Humans have used animals for nourishments, body parts to help survival, in sports, in fields, in experiments and also have domesticated them as companions for a long time.

Although the animal rights groups have been raising the issue of animal cruelty for the past few decades, however, animals are still exploited in the industrial processing. Billions of chickens, turkeys, sheep, cows, pigs, geese, and other animals are maltreated everyday around the world in order to prepare them to feed humans. A vast literature exists on the issue of animal suffering and the cruelties humans exert on them, and its ethical implications have been discussed. However, there are conflicting viewpoints on animal experimentations and particularly genetic manipulations of animals in societies where biotechnology sector has reached a level of potentiality to produce such animals. For example, is it ethical to engineer hundreds of transgenic pigs and keep them in standby positions to provide heart valves and whole heart transplants? Or even engineer a pig to grow a heart using certain genes from the intended heart patients? Is it ethical to use animals entirely as a means to save a human? How is it that the animal can be eaten entirely for food purposes, but may be questioned ethically when the animal is to be helping a human to survive?

In recent years, the biotechnology community has found the capacity to make any kind of transgenic animals they wish including: animals which glow green, become diabetic or oncogenic in a given span of time, serve as bioreactors or bodies that can produce drug molecules. The question is where to draw the line with regard to ethics in using biotechnology to manipulate animals in serving the needs of humans? Obviously, the lines are not quite clear and the standards may differ in different countries and cultures. But, what is clear is that as more societies find the capacity to create animals whose bodies are pharmaceutical manufacturing plants, whose organs provide transplants, and whose bodies are genetically altered to provide experimental platforms; the ethical bodies in the government and non-government should scrutinize the motives and actions where biotechnologies are applied.

As some argue, the best way to measure our humanity is not only in respecting the individual human beings but also in how we treat animals in our societies.

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