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Agricultural Engineering: Achievements and Challenges

Prof. Emeritus R. Lal Kushwaha, P.Eng., Ph.D.
Fellow ASAE, CSAE, SAE International
University of Saskatchewan
Department of Agriculture & Bioresource Engineering
57 Campus Drive, Saskatoon, SK S7N 5A9
Phone: (306) 966-5313 Fax: (306) 966-5334

ABSTRACT

Agricultural engineering is going through a number of changes and development world wide to meet the demand of people and time. Agricultural mechanization had been at the forefront of development for a number of decades; however with the advent of an energy crisis and the possibility of using agricultural materials for energy production we face new challenges that will dominate our times. By 2025 the world population is estimated to reach 8.66 billions. The agricultural engineers will face major issues in increasing food production and ensure food safety.

The paper would define agricultural engineering profession and would explore its historical development. It will highlight achievements made in North America and will also provide similar examples of developments in China and India. The current issues leading to the changes in the profession and calling it biological/bio-engineering in North America will be examined. A vision will be presented with what lies ahead and what challenges the current and future agricultural engineers need to address increasing energy demand, environmental issues and sustainable food production to meet the needs of the increasing world population.

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