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3 Week 2 Assignment Template

Sustainable Living Guide Contributions, Part Two of Four:

Sustaining our Agricultural Resources

Agricultural Robots

The agricultural sector has also applied technology, where both benefits and limitations are experienced. Agricultural robots refer to machines used in activities like removing weeds, planting, harvesting, and taking soil assessments. The first machine was introduced in 1974, highly applied in cotton plantations leading to more production levels. New ideas have been introduced over the years, where the robots are used in almost all agricultural activities. The literature describes the impacts of farming robots on humans and the physical environment and actions needed to control the effects.

Agricultural robots have several effects on living organisms, such as human beings. It is expensive to purchase and maintain robots, creating a gap between low income and wealthy farmers. The machines do work efficiently, faster, and produce a lot. However, all farmers may not access the benefit due to the costs incurred. It means the technology favors the rich while the poor have to depend on the traditional methods (Aravind et al., 2017). For that reason, it is an impact as it deepens the bridge in social classes, yet farming is one of the significant activities in the nation. The robots also affect humans due to the loss of jobs, especially for casual laborers. They replace humans causing unemployment, thus impacting the economy of the people.

Technology also affects the physical surrounding, primarily through land degradation. Agricultural robots lack the reasoning capacity and thus adhere to all the commands given. For example, removing weeds would kill soil organisms necessary for fertility (Vasconez et al., 2019). When this happens, land productivity level reduces, thus harming the environment.

It is the case since the natural system is altered. With land degradation, chances for soil erosion increase, which would be deposited in water bodies altering the marine habitats.

The application of several ideas would resolve the issue. People should be educated on the impacts of robots and ways to deal with their challenges. For example, farmers would be directed to avoid over depending on the machines but incorporating the traditional methods, so land degradation is controlled. Besides, regulations should be passed on limits for which the tools are used. It would not only take care of the surroundings but also control unemployment rates.

In summation, having described the impacts of farming robots on humans and the physical environment and actions needed to control the effects, it is clear that agricultural robots are necessary for the industry, but the effects should be addressed. The machines are costly and replacing human labor and leading to land degradation. As covered, the issues would be solved by educating community members about the impacts and limit puts for which the robots are used.

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References

Aravind, K. R., Raja, P., & Pérez Ruiz, M. (2017). Task-based agricultural mobile robots in arable farming: A review. *Spanish Journal of Agricultural Research*, 2017 (15 (1)), 1-16.

2

Vasconez, J. P., Kantor, G. A., & Cheein, F. A. A. (2019). Human-robot interaction in agriculture: A survey and current challenges. *Biosystems Engineering*, 179, 35-48.

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