INVISIBLE HANDS PROPPING UP INVISIBLE BARRIERS: TRACING THE MOTIVATIONS FOR AND AGAINST CONVERGENCE OF BIOSAFETY SYSTEMS IN THE SOUTHERN AFRICA DEVELOPMENT COMMUNITY

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Preamble

‘Instead of thinking about policy as a routine engagement between certain public officials and a settled retinue of established interests, we are now forced to consider how a single system is constructed from semi-independent institutions and actors linked by resource agreements, joint agreements, joint projects and cross-border engagements … it is really composed of pads of unequal size, each contributing to a characteristic policy ‘footprint’ (Considine, 2005:127).

Background

Southern African countries have found themselves in the throes of food emergencies in the past. For example, in 1991, when a severe drought, combined with inadequate human, infrastructural and organizational capacity in domestic markets severely constrained food supplies leaving millions of people on the verge of starvation (Omamo and von Grebmer, 2005:2). The food emergency of 2002/03 had, by and large, the same cast of issues – drought, infrastructural, organizational and policy factors – BUT with an additional challenge – that the thousands of tonnes of food available to help cover the shortages were suspected to contain unspecified amounts of genetically modified (GM) maize. Uncertainties around food and environmental safety, regulatory preparedness, among other challenges, meant that some countries were unwilling to accept the food aid, with some governments going on record to choose starvation, rather than let their people consume ‘poisonous food’ (e.g. Panos Report No.49, 2005:30). The challenges that this dilemma presented ranged from the grandiose and perennial task of putting in place regulatory and institutional arrangements to the mundane logistical hurdles of ‘how to load grain into rail cars and trucks with minimal escape, how to cover the loaded cars and trucks and how long to allow the trucks to sit in given positions’ (Omamo and von Grebmer, 2005:2). The scenario created tension at various levels: within countries, between countries, with food relief agencies and donors, among others, as affected countries in the region endeavoured to make the best decision, both individually and collectively, under pressure from the food emergency and the uncertainty posed by the suspected GM-food (Moola and Munnik, 2007). At the policy level, the dilemma is attributed with having raised the political temperature around regulation of biotechnology, both within countries and at the cross-national level. At the national level for example, a number of decisions and measures had to put in place to guide decision-making, with some countries, e.g. Zimbabwe and Malawi, deciding to distribute only milled grain and Zambia refusing the grain outright (Mafa, 2004; Moola and Munnik, 2007, Clark et al, 2005). At the regional level, Southern African Development Community (SADC) agriculture ministers cited the lack of a harmonized regional position on GMOs as creating serious operational problems in the movement of food and non-food items, and recommended the formation of an advisory committee on biotechnology and biosafety to develop guidelines on this issue and the broader issues around biotechnology (SADC 2003). Meanwhile, SADC Heads of State in their August 2003 Summit in Maputo, Mozambique, set a deadline of December 2004 for all countries of the SADC region to put in place national biosafety systems (SADC, 2004).

While all this was happening, the key issues and realities for biosafety are that while there is a significant level of agreement on the potential risks associated with GM technology; for example environmental risks from gene flow to non-cultivated plants, agronomic risks from resistance problems in the GM crops and in weeds, co-existence challenges between fields of farmers using GM-crops and those not using them; among
others – there is still considerable disagreement within and across countries regarding the importance of these risks and the scientific possibilities for adequately assessing and addressing them (Birner and Linacre, 2008). Add to these the disagreements on the so-called non-science issues, such as labelling of food and feed derived from GM crops, and socio-economic issues around the technology, one then begins to understand the emergence of a continuum of regulatory systems, ranging from the ‘stringent’ EU system on one end to the ‘permissive’ US system on the other end (Levidow et al, 1996, Paarlberg, 2000). As noted by Arcuri (2001), a ‘regulatory divide’ has emerged, championed by ‘technocrats’ on one hand, who believe in a rational application of the science to identify and manage the risks; and a ‘deliberative’ philosophy on the other hand, which embeds scientific knowledge within policy and societal debates (cf. Birner and Linacre, 2008). These divides also exist in the SADC region, and how they oppose or cultivate fertile grounds for cooperation were among the key areas of focus for this paper.

This paper is based on a study which investigated both existing and new regulatory responses to food emergencies and bigger challenges presented by modern biotechnology. In particular, this paper looks at the challenge of cross-national cooperation in regulation of the technology. One response to this challenge which has dominated policy agendas in the region for a long time, with more prominence after the food emergency, is that of the harmonisation of national regulatory systems. Harmonisation is touted by its promoters as one way in which countries can leverage weaker national and sub-national regulatory capacities, and develop synergies that will place them in a strong position to deal with the dynamic challenges presented by the technology. Admittedly, and as will be detailed throughout this paper, a number of organizations and programmes have entered the policy arena in southern Africa, to champion the harmonisation agenda directly, or to tackle other levels within the policy/regulation development spectrum. This study behind this paper focused on the roles of three supranational organizations (SNOs), the African Union (AU), the New Partnership for Africa’s Development (NEPAD) and the Southern African Development Community (SADC). The desire for cross-national cooperation in biotechnology management was investigated from the broader perspective of policy convergence, with harmonisation being but one of the mechanisms towards the collective responses to the collective challenge.

The three supranational organizations’ involvement in biosafety issues

The African Union set up a group of experts in June 1999 to draft a comprehensive framework of biosafety regulations that would serve as a model law to protect Africa’s biodiversity, environment and the health of its people. This initiative resulted in the African Model Law (AML) on Safety in Biotechnology which was finalized in May 2001. In July 2003 Decision EX/CL/Dec.20-74 (III)1 of the AU Executive Council endorsed the Africa-wide Capacity Building Programme in Biosafety in which adoption of the AML was encouraged for creation of ‘a harmonized Africa-wide space and system in biosafety …’. In November 2006, the Human Resources, Science and Technology (HRST) Directorate of the AU Commission proposed an African Strategy on Biosafety2 in which, among other issues harmonisation through Regional Economic Communities (RECs) and use of

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1 AU EX/CL/Dec.20-74 (III)
the AML was encouraged. A December 2006 Conference of AU Ministers of Agriculture\(^3\) declared an ‘African Position on GMOs in Agriculture’, emphasizing the precautionary approach and establishment of a ‘mechanism to facilitate harmonisation of regulatory systems’ e.g. through encouraging and facilitating dialogue between RECs. Since 2005, the HRST Directorate has implemented an Africa-wide Biosafety Capacity Building Project with funding from Germany.

**The Southern African Development Community (SADC)** is recognised as one of the first RECs to develop guidelines on GMOs and Biotechnology, and this happened in response to the food aid crisis which followed the 2002 drought in the region\(^4\). In 2003, the SADC Secretariat, through its Food, Agriculture and Natural Resources (FANR) Unit set up the SADC Advisory Committee on Biotechnology and Biosafety (SACBB), to draft guidelines/recommendations on handling of food aid; policy and regulations (including harmonization); capacity-building; and public participation in biotechnology and biosafety. The Committee was reconstituted in 2007 after a three year period of low activity to develop and propose institutional arrangements for a ‘SADC Framework on the Safe Handling and Transboundary Movement of GMOs’\(^5\). The proposed framework recommends establishment of a SADC Biosafety Focal Point, to which Member States will communicate national decisions on GMOs. Among other provisions, countries will be responsible for monitoring their obligations under the Framework; while cooperation in research and development on biotechnology and biosafety is ‘encouraged’ and the SADC Secretariat is tasked to ‘coordinate and mobilise the required resources’. Disputes among countries will be referred to the SADC Tribunal (Article 16 of the SADC Treaty). Meanwhile, through the SADC Ministerial Council on Science and Technology, region is developing a Protocol\(^6\) on Science, Technology and Innovation (STI) in which harmonization of biotechnology policies and regulations is one of the targets. An STI Unit is proposed, to be housed in the SADC Secretariat.

In 2005, **NEPAD**, in partnership with the AU set up a high level African Panel on Biotechnology (APB) to analyze the African biotechnology terrain and make recommendations on how best to use the technology for Africa’s development, including developing an African strategy on biotechnology and biosafety. The APB is mandated to propose and promote the adoption of a regional strategy that reflects Africa’s common values, articulates shared needs and focuses on common opportunities. The Panel produced a report (Freedom to Innovate: Biotechnology in Africa’s Development, 2007) and dissemination to key partners and adoption of the report’s recommendations by regional economic communities is in progress. NEPAD, through its Office of Science and Technology (OST)\(^7\) and the African Ministerial Council on Science and Technology also implements an African Biosciences Initiative (ABI) and the African Consolidated Plan of Action (CPA) for Science and Technology through Centres of Excellence in Eastern, Western, Southern and Northern Africa as part of a ‘co-evolution approach’ to technology and policy development.

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\(^3\) AU Dec 2006a – An African Position on GMOs in Agriculture

\(^4\) e.g. Clark et al, 2005

\(^5\) Ref – Draft SADC Framework on the Safe Handling and Transboundary Movement of GMOs

\(^6\) Ref: SADC – Draft 2 – Protocol on Science, Technology and Innovation

\(^7\) www.nepadst.org

Julius T Mugwagwa
Policy convergence

Convergence is premised on growth in similarity of policies, policy scope, institutional and implementation arrangements, among others. This paper presents and discusses research findings based on the different conceptions of similarity, how it occurs and how to measure it. There was a constructivist perspective that similarity had indeed emerged or appreciable strides towards it had been made. The task was to measure it, or gather different views on how far it had emerged, and how NEPAD, the AU and SADC had contributed to its emergence. An open-ended strategy, grounded in participants’ accounts, document reviews and observations, and underpinned by policy convergence theory was used.

This study drew inspiration from other studies and published works on cross-national policy convergence, and on multi-actor interactions broadly (for example Busch and Jorgens (2005); Dolowitz and Marsh (2005); Seeliger (1996); Holzinger, et al, (2006); Franzese and Mosher (2002) and Gauthier (2002); to name a few]. The cross-cutting, multi-level and multi-actor nature of biotechnology and biosafety issues, combined with the cross-national level at which the issue was being investigated, meant that a number of conceptual and theoretical perspectives would come to the fore in trying to understand this issue. The study was about how countries are attempting to manage risk at a multi-country level, and about how they try to be innovative within the different pressures they face, both as individual countries and as a collective entity. The aim was understand how the differences on many fronts within the countries were serving as a rallying point for the desired transnational governance arrangement, with the mediation of NEPAD, the AU and SADC, themselves employing different means to get to the desired end.

The main focus of most studies on policy convergence is on policy output, i.e. the policies adopted by the countries, as opposed to the policy outcome. Policy outcomes are usually affected by many intervening variables, which make it difficult if not impossible to relate the outcomes directly to the causal mechanisms of convergence. Therefore it would not be surprising to find convergence at the level of output, but divergence at the outcomes level. This paper discusses some of these issues.

With respect to research hypotheses, many authors are in agreement that formulating hypotheses on the level of convergence is a difficult task because identifying the level or ‘point’ of a policy to then come up with a convergence point is not always easy (Holzinger and Knill, 2005a). Convergence implies decrease in variation among policies over time, and the unit of measurement is thus the decrease in standard deviation from one point in time to another. A change in the regulatory level means a shift either downwards or upwards of the mean between the two measurement times (Botcheva and Martin, 2001). Therefore to assess convergence, and a shift in the regulations, a reference point is needed. In this paper, the commencement time reference point was 2002. It is assumed the convergence mechanisms championed by NEPAD, the AU and SADC were only beginning to take root, and the systems in the countries were characterized by extensive diversity. The study covered a 6-year period up to 2007. In this period the three organizations were most active, and due to the intensity of discussion of biosafety issues at national, regional and international levels, measurable convergence was expected.

In addition to setting reference frames for the measurement of convergence, researchers are in general agreement that measurement of convergence is removed from the
coincidence domain if observation of the phenomenon is made in a large sample of countries (Leifferink and Jordan, 2002). There is a possibility for changes to run parallel in two countries with different national sources of change. This was the motivation for looking at the 15-country SADC region, as opposed to comparing only a few countries in the same region. In addition, national policy is also admittedly a multifaceted concept, and clarity was needed well in advance regarding where the convergence would be examined. Use of the Busch and Jorgens conceptualisation and other writings from mainstream literature on convergence in investigating the convergence effects of the three organizations also helped to make the dependent variable more tractable.

**Different fears and motivations around convergence**

Various practical and conceptual boundaries which NEPAD, the AU and SADC had to deal with in influencing the cross-national policy convergence were envisaged, among them different actors’ motivations and fears around the drive towards convergence. These fears and motivations represent the different cognitions creating or emanating from the study context, raising the stakes for contending views in the region on whether convergence is a positive, zero or negative sum game. By analyzing who expects what from the convergence, how long each representation has persisted in the policy arena, among other aspects, this paper sheds more light into this quandary. Apart from looking at the presentation of the issues by the different actors, this paper will also look into the agreement and/or variance between belief and action, the responsibility dimension for the different views held, and for the actions needed to move processes forward. Other issues to be looked at include the changes in the motivations and fears as fluctuations occur within the wider policy arena and how this affects the attainment of convergence. With respect to NEPAD, the AU and SADC, categorization of which organization has a particular inclination will be done as a way towards uncovering the similarities and differences between the different players, and capturing how all these different motivations and fears facilitate or hinder different mechanisms for the spread of policies across different boundaries.

**Motivations and fears emanating from the technology**

As described earlier, cross-national policy convergence is defined as the increase in policy similarity between countries over time (e.g. Bennett, 1991). Policy convergence thus constitutes the results of a process in which countries are assumed to have moved from varying positions towards some common point. While knowledge that national policies have converged is useful, it remains silent about the motivations behind the convergence, and the mechanisms through which the convergence has been achieved. This section of the paper looks at some theoretical perspectives which bring an understanding of these different argumentations around the issue, and more importantly how they impact on the convergence agenda. From the onset, it emerged that the framing of issues in the discussions around cross-national convergence of biosafety systems mirrored the same hopes and fears as seen in the debates around the science of biotechnology itself. There was a prominent cluster of issues around the newness of the technology, and the expectation that it had built across societies. Negative impacts of some of the ‘failed’ promises of the technology (for example promises of increasing agricultural productivity and reducing hunger and poverty) were said to await its regulation. Past failures of NEPAD, the AU and SADC, and their programmes, including even other unrelated science and technology programmes, were all lumped together as impediments to the convergence agenda. On the other hand, pro-convergence
respondents also highlighted success scored by the technology (e.g. GM cotton in South Africa, disease diagnosis and therapeutic remedies, among others) and by the three organizations as pointers to potential success of the convergence agenda. All these framings and argumentations are presented and analysed from a sociology of expectations in science and technology perspective (Borup et al, 2006). The risk colonization theory is also used, among many other perspectives, to illuminate the different motivations shaping the convergence discourse.

Sociology of expectations

Societal views on new technological developments are shaped by events and experiences that they have gone through in the past (Borup et al, 2006). These embedded images create favorable expectations or negative perceptions about development, resulting in significant impacts in the institutional and policy process to receive and accommodate the new developments. The close link between framings around the technology, and those around its regulation made it worthwhile to focus on expectations around science and technology shape people’s understandings and framings of policy change. Expectations are defined as wishful enactments of the desired future (Borup et al, 2006). They are both positive and negative and the way an intervention is framed defines the expectations around it. Expectations and visions are not constant; they vary in space and time, and they span as well as bring together different groups within a society (Considine, 2005: 23). These groups and the linkages that they form may vary, say from country to country, making it difficult to predict how given groups of stakeholders would perceive certain technologies. However, with the rise of the knowledge society, knowledge has become a central driving element and there is also an increase in the amount of communication across institutional and epistemic borders (Borup et al, 2006; Evans and Davies, 1999). This is expected not only to result in an increase in shared visions and meanings across frontiers, but across disciplinary boundaries and knowledge networks as well (Stone, 2000). Professionals in different disciplines have been seen to reach beyond the borders of their own specific fields of expertise and establish relationships with wider and more heterogeneous networks of potential collaborators. For this study, these dynamics were seen as factors with a potential to facilitate the bring together motivations in the cross-national convergence agenda. The presentation of empirical findings which follows looks at the complications around the issue, and how different and fluctuating expectations come together towards the desired convergence.

The existence of a unified policy community, geared towards the envisaged output, is among the factors known to facilitate cross-national policy convergence (Gertler, 2001; Drezner, 2001). Members of this community all recognize the problems caused by existing fragmentation, and are all prepared to set aside conceptual differences for the greater good of the region through a consensual transnational governance framework. In the SADC, one challenge to the existence of such a unified policy community was that in the countries themselves, there was no organizational, sectoral or national consensus on the issue. Expecting these differences to suddenly disappear at the regional level was labeled by one respondent as ‘a heroic dream’: the tensions and contentions would only be elevated. The fact that the policy communities and policy networks in countries differed also affected the knowledge exchange that should happen between these stakeholders across countries, prior to the convergence process (cf. Levy, 1997). The absence of uniformity results in discordant communication across countries, a situation that can potentially hamper an already fragile policy agenda.
Risk colonization

Continuing with the look at the organisation of the technology and policy debates around risk, another key theoretical perspective around the hopes and fears for convergence is the risk colonization theory. This theory is used here to build on to some of the issues illuminated by the sociology of expectations; but looking specifically at the distinction between societal risk and institutional risks. Risk colonization theory contends that ‘risk has become an increasingly key organising concept’ or has ‘colonised’ debates about regulatory regimes and extended governance systems, so that we can also talk broadly of a ‘risk society’, where we have become concerned with ‘risk management of everything’ (Power, 2004). According to Rothstein et al, (2006), institutional risk refers to ‘threats to regulatory organisations, and/or the legitimacy of rules and methods of regulation’. As will be discussed later, one key issue mentioned by almost all the respondents throughout this study, was the importance of the process of obtaining convergence, as opposed to the actual convergence itself. Stakeholders were keen on owning and understanding the processes, and seeing that they were addressing their needs, and those of the region. There were thus pressures towards transparency, and accountability of the processes. By stepping onto the podium to champion the convergence agenda, the NEPAD, the AU and SADC were exposing themselves to these pressures from the stakeholders both inside and outside the region. In their own accounts of issues around the convergence process, some operatives from these organisations also acknowledged this double focus on their systems and the technology itself, and the net result it had of raising stakeholder expectations on the issue. Some respondents also felt that there was too much fragility at the regional policy making level, including the continuous shift by governments to new and more pressing policy agendas. As a result, champions of this agenda faced increased risk of losing their reputation as a result of failed deliveries, e.g. from lack of resources, and lack of general stakeholder as well as political commitment to see through the processes.

By describing the motivations behind these perspectives we aim to enrich the assessment of their impact on the convergence, and to develop an understanding on how NEPAD, the AU, SADC and other players might be dealing with these issues. A number of facilitating factors for policy convergence have been advanced by some authors, e.g. cultural similarity, institutional similarity and socio-economic similarity (Lenschow, 2005), and the existence of a unified policy community (Bennett, 1991). This paper takes a look at these factors, with a special focus on NEPAD, the AU and SADC, and draws up conclusions on the hopes (facilitating factors) and fears (inhibitory factors) around cross-national policy convergence in the SADC.

Reasons for desiring convergence

The reasons why convergence was desirable were invariably highlighted in the same vein with the reasons why general or broader cross-national cooperation or collaboration was desirable (cf. ECA, 2006). There was an underlying belief that having similar policy and regulatory systems would improve cooperation and collaboration across various sectors of the national economies (cf. Mugabe, 2001; SADC Review, 2001). In other words, barring different interpretation of similar policies, chances for policy and regulatory conflicts would be greatly minimized if countries had similar policies. With respect to biotechnology, this was largely seen as being even more fundamental because of the high attendant costs for setting up and running sustainable technological and policy systems (Ushewokunze-Obatolu, 2005; Birner and Linacre, 2008). Therefore,
while the cooperation agenda had been a key issue in the region for decades, biotechnology was seen as bringing a functional impetus to the agenda (cf. Radaelli, 2000). Pro-convergence stakeholders pointed to some costs which the region had had to bear already because of the fragmented approach to the development and regulation of biotechnology. Examples of these costs include the 2002/03 food aid debacle (Clark et al, 2005: 75) and the tensions and loss of credibility brought to the scientific community. These tensions resulted in scientists spending most of their time debating biotechnology instead of delivering the science on the bench. The credibility of the science community was highly shaken, especially because of the differences that arose among scientists in some of the countries, notably Zambia (Panos Report, 2005; Omamo and von Grebmer, 2005: 7) and all this was largely attributed to the policy vacuum (Ushewokunze-Obatolu, 2005). The vacuum resulted in many operatives in some of the smaller countries being called upon to make decisions beyond their capabilities (cf. Haas, 1992), stretching and compromising their already fragile positions.

In the backdrop of the challenges and opportunities brought by the technology, countries had sought to collaborate at different levels in order to bring synergies that would benefit all of them. The countries of the region were at different levels of technology utilization and development of the policies and regulatory measures to govern it. This could support a move towards coordinated development and management of the technology through experience-sharing among the countries. In a world in which developmental disparities are a major driver for economic and technological cooperation (ECA, 2006; Newmark, 2002; also Wilson, 2007 on why knowledge differentials should be a resource not a problem), stakeholders in the region also saw geographical contiguity among the regional countries as a major benefit in the quest for cooperation. Requirements for cooperation driven by this geographical contiguity, where it not only became easier for the cooperation to happen, but the spill-over effects of what happened within the confines of another country also made it essential for countries to work together. National borders were porous, and national cultures spanned these borders and shared policy arrangements were seen as one way of adequately preparing national institutions to deal with this reality. This view was in sync with Article 26 of the Cartagena Protocol on Biosafety which requires countries to take into account socio-economic considerations such as impact of living modified organisms on their neighbours before they made their decisions. Converged policy and regulatory systems would thus not only help countries deal with their internal challenges, but would also help them build regulatory and administrative capacity to deal with external challenges and opportunities and meet their obligations at the regional, national or international level.

The technology also came with many competitive forces, especially from a market point of view where multinational corporations have a strong push (cf. Botcheva and Martin, 2001). Fragmented efforts by countries of the region would not put them in a good position to deal with the forces, argued some respondents from science and technology research organisations. Cooperation and synergies would help to build the necessary scale economies to position the region not only as a strong force to resist technology and product dumping and other malpractices, but also as an attractive region for favourable technologies and products. Even in the face of countries enjoying different bilateral and multilateral partnerships, many argued that those separate partnerships would benefit from the backdrop of a united and coherent region.

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8 E.g. meaning power to elicit belief or confidence among different stakeholder groups.
9 Lack of policy direction or leadership
Most of the national economies in the region were too small and too constrained to afford to develop, let alone support the various structures needed for effective management of technology (Ushewokunze-Obatolu, 2005). Cooperation with other countries would enable responsibility-sharing in some of the aspects. One aspect mentioned consistently is risk assessment and management, where, because of the geographical and environmental similarities among the countries, it was said to be largely feasible for assessments or measures made in one country within the region to be applicable to other countries. In principle, capabilities for various technological and regulatory aspects around biotechnology could spread across clusters of countries and be made available for the benefit of the entire region. Having similar regulatory systems was expected to facilitate this spread. This development mode had been tried successfully in some areas (for example in the customs and excise under the Southern African Customs Union (SACU) where some goods do not need individual country approvals), and pro-convergence respondents called for the same concept to be tried for biotechnology management. A number of benefits would accrue to the countries and the region as a result of this cooperation and streamlining of procedures, including reducing procedure turnaround time and experience-sharing, among others, which would result in overall cutting of the regulatory costs. From a risk management perspective, the bigger scale would enable the region to have a bigger voice when calling for enforcement of regulations meant to preserve the environment, e.g. as provided for under the Cartagena Protocol on Biosafety, as one proponent from one of the SNOs argued:

“For all intents and purposes, convergence of biosafety systems is about getting the best from the systems for the countries, for the region and for our technological and economic partners. It is not about giving the region unfair advantage, because at the end of the day, the region needs those same partners in the walk towards the envisaged development, and the benefits will accrue to everyone in the end. People talk about resistance to change, and this is a typical case where extra-regional forces are resisting change being motivated by the region, and our challenge is thus on how to make them see our vision in the same way as us” [Res21 (S), Oct 2007].

A further dimension to the ‘discomfort’ among extra-regional forces was the strong feeling among some proponents of convergence that the region’s commitment to working together, including the convergence agenda, could be derailed by some powerful external forces who were sceptical about the region’s intentions and ability to achieve them. Examples were given of supposedly negative reporting of issues before, during and after the AU summit of January 2007 regarding Africa’s preparedness to take science, technology and innovation issues seriously. It was felt that such negative perspectives, especially from ‘respected’ opinion shapers served as a hindrance to positive progress. Stakeholders indicated, almost pleaded, that while they welcomed and expected criticism, it was also prudent at times for the efforts being made to ‘at least receive some appreciation’ as a way of encouraging the continent. It was clear from this encounter that practitioners were keen to defend their programmes, with some even claiming that they spent a better part of their working time justifying and defending their programmes, further dissipating institutional resources. Why this could not be done by dedicated PR offices could not be ascertained, but the end result was that negative feelings were brought to the policy terrain, and the tension created could be felt for several months after the encounter. However, as Rothstein et al (2006) indicate, ‘blame-avoidance behaviour at the expense of delivering core business is a well-documented organisational rationality’.
The other main reason why countries desired convergence was the envisaged cooperation in dealing with challenges being faced in developing and implementing national systems. The convergence agenda was also related to how a country felt weak or vulnerable on its own, triggering the desire to collaborate with others. The areas of weakness, needing strengthening through cooperation, e.g. technical and regulatory capacity varied from country to country, and they depended also on a country’s capacities, aspirations and targets with respect to biotechnology and biosafety. Variations also occurred within different policy communities in a given country. There were also different policy communities in each country, and multiple pressures on the convergence discourse both on, and from individual, institutional, sectoral, national, regional and international perspectives.

From the above, it was clear that the compelling factors for convergence varied from shared histories and cultural values, to the need for synergistic and strategic cooperation in technology development and the need to have a unified front as a regional economic market. Admittedly, some factors were stronger than others. As one policy maker from one of the SNOs noted;

“Biosafety largely brings countries together or pits them against each other in the realms of trade and environmental safety. What then comes to the fore is how the two opposing forces balance each other out, bearing in mind that some countries pay more attention to one or the other set of issues” [Pmk2 (S), Aug, 2007]

One observation that was made was the inconsistency and the varied emphasis around the issues that were brought to the agenda table. Some fora would emphasise the shared histories agenda, while others would dwell on the culture dimension, yet others would focus on the economic and technological benefits that could accrue to the region as a result of shared policy positions. Still it was not uncommon for all these issues to be debated in one forum, the sticking point always being how to bring them all together given the existing disciplinary boundaries, and in some cases the lack of representation in these fora from government agencies mandated to deal with those issues. The challenges encompassed both the framing and the operational dimensions, and this raised the barriers for the convergence agenda. Also, as mentioned earlier, the desire for convergence of the regulatory systems followed closely the debates in the technology itself, and the biggest forces around the issue related to the operational context for the regulations and the technology. The catch 22 for the technology and the regulations was that each was mentioned as being well placed to create opportunities for the other, and how this would unfold in reality remained to be seen.

**Fears around convergence**

The buoyancy about convergence was however not shared among all policy makers, with some seeing it as another policy fad that would just disappear with time. It was interesting to observe that those who were skeptical were mainly those who had been in the policy arena for a long time, who therefore probably knew what was feasible and what was not, but who may also be just fatigued, and believing that nothing will ever change. The newer players were quick to point fingers at the long-stayers, with one of them, a senior official in the ministry of science and technology in one of the countries saying;
“The biggest fear I have on this issue is that there are too many people who are
tired, and who will never see things happening beyond what they deem feasible.
These people have established themselves to such an extent that they cannot
separate themselves from the issue, and any challenge to the status quo is
perceived as a direct challenge to them as individuals and their wisdom. We have
to start with such people if things are to change” [Pmk4 (R), July 2007].

It was very clear from the statement above and from the other realities observed in the
region that the hopes and fears around the technology, its regulation and the
convergence agenda had to look beyond the technology itself. The bigger regulatory and
institutional context had a major impact on what was feasible, to what extent and the
sustainability of the interventions. For example, as revealed above, the fact that part of
the policy community also consisted of members who had championed the processes
that were being targeted by the changes pointed to a source of internal resistance that
could not be overlooked (cf. Considine, 2005:55), and also revealed the complexity of
knowledge flows within policy communities.

National and sub-national interests

The drive towards cross-national convergence was seen to be a balancing game
between national interests (including sovereignty and right to auto-interpretation of
international law) and regional aspirations, as much it was a balancing game for the
various sub-national interests. Stakeholders argued that the process and the output that
would best serve these multiple and fluctuating interests would then more than likely
lead to an attainment of convergence. However, given the multiplicity and the internal as
well as external location of the forces behind these interests, the attainment of
convergence was admitted to be challenging, ‘and might not be worth the attention and
resources it was getting’, according to one respondent from an NGO. This was also the
main reason, as the same respondent pointed out, why the galvanizing factors were
always changing, in reality or in framing only; reflecting an elusive search for a set of
factors which were appropriately framed and shared by the region to enable a sustained
regional focus towards convergence. Hilgartner and Bosk (1988) in their ‘arenas model’
refer to the importance of promoters of policy issues in sustaining it within the policy
space in which there are other issues competing for attention. Many questions therefore
arise regarding the way learning takes place, and how it can be sustained within such a
dynamic policy space. From a functionalistic point of view, NEPAD, the AU and SADC
were attempting to level the playing field so that more predictable learning and boundary
crossing could take place (cf. Stone 2000).

It also emerged that there were unfulfilled technological and regulatory expectations at
sub-national and national levels, and stakeholders were keen to have these addressed
before moving to the regional level (e.g. the limited successes of the RBFP, the AU
Model Law on Safety in Biotechnology; among others). It was observed that in this case
the fears were directed more at the context, as opposed to the organizations
championing the convergence agenda. In other instances, the fears centered on the
delivery capacity of the organizations championing the process. In the final analysis this
duality represents the practical challenges of reconciling the various tensions around the
issue. This issue could also be interpreted from a motivation perspective, e.g. using the
hierarchy of needs developed by Abraham Maslow (1943) where lower level needs have
to be addressed before aspirations for higher needs become more important. Learning
would be inhibited in a scenario where needs are not addressed sequentially.
**International goals**

The dominant presence of international regulatory and technological targets was said to be compelling the regional grouping and the member states to rush towards convergence, when they would be better off achieving incremental sub-national or national goals. Considerable pressure was being put on countries as they did not want to be seen as failing to comply with standards that other countries were adhering to, and sometimes this compromised a firm of underpinning of processes in national goals and imperatives. The envisaged convergence was seen as having this potential of diverting countries’ focus and resources from their own processes towards the regional desires. It was therefore argued that given the slow pace at which conclusion of international policy processes took place; the desired convergence would also slow down the rate at which national processes took place. Generally, the international goals were not only slow in being set, but they also fluctuated a lot as a result of the often-conflicting national and corporate forces around them. This put the goal-setting and decision-making process beyond the influence of the weak countries in the region and other parts of the developing world (cf. ECA, 2006). Countries have however tried to form international negotiation coalitions (for example during the negotiations of the CPB) to try and counter some of these challenges.

The desire for regional convergence of biosafety systems was seen by some sections of policy makers as one way of trying to institutionalize the positive lessons from the negotiations around the CPB. On the other hand, this was viewed as an external motivator, and given the lack of unanimity within the Protocol negotiation process, some opponents saw this as ‘inheriting a weakness which will come back to haunt the regional convergence process’. They further argued that the push for convergence should not be modeled around rich versus poor, or as pitting environment and trade interests against each other, as what happened in the Protocol negotiations, because the region could ill-afford these divisions. The need for consensus on why convergence was desirable was highlighted, although some were quick to point out that this (consensus attainment) would mark another complex and protracted policy struggle which would unnecessarily divert the region’s focus. It was underscored that the consensus-building and the move towards the convergence should be attempted at the same time. It was also highlighted that trying to evade the different sectoral tensions (e.g. trade v environment etc) would only serve to create fallacies that would result in improper policy outputs. On the whole, it was abundantly evident that the interaction between the domestic and external forces for and against convergence seemed to have a bigger influence than first realised, especially when one took into view their link with the bigger macro-setting of the countries and the region.

**Turning a blind eye to the costs**

While the motivators for convergence were highlighted, an analysis of the costs of divergence seemed to be only an implied converse of the positives. Some respondents argued that as long as this un-quantified cost remained ‘not so huge a deterrent’, then the necessary motivation could remain weak. One respondent from a scientific research institution in Namibia was very emphatic:

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10 This was the opinion of most respondents who have taken part in international negotiations, notably the International Treaty on Plant Genetic Resources (ITPGRC) and the Cartagena Protocol on Biosafety.
'Sometimes it's not about what stands to be gained, but what stands to be lost …typical a bird in hand is worth two in the bush attitude maybe …but I think it is true that African countries have tended to be stronger in staking their claim in situations where there is much to be lost; and in this case, we need to know what it is we stand to lose by continuing to develop and implement our systems independently. Also, it’s not as if there is no cooperation already. It is there as and when necessary, and maybe that’s all we require” [Res22 (R), Mar 2007].

The same respondent indicated that countries of the region seemed to have a lot of inertia as far as ‘going for gains’ was concerned. Maybe it had to do with the pressures, competition and other variables at play where there was room for a gain, because the bigger and stronger countries and other players would also be clamouring to occupy that vantage point. There was divided opinion in the SADC on whether to go for gain or defend what was there. This was another level of the major emerging narratives for biosafety in particular and convergence in general in southern Africa; one school looking at ‘what do we stand to gain’ and another school looking at ‘what do we stand to lose’ (linked closely to level of use of the technology and development of regulatory systems). All this had implications on institutional arrangements as well as human, technological and other arrangements that needed to be put in place to make convergence of systems at the cross-national level feasible. South Africa for example, was looking at being a bio-economy, and saw Sub-Saharan Africa as a market for products, while the rest of the countries did not have the same confidence and preparedness to have these visions. The other countries lay at different positions in the continuum from the protection intentions to the technology exploitation objectives. Not surprisingly, South Africa was said to look more outside the region for technological and policy lessons. This clash between the protective and forward-looking approaches was a challenge for the convergence, starting from whether it was feasible or not, to the nature of the achievable convergence once the initial hurdles had been cleared. Yet it was also appreciated by most of the respondents that it would not be possible for there to be permanent and uncontested agreement on convergence, given the realities transcending the technology and the SADC region. It was therefore up to the stakeholders to find the best way of packaging their similarities in a way that galvanised rather than kept them apart.

Resource diversion

There were some fears based on resource diversion, for example, that once a regional technology management structure was in place, donors would prefer to put resources there at the expense of national programmes. This in many ways showed that stakeholders had no confidence in their own governments honouring their national obligations and making sure the national processes were kept going, feeding into the regional level arrangements. However, these fears of resource diversion and competition were real, and they exposed the fallacy of shared ideals around the regional cooperation. Some respondents were quick to point out that there were tensions between national programmes and some NEPAD initiatives. Some donors, especially the ‘big donors’ preferred to channel their assistance through NEPAD for quicker spread of their visibility, among other reasons, than doing so through national programmes. Such donors therefore favoured cross-national convergence of regulatory systems. Meanwhile, apart from the attraction of financial resources, personnel, for example consultants, would also be more attracted to regional programmes than to national programmes, usually because of higher remuneration. There was the fear therefore that solving the regional level challenges could lead to escalation of the national problems,
which were supposed to be the ingredients for viable regional programmes. In the final analysis, the truth of the matter was that any different policy and institutional arrangement brought with it a competition dimension because of resource and capacity constraints, and this diminished the enthusiasm towards it, as individuals and organizational actors alike felt threatened, eliciting some kind of negative feedback scenario (cf. Considine, 2005:43).

The fear of resource diversion arose from the reality that both regional and national arrangements would suffer if governments did not put resources in the regional arrangements and waited upon donors to support them. In the end, not only would resources be diverted, but also policy attention from stakeholders, including governments.

**Dampening innovation**

Other fears were around how adoption of regional systems could curtail policy innovation in countries. Some respondents from government institutions argued that as much as there were both internal and external pressures necessitating urgency in coming up with functional systems, countries needed to go through the experience curve, in order to be able to own the policy instruments, as opposed to adopting and implementing lessons from elsewhere. This issue locks into many domains, for example sovereignty, and capacity building, where countries emphasized linking issues of biosafety at both national and regional levels to the broader national requirements, and ensuring that capacities for related policy responses were built. This demonstrated the importance of sovereignty. However, it was argued that on the ground sovereignty alone did not bring the needed incentive in development of programmes and processes, and there was need to balance the ‘freedom to innovate’ with avoiding ‘reinventing the wheel’. Others argued that countries of the region ought to appreciate that they had come a long way already through the experience curve, and maybe it was high time other measures, such as the regional convergence were put in place to stimulate further innovation.

**Threats to established relationships**

As mentioned previously, tensions exist between established relationships with partners outside the region (on the technology) and strength in numbers from a regional standpoint. Some countries felt they benefited more from their partnerships with technology-rich trading partners outside the region, and they felt that the region only brought strength, in so far as managing technology risks was concerned, and this was by no means an unimportant component of the agenda. However, according to some respondents who chose to portray themselves as realistic, for developing the technology, some of the countries in the region had nothing to offer, and even the risk management dimension in some cases needed to be looked at beyond the strength-in-numbers perspective.

This was a significant tension area, and one where co-existence was needed, because it was not conceivable that existing relationships would have to end, while at the same time, having these and the new regionalism would in some cases be some kind of a ‘strange bedfellows’ arrangement. Pragmatic policy innovation and looking beyond narrow institutional and national interests may be needed to ensure a win-win scenario.

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11 Mainly laboratory scientists from one of the leading scientific and industrial research centres in the region
from this tension. The example of the UK-EU-US relations is a typical case in point for this tension, with the UK fully aware of the potential gains and losses of further integration into the EU given the long relationship with the US, which predates even the earliest roots of the EU12. However, some international crises have arisen of late, in which many have questioned the prudence of the continued close alliance with the US, when the EU seems to have come of age. This was the same scenario that some SADC countries faced, and the challenge was how to balance the positives from both intra and extra-regional alliances, especially in cases where they seemed to compromise each other. This seemed to throw weight to the notion of case-by-case cooperation arrangements, although it was a fact that cross-national relations were built over time, based on trust, and this might not happen as quickly as it should in times of crises. The bigger and more complex issues around convergence were thus more daunting than a simple cursory glance could reveal.

One fallacy that countries would need to deal with, according to some respondents, was that of a permanent convergence, and one in which countries would be agreeing all the time. The differences amongst the countries in the pre-convergence era should be ample evidence that countries would always have differences. There was need to define the minimum differences that would not threaten the convergence or in whose presence the convergence would still subsist. This was a missing link, and as one respondent, a biosafety expert from the region now based in the UK pointed out:

“Proponents of convergence should not fool themselves that there will come a time when countries will look at themselves as having been unreasonable at some stage. Countries will always see the justification for whatever views they hold (or have held), and it is how these differences are addressed which matters. If one country is expected to make a fool of itself, then for that simple reason, they may resist even the best of ideas” [Res19 (OR), Mar 2007]

This again lent support to the earlier assertion by most stakeholders that it was the process of obtaining convergence, as opposed to the convergence output, which was more important in determining the feasibility of convergence. This was also in line with the convergence hypothesis, where different systems came together, with each one bringing its good attributes to the common agenda.

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12 Robert Whelan, Sept 2007 Article on UK, EU and US relations: Foreign Policy Fears: the ‘special relationship’ versus strength in numbers
Conclusions

This paper has described the contending stakeholder views on the cross-national convergence agenda, leaving NEPAD, the AU and SADC with the daunting task of either creating a predictable environment for the cross-national learning; or ensuring effective learning even in this dynamic environment. Among the major reasons behind the different fears and motivations was the issue of resources and capacities for developing and implementing regulatory systems. NEPAD, the AU and SADC had different capacities to deal with these issues.

Meanwhile, the lack of a sustained, shared and adequately framed convergence agenda, as a result of the fluctuations within the region created many questions at the higher level regarding how and why countries come together to cooperate on an issue. With respect to regimes, for example, some scholars argue that governments create or join regimes in order to make their commitments credible (Hasenclever et al, 2000). From the empirical results presented in this paper, there is some truth that some countries saw a regional approach to biotechnology management as a way of bolstering the credibility of the systems they were developing and employing in their domestic settings. In other words some individuals and countries were using participation in regional processes to read and/or see their places within the biotechnology/biosafety setting (cf. Miller and Dingwall, 1997). Some countries were also advocating for convergence as a way of demonstrating their commitment to regional integration (through functional cooperation) and demonstrating their commitment to having the technology effectively regulated. There were also images of a way of trying to promote investment in the technology, or meeting obligations or expectations of other partners with which the countries had relationships. These issues of credibility and demonstrating commitment seemed to work both ways; in that they could also be used by some countries to push against convergence as a way of showing their allegiance to the bigger forces that might be dictating to them certain positions, e.g. donors and development partners who were against biotechnology.

This paper also showed that a government’s commitment to other governments through pushing for convergence may not only be at variance with their commitment to other external partners, but to domestic actors as well. Convergence was a balancing game where the government had to deal with many issues at vertical and horizontal levels within the broader socio-economic setting, at both national and regional levels. The question that remained, however, was if convergence was about demonstrating commitment, why did governments choose to demonstrate commitment through convergence? Why not demonstrate it through other means of cooperation. This was an argument presented by some neutrals who chose to call themselves realists … pointing to the inherent fragility of the converged position, given the different and fluctuating allegiances that the governments had to deal with. They also said the overall policy decisions in this technology were not entirely in ‘the hands’ of the national governments in the region, making the whole convergence agenda at the worst, ‘an exercise in futility’. It was also clear that policy convergence efforts were not separate policy endeavours, but were part of wider policy processes, especially within discussions around science and technology, agriculture, environment and trade (NEPAD OST, 2007). The wider processes therefore shaped these convergence efforts, as much as the convergence efforts shaped the processes. In addition, there was recognition that in facilitating convergence, NEPAD, the AU and SADC were dependent on other actors and thus

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could not be viewed as isolated change agents (cf. Stone, 2000). There was thus a significant role for agency in these processes, particularly around choices in selection of policy ideas, which was likely to result in bounded rationality in the imitation, copying or modification of policy innovations by decision makers (Rose, 1991). New institutionalism theorists highlight the impact of agency and structure in the convergence process, emphasizing the role of rules, shared interpretations, schema and meanings in the decisions by policy makers (Di Maggio and Powell, 1983). All this was very evident in this study, and it pointed to many challenges that NEPAD, the AU and SADC had to deal with in steering the convergence processes. The SNOs had limited access to some of the policy actors, especially those at the sub-national level, and this meant that in some cases their impact could not reach all key stakeholders in the policy continuum.

The constant reference to external forces when describing coercion was evident, and is supported in other studies (e.g. Stone, 2000). On the other hand, a focus on voluntary mechanisms has been confirmed to direct analytical attention to the internal attributes and salient features of policy arenas, such as similar political ideologies, policy styles, culture, language, and institutional arrangements. This study also confirmed these trends, while also establishing that the various convergence mechanisms may not necessarily act uniformly in different polities, and that there were different sources of the policy lessons, ranging from internal to international sources. This close look at how different motivations influence the mechanisms through which NEPAD, the AU and SADC facilitate spread of policy innovations across countries is critical if grounded understandings of the feasibility of the cross-national convergence agenda are to be achieved.
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