

Communicating Biosafety-A New Approach for Agrobiotechnology Adoption

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“We are obliged to create new models, rather than striving to oust the old, engaged to realize the new conditions of communication”. (Michael Bühler).

Debates over agrobiotechnology is a part of a long history of social discourse over new products. Claims about the promise of new technology are at times greeted with suspicion, doubt, ignorance, opposition and even indifference.

Technology's acceptance is based not only on technological soundness but also on how it's perceived to socially, politically and economically. Public acceptance in modern agrobiotechnology is one of the factors that will largely influence the extent to which countries invest in and benefit from genetic engineering to increase food production.

Biosafety is defined as a “Set of measures or actions addressing the safety aspects related to the application of biotechnologies and to the release into the environment of transgenic plants and organisms, particularly microorganisms, that could negatively affect plant genetic resources, plant, animal or human health, or the environment” (UNEP Glossary 2007) The term “biosafety” is generally used to describe frameworks of policy, regulation and management to control potential risks associated with the use of new biotechnologies (“New biotechnologies” being a term used to differentiate processes that use modern techniques of biotechnology, such as recombinant DNA techniques, from traditional breeding and improvement techniques used in agriculture), including their use, release and transboundary movements. Biosafety frameworks may also address risk communication and other issues such as potential positive or negative socio-economic impacts. Many of the legal instruments addressing biosafety have primary goals, such as the preservation of biodiversity, consumer protection, public participation and information, development and trade, and address biosafety only indirectly. This same term, “biosafety”, is used in the Biosafety Protocol to the Convention on Biological Diversity Cartagena, where it refers specifically to the transboundary movement of living modified organisms (LMOs).

The issue of genetic engineering and biosafety has captured unprecedented public interest and concern around the world. Apart from the scientific discussion and polarized debate about genetic engineering, many other concerns, ethical issues and socio economic impact economic must be treated in biosafety regulation, at international and national level. Nationally there usually biosafety regulatory system comprehensive and complete that countries put in place to meet the objectives of the Biosafety Protocol or, if they are not part of it, to release GMOs to the environment and market

Any process of change starts from the individual, family and community, achieve changes in these levels has its impact on higher levels of organization. But achieving these changes depends on a process of information, awareness and behavior change, change that will only happen if people are well informed and aware of the need for change. An organized community informed and sensitized improve their lifestyles and adopt healthier behaviors and practices of life allowing

you to live better and contribute to local development. With the participation in dialogue and consultation spaces promoting policies aimed at improving the quality of life of the population, is strengthened and promoted citizen participation mechanisms surveillance and social control. In recent years there has been a growing recognition that the success of agrobiotechnology biosafety projects and frameworks depends largely on the use of communication as a facilitating tool for public participation and informed decision making. The experience of the last decade has shown that implementation of projects about biosafety frameworks can fail or get poor results if decision makers and civil society are not involved, integrated, properly consulted, informed and mobilized. Without exception, good communication is regarded as essential in this field. So, the essence is communication and participation. This can contribute in some ways to problem-solving-we just need to get better at knowing how. Using communication both as a tool and as a way of articulation processes of development and social change, improving everyday lives, and empowering people to influence their own lives and those of their fellow community members. There is no “one size fits all” or “best” communication approach, but there are many different ways of communication, depending on several levels. For example, at the policy level, to convince a group of decision makers, or community level, to promote dialogue between the actors. In this sense, an effective communication strategy that involve directly to key audiences, has the potential to generate significant changes at the level of behavior and policies, and therefore, in the development of the territory.

One of the great challenges for those responsible for biosafety frameworks within their organizations is the perception that others have of biosafety. Until now, Risk communication approach was used generally in all the Biosafety frameworks development around the world. But, it is necessary communicate risk or it is more important communicate safety? Professionals dedicated to biosafety are accustomed to seeking and reduce risks, and therefore rely on risk communication. But, unfortunately, the rest of society does not perceive the risks in the same way, making communication difficult.

Generally required that those responsible for implementing biosafety frameworks and risk management promote and facilitate awareness, education and public participation with respect to biosafety,

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also requires mandatory public consultation and allow public access to the results of decisions the decision-making process. But, generally experts fall into the trap of believing in “cognitive deficit” of the public to explain the low participation in biosafety processes or rejection of GMOs and posits that the public should be “educated” in order to have acceptance genetic engineering, then the public will confirm the political decisions that have already been taken, or that scientific discussion should be left to scientists in the political field, while leaving public comments on the ethical and social concerns that accompany genetic engineering. In this context, it has been raised so far, the use of one-way communication strategies that have prevented true public participation in the process of adoption of new biotechnologies and implementation of national biosafety frameworks.

In different Biotechnology and Biosafety Projects, we were used a new approach, based on Communication for Development, Communication for behavior change and socio-semiotics as generating consensus and partnerships among all actors involved in the development of modern biotechnology. Communication for Development is a social process based on dialogue using a broad range of tools and methods. It is also about seeking change at different levels including listening, building trust, sharing knowledge and skills, building policies, debating and learning to achieve sustainable and meaningful change. It is not public relations or corporate communications. The discipline of communication to development is currently at a crossroads.

A new approach called Strategic Communication Biosafety In Agrobiotechnology is proposed to promote the active participation of the various stakeholders in the design, implementation and management of biosafety frameworks. In this approach, one of the most effective ways to communicate the value of security is to focus on people which one attempts to address. The reason someone changes the behavior or action takes place is because there are inherent benefit to the person.

The first step in “communicating biosafety,” begins with knowing what the public knows and does not know already about GMOs and biotechnology. This is central to any sound information process. For this reason, a key focus in Knowledge, Attitudes and Practices’ KAP survey have to be posted. Biosafety FAO/TCP projects in Bolivia, Dominican Republic and Granada understood components of communication and participation: the approach used Survey on Knowledge, Attitudes and Practices (KAP) as the first step towards the development and formulation of a communication strategy and public awareness. A KAP survey is a “representative study of a specific population used to collect information on what is known, believed and done in relation to a particular topic, in this case, biosafety. In most KAP surveys, the interviewer verbally collects data based on a structured questionnaire and standardized. These data can be analyzed either quantitatively or qualitatively, depending upon the objectives and design of the study. However, unlike simple surveys, the KAP survey considers broader cultural issues through questions about the practices and beliefs in general.

The polarized views widely divergent interests and lead us to a state of inertia, which is not possible a credible process of awareness, education and public engagement should allow all views to be heard and debated in all subjects. Values and psychological factors as well as confidence in scientific agencies responsible for biosafety assessment and management influence public acceptance of agricultural biotechnology. The public knows, and knows many things. Experience has also shown that the public can discuss good scientific issues if these have been communicated so that people can understand, having been offered the interpretants necessary for this, and that the public has a

deep wisdom in dealing with scientific uncertainty and political science that must be heard.

It is very important to understand that Information Is Not the Same as Communication. The spread is only part of the Communication process. Communication *per se* does not guarantee active participation. However, certain types of approaches and modes of communication may enhancing it and promote the integration of all stakeholders. Under this framework of specificity, it may be noted that generate access and communication processes is a commitment to a form of access and development, to the extent that it recognizes as part of its strategy to communication phenomena. According to reports on public participation in biosafety of biotechnology, found that so far the actions of responsible authorities, merely INFORM. Clearly this type of information is not sufficient to ensure the active participation, or to promote ownership of projects, consensus on decisions made and the integration of all stakeholders in the implementation of biosafety in a country.

The knowledge and information alone does not produce changes in behavior. We must go beyond the transmission of information to achieve a change in attitudes, practices and knowledge the project should not be seen from the point of view of who implements but from the standpoint of people who will be directly affected by it. To ensure that the strategy is relevant and effective must be designed with the community to consider their priorities and aspirations. This approach reduces the possibility of using approaches, idioms, media, communication channels or inadequate materials. It should work much in the consensus building. Consensus is an agreement which is reached through a process that identifies the needs, interests and values between the parties and aims to satisfy as many as possible of them. Consensus does not require unanimity. An arrangement by consensus may not satisfy all the interests of each of the project participants equally and some may not support all the parties to the agreement on the same level. However, once agreement is reached, each of the parties can commit to its implementation. This usually happens because the main needs, interests and values of the PROJECT and each of the parties are referred to at least some extent, and none of those needs, interests or values are seriously affected by the agreement. This process requires work on the sense of belonging, ownership of the project.

Active participation in the communication process, involving the right to participate in the development of content and messages, as well as the right to influence decision levels overall communications policy for a community to give, both for itself and for its relationship with the outside. A key challenge in public participation is to reach target audiences who are not organized, outside the usual NGOs and civil society groups who are seen as the public face. These sectors include farmers, especially small farmers in developing countries, and consumers in general.

An essential constituent for the implementation of effective public participation is access to information. The key word today is access. How to make so that all stakeholders have access to information? This requires implementing effective communication strategies based on knowledge of the community to which they are addressed.

The broad objective of the biosafety communication is taken a proactive and participatory approach to public-oriented policymaking. These approaches include regulatory agencies, food manufacturers, farmers, the scientific community, consumer activist groups, and media. The civil society remains major stakeholders in this crusade.

We propose to work in a communication to the transformation and

internalization by society biosafety concept, based on a contextual view of the world and a critical-constructivist paradigm, whose philosophy is that of solidarity, ethical thought itself committed to sustainability of all life forms, where human, social, ecological and ethical, prevail over the economic, political and institutional, considered only as means.

- A communication, understanding the world in its complexity, in its multiple interdependent dimensions, opts for communicative rationality which is the reference context and interaction the key to overcoming problems through social learning.

- A communication that part of the stories, realities, needs and aspirations, and innovation assumes when it is relevant and emerges

from social interaction processes with the participation of those who need it.

- A communication that is seen as an activity for all, which means they assume the role of facilitators of conversations, meetings, discussions and debates between all the groups that make the dynamics of a society, and are the privileged place of participatory construction of the public.

Finally, you may need to exercise to listen and read backwards, which wants to appear to the right. You may also need to exercise to appoint new names with new realities, because the old names can not contain them. This is the biggest challenge of the GM adoption: charting a new path in communicating biosafety and modern biotechnology.