

AGRICULTURAL ENGINEERING AND INTERNATIONAL DEVELOPMENT IN THE THIRD MILLENNIUM

*A special ASAE/CIGR session held at the 2002 joint ASAE International Meeting and
CIGR World Congress on 30 July 2002 in Chicago, Illinois, U.S.A.*

FOREWORD

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Special Session Moderator

The progress that Agricultural Engineering has contributed to the world in the last century has been nothing short of sweeping and breathtaking. Encompassing farm mechanization, irrigation, electrification, structures and food processing, Agricultural Engineering played a no insignificant role in the industrialization of world agriculture as well as in the ushering of agriculture into the present Information Age. It certainly is not an exaggeration to state that Agricultural Engineering has been one of the most effective and powerful tools of development in the last 100 years. Despite the unprecedented growth in global food production in the latter half of the last century, however, there remain close to 800 million hungry people in the world today. And with global population, as projected by the United Nations, to reach 9.36 billion in 2050, which is what most experts agree to be the Earth's carrying capacity, there is much work left for agricultural and biological engineers in the new millennium to help meet the needs of a growing hungry world. Delivering the promise of global development is without doubt the profession's worthiest mission.

The objective of this special session was to explore constructive and effective means by which Agricultural Engineering, as an effective and powerful development tool, could best be harnessed to meet the development needs of the third millennium. Select agricultural and biological engineers and other experts from all continents and with significant international background were invited to share their thoughts and ideas on this important subject. The representative papers compiled here address topics pertaining to the role of CIGR, farm power, the environment, food production strategy, education, management strategy, and center for international development, among others. It is anticipated that this special session that directly linked agricultural engineering and international development is not the end, but only the beginning.

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Tamimi, Akrum. "Cooperation Through Education: How Southern West Bank, Palestine, can be Developed Through Agricultural Engineering". Hebron University, Palestine

Cuello, Joel. "Making the World a Better Place: What the Agricultural Engineering Professional Organizations can do in the New Century to Make Good on their Age-old Promise". The University of Arizona, USA

Slack, Donald. "Engineering in a Shrinking World". The University of Arizona, USA

Feyereisen, Gary. "Social and Engineering Aspects of an Aquacultural Development Project in the Nakasongola District of Uganda". University of Minnesota, USA

Clyma, Wayne. "Management Strategies for Sustainable Irrigated Agriculture with Organizational Change to Meet Urgent Needs". Colorado State University, USA