



20 April 2007



Africa is facing enormous water shortages if its agriculture does not become more water efficient

The Water Issue: Thinking Small on a Larger Scale

Up to 250 million people across Africa could be facing water shortages by the year 2020 as a result of global warming, and the output of water-fed agriculture could fall by 50 per cent during the same period, according to the latest international assessment of the impact of human-induced climate change.

If developing countries are to meet the UN Millennium Development Goals (MDG) to eradicate hunger, cropland must continue to expand and massive amounts of additional water will be required for food production, according to a study by the Stockholm Environment Institute, Sweden. However, experts say countries in savannah regions, such as sub-Saharan Africa, could reduce their water requirement through better water policies and more efficient irrigation techniques.

The researchers analyzed water requirements for food production in 92 developing countries – including India, Kenya and Nigeria – using data from the UN Food and Agriculture Organization. The study found that to meet food demands, the rate of cropland expansion would have to continue at a similar rate to the past 50 years – around 0.8 per cent each year. The expansion of agricultural land is a major cause of

damage to natural ecosystems. The authors say that to meet the MDG target, 50 per cent more fresh water – an additional 2,200 cubic kilometers per year – must be used for food production than at present.

The report puts the ball in the court of African countries to act. Observers like Hassan Moawad Abdel Al, former president of Alexandria's Mubarak City for Scientific Research and Technology Applications are already calling for an African observatory to monitor food and water production and identify relevant technologies and policies. Critics respond, that water saving technologies are generally not accessible or affordable to local rural communities in sub-Saharan Africa.

Read more on this issue on <http://www.scidev.net>

- UN hunger targets may increase water burden
<http://www.scidev.net/content/news/eng/un-hunger-targets-may-increase-water-burden.cfm>
- Report sees 'climate divide' between rich and poor
<http://www.scidev.net/content/news/eng/report-sees-climate-divide-between-rich-and-poor.cfm>

New Publications (Book & Articles) Received by the Library

AVRDC – The World Vegetable Center (2007). International conference on indigenous vegetables and legumes, 1st. Shanhua, Tainan : AVRDC – The World Vegetable Center. 162 pp.

Somta, P., Ammaranan, C., Ooi, P.A.C., Srinives, P. (2007). Inheritance of seed resistance to bruchids in cultivated mungbean (*Vigna radiata*, L. Wilczek). *EUPHYTICA*. v.155(1-2):47-55.

Black, M., Bewley, J.D., Halmer, P. (2006). The encyclopedia of seeds: science, technology and uses. Wallingford: CAB International. vii, 828 pp.

International Plant Nutrition Institute (2006). Crop nutrition powerpoint presentation on CD. Norcross, GA: International Plant Nutrition Institute. 1 CD.

International Plant Nutrition Institute (2006). Soil fertility manual & powerpoint slide set on CD. Norcross, GA: International Plant Nutrition Institute. 1 v. (various pagings)

Peng, J.C., Chen, S.K. (2006). Monitoring of tomato yellow leaf curl virus in the field and the transmission of virus by whitefly. TAINAN DISTRICT AGRICULTURAL RESEARCH AND EXTENSION STATION, RESEARCH BULLETIN. no.48:9-15.

Potash and Phosphate Institute (2006). International soil fertility manual & slides sets on CD-ROM. Norcross, GA: Potash & Phosphate Institute. 1 v. (various pagings)

Potash and Phosphate Institute (2006). Site-specific management guidelines & CD-ROM. Norcross, GA: Potash & Phosphate Institute. 1 v. (various pagings)

Sarnaik, D.A., Sharma, G.L., Verma, S.K. (2001). Ivy gourd: a perennial remunerative vegetable. *INDIAN HORTICULTURE*. v.46(3):22-23.

Publications noted in bold have been authored by AVRDC staff. Please send any publications that you have authored or co-authored to the library so that they can be added to our web-accessible collection.

New Popular Magazines Now Available in the Library

The Economist: France's chance – 14th- 20th April 2007

National Geographic: India's shadow city: Dharavi – May 2007

PC World: Best free stuff – May 2007

Time: 23 April 2007



Recommended Web Link of the Week:

International Food Information Council (IFIC) Foundation

IFIC – The mission of the foundation is to communicate science-based information on food safety and nutrition to health and nutrition professionals, educators, journalists, government officials and others providing information to consumers. IFIC is supported primarily by the broad-based food and agricultural industries.

Please visit <http://ific.org/about/index.cfm>

- Source: Fang-chin Chen/Library Services Unit

News from Africa

Travel

Dr. Detlef Virchow, 17–20 April, to visit the Sokoine University of Agriculture in Morogoro, Tanzania, to meet and discuss with the heads of the Departments of Crop Science and Production, Agricultural Economics and Agribusiness, and Food Science and Technology; to meet the Vice-Chancellor, Deputy Vice-Chancellor (Academics) and the Dean of the Faculty of Agriculture to discuss future possibilities for collaboration; to present AVRDC's work to the students of SUA and the staff.

Dr. Mel Oluoch, 18 April–5 May, to AVRDC-HQ to participate in the Research Theme meetings .

Dr. Drissa Silué, 18 April–17 May, to AVRDC-HQ to participate in the Research Theme meetings, interact with HQ scientists and to come up with plan for RCA's

Training

AVRDC-RCA conducted a two-day training course from 12 to 13 April on Vegetable Production, Processing and Preservation for men and women farmers from

Visitors

Dr. Robert Jarman, consultant from the Tanzania Horticulture Association (TAHA) visited RCA on 30 March to discuss with Drs. Wilson Marandu and Detlef Virchow the emerging issues of variety protection and UPOV.

Mr. Tom Apina from Sustainet (Sustainable Agriculture Information Network), Nairobi met with Dr. Shilpi Saxena on 16 April to discuss future collaboration on organic vegetables supply and demand.

Welcome

Mr. Simon Wabwire, who holds a BSc in Horticulture from Sokoine University of Agriculture (SUA), joined RCA as a Technical Research Assistant Trainee on 18 April 2007. Simon will assist in conducting research experiments, data compilation and analysis, multiplication of germplasm, seed production and maintenance of germplasm and storage; as well as providing assistance and other support services.

Mr. Festo Ezekiel Matayo Maro, graduate student of the Agricultural Economics Department, Sokoine University of Agriculture (SUA), Tanzania joined RCA as a postgraduate research trainee on 16 April 2007.

new lab and its equipment and operation, to develop operational procedures for RCA's seed store, and explore potential collaboration areas and training on seed health at BAPHQ in Taiwan.

Dr. Ekow Akyeampong, 19–20 April, to Accra, Ghana, to take part in an Information and Consensus seeking Workshop in relation to the CORAF/WECARD Operational Plan; 23–26 April, to Lomé, Togo to participate in the IITA R4D strategy development workshop for High Value Products.

Dr. Shilpi Saxena, 20 April–11 May, on leave.

Dr. Issoufou Kollo Abdourhamane, 25 April –5 May, to AVRDC HQ, to join in the Theme 2 meetings.

Bomangombe, Hai District, Northern Tanzania. Twenty-seven people participated in the course.

Ms. Marge Leijdens, from AgroEco, a consulting company with an office in Dar-es-Salaam, who runs the Sida funded EPOPA Programme (Export Promotion of Organic Products from Africa) in joint venture with Grolink, met with Dr. Shilpi Saxena on 18 April, to discuss future collaboration on building up a local and regional market/international market for organic vegetables.

Festo will be helping the scientists of the socio-economic research unit and will work under the supervision of Dr. Germain Pichop.

Mr. Ismael Nicolas Barry, junior consultant for ICUC, will join RCA for seven weeks from 7 May–21 June 2007. Mr. Barry will conduct a research on a preliminary assessment of the market for processed indigenous vegetable products in Tanzania, in which RCA is collaborating with the International Center for Underutilized crops (ICUC).

- Source: Dr. Shilpi Saxena/AVRDC-RCA

New Staff — Mr. George Kanza, Financial Administrator of AVRDC-RCA

On behalf of the Director General, I am pleased to inform you that we have appointed Mr. George Kanza as our Financial Administrator of AVRDC-RCA for an initial appointment of two years effective 1 June 2007.

George is a Tanzanian, married, 61 years old. A registered accountant from the National Board of Accountants and Auditors of Tanzania, George has over 35 years of experience in accounting, financial control, and administration. He was previously Chief Accountant of ICIPE (1979-1995) and ILRI (1996-2001) and is currently the Finance Director of the Kilimanjaro Christian Medical Centre, which is one of the biggest hospitals in Tanzania.

George's major responsibilities as the Financial Administrator of AVRDC-RCA will be (1) supervising and executing the administration of AVRDC-RCA, including financial management, planning, budgeting and accounting; (2) preparing daily, weekly, monthly and quarterly reports as required; (3) overseeing the general and management operations of AVRDC-RCA; (4) training AVRDC-RCA staff in accounting; and (5) maintaining fiscal accountability. He will also be playing a major role, with our Comptroller at Headquarters, in the financial management of the Vegetable Breeding and Seed Systems (VBSS) project. He reports to the Director of AVRDC-RCA.

- Source: Dr. Jackie Hughes/DDG-Research and OIC of AVRDC

Growing Commitment by Asia's Seed Sector

In addition to the annual core contribution from the Asia & Pacific Seed Association (APSA) of US\$150,000 per year for three years, AVRDC receives a second donation from Sakata Seed Corporation. "The Sakata Seed Corporation kindly donated 1,000,000 yen to our Center last year and will do so again this year in recognition of the contribution of our genetic material and technologies to the progress of the private sector in vegetable seed production", points out Jackie Hughes,

DDG for Research. In addition to this contribution from the Sakata Seed Corporation, the Center has also in the past received a direct contribution from Takii & Co. "This interest in our Center by the seed sector in Asia, in addition to that through their Association, APSA, is an acknowledgement of the hard work and perseverance of our Center and our staff over the years", Dr Hughes said.

- Source: Jackie Hughes, DDG-R

New Varieties Popular at the Annual AVRDC-APSA Meeting

The joint AVRDC-APSA workshop held this week was a successful exchange of information and partnership building. While AVRDC showcased its the latest advances in breeding work, APSA members contributed their views on the cucurbit industries of Asia as well as their training needs. Approximately 60 seed company owners, managers, and representatives from Thailand, Philippines, India, China, Taiwan, Japan, the Netherlands, and South Korea participated in one and a half days of discussions followed by an afternoon viewing field demonstrations.

New activities and germplasm were in display in the field. Clad in black boots provided by AVRDC the group carefully negotiated the muddy rows looking for vegetable lines of interest. The most popular items were six heat tolerant and 20 cytoplasmic male sterile sweet pepper lines, and 11 geminivirus resistant and 26 late blight resistant tomato lines.

Other activities on display included the collection of leafy crucifer germplasm from East and Southeast Asia of which 100 entries were being evaluated for plant vigor, earliness, yield, heat tolerance, and ease of seed production. An even larger collection was on display in the cucurbit observation plots in which more than 600 entries are being evaluated for heat tolerance, disease resistance and fruit different types.

AVRDC will ship seeds to APSA members who signified interest on particular vegetable lines, and in return some delegation members also promised to donate lines with interesting horticultural characteristics back to AVRDC.

- Source: Communications

Travel

Dr. Manuel C. Palada, 26-30 April, to Cambodia, to visit and monitor on-farm drip irrigation trials and conduct a training workshop on the drip irrigation of chili, tomato and leafy vegetables for IDE field staff, private extension agents and farmer leaders in Prey Veng and Svay Rieng districts; to discuss progress of the project and develop a drip irrigation knowledge base with IDE staff; to discuss a AVREC-IFDC-IDE joint concept note for IFAD funding; 1-3 May, to Bangkok, Thailand, to visit AVRDC-ARC and meet Dr. Peter Ooi

to discuss other projects; to discuss progress of GTZ chili project crop management trials with Thai collaborators.

Mr. Christian A. Genova II, 29 April-12 May, to Cambodia to participate in the chili supply chain survey of the ACIAR/Postharvest project.

- Source: Yvonne Ting/ASU

Welcome



Ms. Rosario A. Salas, Graduate Student from Department of Horticulture, College of Agriculture, Leyte State University, Philippines, arrived at AVRDC on 13 April 2007 for 12 months of training. Ms. Salas will work on the topic of her thesis research entitled "Integrated Disease

Management for Chili Peppers with Focus on Habitat Management and Improved Crop Management Techniques." Drs. Palada and Luther will be her advisors at AVRDC. She can be contacted at 429 (office) and 876 (dormitory), <rasalas_horti@yahoo.com>.



Ms. Terre Virna B. Tanquezon, Research Intern from East West Seed Co., Inc., Philippines, arrived at AVRDC on 14 April 2007 for four weeks of training. Ms. Tanquezon will work under the guidance of Dr. Palada on the following topics: (1) improved technologies for

vegetable transplant production; (2) technologies for efficient water and fertilizer application: drip irrigation, balanced fertilization, and starter solution technology; (3) technologies for off-season vegetable production: grafting, protective structures, mulching, raised beds, and (4) postharvest handling of vegetables. She can be contacted at 412 (office) and 877 (dormitory), <terrevirna.tanquezon@eastwestseed.com>.

- Source: Rose Chan/Communications

Farewell

Mr. Wang Shih-chu, Sr. Technician/Acting Chief of Janitors in the Technical Services Office, will retire on 1 May 2007. Mr. Wang has served the Center for almost 18 years since he joined the Center on 8 May 1989. We express our deep appreciation for his hard work during the past years with the Center. We wish him good health and much happiness!

任職技術服務室的王石柱先生將於5月1日退休，感謝王先生18年來對亞蔬的辛勤付出，在此特別祝福退休後的他身體健康精神愉快！

- Source: Felisa Wang/ASU

Upcoming Seminars

There will be two seminars by the candidates for the position of Agricultural Economist next week . The venue will be in the library meeting room. All are welcome!

Speaker 1: Dr. Roehlano M. Briones, Philippines

Topic: Does agriculture still matter? Transforming the rural economy into an engine of growth

Time: 1430 –1530 hours, Monday, 23 April

Speaker 2: Dr. (Mrs.) Sudha Mysore, India

Topic: Horticulture development means for livelihood support – an economic perspective

Time: 1430–1530 hours, Wednesday, 25 April

Position Announcement: Research Assistant, Socio-economics Unit

AVRDC – The World Vegetable Center with headquarters in Shanhua, Tainan, Taiwan seeks a Research Assistant to support its socio-economics research activities. **Job responsibilities:** The Research Assistant will support the researchers' needs in the area of consumption and production aspects of vegetable research in South East Asia. In particular, s/he will (1) assist in the development of surveys for consumption, farm production and market-related activities; (2) perform data collection activities in target countries, and data processing such as encoding, editing and cleaning; (3) assist in liaising with country collaborators, and providing technical assistance in the processing and completion of survey databases and other project-related matters; (4) maintain databases, documentation and reference files; (5) assist in the design and generation of tables, figures, and graphs; (6) assist in analysis of primary and secondary data using spreadsheets and econometric programs; (7) assist in research activities such as writing, editing and literature research; and (8) perform other duties as assigned. **Requirements:** (1) BS/MS degree in Agricultural Economics, Economics or related discipline; (2) 2–3 years of relevant job experience; (3) proficiency in the use and application of spreadsheets and econometric programs such as Excel, STATA, SPSS and Limdep; (4)

ability to solve and interpret predefined econometric models; (5) proficiency in English; (6) creativity and ability to work independently; (7) interest in problems and issues of agriculture in developing countries; and (8) experience in the conduct and analysis of household surveys in the South-East Asian region is an asset. **Application:** Submit a letter of application, Curriculum Vitae, with names, and contact addresses (phone number and e-mail) of three referees. Send to: Ms. Felisa Wang, Human Resources, AVRDC - The World Vegetable Center, P.O. Box 42, Shanhua, Tainan 74199, Taiwan; e-mail: jobapply@netra.avrdc.org.tw; fax: +886-6-583-0009.

For more information on AVRDC, please visit our Web site: <http://www.avrdc.org>.

Closing Date: The closing date for applications is 6 May 2007. AVRDC – The World Vegetable Center is an international non-profit organization dedicated to research on vegetables. Its mission is to reduce poverty and malnutrition in developing countries through improved production and consumption of vegetables. AVRDC offers a stimulating international research environment.

- Source: Felisa Wang/Human Resources

New E-mail Address



Ms. Lilia Tan-Habacon, Human Resources Manager,

<lilia.tanhabacon@netra.avrdc.org.tw>.

- Source: Shirley Chen/Communications

Happenings around AVRDC Headquarters

The Historical Sites Music Salon 台南市古蹟音樂沙龍

Outdoors weekend music performances in three historical sites in Tainan.

Time: Sunday, 22 April and Saturday, 28 April

- Confucious Temple, Nanmen Road (南門路孔子廟) : 1530 hours
- Anping Fort (安平古堡) : 1530 hours
- Chikan Tower (赤崁樓) : 1930 hours

“BARRAGE” 「弦舞—小提琴版的大河之舞」

A high-octane fiddle-fest performance of an international multitalented cast that features an eclectic mix of music, song and dance. A diverse fusion of cultural, musical styles and incredible performance vitality.

- Kaohsiung Cultural Center, Chih-The Hall, 24 April, at 1930 hours
- Tainan Cultural Center, April 29, 19:30
- Ticket price: 400/600/800/1000/1200/1500

- 時間: 4月24日(星期二) 晚間7點30分
- 地點: 高雄市立文化中心 至德堂
- 票價: 400/600/800/1000/1200/1500 元



Olivia Newton-John Asia Tour 「經典巨星奧莉維亞紐頓強亞洲巡迴臺北演唱會」

- Time: 21, 22 April, 1930 hours
- Venue: Taipei Arena (No. 2 Nan-jing Dong Road, Section 4, Taipei)
- Ticket price: 1200/1500/2000/2500/3600/4000/5000

- 時間: 4月21-22日(星期六、日)晚間7點30分
- 地點: 台北巨蛋台北市南京東路四段2號
- 票價: 1200/1500/2000/2500/3600/4000/5000 元

Trip To Formosan Aboriginal Village 九族文化村一日遊

The trip organized by the R&S Committee to the Formosan Aboriginal Culture Village will be on Saturday, 28 April 2007. The buses will be leaving from AVRDC at 0700 hours sharp. It will take us approximately 2 hours 40 minutes to get there. We will be leaving from the Village at 1600 hours to go back to AVRDC. Transportation cost and part of the entrance fees will be covered by the Center. This will leave each adult to pay NT400, elementary school children NT300 and those over 60 years old NT200. Everybody needs to arrange their own meals. There will be many places to buy food in the Village. There are still 22 seats available. Those interested please sign up with Angela at ext. 402. Please pay your dues to Angela by Thursday, 26 April the latest.

康委會4月28日(星期六)舉辦南投縣九族文化村旅遊。遊覽車早上7點整從中心出發,預計兩小時40分左右可抵達九族文化村,是日下午4點鐘啟程返回中心。交通費及部份的門票將由中心負擔。費用:大人新台幣400元、國小以下孩童300元、超過60歲以上長者200元。餐點自備,九族文化村內也有餐廳,目前尚有22個空位。報名請洽陳美洪(分機402),繳費期限為4月26日(星期四)。

- Source: Kartini Luther/Chairperson/R&S Committee