Statement of Achievement

Dr. S.K. De Datta has played a major role in globalizing integrated pest management for the past 15 years. Following a 27-year distinguished career in agronomy and weed science at the International Rice Research Institute in the Philippines, Dr De Datta moved to Virginia Tech where in 1993 he initiated and has since led the Integrated Pest Management Collaborative Research Support Program (IPM CRSP). The IPM CRSP, supported by the U.S. Agency for International Development (USAID), has institutionalized IPM programs in Asia, Africa, Eastern Europe, Latin America and the Caribbean. The CRSP program has developed, through collaborative research with local institutions and scientists, a series of IPM practices and strategies that have reduced numerous pest problems and pesticide use and have increased incomes for thousands of limited resource farmers. As Principal Investigator (PI), Dr. De Datta has coordinated on a daily basis the program, finances, and other administrative activities that have enabled this large research program with hundreds of scientists to achieve its goals, reducing poverty and improving health and the environment around the world. His leadership has been constant and his efforts have been tireless.

As a result of Dr. De Datta's leadership, the IPM CRSP has advanced IPM science, and developed improved pest management technologies, information, and systems. The program has improved IPM communication and education, and the ability of practitioners to manage knowledge. It has provided information and capacity building to reform and strengthen policies and local/national institutions related to pest management. Dr. De Datta has worked to ensure that gender issues are addressed in each research site so that IPM adoption is maximized and women are empowered by the improved technologies.

Dr. De Datta's entire career has been marked by creativity, innovation, and teamwork. Early in his career, he was instrumental in developing production packages to accompany "Green Revolution" varieties. He was among the first to identify the need for direct seeding in rice areas where labor costs have reached a certain threshold. More importantly, he recognized the need for an accompanying production package that emphasized alternative weed management strategies and developed it. He then took his knowledge of pest management, agronomy, and mechanisms for effective interdisciplinary research to Virginia Tech where he assembled and led the team that initiated and implemented the global IPM program mentioned above. When he did so, he was not content with the thinking of some in the early 1990s that adequate scientific research existed for pest management, and that all that was needed was improved farmer training/research based around programs such as "Farmer Field Schools (FFS)." While recognizing the importance of extending information to farmers, and in including farmers in the research process (and the validity of approaches such as FFS in some situations), he also saw the need for farmer-participatory IPM research that linked all the key players in the agricultural scientific community as well as non-governmental organizations (NGOs). Up-stream and down-stream linkages were both essential for improved pest management as well as integration of biological and social sciences.

Dr. De Datta built the IPM CRSP around a linking of biological and social scientists from U.S. universities, developing country national institutes and universities, and international

agricultural research centers (IARCs). The centers of research operation are in the developing country institutions, and these scientific centers are linked to on-farm research and to a host of institutions for stimulating adoption of IPM strategies, including NGOs, government extension services, and private firms. Government policy makers are considered important stakeholders as well as policies that directly or indirectly subsidize or tax pesticides or pest management practices influence IPM adoption. Methods of extending information to producers are not confined to one technique but take into account the cost effectiveness of various methods for reaching target audiences in different circumstances.

The program has centered on IPM programs of excellence in eight regions (West Africa, East Africa, South Asia, South East Asia, Central Asia, Latin America, the Caribbean, and Eastern Europe), but has also included work on a set of global themes such as insect transmitted viruses, invasive species, and regional diagnostic laboratories that cut across regions. Both short term training for scientists and long term education for graduate students are integral components of the program. The IPM CRSP program has trained more than 85 students at the graduate level, with more than 80 percent of those students returning to their home countries to help in institutionalizing IPM in the developing world.

During his career, Dr. De Datta has personally advised 77 MS and PhD students, led the Agronomy Department at IRRI, and has served as Associate Provost for International Affairs and Director of the Office of International Research Education, and Development (OIRED) at Virginia Tech. In the latter capacity he has been Administrative PI for more than $100 million in donor-funded projects in developing countries. The IPM CRSP has been the centerpiece of the OIRED program with over $30 million in grants.

Under Dr. De Datta's leadership, Virginia Tech was ranked by the National Association of State Universities and Land Grant Colleges among the top five international agricultural programs in garnering funds from agencies such as USAID. Dr. De Datta's international administrative efforts were also significant in contributing to a top ten NSF ranking in the United States for the Virginia Tech College of Agriculture and Life Sciences.

Dr. De Datta has devoted more than 44 years to a career entirely focused on improving food security in the developing world. His scholarship has been massive, exemplified by over 350 publications. His contributions are all the more remarkable because after playing a major role in the Green Revolution in rice in Asia, he was able to build on that experience and reduce pest problems on numerous crops throughout the world, especially on vegetables in rice-based systems. Few agricultural scientists have made such a dual contribution to improving the availability of food and the sustainability of the environment.

Over his career, Dr. De Datta has received numerous national and international awards, including the Norman Borlaug Award for Outstanding Contribution to Agricultural Sciences and the Green Revolution in India, and the fellows and international service awards from the Agronomy, Soil Science, and Crop Science Societies in the United States. His greatest achievement, however, has been the visible impacts of his research and research administration on improving the food situation of the poorest of the poor in fragile ecosystems around the world.