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"Utilisation of diversity in land use systems: Sustainable and organic approaches to meet human needs"

Assessing the Impacts of Agricultural Biotechnologies in the Tropics

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Abstract

The application of biotechnology-based products to respond to critical needs in the agrifood and environmental management sectors of developing countries is an integrated set of activities designed to identify opportunities for biotechnological innovations, and to overcome key bottlenecks to their effective application.

This decision reflects recognition of the need for careful, rigorous analysis of the social, economic, and environmental impacts of agricultural biotechnology applications. From the outset, it was felt that this should be a crucial part of the overall work program, an essential complement to activities geared to promoting the transfer and application of specific biotechnology-based products, and improving the capacities of biotechnology-based enterprises.

Understanding the way in which biotechnology applications affect socioeconomic and environmental variables is not simply an academic exercise. Impact assessment data is important to a range of decision-makers ‰ from public sector research agencies involved in supporting biotechnology research; to regulatory bodies charged with granting approvals for the introduction of specific products; to a range of private sector and nongovernmental actors faced with decisions regarding future investments in the adoption and application of biotechnology-based products.

Unfortunately, the very diversity of interests at stake complicates the task of assessing the impacts of particular biotechnology applications. The impact analysis approach the issue from differing perspectives and with differing needs in terms of the type of information and level of detail they require. The point of view and methodological approach of a university-based research are likely to differ widely from those of a regulatory office. More broadly, it will underscore the need for a consultative approach to impact assessment to ensure that the broadest possible range of interests is reflected in the analysis. This is essential not simply to improve the quality of analysis but also to ensure a strong constituency of public support for resulting policy decisions. Ensuring a balance between scientific rigor and public participation is by no means an easy task, but it is essential to ensure the effectiveness and credibility of impact assessment exercises.

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