### JOURNAL FÜR ENTWICKLUNGSPOLITIK

herausgegeben vom Mattersburger Kreis für Entwicklungspolitik an den österreichischen Universitäten

vol. XXIX 2-2013

### TRADING KNOWLEDGE IN A GLOBAL INFORMATION SOCIETY The Southern Dimension of TRIPS and GATS

Schwerpunktredaktion: Thomas R. Eimer, Verena Schüren

mandelbaum edition südwind

#### Inhaltsverzeichnis

- 4 THOMAS R. EIMER, VERENA SCHÜREN Trading Knowledge: The Southern Dimension of TRIPS and GATS
- 11 PATRICIA GRAF Research and Development in Mexican-American Relations Post-NAFTA
- 31 THOMAS R. EIMER Global Wordings and Local Meanings: The Regulation of Traditional Knowledge in India and Brazil
- 51 CHRISTOF MAUERSBERGER Commercial Markets or Communication Rights? International Norms and the Democratisation of Media Markets in Argentina and Brazil
- MARKUS RAUCHECKER
  Intellectual Property Rights and Rent Appropriation:
  Open Conflict regarding Royalties on RR Soy in Argentina
- 87 KENNETH C. SHADLEN The Patent Policy Trilemma

106	Book Review
108	Editors of the Special Issue and Authors
III	Impressum

#### MARKUS RAUCHECKER Intellectual Property Rights and Rent Appropriation: Open Conflict regarding Royalties on RR Soy in Argentina

#### 1. Issue and central question

"Argentine farmers have the right to replant – although not to sell – seed generated from a harvest originating from registered seeds without paying royalties" (O'Donnell 2011b). This quotation from a cable signed by the ambassador of the United States in Argentina, Lino Gutierrez, points directly to the core of the conflict between Monsanto, Argentine soy farmers and the Argentine government about royalties on the transgenic seed Roundup Ready (RR) Soy, which is tolerant to the pesticide glyphosate. The dispute arose with the introduction of RR Soy in the Argentine market by Monsanto via licensees in 1996, but without them holding a patent on RR Soy. The conflict takes place in the context of the broader debate concerning two contrary concepts of the appropriation of rents, in this case generated by the soybean cultivation in Argentina, concepts which are based on different interpretations of intellectual property rights: the intellectual property rights of seed breeders versus the farmers' privilege.

This paper focuses on the crucial aspect of rent appropriation within the debate on intellectual property rights regarding agricultural production; in short, the effects of the commercialisation of knowledge. Rent appropriation is understood as a reduction of agricultural rents via royalties, or export taxes in this case. Both compete for the same slice of the cake. Departing from the understanding of knowledge as a private, patentable and tradable good in international treaties (UPOV 1978: Art. 2; TRIPS 1994: Section 5: Patents) and Argentine legal norms (Law 20.247/1973, Art. 19-24; Presidential decree 260/1996, Art. 4-7), this paper discusses the range of intellectual property rights within the area of agricultural production and processing,

in the sense of the control and remuneration of knowledge. The main question to be asked is this: why did Monsanto fail to impose a collectively binding norm of rent appropriation via royalties and through that a certain interpretation of intellectual property rights in Argentina? This paper attempts to contribute to the study of rent appropriation, especially that without a clear basis in national legal norms, within the debate regarding intellectual property rights. The seed breeders (Monsanto is used here as an example) fight for the introduction of royalties. The big farmers' associations Federación Agraria Argentina (FAA), Confederaciones Agrarias (CRA), CONINAGRO and Sociedad Rural Argentina (SRA), in general have different interests depending on the size of the farmers they represent. FAA, which represents small farmers, rejected all proposals for a royalty system, because it would reduce the agrarian rents. In contrast, SRA, the association of big farmers, is mostly in favour of royalties, because of the interest of big farmers in new technologies. The two other farmers' associations are located between FAA and SRA. The Argentine government vacillates in its position because of its dominant interest in the appropriation of soy production rents by export taxes. In this sense the Argentine government is not only understood as an intermediary but as a conflict actor with its own interests.

The analysed case of the conflict concerning royalties on RR Soy is mainly located within the national context of Argentina but also in the supranational context of the European Union. The case is constructed as an archetypal case study, which seeks to generate theory (Hague et al. 1998). The uniqueness of the case lies in the intent of rent appropriation by royalties through seed breeders in spite of the lack of a patent on the transgenic seed RR Soy. The text material (see References) is evaluated based on the Qualitative Content Analysis<sup>1</sup> (Mayring 2000).

The empirical investigation uses the governance approach as an analytical tool to visualise the role of private actors in the generation of collectively binding norms. The state is no longer the steering protagonist but rather only one producer of governance output. Three modes of coordination are distinguished: a (state) actor can force other actors to follow its rules (in the mode of hierarchy), whereas non-hierarchical modes require cooperation and the balancing of different public and private interests by negotiation and competition. Within the process of negotiation or competition certain actors can have more power and resources, but they are not able to exert force over other actors. A (possible) hierarchical intervention by (external) state actors is ascribed a privileged function, because it can induce and backup non-hierarchical modes of coordination constituting a shadow of (external) hierarchy. The modes of coordination are determined by an institutional structure, which can be hardly changed by the governance actors (Börzel 2010; Mayntz 2005).

The empirical analysis is structured in two parts. Firstly, the nested governance structure of the conflict on royalties on RR Soy - consisting of the international treaties, the International Convention for the Protection of New Varieties of Plants (UPOV 1978, 1991) and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS 1994), as well as the national legal norms seed law and patent law - is discussed. This part treats the convergence of the international and respective national norms towards a restriction of the farmers' privilege and the persisting contradiction on both levels regarding the farmers' privilege, which gives rise to the conflict under analysis. Secondly, the paper focuses on the struggle between seed breeders, in this case mainly Monsanto, Argentine soy farmers and the Argentine government regarding royalties on RR Soy since 1996. The conflict is analysed from the perspective of Monsanto in order to highlight the company's strategies, based on (non-)hierarchical modes of governance, to generate a collectively binding norm in spite of the lack of a patent and the contradiction in the governance structure. At the same time, Monsanto aims to alter the governance structure itself by encouraging the adherence of Argentina to UPOV 1991 and the reform of the Argentine seed law. Finally, the paper concludes with three explanations as to why Monsanto's struggle for remuneration has not been successful so far.

## 2. Nested governance structure: contradiction of norms as a source of the conflict

#### 2.1 International treaties: UPOV vs. TRIPS

To understand the legal norms in Argentina and their interpretation, as well as the analysed conflict, it is essential to analyse their overarching governance structure which consists of the international treaties UPOV 1978, 1991 and TRIPS. These treaties generate two diverging positions in the debate between the intellectual property rights of the seed breeders and the farmers' privilege. However, both treaties conceptualise knowledge as a private, patentable and tradable good, as well as introducing the concept of remuneration (royalties) (UPOV 1978: Art. 2, 9; TRIPS 1994: Section 5: Patents).

This study focuses mainly on UPOV 1978 (to which Argentina is a member) and will only describe the main changes in UPOV 1991, because some actors of the above mentioned conflict demand the adherence of Argentina to the latter and argue based on its concepts. UPOV 1978 clearly establishes the intellectual property rights of the seed breeder of a new variety (Art. 2, 5) for a defined time period (Art. 8). The farmers' privilege is not mentioned explicitly but rather implicitly in Art. 5 paragraph 1. This paragraph determines three actions (production for purposes of commercial marketing, offering for sale, marketing), which require the former authorisation of the seed breeder. More important is what is not mentioned: while the production of the farmer to save seeds and sow them on his own plantation is not addressed and therefore not prohibited (Kochupillai 2011: 2-5; Phillips 2007: 54-56).

UPOV 1991 introduces the explicit privilege of the farmer as an optional exception implemented in national legal norms (UPOV 1991: Art. 15, para. 2). However, the treaty establishes the new distinction between marketed and unauthorised material of the protected variety (UPOV 1991: Art. 16). The further use of marketed material is excluded from the authorisation of the seed breeder. Nevertheless, the products obtained from unauthorised material of the protected variety, such as "harvested material" and "products made directly from harvested material", (UPOV 1991: Art. 14, para. 2, 3) require the authorisation of the seed breeder. Therefore, the range of the property rights of the seed breeder and the collection of royalties is extended to the harvest and the products directly made from harvested material (Borgarello/Lowenstein 2006: 221-223; Borowiak 2004: 518-519).

Differing from UPOV 1978 and 1991, the TRIPS Agreement does not contain the farmers' privilege or any reference to that. Essential for our discussion is the fact that non-biological and microbiological processes can not be excluded from patentability by the legislation of the member states

(TRIPS 1994: Art. 27, para. 3), a point which enforces the patentability of transgenic seeds in national legal norms. To clarify the range of the intellectual property rights of a patent holder, it is necessary to analyse the exclusive rights in Art. 28 and its exceptions in Art. 31 of TRIPS (1994) in comparison to UPOV 1978 and 1991. Art. 28 prohibits the use and production of the patented product, of the patented process and of the product obtained directly from the patented process without the authorisation of the patent holder. As a result, the interpretation of the intellectual property rights of the seed breeder goes clearly further than in UPOV 1978 and 1991. The exception in Art. 28, the use without authorisation of the patent holder, is limited to governments and third parties authorised by the government in the case of emergency or public non-commercial use based on the remuneration of its use (TRIPS 1994: Art. 31). The exception of the intellectual property rights of the seed breeder are more limited than in UPOV 1978 and 1991, which allow non-commercial use, experimental use and the use to breed other varieties by any other party.

UPOV 1978 and 1991 as well as TRIPS can be understood as conflicting international treaties regarding the range of the intellectual property rights of the seed breeder and the farmers' privilege. This is important for the empirical case, because UPOV 1978 and TRIPS, as ratified international treaties, have a legal status between the national constitution and laws in Argentina (Argentine National Constitution 1994: Art. 75, para. 22). Furthermore, the corresponding Argentine legal norms – seed law and patent law – reproduce the legal conflict which exists between UPOV 1978, 1991 and TRIPS.

#### 2.2 National legal norms: seed law vs. patent law

Through the analysis of the Argentine seed law and patent law, this paper intends to underline the convergence between the national governance structure with the content and logic of the international treaties, UPOV 1978, 1991, and TRIPS. This nested governance structure on two different levels forms the framework for the struggle between multinational seed breeders, Argentine farmers and the Argentine government.

The Law of Seeds and Fitogenetic Creations (Law 20.247/1973), which was set in force in 1973 and so prior to UPOV 1978 and Argentina's adherence to this in 1994, determines fitogenetic creations, in which transgenic seeds are included (Art. 2, para. b, extended in Presidential Decree 2.183/1991: Art. 1, para. b), as private goods (Art. 19-24). The inventor of a new variety obtains the property rights *(derecho del obtentor)* through its registration in the National Register of the Property of Plants. But this right of the seed breeder differs from a patent. The seed law contains a widely interpreted farmers' privilege in Art. 27. Apart from the authorisation of the intellectual property holder, the farmers' privilege makes two exceptions to the intellectual property right of the seed breeder:

- (1) The reserve and sowing of seeds for own use
- (2) The use or sale of raw material or food as the product obtained from the cultivation of the fitogenetic creation.

Thus, the Argentine seed law uses a broader interpretation of farmers' privilege than UPOV 1978, 1991 and TRIPS. It restricts the range of the intellectual property rights of the seed breeder, which end with the cultivation of the protected plant variety.

Within the context of Argentina's adherence to UPOV 1978 in 1994 and the introduction of RR Soy in the Argentine market in 1996, the farmers' privilege was restricted both implicitly (Presidential decree 2.183/1991: Art. 44) and explicitly (INASE Resolution 35/1996: Art. 1-2) to only allow for reserving and sowing seeds on farmers' own plantations. Through these measures, the Argentine government adopted the logic of the farmers' privilege used in UPOV 1978. Resolution 35/1996 of the National Institute of Seeds (INASE) established a difference between legally and illegally acquired seeds, as in UPOV 1991, which was not signed by Argentina. It also excluded the seeds obtained by the cultivation of illegally acquired seeds from farmers' privilege. Such limitations of the farmers' privilege show a clear convergence with the content and logic of UPOV 1978 and 1991. It is important to reiterate that these reforms were made before the introduction of RR Soy in the Argentine market and the subsequent conflict between seed breeders, Argentine soy farmers, and the government.

Within the legislation process of the patent law in 1995 and 1996, we observe an important change. The original version of the patent law, which passed in Congress as Law 24.481 from 23.5.1995, included major parts of TRIPS (1994: Art. 27, para. 2, 3). What is especially interesting are the exclusions from patentability: in the first version of the Argentine patent law micro-organisms and essentially biological processes are not excluded

(Law 24.481/1995: Art. 7, para. c). This law was vetoed, with changes by the President. In the newer version of the patent law, paragraph c of Art. 7 was deleted without replacement. Therefore, micro-organisms and essentially biological processes can be understood as being excluded from patentability. This point is crucial, because the current version of the patent law contains no reference to microbiological processes, which cover transgenic seeds, like TRIPS. Although the patentability of transgenic seeds is open to further interpretation, in practice several patents of transgenic seeds already exist (Borgarello/Lowenstein 2006: 228-241).

To move on from the general question of patentability to the concrete question of the farmers' privilege, an important point to be considered is this: what exactly is protected by a patent? As in Art. 27 of the TRIPS Agreement, the patent prohibits the production, use, offering for sale, sale and import of the patented product by a third party without the authorisation of the patent holder. Regarding the patent of a process we observe a difference; the Argentine patent law only prohibits the use of the patented process and there is no reference to the product obtained by the protected process (Presidential decree 260/1996: Art. 8). Therefore, the cultivation of reserved transgenic seeds without the authorisation of the patent holder is not explicitly prohibited. The rights of the patent holder are open for interpretation.

To make it clear, the national legal norms in Argentina introduce two different concepts of intellectual property rights: rights protected by patents and the rights of the seed breeder *(derecho del obtentor)*, as protected by the National Register of the Property of Plants. The reconstruction of the interaction between the nested governance structure and the governance modes in the struggle between seed breeders, Argentine farmers and government is the theme of the next section.

# 3. Archetypal case: conflict regarding royalties on RR soy in Argentina

This study analyses the previously mentioned struggle from the perspective of Monsanto, because the US-American company played the most active part in the conducting of the conflict. The other actors largely reacted to the actions of Monsanto. Moreover, this analytical view enables us to identify the strategies of a non-state actor – based on a mix of the governance modes (external) hierarchy and bargaining – to generate and implement a collectively binding rule without a clear legal basis in different governance arenas with diverging actors.

In 1996 Roundup Ready Soy was introduced by Asgrow in the Argentine market, based on a license of Monsanto. Asgrow Argentina was later acquired by Nidera and with that the license to release and sell RR Soy in Argentina. Nidera obtained the official permission to release RR Soy in Argentina on 25.3.1996, but Nidera could not request either the patent or the protection by seed breeders' rights, because Nidera was not the inventor. Monsanto requested the patent, but it was denied because of the already exceeded time limits and the prior release of the gene construct, and thus it did not fulfil the requirement of novelty in the Argentine patent law and seed law. Monsanto tried to contest the denial of the patent with various appeals up to the Argentine Supreme Court, which finally denied the request of a patent of RR Soy by Monsanto in 2001. From 1996 on Monsanto signed private license contracts with other seed companies, in which Monsanto included a type of royalty. Nevertheless, Monsanto could not collect royalties from the farmers and also could not exert control over the use of its RR Soy seeds because of the denied intellectual property rights based on a patent and on the plant breeders' rights by the registration in the National Register of the Property of Plants (Bird 2006: 293-294; Brieva 2006: 243-244, 252-253; Trigo et al. 2002: 119-120; Vara 2005: 23). Simply put, Monsanto lacked the legal basis of the remuneration of the use of their RR Soy seeds, which is an important characteristic of the conflict.

Despite all of this, Monsanto strengthened its intents, since 1997, to collect royalties from the soy farmers on the basis of private contracts, which oblige the farmers to pay royalties as well as restricting the farmers' rights to reserve and sow seeds on their own fields, which is permitted by the seed law. The farmers' association, FAA, went to court and won the case based on the farmers' privilege in the seed law. In 1998 Monsanto came up with a new contract, in which the farmers had to recognise the intellectual property rights of Monsanto and follow the restrictions in the patent law, although Monsanto did not hold a patent on RR Soy; otherwise, the farmers would have been excluded from the seed sale. Monsanto also

forced the other seed companies, like Nidera, to require the signing of that contract by the soy farmers. Besides the restriction of the right to reserve seeds for the next sowing, the contract obliged the farmers to sell the entire harvest to a specific company and to pay extended royalties for the use of reserved seeds. Through these private contracts with farmers, Monsanto tried to implement a collectively binding norm, based on the governance mode negotiation, in order to collect royalties and to exert control over the use of its transgenic soy seeds (Bird 2006: 295, 302-304; Brieva 2006: 250; Vara 2005: 24). This intent mostly failed because of the practice of the white bag trade (*bolsa blanca*) of unregistered seeds. The share of white bag traded and reserved seeds of all seeds cultivated is estimated as being between 30 % to 80 % (e.g. Trigo et al. 2002: 119-120; Vara 2005: 23-24). That is why Monsanto adopted other strategies and switched to other governance arenas with different actors in order to obtain the remuneration for their RR soy seeds.

In 2004 Monsanto increased the pressure with the suspension of the seed sale and of the further introduction of new technologies like the second generation of RR Soy in the Argentine market, using its market dominance to influence the negotiation in its favour. Monsanto argued that the business is not profitable because of the loss of royalties due to the white bag trade of non-registered seeds. The Argentine government reacted with the proposal of a reform of the seed law to adhere to UPOV 1991 and of universal royalties on the sale of harvested crops through the technology compensation fund. These global royalties were limited to seven years, so seeds introduced in 1996 were not included. The farmers' privilege to reserve and sow seeds was restricted to plantations smaller than 65 acres and fines were introduced for the cultivation of unregistered seeds. In 2002 the farmers' associations CONINAGRO, SRA and FAA had already agreed on their rejection of Argentina's adherence to UPOV 1991. The legislative initiative from 2004 was partly accepted by the majority of the farmers' associations, but completely rejected by the FAA. Monsanto also demanded an alteration of the time limitation up to 20 years in the proposal (Brieva 2006: 251-252; Federación Agraria Argentina 2005; Vara 2005: 27-29; Varise 2005a). The negotiation on the legislative initiative to alter the governance structure went on until 2008, but the farmers' strike altered the context and led to its breakdown. The farmers' strike in 2008 and 2009 changed

the focus of discussion to another important point of the rent appropriation: the export taxes. While the farmers perceive the royalties and the export taxes as two different forms of rent appropriation (Roulet 2005), the Minister of Agriculture, Miguel Campos, emphasised the importance of the soy sector to generate state income via export taxes (Mira 2006). The conflict regarding this form of rent appropriation froze the struggle on the above-mentioned legislative initiative. (O'Donnell 2011a, 2011b) Therefore, Monsanto's plan to change the governance structure failed. An important change in the legislative initiative was the collection of royalties on the sale of harvested soybeans from the former demand to charge royalties on the sale of the RR Soy seeds. This new concept converges with the extension of the seed breeders' rights to the harvest of unauthorised cultivated seeds in UPOV 1991 (Art. 14), which was not signed by the Argentine government.

In 2004 Monsanto legally contested the importation of Argentine soybeans and derivatives in several countries of the European Union based on the patent of RR Soy in the EU to obtain the collection of royalties at European harbours and by so doing enforce the introduction of royalties in Argentina. Therefore, Monsanto left the Argentine national arena in order to enforce its interests in a different national as well as supranational arena with a different legal context. The threat of collectively binding decisions by courts in the EU, enforced by hierarchical instruments, should alter the conflict in Argentina and can therefore be described as governance mode of external hierarchy. Besides this, Monsanto opposed another actor group of the Argentine soy sector - the importers of soybeans and derivatives - and aimed to levy royalties indirectly from the soy farmers. This action follows the extension of seed breeders' rights to products directly obtained from harvested material based on the unauthorised cultivation of protected varieties in UPOV 1991. Dutch judges sent the case to the Court of Justice of the European Union in 2008 demanding a leading decision (Brieva 2006: 252; Mira 2006; Premici 2010; UPOV 1991: Art. 14; Vara 2005: 31-32). The Argentine government participated in the trial as co-defendant to protect the Argentine agricultural sector and its taxation by the Argentine state, and to defend the Argentine national legislation of intellectual property rights based on the lack of a patent on the RR Soy of Monsanto. The government's position was backed by the farmers' associations, especially by SRA and FAA (La Nación 2006; Mira 2006; Varise 2005b). In connection with the above-mentioned willingness to change the seed law, and to adhere to UPOV 1991 and to implement royalties, the participation in the trial shows the oscillating position of the Argentine government regarding the royalties on RR Soy. On 6.7.2010 the Court of Justice of the European Union (2010: Art. 1) denied Monsanto's claim for patent protection for products cultivated with RR Soy in Argentina: "On those grounds, the Court (Grand Chamber) hereby rules: 1. Article 9 of Directive 98/44/EC of the European Parliament and of the Council of 6 July 1998 on the legal protection of biotechnological inventions is to be interpreted as not conferring patent right protection in circumstances such as those of the case in the main proceedings, in which the patented product is contained in the soy meal, where it does not perform the function for which it is patented, but did perform that function previously in the soy plant, of which the meal is a processed product, or would possibly again be able to perform that function after it had been extracted from the soy meal and inserted into the cell of a living organism".

The judgment made it clear that the characteristics of the patented RR Soy seeds are not in performance in harvested and processed material and therefore the court restricted the range of patent protection. Moreover, the Court of Justice of the European Union declared that Art. 27 and Art. 30 of the TRIPS Agreement do not affect this interpretation (Court of Justice of the European Union 2010: Art. 3). As consequence of the judgment Monsanto withdrew the lawsuits against companies that import soy from Argentina and focussed its strategies on the protection of new technologies and on the direct negotiation with Argentine soy farmers, thereby bypassing the farmers' associations (Interview 1; Premici 2010).

A governance arena, one characterised by the governance mode of external hierarchy, was the non public meetings of Argentine and US government officials and congress members who exerted pressure in favour of Monsanto. These previously unknown connections were uncovered and published by Wikileaks on the basis of the cables sent from the US Embassy in Argentina to the US State Department. The cables show that the pressure from US representatives on the Argentine government to implement royalties on RR Soy in favour of Monsanto was strengthened in 2006 and went on until 2009, during the legal conflict between Monsanto and the Argentine state in the European Union. The main addressees of the 11 meetings were the Argentine Minister for Economic Affairs and the Secretary of Agriculture. One consensus of the conversations was the right of Monsanto to collect royalties, but their amount and their form, as well as the pressure from Monsanto, were questioned by the Argentine government officials. The US representatives insisted on the implementation of a system of royalties not only based on intellectual property rights, but also on the rejection of the competitive advantage of the Argentine over the US soy farmers. The US officials and congress members demanded that the Argentine government moderate the conflict between Monsanto and the Argentine soy farmers in favour of the US-based company. Another concern in the meetings was the protection of the second generation of RR Soy, which will be introduced in Argentina by Monsanto at some stage. (O'Donnell 2011a, 2011b).

Furthermore, Monsanto used another instrument of its market dominance to enforce its interests in the negotiation: new technology, precisely the second generation of RR Soy (RR2YBt). Monsanto follows a double strategy: legal protection of the intellectual property rights of RR2YBt through a patent in 2009 and private contracts with soy farmers. In the contract, the soy farmers accept the intellectual property rights of Monsanto and oblige themselves to pay royalties as remuneration for the use of the RR2YBt seeds. The Argentine soy farmers partly fear the loss of their international competitive ability without the new transgenic soy seeds. But only 7,000 farmers have up to now signed the private contract with Monsanto, which represents around 10 % of all soy farmers in Argentina. FAA maintained its rejection of the private contracts with Monsanto, while several big farmers, represented by SRA, tend to sign the contract (Bertello 2011; El Diario24 2011; Interview 1; La Nación 2012b; La Política Online 2009).

Despite this, Monsanto still claims the reform of the seed law and, through that, of the governance structure. A new legislative initiative, elaborated by the Ministry of Agriculture, to reform the Argentine seed law and especially to restrict the farmers' privilege to small farmers was introduced in the House of Representatives on 27.11.2012, and is still in progress. The FAA rejected the proposal while the other farmers' associations are mostly in favour of the reform (Diputados Expediente 8288-D-2012; La Nación 2012a). The introduction of the second generation of transgenic soy seeds of Monsanto as well as the reform of the seed law are still pending and so is the conflict about the remuneration.

#### 4. Conclusion: why has Monsanto failed so far?

This paper shows that, despite several attempts by Monsanto to enforce the payment of royalties in different governance arenas based on the governance modes of negotiation and external hierarchy, the farmers' privilege is still in force; because of that the intent of remuneration through royalties has so far failed. To answer the main question, I want to offer three interconnected explanations as to why the attempts of Monsanto failed to generate and implement a collectively binding norm of remuneration.

Firstly, the nested governance structure on the international and national level contains a contradiction regarding the farmers' privilege between UPOV 1978, 1991 and the Argentine seed law, as well as TRIPS and the Argentine patent law. This legal contradiction enables the rejection of royalties by the Argentine soy farmers and it causes the conflict I have analysed in the paper. That is why Monsanto tries to alter the governance structure through the adherence of Argentina to UPOV 1991 and the reform of the seed law. The lack of a Monsanto patent and the seed breeder's right on RR Soy seems to be a minor factor. The convergence of the governance structure towards an extension of seed breeders' rights and a restriction of the farmers' privilege did not help Monsanto to introduce a collectively binding norm regarding royalties.

Secondly, the big farmers' associations acted in different constellations at different moments of the conflict against differing actions of Monsanto; FAA, SRA and CONINAGRO found consensus on their rejection of the adherence to UPOV 1991, but they disagreed on the payment of royalties. FAA contested the private contracts between Monsanto and farmers at the beginning through a court case and later by claims towards the government in spite of the threat of Monsanto not to introduce the second generation of transgenic soy seeds in Argentina. During the trial between the soy importers, the Argentine government and Monsanto in the European Union, FAA and SRA supported the government's position against the collection of royalties at European ports. As well as the political actions of the farmers' associations, the farmers' practice of the white bag trade of unregistered seeds is also part of the resistance. The resistance is directed against the rent appropriation and not against the use in itself. Monsanto's strategies – understood as non-hierarchical governance modes, which require a certain degree of collaboration – collapsed, because of the resistance of the farmers' associations and despite Monsanto trying to exert its negotiating power, based on its market dominance.

Thirdly, the Argentine government acted both in favour of and against the remuneration of RR Soy. The government made various proposals for legislation but took into account the positions of Monsanto and the farmers' associations. But the government also participated in the trial in the European Union on the side of the soy importers against Monsanto and resisted the pressure from the US government to introduce royalties. The reason for such vacillation on the side of the government is the priority of the rent appropriation by export taxes over royalties. Thus, the Argentine government's actions were directed against the exerting of external hierarchy and towards the partial refusal to back Monsanto's strategies with hierarchical instruments; this led to the failure of Monsanto.

To sum up, the contradiction in the nested governance structure enabled the refusal of royalties by the Argentine soy farmers and the resistance of the farmers' associations thwarted the non-hierarchical strategies of Monsanto, which lacked the support of hierarchical instruments of the Argentine state or external state actors like US government officials. The interplay of these three factors led to the failure of Monsanto to introduce a collectively binding norm regarding royalties on RR Soy. Future research should focus on a small-N comparison with cases like Bolivia, Brazil and Paraguay to analyse the validity of these conclusions for other cases.

I Qualitative Content Analysis is a systematic and rule-led approach to analysing text material with the aim of inductive or deductive category building (Mayring 2000).

#### References

- Bertello, Fernando (2011): Quieren acelerar un acuerdo por una nueva soja transgénica. In: La Nación, 11.3.2011. http://www.lanacion.com.ar/1356440-quierenacelerar-un-acuerdo-por-una-nueva-soja-transgenica, 1.3.2012.
- Bird, Mara Nielle (2006): Policies for Genetically Modified Crops in Developing Countries – The Role of Non-State Actors. Los Angeles: Faculty of the Graduate School – University of Southern California.

- Borgarello, Mariella/Lowenstein, Vanesa (2006): Propiedad Intelectual sobre vegetales – Protección por patentes de invención y por derechos de obtentor en la República Argentina: Panorama Actual. In: Bisang, Roberto/Gutman, Graciela/Lavarello, Pablo/Sztulwark, Sebastián/Díaz, Alberto (eds.): Biotecnología desarrollo – Un modelo para armar en la Argentina. Buenos Aires: Prometeo Libros.
- Borowiak, Craig (2004): Farmers' Rights: Intellectual Property Regimes and the Struggle over Seeds. In: Politics & Society 32 (4), 511-543.
- Börzel, Tanja (2010): Governance with/out Government False Promises or Flawed Premises? In: SFB-Governance Working Paper Series, No. 23. Berlin: SFB 700.
- Brieva, Susana Silvia (2006): Dinámica socio-técnica de la producción agrícola en países periféricos: configuración y reconfiguración tecnológica en la producción de semillas de trigo y soja en Argentina, desde 1970 a la actualidad. Buenos Aires: FLACSO.
- El Diario24 (2011): Buzzi pide romper convenio con Monsanto, 26.4.2011. http:// www.eldiario24.com/notas.php?id=220275, 30.7.2012.
- Federación Agraria Argentina (2005): Patentamiento y regalías en semillas Un país que resigna soberanía. Buenos Aires: Federación Agraria Argentina.
- Hague, Rod/Harrop, Martin/Breslin, Shaun (1998): Comparative Government and Politics An Introduction. Basingstoke: Macmillan.
- Kochupillai, Mrinalini (2011): India's Plant Variety Protection Law: Historical and Implementation Perspectives. In: Journal of Intellectual Property Rights 16 (2), 88-101.
- La Nación (2006): Campos llevó a los EE.UU. el conflicto con Monsanto, 23.2.2006. http://www.lanacion.com.ar/783097-campos-llevo-a-los-eeuu-elconflicto-con-monsanto, 30.7.2012.
- La Nación (2012a): La proyectada ley de semillas, 16.10.2012. http://www.lanacion. com.ar/1517558-la-proyectada-ley-de-semillas, 1.2.2013.
- La Nación (2012b): Alientan el ingreso en el país de nuevas tecnologías en semillas, 9.3.2012. http://www.lanacion.com.ar/1455084-alientan-el-ingreso-en-el-pais-de-nuevas-tecnologias-en-semillas, 10.3.2012.
- La Política Online (2009): Monsanto logró patentar una soja transgénica, 7.1.2009. http://www.lapoliticaonline.com/noticias/val/54417/monsanto-logro-patentaruna-soja-transgenica.html, 1.3.2012.
- Mayntz, Renate (2005): Governance Theory als fortentwickelte Steuerungstheorie. In: Schuppert, Gunnar Folke (ed.): Governance-Forschung – Vergewisserung über Stand und Entwicklungslinien. Baden-Baden: Nomos, 11-20.
- Mayring, Philipp (2000): Qualitative Inhaltsanalyse. In: Forum Qualitative Sozialforschung – Theorien, Methoden, Anwendungen 1 (2). http://www.qualitativeresearch.net/index.php/fqs/article/view/1089/2384, 22.12.2009.

- Mira, Cristian (2006): Detienen un embarque de soja argentina en Liverpool. In: La Nación, 8.2.2006. http://www.lanacion.com.ar/778880-detienen-unembarque-de-soja-argentina-en-liverpool, 1.3.2012.
- O'Donnell, Santiago (2011a): El santo preferido de la embajada. In: Página/12, 3.3.2011. http://www.pagina12.com.ar/diario/elpais/1-163369-2011-03-03.html, 4.3.2012.
- O'Donnell, Santiago (2011b): Los cables utilizados. In: Página/12, 3.3.2011. http:// www.pagina12.com.ar/diario/elpais/subnotas/163369-52332-2011-03-03.html, 4.3.2012.
- Phillips, Peter W.B. (2007): Farmers' Privilege and Patented Seeds. In: Phillips, Peter W.B./Onwuekwe, Chica B. (eds.): Accessing and Sharing the Benefits of the Genomics Revolution. Dordrecht: Springer, 49-64.
- Premici, Sebastián (2010): Monsanto muerde la semilla. In: Página/12, 7.7.2010. http://www.pagina12.com.ar/diario/economia/2-149007-2010-07-07.html, 1.3.2012.
- Roulet, Néstor (2005): Hacia un sistema equilibrado que contemple todos los intereses. In: La Nación, 30.7.2005. http://www.lanacion.com.ar/725576-hacia-unsistema-equilibrado-que-contemple-todos-los-intereses, 30.7.2012.
- Trigo, Eduardo/Chudnosvky, Daniel/Cap, Eugenio/López, Andrés (2002): Los transgénicos en la agricultura argentina – Una historia con final abierto. Buenos Aires: Libros del Zorzal.
- Vara, Ana María (2005): Argentina, GM nation Chances and choices in uncertain times. Buenos Aires: Centro de Estudios de Historia de la Ciencia José Babini, Escuela de Humanidades, Universidad Nacional de General San Martín.
- Varise, Franco (2005a): Modificarán reglas para las semillas. In: La Nación, 26.1.2005. http://www.lanacion.com.ar/674157-modificaran-reglas-para-las-semillas, 1.3.2012.
- Varise, Franco (2005b): Dura embestida oficial contra Monsanto. In: La Nación, 2.7.2005. http://www.lanacion.com.ar/717964-dura-embestida-oficial-contramonsanto, 30.7.2012.

#### Legal norms

- TRIPS Agreement on Trade-Related Aspects of Intellectual Property Rights, Annex 1C of the Marrakesh Agreement of the World Trade Organization, Marrakesh, Morocco, 15.4.1994.
- Argentine National Constitution, Ciudad de Santa Fe, 22.8.1994.
- Court of Justice of the European Union (2010): Judgment of the Court (Grand Chamber) of 6 July 2010. Monsanto Technology LLC v Cefetra BV and Others, Case C-428/08, Luxembourg.

- Diputados Expediente 8288-D-2012: Semillas y Creaciones Fitogéneticas, Ley 20.247, Modificaciones sobre el derecho de propiedad de los cultivares, Trámite parlamentario No. 174. http://www1.hcdn.gov.ar/proyxml/expediente. asp?fundamentos=si&numexp=8288-D-2012, 1.2.2013.
- INASE Instituto Nacional de Semillas: Resolution 35/1996, Buenos Aires, 25.3.1996.
- UPOV International Convention for the Protection of New Varieties of Plants, 1978, Geneva, 23.10.1978.
- UPOV International Convention for the Protection of New Varieties of Plants, 1991, Geneva, 19.3.1991.
- Law 20.247/1973 Ley de Semillas y Creaciones Fitogenéticas, Buenos Aires, 30.3.1973.
- Law 24.481/1995 Ley de Patentes de Invención y Modelos de Utilidad, Buenos Aires, 23.5.1995.
- Presidential decree 2.183/1991 Nueva reglamentación de la Ley N° 20.247, Buenos Aires, 1.11.1991.
- Presidential decree 260/1996 Ley de Patentes de Invención y Modelos de Utilidad, Buenos Aires, 20.3.1996.

#### List of Interviews

Interview 1: Monsanto representative, Buenos Aires, 7.12.2012.

#### Abstracts

The paper analyses the interaction between the governance structure – consisting of the international treaties UPOV and TRIPS and the Argentine seed law and patent law – the hierarchical instruments of state actors and the (non-)hierarchical instruments used by Monsanto to generate and implement a collectively binding norm regarding royalties on RR Soy and to alter the governance structure of rent appropriation. The paper addresses the reasons for the breakdown of Monsanto's strategies in the struggle with the Argentine soy farmers and government and offers three possible explanations: conflict of legal norms, resistance of farmers' associations, and the partial support of the Argentine government.

Der Artikel analysiert die Interaktion zwischen der Governance-Struktur – die aus den internationalen Verträgen UPOV, TRIPS sowie dem argentinischen Saatgutgesetz und Patentgesetz besteht –, den hierarchischen Instrumenten staatlicher Akteure und den (nicht-)hierarchischen Instrumenten, die von Monsanto verwendet werden, um eine kollektiv verbindliche Norm bezüglich der Lizenzgebühren auf RR-Soja zu generieren, zu implementieren sowie die Governance-Struktur der Rentenaneignung zu verändern. Dabei werden die Gründe für Monsantos Scheitern im Konflikt mit den argentinischen Sojabauern und der Regierung auf der Basis dreier Erklärungsansätze thematisiert: Konflikt rechtlicher Normen, Widerstand der Bauernverbände, teilweise unterstützt durch die argentinische Regierung.

Markus Rauchecker desiguALdades.net, Freie Universität Berlin markus.rauchecker@fu-berlin.de