



Techno-economy in the Next Decade



PROF. (DR.) AMAR P. GARG

Vice-Chancellor

Shobhit University, MEERUT - 250110

***Advancement in technology
of computers, machine
learning, robotics, artificial
intelligence, sensors and
genome sequencing will
enable the medical system to
advance more in next decade
than in last 100 years***

Computer based medical technology with the help of artificial intelligence and learning will facilitate the development of self serve diagnostic kits and star trek style portable systems.

Robots will replace nursing staff and will do the surgery. Tele-surgery will allow the world's top surgeons to do their work from their comfort hospital.

***Cell and organ culture
will facilitate the
replacement of ailing
organs.***

Genetic computer based technology will facilitate the production of medicines as per the needs of personal genome.

Treatment of various diseases with microbial cultures will be the major medical practice.

Probiotics and functional foods will treat the major diseases including most cancers.

We all believe that our body is made up of cells but the researchers have now proved that our body contains 10 times more microbes than cells. Microbiome may be a missing link between environment, genome and human health.

It is expected that the dietary habits will change in next decade. Non-vegetarian population in India will rise and vegetarians will be more inclined to fruits, butter and milk diets while Chinese will lose interest in pork.

Dietary habits will reshape global economy and the trade will flow to agriculture forcing the companies to develop new food products to serve shifting tastes.

***Organic agriculture including
aquaculture will flourish.***

Biotechnology will facilitate the production of genetically modified crops to meet the growing demand of qualitative nutritious food.

Plant breeders will produce early maturing high yielding hybrid varieties which will govern the economy of a country.

Environmentally controlled cropping will facilitate the production of all types of food crops in all areas round the year.

Bigger herds and fatter animals will be the future trend.

Advances in engineering and technology will make the products within the reach of last person.

Geo-engineering, smart grids including solar power, nanotechnology, green engineering, sustainable cities, deeper knowledge of space, climate change, communication technology and production of drinking water from oceans will change the life of a common man. The nations which will develop new innovative cheaper technologies will govern the economy of the world in next decade.