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Statement in support of the M. S. Swaminathan candidacy to 2010 Nobel Prize

A candidate for the 2009 Nobel Peace Prize, Professor M.S. Swaminathan will undoubtedly be candidate once again due to his numerous estimators from many different disciplines, great scientists, Academies of which he is a member and Universities which conferred him *honoris causa* degrees, leading statesmen engaged in global development policies, and simple, ordinary men and women. From his writings and even more through his works, he is regarded as a defender and promoter of the struggle against poverty and hunger, in the endeavour to guarantee every human being the basic and fundamental right to a dignified quality of life.

After completing his studies in India, Swaminathan commenced his work since more than 50 years ago by establishing fruitful relations with international researchers, from Europe to North America; and since then his ideas and concepts started to become tangible. Moving from hypotheses to concrete actions, his studies focused on the excellence of science and on basic scientific technologies applied to the modernisation of agricultural productivity, and reached the conclusion that a diversity of approaches were needed.

He placed genetics at the centre of his projects and scientific studies, aiming towards the genetic improvement of agro-alimentary species and the biological diversity of plants, concentrating his efforts in those areas in which the endemic poverty of local populations and scarce technical and scientific know-how exacerbate the evident and unjust fracture between the northern and southern hemispheres of the planet. His *modus operandi* has been exemplary: implementation of projects by aggregating growing groups of young researchers, technicians, practitioners and the agricultural communities, thus favouring synergic and enthusiastic teams motivated by a common goal: a worldwide food and rural sustainability.

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The friendly and collaborative working relationship with colleagues all over the world and the increasing involvement in a consultative and managerial role (f.i. chairman independent of the FAO Council, of the Pugwash conferences on science and world affairs, of the International Union for Conservation of Nature, director general of the International Rice Research Institute (in Manila) of the Consultative Group of International Agricultural Research, etc.) have qualified Swaminathan as one of the major protagonists and advocates *par excellence* of the so-called “Green Revolution”. A strategy which he has promoted as primary factor for the intensification of global agriculture in the Indian subcontinent and in the South-east Asian region, as well as in the subsaharian and subtropical African areas.

This timely book “Science” and sustainable food security brings together the most significant contributions of M.S. Swaminathan, and testifies to the outstanding activities and results obtained during the past half century. It is almost a journey through the development of a great country with ancient traditions and customs, but still facing a social imbalance. A journey through the underdevelopment and poverty of many other regions of the planet. A journey which permits to appreciate the originality of the projects emerging from the dialogue between knowledge and operativity, as well as the elaboration of new scientific policy lines and the innovative knowledge stemming from advanced and applied studies on plant genetics and agroecology: in a word, the new progressive realities created by the untiring activity of M.S. Swaminathan.

The most impressive manifestation of the great reputation and trust enjoyed by Swaminathan is represented by the institution in 1988 at Chennai of the scientific Foundation bearing his name: M.S. Swaminathan Research Foundation – MSSRF.

Winner of the first World Food Prize (1987), he invested its proceeds in the Foundation budget, successively integrated by numerous other prizes, donations and research contracts from scientific Organizations, Governments, cultural and humanitarian Associations, etc.

The MSSRF has organized a galaxy of international interdisciplinary conferences, on the agrotechnologies, biotechnologies; methodologies for promoting the role of conservation and utilization of plant genetic resources, women’s role in biodiversity management, as well as workshops in collaboration with the U.N. World Food Programme and U.N. Committee on Nutrition, etc. Agrobiodiversity and Gene Banks Centers. Ecological Centers, Gene management networks for sustainable food security, Biocenters, Village Knowledge Centers, Biovillages for sustainable rural development based on a blend of traditional experiences and advanced agro-eco-technologies, have been created since then in Chennai or in other Indian districts, and have also served as models for similar enterprises in many developing countries. To enhance plant production special programmes were fostered, f.i., for Mangrove Forest management on the east coast of India; or for breeding – through Mendelian and Molecular technologies – rice varieties tolerant to salinity, drought and biotic stresses, in irrigated and rainfed areas.

In 1994 the “Gian Tommaso Scarascia Mugnozza” a Community Gene Bank was established in Chennai as part of the Genetic Resources Center, to collect and conserve land races and wild relatives of local crop plants.

The vision of appropriate integration between frontier biosciences and the analytical studies on the behaviour of different agro-ecosystems led Swaminathan to elaborate original concepts and strategies for progressive increase in productivity, offered by the interconnection among plant genomes, agronomic techniques and agroecosystems structure and functions. Then, before the end of the XX century, the paradigm of an “ever-green revolution” was coined by Swaminathan.

However, the goal of the evergreen revolution, “food for all and for ever”, is now dramatically threatened by climatic changes and global warming, especially dangerous for the agroecosystems sustainability and food security of the developing countries.

Therefore, it is imperative to face the negative impact of climatic changes by intensifying efforts to achieve mitigation and improved crop adaptation by breeding new varieties with the use of genetic resources.

The MSSRF is thus once more on the frontier line: the Community of the Genetic Resources Centre and Gene Bank founded in 1993 has been recently developed into a “Gene Bank for facing the challenges of global warming and climate change”.

M.S. Swaminathan is an example of moral energy, personifying the spirit of brotherhood and social equality in humankind, regardless of race, creed or ethnicity. He encompasses the value of conscious social responsibility, which is an essential and inalienable element of professional ethics.