

Need for risk assessment of biotechnology projects

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Need for Risk Assessment of Biotechnology Projects. Development of biotechnology has led to tremendous progress in the fields of agriculture, medicine, waste management and pollution control. The advancement in the genetic engineering and molecular biology have helped to develop modified or special organisms that could be used in some specific tailor made situations and applications. The risk being referred to these situations are related to the extend of hazard that is assessed based on the type of the population exposed, the concentration of the exposure and the duration of exposure of engineered species .(Wolt and Peterson, 2000). And also, the extend of risk varies from situation to situation. In the case of agriculture , the engineered species are applied on the field and hence major apprehensions would be the environmental impact and various issues related to the human health . When it is related to industrial products, the concerns would be more towards the worker safety and the potential threat to their health. The perception of risks and benefits of genetically modified organisms or plant varieties in the minds of public decides the extend of attempts that industries would have to involve in the test production and marketing of these products. Often the sense of apprehension that have permeated across the society about this high technology is due to the absence of proper scientific explanations and not the large scale tests (Wolt and Peterson, 2000) .

The acceptability of these technologies by the public is related to the extend of knowledge transmitted. When this factor becomes limiting, the public has limited appreciation of technology and the emotive factors that often lead to the risk perception turns highly skewed (Wolt and Peterson, 2000). Thus , the public perception of the risks related to the biotechnological developments <https://assignbuster.com/need-for-risk-assessment-of-biotechnology-projects/>

would be totally different from the knowledge led perception of the experts. And hence, the missing aspect in the entire system is the non-technical aspect of risk assessment of the operations. The risk assessment process that are often too quantitative in nature could be improved by supplementing with some essential qualitative information. Integrating knowledge and risk through societal analysis in the form of expert panels, citizen juries or focus groups to ensure the public participation in the management and communication of risk (Wolt and Peterson, 2000). Another significant gap in the risk management process is the ineffective communication of the risk by the most trusted sources. Though the risk assessment is a process rooted firmly on scientific principles its judgment on the acceptable risk involves a more larger domain of decision making on public policy. And , the lack of information available to public to understand the level safety in most of the biotechnological trials is the root cause of the concern (Wolt and Peterson, 2000). As these essential components are not well communicated the reasons to assure trust in the exercise turns minimal. And further, the lack of flexibility in the public opinion on these issues prevents the policy makers to make suitable decision. Thus the public is unable to decide either on knowledge or on trust and most of the biotechnological programmes involving generically engineering faces significant public resistance.

Works Cited

Wolt, J. D., Peterson, R. K. D. (2000). Agricultural biotechnology and societal decision-making: the role of risk analysis. *AgBioForum*, 3(1), 39-46. Available on the World Wide Web: <http://www.agbioforum.org>.