners in the Americas, Africa and the Asia-Pacific, AIRCA associates (see page 3) have particular strengths in helping countries in the developing world build their own agricultural research and development capacity. All nine have a historical track record of successful research outcomes that have been scaled up to development impact at landscape and regional levels. Representation at the regional level provides AIRCA with the diverse
public and private sector linkages necessary to plan, develop and execute research with strong local support and a high probability of attaining sustainable development outcomes.

For decades, AIRCA associates have helped farmers in the field overcome the difficulties they experience in producing good crops in troublesome niche environments. The germplasm and diagnostic skills AIRCA associates provide assist poor farmers in their daily confrontations with harsh climates, pest and disease outbreaks, erratic input supply chains, and weak policy and market structures.

AIRCA members’ extensive competence in crops with high economic, social, nutritional and ecological value complements the work of the Food and Agriculture Organization (FAO) and the Consultative Group on International Agricultural Research (CGIAR) in staple crops. “A strong orientation toward problem solving at a system level, rather than a focus on a single commodity, grounds AIRCA’s research and development actions in the day-to-day challenges experienced and articulated by the poor farming community in the developing world,” said Dyno Keatinge.

AIRCA is poised to address complex and rapidly evolving problems such as global climatic uncertainty and widespread malnutrition through its genebanks, from which material is made available to partners as freely and effectively as possible. By planting varieties suited to specific agroecological conditions, farmers can create the intensified yet sustainable climate-smart landscapes necessary to feed and nourish the world.

Because they are relatively small in size and have uncomplicated governance and management structures, AIRCA associates can respond to agricultural problems quickly and efficiently, combining and re-combining as necessary with a diversity of partners to provide solutions to development problems. Strong working relationships with other major players such as the FAO, the CGIAR Centers, the academic community and the private sector worldwide offer additional avenues to contribute expertise to assist the poor and disadvantaged.

Mitigating the impact of flooding, drought, salinity, soil infertility, and pests and diseases on agriculture, human diets, health and prosperity motivates AIRCA to reach out to donors and partners as a unified, action-oriented group. Together, all can contribute to the attainment of the Millennium Development Goals.

— Dyno Keatinge
AIRCA associates

**AVRDC – The World Vegetable Center**
Alleviation of poverty and malnutrition in the developing world through the increased production and consumption of nutritious and health-promoting vegetables.

**CABI**
Improves people’s lives by providing information and applying scientific expertise to solve problems in agriculture and the environment.

**Tropical Agricultural Research and Higher Education Center (CATIE)**
Contributes to rural poverty reduction by promoting competitive and sustainable agriculture and natural resource management, through higher education, research and technical cooperation.

**Crops for the Future (CFF)**
Helps partners to generate, synthesize and promote knowledge on neglected and underutilised crops for the benefit of the poor and agricultural sustainability.

**International Center for Biosaline Agriculture (ICBA)**
Helps water-scarce countries improve the productivity, social equity and environmental sustainability of water use through an integrated water resource systems approach, with special emphasis on saline and marginal quality water.

**International Centre for Integrated Mountain Development (ICIMOD)**
Enables and facilitates the equitable and sustainable well-being of the people of the Hindu Kush-Himalayas by supporting sustainable mountain development through active regional cooperation.

**African Insect Science for Food and Health (icipe)**
Helps alleviate poverty, ensure food security and improve the overall health status of people in the tropics by developing and extending management tools and strategies for harmful and useful arthropods, while preserving the natural resource base through research and capacity building.

**IFDC**
Focuses on increasing productivity across the agricultural value chain in developing countries by the creation and transfer of effective and environmentally sound crop nutrient technology and agribusiness expertise.

**International Network for Bamboo and Rattan (INBAR)**
Improves the well-being of the producers and users of bamboo and rattan within the context of a sustainable bamboo and rattan resource base.
The Center in the news

A symposium on safe pest management hosted by the Abu Dhabi Food Control Authority in Al Ain, Abu Dhabi on 12 March 2012 received extensive coverage in the United Arab Emirates (UAE). AVRDC Entomologist Srinivasan Ramasamy spoke on management of thrips, whiteflies, and aphids on vegetables in greenhouses, and noted pesticide use is high in UAE at 9.86 kg/ha compared with 0.5 kg/ha in India, 1.5 kg/ha in the USA, and 19 kg/ha in Europe. “Alternative pest management strategies are needed to prevent adverse effects on human health and the environment caused by pesticide use,” Srini said.

Recent publications


http://www.actahort.org/books/911/911_53.htm


Welcome

Sorawit Limsiriwat joined AVRDC East and Southeast Asia on 1 March 2012 as an Information Technology and Communication Assistant. Khun Ball, as he is fondly called, has a bachelor’s degree in Information Communication and Technology. He will be responsible for providing computer and multimedia equipment support services, maintaining the East and Southeast Asia and AARNET section on AVRDC’s website, and producing print and electronic communications materials in close cooperation with the Regional Director and AVRDC headquarters. Khun Ball will further assist in creating a geo-database for AVRDC’s new project on urban and peri-urban vegetable production and marketing systems in the Greater Bangkok area. Contact Sorawit at <sorawit.limsiriwat@worldveg.org>.

Narin Senapa joined AVRDC East and Southeast Asia on 16 March 2012 as a Vegetable Research and Training Assistant. Narin holds an MSc in Agriculture-Horticulture from Chiang Mai University; previously he worked in customer business services for an agriculture cooperative bank, and in the private seed sector as a breeder, farm and marketing manager. He will contribute to the effective implementation of training, research and development projects in East and Southeast Asia by providing scientific and technical support to AVRDC’s senior scientists and the Regional Director. Contact Narin at <narin.senapa@worldveg.org>.

Omary Ijumaa Mbwambo from Jomo Kenyatta University of Agriculture and Technology (JKUAT), Nairobi – Kenya, joined AVRDC’s Regional Center for Africa (RCA) in January 2012 to work for one year on research conceptualization, design, data collection and management, data analysis and report writing under the supervision of Vegetable Breeder Chris Ojiewo, and to carry out a study on amaranth to evaluate superior lines with potential in grain yield and dual-purpose lines with potential in both leaf and grain yield in Northern Tanzania. Omary worked at RCA from 2004 to 2010 as a Research Assistant/Farm Manager before joining JKUAT. Contact Omary at <omary.mbwambo@worldveg.org>.

Farewell

Somchit “Oi” Pruangwitayakun, Research Assistant for Vegetable Crops based at AVRDC East and Southeast Asia, has left the Center after 15 years of dedicated service to have more time for her family. Oi was involved in coordinating AVRDC’s regional and international training programs, and implemented various projects, particularly those dealing with indigenous vegetables. She was featured on Thai TV demonstrating vegetable grafting techniques. We wish Oi all the best in her future endeavors and will surely drop by her restaurant offering specialty dishes from Northern Thailand.
Several groups of visitors came to headquarters on 9 March 2012. Yin-fu Chang and Plant Pathologist Jaw-fen Wang welcomed Senator-at-Large Peter M. Christian, Vice Speaker Berney Martin, Senator Dohsis Halbert, and Senator David W. Panuelo from the Federated States of Micronesia, accompanied by Yu-chi Wang of MOFA. The legislators toured the Demonstration Garden and met with staff. Chiaki Konishi and Hiromi Ogasawara of the Nippon Del Monte Co., Japan, discussed processing and fresh market tomato with Peter Hanson and Chee-wee Tan of Tomato Breeding, and met with Roland Schafleitner, Head of Molecular Genetics, Lawrence Kenyon and Wen-shi Tsai from Virology, and Jaw-fen Wang and Wallace Chen from Bacteriology. A delegation of five Rotary Club members from Latvia and Sweden, accompanied by six Rotarians from local clubs in Yong Kang, Nanke, and Chihkan received a briefing by Head of Communications and Information Maureen Mecozzi and a tour of the Demonstration Garden with Greg Luther and Mandy Lin of Global Technology Dissemination.
Giving credit where credit is due

In a recent catalog, Clover Seed Co., Ltd., Hong Kong graciously credited the use of AVRDC genetic material in its breeding programs, and also recognized the support it has received from Center scientists. Clover is a member of the Asia and Pacific Seed Association and has had close contact with AVRDC for several years. Many seed companies in Asia and elsewhere use AVRDC germplasm and breeding lines to develop improved varieties, but not all are as thoughtful as Clover in acknowledging the source. Thanks, Clover!
In Central Asia and the Caucasus average vegetable yield is about 20 t/ha—far below the potential of what countries in the region are capable of producing with improved varieties and better production methods.

Only a few institutes and universities conduct research on vegetable crops, and many young specialists have sought collaborations with AVRDC to study promising germplasm and techniques for breeding new varieties. The Center’s efforts in the region over the past several years have led to the release of new and improved varieties in Kazakhstan (2 hot pepper, 1 sweet pepper) and Uzbekistan (3 vegetable soybean, 4 mungbean, 1 yard-long bean, 1 leafy cabbage, and 2 hot pepper).

To foster quality research throughout the region, AVRDC’s Central Asia and the Caucasus office joined with the Uzbek Research Institute of Vegetables, Melon Crops and Potato (UzRVMCP) and the CGIAR Program Facilitation Unit (PFU) to host a training course on “Breeding methods and high effective technologies in vegetable production” from 12-15 March 2012 in Tashkent, Uzbekistan. Ten specialists working in research institutes and universities in Kazakhstan and Uzbekistan attended the course.

**Ravza Mavlyanova**, AVRDC Regional Coordinator for Central Asia and the Caucasus, **Zakir Khalikulov**, Deputy Head of PFU and **Rafik Khakimov**, Director of UzRVMCP officially opened the training. Ravza and lead researchers from the Uzbek Research Institute of Genetics and Plant Experimental Biology (RIGPEB), UzRVMCP; Tashkent State Agrarian University (TSAU) and Ecology, an NGO, served as resource persons on 15 topics.

Participants reported on the activities of their institutes and their own research work. The group was then introduced to AVRDC – The World Vegetable Center’s scope of activities, including the genebank and the conservation and use of germplasm to develop improved varieties; breeding methods, including molecular tools and genetically modified organisms; primary and elite seed production methods; and vegetable cultivation in greenhouses and in the open field.

In practical sessions the course participants learned how to graft tomato, pepper and melon. Participants visited UzRVMCP and were introduced to the institute’s history of vegetable breeding and its current research and collaboration projects.

All participants expressed interest in joining regional variety trials, and in adopting and adapting mature technologies and other innovations.
Robert Holmer, Regional Director East and Southeast Asia, Sheila de Lima, Administrative and Training Officer, and Narin Senapa, Vegetable Research and Training Assistant were invited by the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) to attend the UN World Water Day 2012 celebrations at the United Nations Conference Centre in Bangkok under this year’s theme “Water and Food Security.”

Robert, Sheila and Narin listened to the message of United Nations Secretary General Ban Ki-moon, delivered by Shun-ichi Murata, Deputy Executive Secretary of UN ESCAP, which focused on the importance of water to achieve food and nutrition security. Other keynote speeches were given by Michael Yates, Mission Director of the United States Agency for International Development Regional Development Mission for Asia, Hiroyuki Konuma, Assistant Director-General and Regional Representative for Asia and the Pacific of the United Nations Food and Agriculture Organization, and Phoovanet Thongrungroj, Executive Advisor in Operation and Maintenance of the Royal Irrigation Department, Thailand.

At a poster exhibit Robert interacted with the keynote speakers and informed them about AVRDC activities that contribute to the objectives of World Water Day, such as the promotion of low-cost microirrigation systems, mulching, and other approaches to conserve precious water resources.

UN World Water Day
http://www.unwater.org/worldwaterday/
Vegetable industry forum in Cambodia

On 28 February 2012 AVRDC Director General Dyno Keatinge delivered the keynote address “The vegetable sector in Southeast Asia: Key learnings for the Cambodian industry” at the Cambodia Vegetable Industry Forum in Phnom Penh in the presence of Penny Richards, Australian Ambassador to Cambodia and Chan Sarun, Minister of Agriculture, Forestry and Fishery.

The forum was hosted by the Royal Government of Cambodia, represented by the Ministry of Agriculture, Forestry and Fisheries, with financial assistance from the Australian Centre for International Agricultural Research (ACIAR), the Australian Government Overseas Aid Program’s Cambodia Agricultural Value Chain Project and SNV-Netherlands Development Organization as an initiative of the ACIAR project “Strengthening the Cambodian and Australian vegetable industries through adoption of improved production and postharvest practices.”

Robert Holmer, AVRDC Regional Director East and Southeast Asia and Peter Hanson, AVRDC Global Theme Leader - Breeding, attended the event, where several posters on AVRDC activities in the above-mentioned ACIAR project were displayed. Dyno, Robert and Peter used the opportunity for a closer interaction with Les Baxter, ACIAR Research Program Manager for Horticulture and Suzie Newman of the New South Wales (NSW) Department of Primary Industries, who chaired the forum’s Organizing Committee. The AVRDC trio greeted International Vegetable Training Course alumni Chandary Keo, country representative of East-West Seed Company, and Keo Chenda, Agriculture Advisor of the Cambodian Agricultural Value Chain program.

Prior to the forum, the AVRDC representatives attended a meeting at the Cambodian General Directorate of Agriculture with So Khan Rithykun, Director General, Chan Phaloeun, Deputy Director General, Ho Puthea, Director of Horticulture Division, and Heng Chhun Hy, Deputy Director of the Department of Plant Protection, to discuss strategies for enhanced involvement of AVRDC in Cambodia. This was followed by a courtesy call to Ouk Makara, Director of the Cambodian Agricultural Research and Development Institute, where at present a trial to evaluate advanced AVRDC tomato and chili lines is being conducted.

Dyno and Robert also met with Dennis Lesnick, Director/Chief of Party of FINTRAC, United States Agency for International Development (USAID) contractor of the Cambodia HARVEST program, and with Ronit Kirshner Gerard, Agriculture & Environment Officer of USAID Cambodia’s Office of Food Security & Environment Office for an update on USAID initiatives in Cambodia.
Alerting Cameroon to the value of vegetables

On 2 March 2012, Esimi Menye, newly appointed Cameroon Minister of Agriculture and Rural Development and Kanayo F. Nwanze, President of the International Fund for Agricultural Development (IFAD) visited the International Institute of Tropical Agriculture (IITA) campus in Yaoundé, Cameroon following the successful implementation of the Roots and Tubers Market Driven Development Program. AVRDC – The World Vegetable Center is based at the IITA campus. During the visit, Takemore Chagomoka, AVRDC Liaison Officer for Cameroon and Seed Business Specialist, took the opportunity to update the Minister of Agriculture and IFAD President on the Center’s work, and explored possible areas for collaboration to increase vegetable production and consumption to generate income for farmers and improve the health of the country’s citizens. The Center and other international research institutions put up display booths to showcase technologies and research results.