



## Annex C. Study panel biographies

### Co-chairs

**Speciosa Wandira KAZIBWE** is former Vice-President of the Republic of Uganda and a former Minister of Agriculture, Animal Industry and Fisheries. She is currently enrolled in a Ph.D. program at Harvard University. She received a medical degree from Makerere University in Kampala. She has been very active in programs relating to youth and women. She was a Councilor in the Kampala City Council, a Representative in the Parliament and a member of the assembly that drafted Uganda's new Constitution. She has also been active in the World Forestry Commission, the International Food Policy Research Institute, the World Water Commission, the High Level Panel of Advisors to the Secretary-General of the UN on the Development of Africa and the African Women Committee on Peace and Development. She was awarded the FAO CERES Medal in 1998 for her contributions to food security and poverty eradication.

**Rudy RABBINGE** is Dean of the Wageningen Graduate School in The Netherlands and university professor for sustainable development and systems innovation. A biologist by training, he worked for the past 30 years in various functions on the ecologization of agriculture. As Professor of theoretical production ecology (1978-1998), he initiated programs in the application of basic knowledge to innovative processes for primary production and systems approaches in agricultural research. He has led various missions and agricultural programs in developing countries, served as editor of several journals, published more than 100 scientific publications, five textbooks and more than

200 other publications. He served on the Board of six centers in international agricultural research and was Chairman of the Board of IRRI (1995-2000). He was member of the Netherlands Prime Minister's Scientific Council for Government Policy (1988-1998) and senior advisor to the Minister of Agriculture, Fisheries and Nature (1992-1999). He is at present a member of the Senate of the Netherlands Parliament, Vice-chairman of the Royal Institute of the Tropics and member of the Board of various international agri-business firms.

**M.S. SWAMINATHAN** has worked for the past 45 years with scientists and policy makers on a wide range of problems in basic and applied plant genetics, as well as in agricultural research and development. As Secretary of the Ministry of Agriculture and Co-operation, he developed a strong food security system in India. As one of the leaders of the Green Revolution in India, he now recognizes the need for an 'Evergreen Revolution' to extend the benefits of development to the most marginalized. His work in crop genetics and sustainable agricultural development in India and the Third World earned him the first World Food Prize in 1987, the Tyler and Honda Prizes in 1991 and the UNEP Sasakawa Award in 1994. He served as Director-General of the Indian Council of Agricultural Research (1972-1978) and of the International Rice Research Institute (1982-1988). He served as independent Chairman of the FAO Council (1981-1985) and as the President of International Union for the Conservation of Nature and Natural Resources (1984-1990). He was the President of National Academy of Agricultural Sciences of India and is member of various

academies including the Royal Society of London, the US National Academy of Sciences, the Russian Academy of Sciences and the Chinese Academy of Sciences.

### Panel members

**Mohamed BESRI** became Doctor-engineer in Agronomy and Doctor in Plant Pathology at the University of Nancy, France. Additional training took place in the United States, Denmark, Holland, Spain, France, Belgium and India. At present he is Professor in plant pathology and integrated diseases management at the Hassan II Institute of Agronomy and Veterinary Medicine, Morocco, and Director/Dean of the graduate school. He is an expert in soil and airborne pathogens, integrated pest management of various crops (particularly vegetables and fruits), alternatives to methyl bromide, evaluation of research and teaching activities, evaluation of the impact of education on agricultural development, implementation and coordination of national and international research projects, pesticides use and distribution. He is consultant to FAO, USAID, UNDP, UNEP, the European Union and other governmental and non-governmental international organizations. He was visiting professor at many American, European and African universities, he was Vice-President and President of the Arab Society for Plant Protection and he is a member of various national and international associations. Has published some 100 papers in international and national journals and books.

**Maria Manuela CHAVES** is Professor at the Faculty of Agronomy (ISA) of the Technical University of Lisbon (UTL)



and leader of the Plant Molecular Ecophysiology Laboratory of the Instituto de Tecnologia Química e Biológica (ITQB), Oeiras. From 1992-2002 she was coordinator of the Research Center on Botany Applied to Agriculture of the UTL. Her background is in agronomy and her scientific interests in the past 30 years have been in plant ecophysiology, in particular studying plant/crop response and adaptation to stressful environments. She was national coordinator of several EU-funded research projects. This work includes improvement of forage crops for semi-arid areas (1993-1997); natural resource development and utilization in the Sahel (together with partners in India, Senegal and Ivory Coast from 1993-1997); and partial root drying, a sustainable irrigation system for efficient water use without reducing fruit yield (together with Morocco, Cyprus and Turkey from 2000-2003). Also, her work includes the future of the tropical forest carbon sink (with a EU/Brasil consortium from 2000-2002), network for ecophysiology in closing terrestrial carbon budget (2000-2003) and diagnosis and analysis of plant stress using thermal and other imaging techniques (2002-2006). She was the first Chair of the Portuguese Committee for the International Geosphere-Biosphere Programme (IGBP). She participated in conferences in Europe, South America, China and Africa. She is member of the editorial board of two major international journals in plant sciences.

**Avílio Antonio FRANCO** graduated in Agronomy at the Universidade Rural do Brasil, and earned a masters degree in microbiology at the University of New South Wales, Australia; a PhD in soil science at the University of California; and was a visiting Academic at the University of Queensland, Australia. He works with the Empresa Brasileira de Pesquisa Agropecuária (Embrapa) at the Centro Nacional de Pesquisa em

Agrobiologia (Embrapa Agrobiologia). His research of biological nitrogen fixation in Phaseolus bean, soybean and tropical legume trees has had great impact on the expansion of the two crops in Brazil and the development of a technology on land reclamation using nodulated and mycorrhizal legume trees that was awarded the 2001 von Martius prize. At present he is in the Agronomy Advisory Committee of the Brazilian National Research Council and the Rio de Janeiro State Agriculture Research Enterprise and Adviser of the Rio de Janeiro 'Carlos Chagas Filho' Foundation to support Science and Technology. He is member of the Brazilian National Academy of Science and the Third World Academy of Science.

**Jikun HUANG** is Professor and Chief Scientist at the Institute of Geographical Sciences and Natural Resources Research in China, as well as the Founder and Director of the Center for Chinese Agricultural Policy (CCAP) of the Chinese Academy of Sciences. His research and publications cover a wide range of issues on China's agricultural and rural economy, including work on agricultural R&D policy, resource and environmental economics, price and marketing, food consumption, poverty, and trade liberalization. He has led more than forty research projects funded both internationally and domestically. He also serves as professor in Nanjing Agricultural University, Zhejiang Universities, and Xingjiang Agricultural University in China. He has been a consultant to several international organizations (World Bank, FAO, OECD and others) and policy consultant to several ministries in China. He has received several awards and prizes from the Chinese Government. He has received the Outstanding Scientific Progress awards from the Ministry of Agriculture three times.

**Ryuichi ISHII** graduated from the Faculty of Agriculture, University of Tokyo,

in 1967 with a major in crop science. After several research positions with the University of Tokyo, he became Associate Professor at the Faculty of Agriculture, University of Tokyo, in 1979. In 1982 he became Associate Professor and in 1987 Professor in crop science at that Faculty. In 1998 he was visiting professor at the China Agriculture University. His present position is Professor of crop science at the College of Biore-source Science, Nihon University. He has been involved in several international research projects: Japan-USA on carbon metabolism in plants (1984), Japan-Brazil on photosynthesis of wheat cultivars under water stress conditions (1985), research project in Ghana on photosynthetic characteristics of *oryza glaberrima* (1988), with the International Rice Research Institute (IRRI) on physiological characterization of new plant type rice (1994), with the Royal Prikulthon Development Center, Thailand, on crop production under acidic soil conditions and with the West Africa Rice Development Association (WARDA) on agronomic characterization of interspecific hybrid rice progenies between *oryza sativa* and *oryza glaberrima*. He organized several international congresses and he is President of the Crop Science Society of Japan and member of Board of WARDA, Cote d'Ivoire.

**Renald LAFOND** is a Senior Program Specialist in information and communication technologies (ICT) for development at the International Development Research Centre (IDRC), Canada. He is the Team Leader of the Pan Network Program Initiative, a research program on ICTs and development and networking in developing countries. Recent emphasis of this program was on rural access to ICTs. He is a professional engineer and holds a Master degree in chemical engineering from Laval University, Canada (1968). He worked a few years in applied industrial research



and was later involved in the establishment of an information service for small industries in Quebec. He worked for more than six years with the United Nations Industrial Development Organisation (UNIDO) in Africa and Vienna before joining the Information Sciences Division of IDRC in Ottawa in 1985. At IDRC he was initially responsible for the development of an information program for small industries in the Science and Technology Information Program, covering Africa, Asia and Latin America. He was involved in various other information activities, in particular in the area of agricultural information, mainly in Africa. He has been involved in the development of the PAN Global Networking Initiative since 1994 in Asia and Latin America and he was associated to the development of a similar program for Africa.

**Peter MATLON** is Deputy Director for Food Security at the Rockefeller Foundation, New York. His responsibilities include supporting the Foundation's grant making in science and technology, market development, policies and capacity building in the field of agriculture. Earlier, he held positions as: Group Leader, Environmentally Sustainable Development Group of UNDP (2001); Chief, Global Programme for Food Security and Agriculture, Sustainable Energy and Environment Division of UNDP (1997-2000); Director of Research at the West Africa Rice Development Association (1988-1997); Principal Economist and West African Economics Program Leader at ICRISAT (1979-1988); and Assistant Professor, Department of Agricultural Economics, Michigan State University (1977-1979). He obtained a PhD in agricultural economics at Cornell and a MPA in development economics at Princeton. He is member of the Board of international journals, has been a consultant to the World Bank and other national and international organizations and serves on the Board of

numerous scientific cooperation arrangements in the field of agriculture. He has published extensively.

**Ahmadou Lamine NDIAYE**, graduated at the Veterinary school of Lyon and specialized in animal production at the Institut National Agronomique de Paris and in 1974 became Agrégé des Ecoles Nationales Vétérinaires Françaises in animal production and nutrition. He is a former Minister and Special advisor to the Head of State, Senegal. Previously he was Head of the Veterinary School of Senegal, Dakar, 1976-1986, and Rector of the University of Saint Louis, Senegal, 1990-1999. He was Chairman of the organizing committee for the Biennial Conference on science and technology in Senegal, AFRISTECH, and Chairman of the AFRISTECH Foundation. He is member of the editorial panel for several publications, such as the Bulletin of Health and Animal production in Africa. He was awarded the Bronze Medal of the Cattle Breeding and Veterinary Institute for Tropical Countries and the Silver Medal of the France Veterinary Academy. He is a member of the African Academy of Sciences and Vice-President of the Academy of Sciences and Technology of Senegal and Chairman of the Agricultural Sciences section of that Academy. He is member of the United Nations University Council and the Executive Board of the Association of African Universities and involved with capacity development in Africa, as well as university cooperation. His research areas focus on valorization of harvest residues and agro-industrial by-products for animal feed. Numerous publications in professional journals

**Bongiwe NJOBE** is Director General of the South African Department of Agriculture. Prior to this post she was Professor in the agricultural faculty of Pretoria University. She has worked on all aspects of agriculture, from academia and production to government. Born in

South Africa, she spent most of her childhood in Zambia. In 1979 she studied in Bulgaria, where she attained a master of agriculture degree. During college summer holidays she did practical training, working on an African National Congress farm in Tanzania. Back in Zambia she worked for a small fruit and vegetable export company, then moved to Canada, where she helped with a subsistence self-training program and worked with non-governmental organizations and various agricultural industries. She then began lecturing at the School of Agriculture and Rural Development at the University of Pretoria. In 1995 she participated in the development of the ANC's agricultural policy, serving on a committee which looked at broadening access to agriculture for owners, entrepreneurs, scientists and service providers.

**Emmanuel Uche ODIGBOH** is Professor of Agricultural Engineering at the University of Nigeria since 1978. He obtained a BSc at Technion, Israel (1966) and a MSc and PhD at Pennsylvania State University, USA (1972 and 1974). In 1981 he established Agromech Consultancy Services Inc. within the University's Department of Agricultural Engineering. He has consulted extensively for private and public organizations on agricultural mechanization, agribusiness development, integrated rural development, soil and water resources management and the development of post-harvest technology systems. He served for two terms as Dean of Engineering (1982-1984 and 1995-1998) and he has been Acting Deputy Vice Chancellor (1989). Since 1997, he has been Chairman of the University's Consultancy Management Board. He was National President of the Nigerian Society of Agricultural Engineers (1980-1982) and he served on the Governing Council of the National Center for Agricultural Mechanization (1994) and the management board of Anambra State Agricul-



tural Development Corporation. He has published over one hundred articles and books in national and international journals and he has designed and developed over fifteen unique agricultural production and processing machines.

**Gideon ORON** is Professor and research leader at the Environment Water Resources Center, The Institute for Desert Research, Ben-Gurion University of the Negev, Kiryat Sde-Boker, Israel, as well as the Department of Industrial Engineering and Management, Ben-Gurion University of the Negev. He obtained a M.Sc. (1969) and a PhD. (1975) at Technion, Israel Institute of Technology, Haifa, Israel. Currently he is the chair of the Membrane Special Group of IWA. His main research interests are application of operations research; water resources; environmental systems; management modeling; wastewater treatment and reuse; membrane technology; aquaculture for wastewater reclamation; optimal marginal water use primarily in arid regions and irrigation. He conducted research projects on: wastewater treatment by anaerobic methods; wastewater treatment by aquaculture methods and stabilization ponds systems; effluent reuse for irrigation; saline water use for irrigation; remote sensing methods for quality control of large water and waste water bodies; use of membrane technology for effluent quality control; biopolymers use for effluent polishing; sludge management; and water resources management in arid zones. He has cooperative ongoing research projects with several European countries, USA, several countries in the Middle East and North Africa. In the past he had also close research ties with countries in the Far East.

**Per PINSTRUP-ANDERSEN**, a native of Denmark, joined the International Food Policy Research Institute (IFPRI) as its Director General in 1992. Prior to this,

he was director of the Cornell Food and Nutrition Policy Program, professor of food economics at Cornell University and a member of the Technical Advisory Committee to the CGIAR. Before taking up his teaching and research positions at Cornell, he served as a research fellow and director of the Food Consumption and Nutrition Policy Program at IFPRI, as an agricultural economist at the International Center for Tropical Agriculture (CIAT) in Colombia, as director of the Agro-Economic Division at the International Fertilizer Development Center (IFDC) in the United States and as an associate professor of the Danish Veterinary and Agricultural University in Copenhagen. He is a Fellow of the American Agricultural Economics Association and the American Association for the Advancement of Science (AAAS). He is the recipient of the 2001 World Food Prize for his contribution to the improvement of agricultural research, food policy and the lives of the poor.

**Elly N. SABIITI** is Dean of the Faculty of Agriculture and Forestry, Makerere University, Uganda. He obtained a BSc and a MsC in agricultural science from Makerere University (1973-1979) and a PhD from the University of New Brunswick, Canada (1983-1985). In 1985 he was appointed Lecturer in the Department of Crop Science, Makerere University, and in 1995 Professor of Crop Science. His research focuses on the use of forage legumes in crop and livestock farming systems and on range resource management. He holds membership in many professional organizations and he is a founding member of the Association of Uganda Professional Agriculturalists. He published about 30 articles in refereed international journals and he has more than 150 other publications on his name. He is a member of the Steering Committee of the African Feed Resources Network and he serves on several committees of the National Agriculture Research Organization. In

2002 the Ugandan Minister of Agriculture, Animal Industry and Fisheries appointed him Director of the Board of the National Agricultural Advisory Services. He also is member of the National Task Force to prepare a National Agricultural Education strategy. He was awarded a Fulbright Fellowship for Senior African Scholars (1994), he is a member of the Uganda National Academy of Sciences and he is a Fellow of the Third World Academy of Science.

**José SARUKHAN** is Professor of Ecology at the Autonomous National University of Mexico (UNAM) in Mexico City. He was educated at UNAM in Biology, 1958-1961. He obtained an Agricultural Botany Master at the Postgraduate College, Chapingo, Mexico, 1963-1965, and a PhD in ecology at University College of North Wales, 1968-1972. Since 1978 he has been on the research staff of the Institute of Ecology, Mexico. From 1992 onwards he has been National Coordinator of the Mexican National Commission on Biodiversity (CONABIO). Other positions include: Vice-Chancellor for Science, UNAM, 1987-1988, Director Institute of Biology, UNAM, 1979-1987, Senior Research Staff, Institute of Biology, UNAM, 1972-1978, Rector of UNAM, 1989-1992 and 1992-1996 and Tinker Professor, Stanford University, 1997-1998. His research focuses on plant population ecology, systems ecology of tropical ecosystems and biodiversity science. He is the recipient of many awards and prizes. He received four honorary doctorates and is a foreign member of the National Academy of Sciences, USA.

**Jennifer THOMSON** is Professor in the Department of Molecular and Cell Biology at the University of Cape Town, past Head of the Department of Microbiology (1988-2000) and Deputy Dean Faculty of Science (1996-98). She was Associate Professor at the University of the Witwatersrand, Visiting Scientist at



the Massachusetts Institute of Technology, USA, Director of the Laboratory for Molecular and Cell Biology of the Council for Scientific and Industrial Research, South Africa, and Research and Teaching Fellow at Harvard University. Her research has focused on the development of maize resistant to the African endemic maize streak virus through molecular biology techniques. She has also been involved in development of maize and other crops tolerant to drought and other abiotic stresses. She has written many scientific papers on microbiological subjects and has published a book, *Genes for Africa: Genetically Modified Crops in the Developing World*, aimed at explaining to decision makers and the general public the issues involved in utilizing GMO techniques in a developing country context. She has had wide interaction with workers in many African countries, including running workshops and training programs in Nigeria, Zimbabwe and Kenya, etc. She has been recipient of several awards and fellowships and she was Vice-President of the Academy of Science of South Africa. She serves as an adviser to the WHO and other organizations.

### Study director

**Jim RYAN** is an Australian agricultural economist with a PhD in economics from North Carolina State University in 1972, a Master of Science in Agriculture in 1969 and a Bachelor of Science in Agriculture in 1962, both from the University of Sydney. He was awarded membership of the Honor Societies of Phi Kappa Phi and Gamma Sigma Delta in the U.S. and is a Fellow of the Australian Institute of Agricultural Science and Technology. He has specialized in studies of the economics of agricultural research and technological change in developing countries, including implications for employment and human nutrition. He has more than 120 publications. He was Leader of the Economics Program at the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) in Hyderabad India (1974-83), Deputy Director and Chief Scientist of the Australian Center for International Agricultural Research in Canberra Australia (1983-91), and Director General of ICRISAT (1991-97). Since May 2000 he has been a Visiting Fellow in the Research School of Pacific and Asian Studies of the Australian National University in Canberra. He has been a member of the Boards of the Asian Vegetable Research and Development Cen-

ter (AVRDC) in Taiwan and the International Maize and Wheat Improvement Center (CIMMYT) in Mexico, and served as a member of the Technical Advisory Committee of the Consultative Group on International Agricultural Research. He has led a review of the Australian agricultural aid program for AusAID, chaired the Sixth External Program and Management Review of AVRDC and was a member of the first External Program and Management Review Panel of the International Service for National Agricultural Research. Current interests and recent assignments include the assessment of the economic impacts of agricultural and policy research, future strategies and priorities for international livestock research, and the prospective challenges and opportunities for agricultural R & D in the semi-arid tropics.