

# fresh

News from AVRDC – The World Vegetable Center



March 25, 2011

[www.avrdc.org](http://www.avrdc.org)

23 new  
vegetable  
varieties  
released in  
Mali

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## Vegetable gardening makes headlines

Public figures and celebrities promote vegetables as part of a healthy lifestyle



US First Lady **Michelle Obama** works with kids from Washington's Bancroft Elementary School to break ground for a White House vegetable garden.

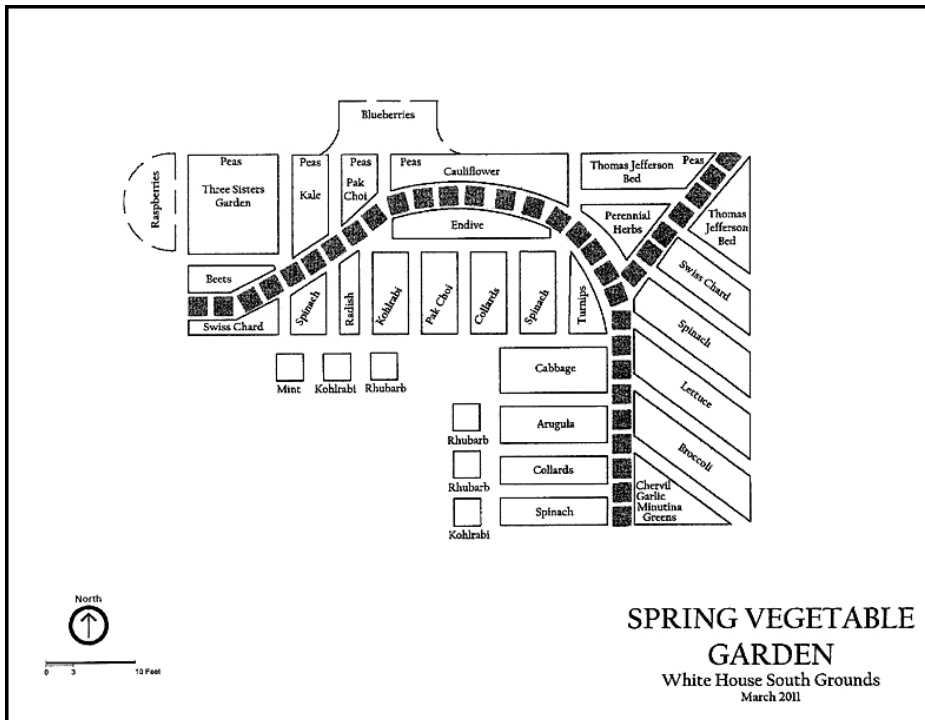
Courtesy The White House /  
Joyce N. Boghosian

As **Michelle Obama**, First Lady of the United States, began double-digging the raised beds on the South Lawn of the White House for spring planting last week, she took the opportunity to announce she will soon publish a book about growing fruit and vegetables at

home. The book will offer gardening tips and advice on healthy eating and feature some of the Obama family's favorite recipes.

The most famous "backyard garden" in the United States has yielded about 1000 kg of fresh,

organically grown fruit and vegetables since it was established in March 2009. It also has produced a bumper crop of good publicity about the benefits of vegetable consumption—a message that cannot be repeated often enough in a country struggling with



(above) Sarah Geronimo, a Filipino pop singer who is a spokesperson for the Oh My Gulay! Campaign, holds a bouquet of *kamote* -- sweet potato leaves. (left) The plot plan for the 2011 Spring Vegetable Garden at the White House allows plenty of room for leafy greens.

rapidly rising rates of obesity and other chronic diseases. “Small lifestyle changes can achieve big health results,” said Mrs. Obama on the White House blog, where she promotes locally grown food, support for local farmers’ markets, and the creation of community, school and urban gardens.

In most countries, developed or developing, vegetable consumption is much lower than it should be for good health. Recommendations for daily consumption—5 to 9 servings, about 400 g—go unheeded, often due to lack of supply or lack of access. Competition from processed foods is another barrier to better health; starch-based diets and high fat snacks and fast food leave little room for vegetables on the plate.

Preference plays a role as well. Although there are 1500-2000 edible vegetable species worldwide

(and more than 7000 edible plants), palates in many places choose from a very limited palette of 20 or so vegetable types. This lack of diversity in diets often leads to micronutrient deficiencies and dietary imbalances.

Humble vegetables need a little star power to claim their rightful place in the human diet. The Philippines, for instance, recently launched the **Oh My Gulay!** (OMG!) initiative to promote greater vegetable consumption among children and young adults. Popular musicians, actors, and sports figures carry the message in print, TV, and online media. The Center was instrumental in encouraging **Sen. Edgardo J. Angara** to begin the campaign to bring more vegetables to the table in the Philippines.

One out of every four Filipino preschool children is

malnourished; the OMG! campaign aims to get school-age kids involved in planting, growing, and harvesting vegetables in school gardens and eating those vegetables at school and at home.

Mrs. Obama, frequently photographed in the garden with a rake or shovel in hand, is a highly visible advocate for the global effort to halt micronutrient malnutrition by increasing vegetable consumption.

## Learn more

*Inside the White House: The Kitchen Garden*

[http://www.youtube.com/watch?v=aVpEr3kfWjc&feature=player\\_embedded#at=15](http://www.youtube.com/watch?v=aVpEr3kfWjc&feature=player_embedded#at=15)



## Joint effort to promote grain legume research

Five international agricultural research centers working on grain legume crops —**AVRDC – The World Vegetable Center**, **International Center for Tropical Agriculture (CIAT)**, **International Center for Agricultural Research in Dry Areas (ICARDA)**, **International Institute of Tropical Agriculture (IITA)**, and **International Crops Research Institute for the Semi Arid Tropics (ICRISAT)**—met from 10-13 March in Dubai, UAE to revise a joint proposal for a **Consultative Group on International Agricultural Research (CGIAR)** Research Program (CRP). **Warwick Easdown**, Principal Scientists, represented AVRDC at the meeting.

The CGIAR's grain legume improvement effort is focused on 11 different legume crops. Meeting participants sought to strengthen the rationale for a grain legumes research program based on the comparative advantages of these crops for reducing poverty, hunger, malnutrition/ill health, and environmental degradation across all agroecosystems where these crops fit. Program thrusts will be built around these four targets.

The centers involved will gain many advantages by working together on key constraints and opportunities, including genetic correspondence (synteny) between genes for disease, insect and stress resistance, yield and other traits; geospatial mapping of target environments and climate change-



legume interactions; socioeconomic and value-chain modeling; and seed systems among others. The proposal will be submitted to the CGIAR Consortium Board in May.

## The Center in the news



In her “Nourishing the Planet” blog, **Danielle Nierenberg** of the **Worldwatch Institute** once again noted the vital work of AVRDC – The World Vegetable Center in increasing vegetable production and consumption in Africa, this time in light of rising global food prices. The Center's efforts in developing and disseminating improved vegetable lines, promoting nutritious indigenous vegetables such as amaranth and African eggplant, and building networks to strengthen Africa's vegetable seed sector were highlighted in the institute's *State of the World 2011* report, in a chapter written by AVRDC'S **Abdou Tenkouano**, Director, Regional Center for Africa.

<http://blogs.worldwatch.org/nourishingtheplanet/>

## Visitors



(left) **Jack de Wit**, Business Support Research and Development, and **Martijn Eggink**, Pepper Breeder of **Rijk Zwaan**, a multinational seed company with headquarters in the Netherlands, visited AVRDC on 22 March 2011 to discuss a potential project on begomoviruses. The visitors met with AVRDC Director General Dyno Keatinge, Virologist Lawrence Kenyon, Tomato Breeder Peter Hanson, Pepper Breeders Susan Lin and Jin Shieh, Pathologists Jaw-Fen Wang and Zeke Sheu representing Mycology, Grants Manager Annelie Öberg and Genebank Manager Andreas Ebert.

## Farewell

**Jim Fu Mou-sen**, (center, holding a gift from staff) Purchasing Officer in Administrative Services, retired from the Center on 23 March 2011 after 36 years of service. During his long career Jim helped colleagues obtain the materials and services necessary to conduct their research, ensured all purchases provided the best value for money, and kept the Center operating with smooth efficiency. Jim's quiet, calm, and gracious presence will be missed. Best wishes, Jim!



With the conclusion of the Vegetable Breeding and Seed Systems Project (vBSS), **Benjamin Rakotaorisoa**, vBSS Project Liaison Officer for Madagascar, will leave the Center at the end of March 2011. Benjamin organized trials of selected AVRDC vegetable lines and built partnerships with local seed producers to promote improved varieties. We thank Benjamin for his contributions to the project, and wish him best of luck in his future undertakings.

## Welcome (back!)



**Joko Mariyono** has been appointed as the Project Site Coordinator (Indonesia) to implement a research and development project sponsored by the United States Agency for International Development (USAID) in Indonesia. He will be based in Malang, East Java, Indonesia, and report to Greg Luther, Principal Investigator. Joko previously worked on the Center's Chili IDM (Integrated Disease Management) project funded by the Australian Centre for International Agricultural Research (ACIAR).



## Where water is used well



(l) Small pumps draw water from drainage canals. (r) Vegetables growing in Hanoi's backyard.

**Water for the City: Responding to the Urban Challenge is the theme for the United Nation's 2011 World Water Day (22 March)**



Using two watering cans suspended from a shoulder board help farmers make the most of each trip to the water source.



**AVRDC economist Madhusudan Bhattarai took a look at how urban vegetables farmers in Vietnam face the challenge of water scarcity.**

Peri-urban vegetable farming around Hanoi, Vietnam provides employment to large numbers of people who supply vegetables—and nutrition—to city residents. Growing vegetables close cities minimizes transportation costs, helps maximize water and resources, and reduces the urban carbon footprint. A 2006 AVRDC study found that more than 50% of Hanoi's food requirements are met from domestic production within the city, equivalent to importing more than 600,000 t of food from other provinces.

Water scarcity threatens to curtail this

valuable urban service. Hanoi's innovative farmers are exploring new water management techniques, including effective reuse of drainage water and other efficient ways to manage on-farm water. Peri-urban vegetable production generates higher returns per unit of land than cereals, and Hanoi's growers are particularly adept at raising leafy vegetables. These photos were taken during a socioeconomic survey of farmers' use of pesticides and chemicals in peri-urban vegetable farming in Hanoi, January 2011.

## Networking with partners in East and Southeast Asia

### Association of Asian Confederation of Credit Unions



(l to r): Ranjith Hettiarachchi, Robert Holmer, Steve Kebasen, Elenita V. San Roque

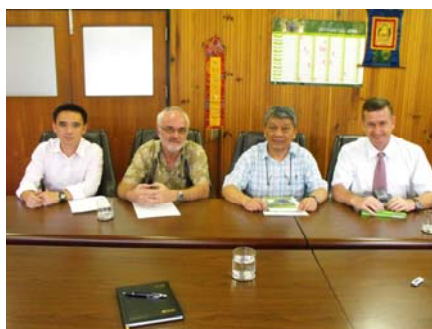
On 4 March 2011, East and Southeast Asia Regional Director **Robert Holmer** and assistant **Steve Kebasen** met with the management of the **Association of Asian Confederation of Credit Unions (AACCU)**, represented by **Ranjith Hettiarachchi**, Chief Executive Officer and **Elenita V. San Roque**, Manager of Member Services, in Bangkok. AACCU is a regional member-based organization of credit unions and cooperatives in Asia. Founded in 1971; to date it serves more than 21,947 credit unions with 38.1 million individual members in 26 Asian countries, with 34 affiliates promoting credit unionism, among them the Credit Union League of the Republic of China, Taiwan.

Aimed at improving the socioeconomic status of its membership through strong and thriving credit unions, AACCU promotes activities geared towards increased financial literacy to help their members become better resource managers. Because a significant number of AACCU's members gain their livelihoods from agriculture, the potential of

improving their health and economic status through an AVRDC-AACCU partnership were discussed. AVRDC's technical input and experience in vegetable production and marketing in Asia complements AACCU's expertise in training its members to become better financial managers.

Association of Asian Confederation of Credit Unions  
[www.aaccu.asia](http://www.aaccu.asia)

### RECOFTC - Center for People and Forests



(l to r): Steve Kebasen, Bernhard Mohns, Yam Malla and Robert Holmer at RECOFTC Office

On 9 March 2011, Robert and Steve met with **RECOFTC - Center for People and Forests** Executive Director **Yam Malla** and Senior Program Officer **Bernhard Mohns** at Kasetsart University's Bangkhen Campus. Founded in 1987 as the Regional Community Forestry Training Center for Asia and the Pacific (RECOFTC) to provide training on community forestry in Thailand, it has since evolved to serve the needs of countries throughout the Asia-Pacific region. RECOFTC builds the capacity of local communities to actively manage forests, thereby ensuring optimal social, economic, and environmental benefits.

Potential areas for collaboration between RECOFTC and AVRDC were identified, such as integrating vegetable production into agroforestry systems, classification of production and consumption practices of indigenous tree vegetables, and hill and bamboo drip irrigation production technologies.

RECOFTC - Center for People and Forests  
[www.recoftc.org](http://www.recoftc.org)

### Helen Keller International



(l to r): Aminuzzaman Talukder, Robert Holmer and Steve Kebasen at ESEA Office

**Aminuzzaman Talukder**, Country Director Cambodia and Regional Food Security Advisor for the Asia Pacific for Helen Keller International (HKI), visited AVRDC's Regional Office in Bangkok on 14 March 2011. HKI's nutrition programs, particularly dietary diversification, and homestead, community and school gardens complement AVRDC's mission. With a similar focus on food and nutrition security, it was agreed that HKI and AVRDC further explore possibilities for working together for increased impact in the region.

Helen Keller International  
[www.hki.org](http://www.hki.org)



## HortCRSP Workshop



On 9 March 2011, **Robert Holmer** and **Steve Kebasen** attended the preparatory workshop of the USAID HortCRSP (Horticulture Collaborative Research Support Program) exploratory project “*Market Oriented Sustainable Peri-Urban and Urban Garden Cropping System: A Model for Women Farmers in Thailand, Cambodia, and Vietnam*” at Kasetsart University. The project’s long-term goals are to develop strategies to promote a sustainable peri-urban and urban garden cropping enterprise system for small and minority women growers in the target countries. After the formal opening of the workshop by **Vichan Vichukit**, Dean of KU’s Faculty of Agriculture, **Dharmalingam Pitchay** and **Juan Carlos Diaz-Perez**, lead principal investigators from Tennessee State University and the University of Georgia, respectively, led the discussion on the planned activities of the one-year project. **Yingyong Paisooksantivatana**, **Pariyanuj Chulaka**, and **Pichitpra Kaewsorn** from Kasetsart University joined in the talks.



(top, l to r): Pichitpra Kaewsorn, Yingyong Paisooksantivatana, Vichan Vichukit, Juan Carlos Diaz-Perez, Dharmalingam Pitchay, Robert Holmer and Pariyanuj Chulaka

(center): Yingyong Paisooksantivatana (c) gave tokens to guests.

(bottom): USAID HortCRSP meeting

## HortCRSP

<http://hortcrsp.ucdavis.edu/main/24PeriUrban.html>

## Cucurbit breeder from Taiwan visits ESEA Thailand

**Cheng-Jung Hu**, Assistant Researcher from the **Hualien District Agricultural Research and Extension Station, Council of Agriculture, Taiwan**, visited AVRDC East and Southeast Asia from 14-20 March 2011 to learn more about the cucurbit breeding activities of AVRDC, **Kasetsart University**, and the private sector in Thailand.

After being welcomed by Regional Director **Robert Holmer** in Bangkok, **Narinder Dhillon**, AVRDC cucurbit breeder and research assistant **Supunsa 'Pla' Phethin**, brought Ms. Hu to the Research and Training Station in Kamphaeng Saen to see the AVRDC cucurbit breeding trials and discuss

the objectives and current status of the program. **Anyamanee Auvuchanon**, pumpkin breeder from Kasetsart University, facilitated a visit to KU's pumpkin breeding laboratory and discussions with KU scientists.

Ms. Hu visited two breeding stations of **East-West Seed Co.** in Suphanburi and **Chia Tai Seeds** in Kanchanaburi.

Further exposure trips brought her to **Talaad Thai**, Thailand's largest wholesale vegetable market as well as the Wolff Farm of **River Kawai International Food Industry** and **Wasana Melon Farm** located in Ayutthaya province. Before returning to Taiwan, Ms. Hu

thanked AVRDC's staff for a rewarding and fruitful trip and concluded, "The weather in Thailand is very hot and the people in AVRDC are warmhearted."



Left: Kasetsart University pumpkin breeding lab: **Anyamanee Auvuchanon** (r), **Cheng-jung Hu** (pink jacket), **Supunsa Phethin** (left, in black jacket), **Narinder Dhillon** (black jacket), **Dr. Lop** (third from right).



Right: **Cheng-jung Hu** (r) and **Supunsa Phethin** visit the **Talaad Thai** wholesale market.



## New varieties released in Mali



Three new okra varieties will diversify diets and improve nutrition in Mali: 'Sasilon,' 'Batoumambè,' 'Safi' (l to r).



Annex 1/Encadré 1, 2011

**Twenty-three improved vegetable varieties** developed from AVRDC – the World Vegetable Center lines were officially released by the **National Variety Release Office** in Mali on 8 March 2011 and published in Volume III of the *Catalogue Officiel Des Espèces et Variétés* maintained by the Institute of Rural Economy (IER), Mali's national institute for agricultural research.

These new releases—and nine varieties released in Tanzania last month— bring to **32** the number of vegetable varieties AVRDC and partners have introduced to Africa in 2011.

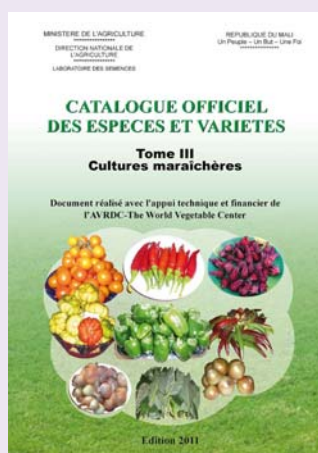
Congratulations to Onion Breeder **Albert Rouamba**, Vegetable Breeder **Sokona Dagnoko**, Seed Specialist **Ousmane Sanogo**, and Community Development Specialist **Theresa Endres** for their efforts to introduce good tasting, high yielding, pest- and disease-tolerant, and heat-tolerant vegetables for Mali's farmers and consumers.



**African eggplant 'L10'**: Yields 25-30 t/ha, has a slightly bitter taste favored by consumers, and can be eaten fresh or cooked.



Annex 1/Encadré 1, 2011



Species	No. of AVRDC lines	Variety Name
Amaranth ( <i>Amaranthus</i> sp.)	2	A2002, A2004
African eggplant ( <i>Solanum aethiopicum</i> )	2	Soxna, L10
Okra ( <i>Abelmoschus esculentus</i> )	3	Sasilon, Batoumambé, Safi
Onion ( <i>Allium cepa</i> )	2	Lafia, Founou-Founou
Roselle ( <i>Hibiscus sabdariffa</i> )	2	Samandah, L28
Hot pepper ( <i>Capsicum annum</i> )	5	Nafama, Nisondia, Bafarima, Demon F <sub>1</sub> , Beibehong 695 F <sub>1</sub>
Sweet pepper ( <i>Capsicum annum</i> )	3	Poivron Jan, Wassa, Séguifa
Tomato ( <i>Solanum lycopersicum</i> )	4	Bèbi yèrèyè, Kénéya, Nayéli, Konica

inside  
insight

# Development Opportunity in Diversity Initiative

**AVRDC – The World Vegetable Center and other stakeholders of the Global Forum on Agricultural Research (GFAR) recently prioritized the issue of agrobiodiversity as one of prime global importance. The International Treaty on Plant Genetic Resources in Food and Agriculture (ITPGRFA) recognizes the importance of agricultural research and contains special provisions for the exchange of information, transfer of technology and capacity building related to plant genetic resources.**



## Excerpts from the manifesto:

The visions of GFAR and ITPGRFA converge in the need to expand varietal conservation, exchange and use, and the fair sharing of benefits, to include a wide range of species that have local significance and in many cases global market potential. Both GFAR and ITPGRFA are keen to facilitate greater collaboration and synergies among the many programmes addressing these crops, a view that has been echoed through discussion with all those concerned about the future of these species.

Over recent years, regional initiatives and multi-partner international actions related to the International Year of Biodiversity have highlighted these links. There

is a strong desire for collaborative action in and between regions in order to achieve development impact at scale. Examples are the recently set-up frameworks biodiversity conservation and use in Africa and Asia.

To promote greater international synergy around this crucial agenda, GFAR, with the ITPGRFA Secretariat, held an initial meeting in Rome on 20-21 January 2011. This meeting brought together UN organizations, international research networks and institutions as well as civil society, all concerned with generating, accessing and using knowledge of these crops and with promoting their sustainable use and their value in development.



## inside insight

Through productive discussions, these diverse programmes agreed to form a collective movement, open to all and provisionally termed the Development Opportunity in Diversity Initiative, with the goal of collaborative action to strengthen the role and value of agrobiodiversity and its sustainable use in contributing towards development aims.

Through this meeting the potential importance of these crops was highlighted and three key development objectives, considered as pillars for action were identified:

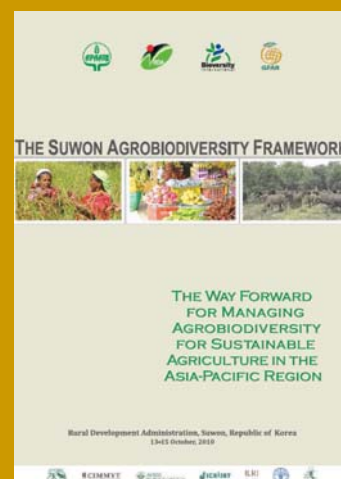
1. Nutrition and health – keeping traditional diets alive through the production of these crops, thus providing food security and a diet naturally rich in micronutrients.
2. The resilience of farming systems and environmental services at field or landscape level (e.g. to manage pests and diseases or maintain soil fertility).
3. Source of income for farmers, enabling market opportunities and value addition potential, especially for poor producers who have very little land.

We must take this unique opportunity to bring the ideas and the resources of currently fragmented initiatives together to enable each value and achieve greater development impact than any one could alone. In that perspective, a action plan was proposed:

1. Set up inclusive working groups to grow collaboration around each of the development pillars.
2. Organize a side event at the fourth session of the Governing Body of the International Treaty in March 2011 highlighting the agenda and its development linkages.
3. Identify and pursue appropriate events (e.g. Science Forum, 2011; Rio plus 20, 2012) to build collaborative actions that can achieve large scale development impacts.

All interested partners are invited to become involved in this collaborative action. For further details, contact the GFAR Secretariat:

**[gfaresecretariat@fao.org](mailto:gfaresecretariat@fao.org)**



Discussions at regional forums such as the **International Symposium on Sustainable Agricultural Development and Use of Agrobiodiversity in the Asia-Pacific Region**, 15-10 October 2010 in Suwon, Korea informed the **Development Opportunity in Diversity Initiative**. AVRDC Genebank Manager **Andreas Ebert** participated in the event, and also presented a paper on behalf of Deputy Director General – Research **Jackie Hughes**.