GREEN REVOLUTION A BOON OR A CURSE?

1970 was the year when ‘Father of green revolution’, Norman E Borlaug was awarded with noble prize for his extra ordinary work in world peace through increasing the food supply. He introduced semi-dwarf, high yielding, disease resistant variety of wheat (stem rust resistant) along with modern technology in Mexico. He introduced this variety in Mexico, Pakistan and India. The country which were unable to produce sufficient food are starting to export to other countries. According to the article published on 1997 states that the way of agriculture adopted by Borlaug have saved billion of life. Borlaug’s crop was different from traditional crop as it was highly responsive to pesticide and fertilizer application. This result lead to establishment of many chemical fertilizer industries and pesticide industries. From that excessive use of chemical were being applied in the agricultural field. The health of farmers and consumers are degrading which are seeing nowadays.

Although the production has been increased through green revolution but It always be the question was there no any other way for increment of production? It is nice to see the world is developing day to day. Many Agro-based industries have been established and many people are getting job. The problem of food security is solving but the health condition is the major concerns. The excessive use of pesticide and chemical fertilizer mixed with source of water and result in pollution of water. It leads to destruction of aquatic lives. The soil condition is now totally depending on fertilizer and pesticides. The structure of soil, its fertility and microbial density is completely degrading. Farmer have to spend more amount of money on pesticides and fertilizers since crop production is extremely scarce in absence of these two. Farmer have to take loan money for buying and pesticide checking authority reject many crops and vegetables due to presence of chemical and farmer cannot pay his loan and ultimately, he/she suicide. It is very serious issue.
According to research article of Rosemary Steinmetz, Peter C. M. Young, Andrea Caperell-Grant, Edward A. Gize, Burra V. Madhukar, Nira Ben-Jonathan and Robert M. Biggsby on pesticide residue shows that the estrogenic action of some persistent organochlorine pesticide residues may play a role in the progression of hormonally responsive tumors of the breast and uterus. Every year many people are suffering from cancer. According to the news of India, every year a large number of children are born with abnormal body development. Children are born with brainless skull or poor developed brain. They are unable to walk properly, speak properly and show slow response. The lactating mother are suffering from pesticides effects which have been directly influenced on the health of newborn child. According to the report, the mother milk contains 300% more endosulfan than normal range which affect on health of children. Every year number of patient suffering of heart-diseases, lung disease and cancer are increasing. Nation have to spend more amount of money on health sector. Even teenagers are suffering from Heart attack and diabetes problems. Her citizens are becoming passive and unhealthy.

Norman had to develop a variety which is more responsive towards organic manure rather than chemical fertilizer. There are many possible ways for increasing production using organic manure. The use of FYM, Compost, green manuring etc. took few times for increasing production but they are more sustainable. They don’t have residual effects on the health of consumer. Nowadays whole world is adopting organic farming. They have now realizing the effect of chemicals. Many places of world, farmers are still using organochloride and organophosphate pesticide which have long persistent period in the environment. The pests are developing resistant towards many chemical pesticides by which number of pests are increasing day by day which are destroying our crops. This can be control either by using high dose of pesticide which affect environment and health exponentially or by using cultural methods (crop rotation, inter-cropping, trap-cropping, use of resistant variety), mechanical method (use of different insects’ trap) and physical method (modification of temperature and moisture, use of radiant energy) and most effective Biological method (bio-pesticide). It has been so long that we are using chemical in our farm, it took many years for its recovery. We have to shift towards organic farming by slowly reducing the use of chemical fertilizer and also decreasing the use of chemical pesticide.
Norman E. Borlaug have great contribution in agriculture and I cannot debate in his contribution. I am person of 20th century and if he hasn't made new variety then world was in war. There will be conflict among every country. Military powerful country will dominate towards poor country for food and my forefather may or mayn’t be survive and I will or won’t be today. I have great respect toward father of green revolution. Norman developed new variety responsive for chemical fertilizer but we started to put more fertilizers in the farm for increasing yield. It increases yield for few years on increasing dose of fertilizer but after that no further increment on yield and plant become so susceptible to pest that we have to spray pesticide to protect our crop. Thereafter many poisonous pesticides have been evolved such as DDT, BHC etc. and its effect was first introduced by Rachel Carson in her book called ‘The Silent Spring’. We can adopt natural way of farming to increase our production which was explained by famous Japanese farmer Masanobu Fukuoka in his book called ‘One Straw Revolution’.

THANK YOU....