The Role of Agricultural Science Knowledge Transfer to Promote Food and Nutrition Security

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Introduction and Objectives

• Agricultural science strives to improve people’s basic livelihoods. In this respect, it has achieved great success to improve food security in developing countries in the last decades.
• However, the agricultural sector has become negatively to the spotlight in the public opinion. Critical consumers question the health, ethical and moral aspects of modern agricultural production. Since large parts of society no longer have direct contact with agriculture, they draw their knowledge from mass media coverage, which is often negatively connoted and contributes significantly to the skeptical perception of agriculture from a consumer perspective.
• In addition to the media, citizens’ initiatives, interest groups and non-governmental organizations (NGOs) have an ever-increasing influence on public discussions and policy-making of agricultural issues.
• This study aims at investigating whether and to what extent universities, as the promoter of state agricultural research, can contribute to knowledge transfer for a partly non-academic clientele in order to present a more balanced picture of agricultural realities.

Materials and Methods

• The methods used are based on a comprehensive literature research.
• Furthermore, guide-based telephone interviews were conducted with agricultural scientist of the University of Hohenheim in order to discuss and analyze the topic from the point of view of practicing science based on this case study.

Conclusions

• At present, the scientific system is based on indicator-based performance incentives and resulting competition for attention. What is needed is the establishment of a new evaluation system that not only measures the content of scientific publications in value for knowledge and which also recognizes and appreciates knowledge transfer services as a service to society.
• Above all, the universities themselves, but also the donors with their influence through their third-party funding, are called upon. Discussion and guidelines for action are needed, on the one hand, which strategic objectives are to be pursued and, on the other hand, under what conditions or evaluation indicators they want to award research funds.

Results

• Confidence in science has fallen significantly in recent years, at least for one part of society. University science communication can help to create an awareness that public funds are used efficiently and sensibly in the scientific system. It can also reclaim lost trust in science.
• Such knowledge transfer services cannot be taken over exclusively by the scientists themselves. It requires cooperation and a clear division of tasks, e.g. with experts from the communication sciences and/or with science journalists.
• By means of good, regular and trusting cooperation, scientific external representation could take place at the highest level across institutes. This serves both the institutes as well as the university as a whole and guarantees a professional external presentation at large that goes far beyond the field of pure public relations.
• Universities need to understand the promotion of transfer activities (in particular science communication) as a strategic task and take responsibility for them. In exchange with partners from politics, civil society, business or culture, a sound understanding of natural and social changes can be developed. However, such exchange processes are complex and require time, personnel and money.