ORGANIC AND NATURAL FARMING ACTORS EDUCATE COMMUNITY MEMBERS ON ENVIRONMENTAL AND FOOD RELATED ISSUES WITH REGARD TO GMO'S

Doris Pick University of Kassel, Germany Economics of Town and regional Development doris.pick@uni-kassel.de

Regional actors in many regions of the world are concerned about genetically engineered plants, food, feed and seed. Regional actors involved in the organic and natural food and farming businesses seem to lead the way in wanting to know more about the sources of their food, what their food contains and how it is produced. In various ways they pass this information on to their community members. This paper highlights different and sometimes innovative approaches to community education with regard to GMOs in different study regions of North America and Germany, and shares diverse outcomes of community education within particular statutory and other frameworks.

Materials and methods

Expert Interviews in North America (California, Vermont, Ontario) and Germany (primarily in Mecklenburg-Western Pomerania and Baden-Wuerttemberg), together with literature surveys, examined different levels of involvement, challenges faced, and achievements of organic and natural farming actors initiating or participating in GMO-related community education.

Diversity of relevant statutory and other frameworks

Whereas in Germany the establishment of county laws regarding GMOs is not a legal option, counties in California can make use of this opportunity, and several of them have done so in the past four years by creating GE-free regions. In Germany, GE-free regions have most often been created via voluntary farmer-to-farmer commitments (see Pick 2005). The process of creating GE-free regions has been accompanied by a range of GMO- related community education activities. This is also true of the process of establishing precautionary GMO legislation in North America, such as the seed labelling law in the State of Vermont (see Pick 2007).

Various GMO related community education subjects

- What is genetic engineering in agriculture and how does it impact e.g. seeds, plants, food and feed, farming, rural community and environmental systems?
- Economic effects of the introduction of GMOs for farmers
- The protection of biodiversity, rural landscapes and communities.
- Indigenous peoples' knowledge (regarding indigenous and traditional knowledge, see also Fourmile 1999) and GE-free reserve land
- The potential for community supported agriculture (regarding community supported Agriculture in California, see also Strochlic 2004), organic and other low input farming systems

Different actors and approaches to community education with regard to GMO issues

- Farmer-to-Farmer Education: Farmers markets, farmers meetings, farm visits, (movie) demonstrations
- Farmer-to-Consumer Education: School farms, internship on farms, farm tourism enhanced with environmental and food consulting, (movie) demonstrations
- Citizen-to-Citizen Education: Town meetings, bulletin boards (of supermarkets), (movie) demonstrations, information booths (to collect signatures), GMO related Art work (music and drawings)
- Entrepreneur-to-Citizen Education: Restaurant actions, bulletin boards of Supermarkets, extra Labelling in supermarkets, movie sales and rentals
- Stakeholder-to-Citizen Education: Consulting events, information booths (to collect signatures), (movie) demonstrations

GMO-related community education took place in organic and natural supermarkets, which provided information on bulletin boards, pamphlets, extra labelling or a special selection of only (almost) GE-free products. Some co-op supermarkets, in California especially, encouraged their members to donate their membership benefits to the local GE-free county initiative. GMO-related community education also took place during town meetings in the State of Vermont, when discussing the possibility of passing GE-free town resolutions or details of a GE seed labelling law. Meetings and Conferences organised by a variety of local actors were in all study areas a great source of GMO-related community education, although the primary active stakeholder groups varied between the regions, as did the main focus of their education and its outcomes. In Germany for instance, organic and other low input farmers and their organizations formed the most active stakeholder groups. Here, farmer-to-farmer education regarding GMO issues led to farmer-to-farmer commitments, which resulted in the founding of various GE-free regions.

GMO-related community education led in general to greater institutional diversity (regarding institutional diversity in general see Ostrom 2005). New variations of resource governance, initiated through regional actors, like GE-free regions in California and Mecklenburg- Western Pomerania or GE seed labelling laws in Vermont, are dealing with real and potential threats to ecologically, economically and socially sustainable systems. By doing so, they reduce (potential) risks to farmers and the environment as well as to rural and urban communities.

Bibliography

Clark, A. (2004) GM crops are not containable. In Breckling, B., Verhoeven, R. (eds.) Risk Hasard Damage – Specification of Criteria to Assess Environmental Impact of Genetically Modified Organisms Federal Agency for Nature Conservation, Bonn, p. 91 ff.

Fourmile, H. (1999). "Indigenous peoples, the Conservation of Traditional Ecological Knowledge, and Global Governance," in Low, N. (eds.), Global Ethics and Environment, London, Routledge, p. 235 ff.

Ostrom, E. (2005) Understanding Institutional Diversity, Princeton University Press, Princeton, New Jersey.

Pick, D. (2005) Involvement, Challenges and Chances of the Organic Farming Sector in the process of founding Ge-Free regions, Paper presented at the IFOAM Organic World Congress in Adelaide, Australia and published in the Conference Proceedings Book.

Pick, D. (2007) Innovative Verantwortungsgemeinschaften durch nachhaltigen und Ökologischen Landbau – Beispiele aus Mecklenburg-Vorpommern und Kalifornien [Innovative and responsible communities through sustainable and organic farming – Examples from Mecklenburg- Western Pomerania and California]. Paper presented at Zwischen Tradition und Globalisierung - 9. Wissenschaftstagung Ökologischer Landbau, Universität Hohenheim, Stuttgart, Deutschland, 20.-23.03.2007.

Pick, D. (2007): Kompatibilität von Agro-Gentechnik und integrierter Regionalentwicklung in peripheren ländlichen Räumen. In: Agro-Gentechnik im ländlichen Raum, Reihe "Forum für interdisziplinäre Forschung", J.H.Röll-Verlag, Dettelbach, p. 179-202.

Strochlic, R., Crispin, S. (2004): Community supported agriculture in California, Oregon and Washington – Challenges and Opportunities, California Institute for Rural Studies, Davis.

Sumner, Jennifer (2003): Environmental Learning and Community Sustainability in the Age of Corporate Globalization. In Darlene E. Clover and Lilian H. Hill (eds.), Environmental Adult Education: Issues and Concerns. New Directions for Adult and Continuing Education, San Francisco: Jossey-Bass Publishers.