

Nanotechnology article review sample

[Technology](#), [Development](#)



Discussion Board

Nanotechnology refers to the design, study, manipulation, application, and synthesis of functional devices, materials, and systems through the process of control of matter (Salamanca-Buentello et al., 2005). This form of technology can be harnessed to address the most crucial world's problems related to development. It is, however, unfortunate that the applications of nanotechnology have not been systematically prioritized to address the challenges that most developing countries across the world face every day. Proponents of this form of technology anticipate that it will provide solutions to critical challenges that face developing countries and less developed countries.

However, such optimistic view as argued by a few researchers does not take into account the social factors that have significant influence on the development of science and technology (Invernizzi and Foladori, 2005).

Some scholars argue that applications of nanotechnology that may be beneficial to poorer countries are only at their initiation process implying that prevailing socioeconomic hierarchies may hinder the applications from benefiting the poorer nations. However, through the recognition of such ideas and facts, the society may avoid the repetition of errors in the biotechnology and pharmaceutical industries. This may enable the applications of this technology to become a strategy aimed at alleviating challenges instead of widening disparities.

Nanotechnology may be beneficial or not to the developing countries.

Whatever the cases, the circumstances of the application is what determines the results. For this reason, it is essential to note that science and

technology alone cannot provide solutions to the challenges of sustainable development (Salamanca-Buentello et al., 2005). However, the benefits of the applications cannot be ignored especially for those countries that have adopted the technology. For instance, the applications have been proven to reduce the rates of mortality thus improving the life expectancy of individuals in these countries. This implies that nanotechnology relates directly to medical and social well-being.

Nanotechnology benefits the energy and manufacturing sectors (economic perspective). For instance, it leads to the development of more efficient products of absorbing, producing, and storing energy. In addition, manufacturing sector products are lighter and durable as compared to materials not produced using the technology. Thus, nanotechnology improves efficiency and effectiveness through applications. Its application in the medical field is widely recognized in countries that have adopted the technology. Although, expensive, medical products produced through the technology such as drugs are efficient and effective. The technology, however, is expensive and can mean significant costs for developing countries that are already struggling to boost their economy (Salamanca-Buentello et al., 2005).

Nanotechnology relates to the study of the rise of technology and its effect on individuals and their institutions, relations, politics, health, war, education, and all aspects of human life. As learnt in the course, technology plays a significant role in improving the life of people, just like nanotechnology does in the developing countries. Nanotechnology applications are of great benefit if adopted appropriately and for the

appropriate application. For developing countries, support should be offered in the adoption process if countries are willing to harness the technology. Political leaders should play a key role in creating awareness, adopting, and implementing the technology as they are the ones responsible for implementation of any policies and programs in the country. Adopting the technology will assist in the achievement of some of the Millennium Development Goals (MDG's) such as improving the quality of life of people through reduction of mortality rates especially in the developing countries. Thus, it can act as one of the solutions to challenges faced by the poor, instead of creating disparities.

References

- Invernizzi, N., & Foladori, G. (2005). Nanotechnology and the Developing World: Will Nanotechnology Overcome Poverty or Widen Disparities?. *Nanotechnology Law & Business Journal*, 2(3), 1-10.
- Salamanca-Buentello, F., Persad, D. L., Court, E. B., . Martin, D. K., Daar,, A. S., & Singer, P. A. (2005). Nanotechnology and the Developing World. *Policy Forum*, 2(5), 383-386.