

# **ASSIGNMENT-1**

## **Topic : Agriculture**

**Background :** Agriculture industry faces ethical dilemmas regarding the use of genetic modified organism and organic farming practices, Where as GMO foods are designed to be healthier and cheaper to produce and include added nutrients, fewer pesticides, and cheaper prices, but they raise concerns having effect on human health. Whereas sustainable farming gives priority to human health, soil fertility and environment.

In this dialogue Sheshank and Srishanth discuss their perspectives.

### **Participants :-**

**Srishanth :** A genetic engineer specializes in improving crops through GMO.

**Sheshank :** An organic farmer who follows traditional farming methods.

**Srishanth :** Hey Sheshank, Genetic modification of seeds helps to increase the yield of production efficiently in less time.

**Sheshank :** Yes, GM yields the production but it has huge health and environmental risks associated.

**Srishanth :** It reduces the use of pesticides, fertilizers and chemicals and enhances the nutrients in the crops.

**Sheshank :** Well, Organic farming helps to grow the crops in a natural way and the major thing is it promotes soil health and fertility.

**Srishanth :** Yes, organic farming may promote soil health but Genetic modification helps in large scale production to meet the growing global demand for food.

**Sheshank :** Well, Organic farming reduces the waste of food , for example: banana peels , vegetable peels and left over food which can be used for decomposition.

**Srishanth :** While in addition, making plants more resilient to climate change. This allows us to develop plants that can thrive in adverse conditions and produce more nutritious food.

**Sheshank :** But on the other hand, sustainable farming methods favor natural and organic methods which I believe are safer for the environment and consumers.

**Srishanth :** I agree, Organic farming concerns about health issues but GM crops go thorough security testing, by being affirmed for commercial utilize and also it reduces deforestation.

**Sheshank :** Here, sustainable farming practices biodiversity, greatly promotes healthier ecosystems and consumers are also demanding organic products due to concerns of the long-term impacts on human wellbeing.

**Srishanth :** Reduced need for chemical pesticides and herbicides associated with some genetically modified crops may lead to less environmental damage and minimizes crop diseases.

**Sheshank :** Here, Organic provides pest controls and manages environmental challenges.

**Srishanth :** I agree with the point, but coming to the demand of food it should be given more priority because food scarcity is a concern.

**Sheshank :** but, This enhances diverse crop rotation and responsible land management.

**Srishanth :** Yes its true, organic farming has its merits but in some case these two methods can co-exist.(GMO and organic farming), As GMO reduces the chemical pesticides in organic farming.

**Sheshank :** yeah, we can use both to overcome the challenges.

**Srishanth :** We should be ensuring that agriculture remains ethical and sustainable.

**Sheshank :** Exactly, We have to prioritize the health of the consumers , environment and the methods to feed growing global demand.

**Reflection :** In this conversation Sheshank and Srishanth depicts the ethical dilemma in agriculture.

where, Sheshank highlights the importance of GMO as it overcomes the challenges of the food demand, increases nutrients and reduce the need of deforestation. Srishanth emphasizes the potential benefits of organic farming which classifies and prioritizes biodiversity and human health on long run.

The dialogue highlights that, there is a need to balance the GMO and Organic farming practices when necessary to meet the food crisis, prioritizing human health which also enhances soil structure and nutrient intake.