International Conference on
Contemporary Issues in Integrating Health and Nutrition with the
Emerging Areas of Food Technology, Agriculture,
Environment and Allied Sciences

Impact of Modern Technologies on Food and Agriculture

Manisha Ohlan[1], Dr. Manju Dahiya[2] and Neenu Poonia[3]

[1]Ph.D. Scholar, Department of Extension Education and Communication Management
[2]Principal Scientist, Department of Extension Education and Communication Management
[3]Ph.D. Scholar, Department of Textiles and Apparel Designing I.C. College of Home Sciences
CCS Haryana Agricultural University, Hisar, Haryana
E-mail: [1]anishaohlan1@gmail.com, [2]manju_hau@rediff.com, [3]ninu29poonia@gmail.com

Abstract—*Food and Agricultural Organization's vision is of a 'world free from hunger and malnutrition, where food and agriculture contribute to improving the living standards of all, especially the poorest, in an economically, socially and environmentally sustainable manner'. The world's population is expected to grow to almost 10 billion by 2050, boosting agricultural demand – in a scenario of modest economic growth – by some 50 percent compared to 2013. Over the centuries, as farmers have adopted more technology in their pursuit of greater yields, the belief that 'bigger is better' has come to dominate farming, rendering small-scale operations impractical. But advances in robotics and sensing technologies are threatening to disrupt today's agribusiness model. Modern farms and agricultural operations work far differently than those a few decades ago, primarily because of advancements in technology, including sensors, devices, machines, and information technology. Today's agriculture routinely uses sophisticated technologies such as robots, temperature and moisture sensors, aerial images, and GPS technology. These advanced devices and precision agriculture and robotic systems allow businesses to be more profitable, efficient, safer, and more environmentally friendly. Farmers no longer have to apply water, fertilizers, and pesticides uniformly across entire fields. Instead, they can use the minimum quantities required and target very specific areas, or even treat individual plants differently. The benefits includes higher crop productivity; decreased use of water, fertilizer, and pesticides, which in turn keeps food prices down; reduced impact on natural ecosystems; less runoff of chemicals into rivers and groundwater and increased worker safety.*

Keywords*: Food, agriculture, technologies, advancement.*

ISBN: 978-93-85822-87-2
Page No. 63-63