



Rethinking regulation: international norms and local realities

From the STEPS Centre project:
Rethinking Regulation

STEPS project briefing

More reading

Regulating Technology: International Harmonization and Local Realities (2011), by Patrick van Zwaneberg, Adrian Ely and Adrian Smith. Earthscan Books. ISBN 978 1 84971 247 7

Regulatory harmonization and agricultural biotechnology in Argentina and China: Critical assessment of state-centered and decentralized approaches. *Regulation & Governance* (2010), by Patrick Van Zwaneberg, Adrian Ely, Adrian Smith, Chen Chuanbo, Ding Shijun, Maria-Eugenia Fazio and Laura Goldberg.

"Regulation": Rethinking regulation: International Harmonisation and Local Realities, STEPS Working Paper 12 by Patrick van Zwaneberg, Adrian Ely and Adrian Smith (2008) ISBN 978 1 85864 555 7

"Whose reality counts when designing regulation on transgenic seeds in cotton production?" by Arza, V., Fazio, M. E., Goldberg, L. & van Zwaneberg, P. (2009). CENIT Working Paper DT 37/2009, Centro de Investigaciones para la Transformacion, Buenos Aires

Arza, V., Fazio, M. E., Goldberg, L. & van Zwaneberg, P. (2009) 'Whose reality counts when designing regulation on transgenic seeds in cotton production?' CENIT Working Paper DT 37/2009, Centro de Investigaciones para la Transformacion, Buenos Aires

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Credits

This briefing was written by Adrian Smith and Patrick van Zwaneberg and edited by Samantha Reddin.

About the STEPS Centre

The STEPS Centre (Social, Technological and Environmental Pathways to Sustainability) is an interdisciplinary global research and policy engagement hub uniting development studies with science and technology studies. We aim to develop a new approach to understanding, action and communication on sustainability and development in an era of unprecedented dynamic change. The STEPS Centre is based at the Institute of Development Studies and SPRU Science and Technology Policy Research at the University of Sussex with a network of partners in Asia, Africa and Latin America and is funded by the Economic and Social Research Council. Find out more: www.steps-centre.org

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Technologies are finding their way to more remote and diverse corners of the globe, bringing with them significant opportunities for human development, but also risks – to individuals, the environment, and society as a whole. The ESRC STEPS Centre's Regulation project investigated the challenge of regulating technology across very different local settings within

an interdependent and globalising world. The way people use technology often operates far beyond the view of those who negotiate international regulations. We wanted to see how the 'proper' use of technologies assumed in regulatory goals compares with situations on the ground – especially the realities of how poorer communities use technology.



A medicine vendor selling pills and tablets in the Central African Republic. Photo: Juan Vrijdag/PANOS

Critical challenges

In both the cases we studied (see boxes 1 and 2), poorer users are not getting the full benefits of the technology, and so endure certain kinds of risks. Local practices are also raising questions about broader public interests in the sustainability of the technology. This raises some **critical challenges**:

- How do regulators' understandings of the appropriate use of transgenic cotton seeds or antibiotic medicines compare with poorer users' experiences and concerns?
- How, for example, do poorer users access and use technological artefacts? What issues are being raised through the actual use of these technologies, and that the regulatory view does not consider?

A range of rules and regulations at both international and national levels is supposed to determine the way people produce, access and use new technologies. Technologies are subject to multiple procedures for setting norms and standards in relation to quality, safety, effectiveness, intellectual property, environmental protection, and so on. For technologies such as transgenic seeds and pharmaceuticals, the formulation of regulatory assurances is a crucial aspect of the technology development process itself.

Copying Bt cotton in Argentina

Almost all cotton produced in North East Argentina is genetically modified. Yet the vast majority of Chaco's cotton farmers cannot afford to buy 'certified' transgenic seeds. With no cash, and no access to formal credit, small farmers are provided with copied versions of the new varieties, from local co-operatives and other 'informal' dealers, in exchange for part of the farmers' subsequent harvest. The seeds are not certified for minimum quality and performance standards. Sometimes they have not been approved for use on biosafety grounds.

Regulations influence investment decisions, innovation processes, market and industrial structures, the forms in which artefacts are made available, and the ways in which they are used. But technology developers and users are rarely passive followers of regulation. They lobby against, reinterpret, evade and simply ignore regulatory norms, according to their own private requirements or circumstances, or their perception of the public interest.

Over-using antibiotics in China

In Hubei Province in China, a booming pharmaceutical sector provides people with access to a wide range of drugs. When ill, even with a common cold, people are usually sold antibiotics. Doctors, clinics and hospitals often prescribe the newer, more expensive antibiotics, especially to patients who can afford them, because income from drug sales is the only way to earn a living or run a hospital. Patients expect and ask for antibiotics for all sorts of ailments, and rural doctors often oblige. This imposes an unnecessary financial burden on patients and threatens the long-term efficacy of the drugs.

Problems with international "harmonisation"

The international harmonisation of regulation, which has accompanied the liberalisation and expansion of trade, projects certain norms into distant locations. The norms are meant to fix and impose patterns of technology use, mainly through the creation of legal frameworks administered by the state. From the perspective of the OECD countries in which regulatory norms originate, and the international business and civil society lobbies who seek to influence those norms, regulatory harmonisation is supposed to ensure that technologies (and the social practices through which they are produced and used) evolve in particular sought for directions, and not others.

Our research into genetic seed and antibiotic use in Argentina and China found assumptions about the possibility for harmonisation to be problematic. The realities on the ground suggest that internationally harmonised regulation is not able to ensure that socio-technical-ecological pathways of change unfold in the directions that are sought, but also that those sought-for pathways are not always desirable and valued, especially from the perspectives of those groups marginal to the negotiation of regulatory norms.

Harmonisation is not always appropriate, responsive and adaptable to local needs and to the issues of particular groups, especially poorer communities who are generally peripheral to regulatory negotiations.

- Policy responses to regulatory harmonization will have to be tailored to local circumstances and contexts.
- Regulatory space must be provided for poorer peoples' concerns over the diffusion of technological benefits and risks.

Private good vs public good

But the private good for poorer users does not necessarily equate with the public good.

One task is to reframe the problem of regulation in ways that allows poorer users to participate in the negotiation of those norms.

Another is to be able to reflect on the role of regulation in balancing immediate and local developmental concerns with longer-term risks and global public issues.

These proposals are difficult to envisage in circumstances where agricultural and health political economies currently exclude the voices of marginalized actors, and where there are limits on the autonomy of individual jurisdictions to devise locally appropriate technological policies. Nevertheless, it remains important to point out regulatory difficulties such as those identified in this project, since these can inform a rethinking of regulation when opportunities are presented by future openings in harmonization, and new fora for debate.



Cotton. Photo: cobalt123 on Flickr (creative commons)