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# The right to agroecology

Using the law to support  
sustainable farming in Brazil

## **The right to agroecology: using the law to support sustainable farming in Brazil**

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## Summary

This publication aims to show how existing national and international legal frameworks can be used to support sustainable agriculture in Brazil, thereby reducing pressure to convert forests to large plantations. Small-scale farmers are increasingly using ecological agriculture – agroecology – to produce food for themselves and for sale in local markets. Through growing several different crops on the same plot, and using organic methods of fertilisation and pest control, agroecology produces food that is both high quality and affordable. It also provides rural employment and helps farmers achieve self-determination.

Despite these benefits, the existing Brazilian legal framework is under-used in supporting agroecology in Brazil. National priorities remain focused on large-scale commercial agriculture: cattle ranches or plantations growing single crops such as soy, sugar cane or eucalyptus. Much of Brazil's farming does not meet local food needs, but generates commodities for export. Brazil's increasing soy output, in particular, is largely used to produce feed for pigs and chickens in other countries. While the agri-food sector generates significant national income, it is unsustainable and delivers huge environmental and social costs.

Export-focused agriculture in Brazil is contributing to widespread deforestation because it results in large monocultures established on land cleared of natural forest. It is unsustainable because it depends on expensive inputs such as transgenic seeds and oil-based fertilisers and biocides, which pollute and degrade the natural environment. This type of agriculture contributes to rural unemployment, exploitation of those it does employ, and the forced decline of traditional communities and livelihoods based on forest resources.

Agroecology is an approach well-aligned to the Brazilian Federal Constitution, which emphasises social justice and the need to eradicate poverty. The Constitution also states that Brazil must be governed by international agreements, such as those on biodiversity and species protection, and by the supremacy of human rights. By strengthening the domestic food market, agroecology enables greater social inclusion. As domestic production increases, diversifies and involves more people, this could lead to an improved and more accessible food supply, with consequent benefits for health. This would help to achieve the human rights to adequate food, work, health and the environment.

The Constitution refers to the 'social function of land', which can be an argument in favour of both environmental protection and the defence of ownership of whoever cares for the land. There are several possible approaches in law to support the argument that economic productivity alone is not an adequate reason to deny the possibility of land reform.

Agroecology demonstrates that human rights can be implemented through adopting a farming model not based on worker exploitation and large-scale deforestation but on sustainability – in social, environmental and economic terms. Lawyers, engaged citizens and city dwellers can work with rural people to generate real gains for all, within a context of the new Latin American constitutionalism. Despite considerable obstacles, the development of agroecology is essential for a world in which people produce food in a way that sustains life and livelihoods for themselves and their descendants.

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## Foreword

While forests continue to be cut down so land can be used to grow monoculture export crops, companies increasingly pledge to ensure zero deforestation in their supply chains. Solutions are available, such as reducing the demand for meat and animal feed, but receive less attention.

In July 2017, 14 European Union Member States called for support to plant protein crops in Europe. This would be a good first step, but it needs to be supported by legislation to ensure responsible sourcing of soy from Brazil and other Latin American countries, where deforestation and related human rights challenges are rife.

The EU is looking to modernise its farm policy, the Common Agricultural Policy, and civil society voices are increasingly calling for it to support agroecology. But farmers using such production methods are still under-represented and not well organised to make their voices and success stories heard. The United Nations Food and Agricultural Organisation (UN FAO) has issued statements since 2007 showing that low-input, organic agriculture can actually increase yields, but these go largely unnoticed in discussions about how to feed a growing world population.

With this publication we draw attention to the many contributions that agroecology can make, including reducing inequality and halting deforestation. Such information must be part of the EU's deliberations on the new Common Agricultural Policy and the EU trade agreements with Mercosur countries (Argentina, Brazil, Paraguay and Uruguay).

Nicole Polsterer

Sustainable Consumption and Production Campaigner  
Fern  
January, 2018









## Preface

### **Why associate agroecology with human rights?**

**Proposing a right to agroecology is also to propose a new model of agriculture and society, in which the economic development of states and their peoples should occur not in isolation from, but coupled with social and environmental advances. For more than five centuries, Brazil has had an economic structure based on the export of commodities. In the 21<sup>st</sup> century, projects based on large land estates (latifundia), the devastation of our forests and the exclusion of peoples are no longer supported and should not be allowed.**

**These are challenges of global concern, and alternatives are thus important for all. The idea for this publication developed during discussions in November 2016 in Passo Fundo, Rio Grande do Sul, Brazil, at a meeting organised by the British Council legal research network. I invite all of us to continue reflections, bringing the right to agroecology to the centre of a debate, about how to realise human rights through the introduction of agroecology. This is not only specific to Brazil and Latin America, but concerns all that are committed to achieving common social and environmental changes.**

Gladstone Leonel Júnior

Rio de Janeiro  
January, 2018

# Glossary

|   |   |
|---|---|
| <b>Agribusiness</b>                         | Production of agricultural commodities on a large scale, based on an industrial model and with the main aim of maximising profits, often generating goods for export and often with the involvement of large companies and foreign or multinational investors.  |
| <b>Agroecology</b>                          | Sustainable farming with the main aim of producing food for the practitioners, usually on a small scale – family or small community – with produce principally for local consumption and sale at a fair price. This type of agriculture also emphasises environmental sustainability and social welfare.  |
| <b>Agroforestry</b>                         | An agroecological approach involving forestry: different crops are mixed with local trees and fertiliser plants, preserving high soil quality and biodiversity.   |
| <b>Biocide</b>                              | A chemical – often a pesticide, herbicide, or fungicide – that destroys life by poisoning, usually to control or eliminate unwanted insects, plants or moulds. Many biocides can be harmful to humans and the environment as they are concentrated within ecosystems and spread into water resources.   |
| <b>Cerrado</b>                              | The world's most biologically rich savannah: a tropical ecosystem of mixed woodland and grassland, extending over nearly 500 million acres of Brazil.   |
| <b>Latifundia</b>                           | Large estates characterising a system of land tenure common throughout Latin America since colonial times. The system is associated with exploitative employment practices and even slavery. Latifundia are prevalent in areas of cattle ranching in Brazil.  |
| <b>Legal pluralism</b>                      | Going beyond the norms of state legality to allow space for a legal process in which it is possible to extend the rights of collectives and individuals, based on customary and international law. This can help to increase the participation in society of minority or disadvantaged groups by guaranteeing and promoting their rights.   |
| <b>Monoculture</b>                          | A farming system growing just one crop within a single area. Extensive monocultures are associated with agribusiness and other forms of commercial farming. They have been heavily criticised because they reduce biodiversity and their maintenance often requires large amounts of chemical and mechanical inputs.  |
| <b>New Latin American Constitutionalism</b> | Constitutionalism is a political philosophy based on the idea that government authority is derived from the people and should be limited by a constitution that clearly expresses what the government can and can't do. It's the idea that the state is not free to do anything it wants, but is bound by laws limiting its authority. New Latin American Constitutionalism is concerned with establishing a constitutional process with broad popular participation and respect for the rights of nature. New Latin American constitutionalism is based on the belief that democracy is the only legitimate mechanism to elect political authorities, and that even governments elected by the majority must respect the fundamental rights of all, including those of minorities. |
| <b>Polyculture</b>                          | A farming system growing several compatible crops, and sometimes also keeping animals in the same area of land. Polyculture includes multi-cropping, intercropping and companion planting, and is associated with environmentally sustainable farming.  |
| <b>Positivism</b>                           | In law, the positivist view emphasises the conventional nature of law, including case law or common law, and accepts the law as it is. Positivism can be used in the sense of a philosophy that does not challenge existing legal frameworks, in contrast to other critical or radical approaches.  |
| <b>Positivity of combat</b>                 | Positivity of combat is an alternative approach to the law. It works within the existing framework and structures of the law, but focuses on promoting social justice and supporting groups often excluded from legal processes.  |
| <b>Transgenic</b>                           | A transgenic seed or plant contains genetic material introduced artificially, often using methods collectively known as recombinant DNA (rDNA) technology. The inserted genes, called transgenes, may come from another plant of the same or a different species, or from an unrelated organism such as an animal or bacterium. Once a transgenic plant is created, the transgenes can be inherited along with the rest of the plant's genes through pollination. Transgenic plants are often referred to as genetically engineered (GE), genetically modified (GM) or bioengineered.   |



## Introduction: the need to support agroecology

Today, there are two contrasting models of Brazilian agriculture. One is agribusiness, developed directly from the latifundia established after the Portuguese invasion in the 16<sup>th</sup> century. This model is often linked to large-scale deforestation and is characterised by extensive monoculture and aimed at the export market. Agribusiness receives large financial incentives, mainly from the government. While the agri-food export sector generates significant national income, it is unsustainable and incurs a huge social cost.

*'Environmental degradation, workers kept in a state of semi-slavery, concentration of income and wealth, amnesty of ruralist debts every five years and the expulsion of thousands of field workers are just a few examples of what maintaining the agribusiness model costs us.'*

*(Editorial, 2009)*

The second model of agriculture in Brazil is agroecology, often family farming. Many small-scale farmers, concerned with sustainable production and conserving the quality of the environment in which they live and work, have adopted agroecology – an ecological approach to farming. The main task of agroecology is not to obtain huge profits, but to provide affordable, healthy food while conserving natural resources.



Unfortunately, the legal rules regarding agroecology are largely ignored under Brazilian law. In this publication, we look at how the law can help to promote and defend agroecology in Brazil. While taking a critical view of the existing legal framework, we identify creative and constructive ways of working (mostly) within it. We aim to show that these rules exist, that they are protected constitutionally and internationally, and that they can also promote human rights to food, health, work and the environment.

## 1. The challenges to sustainable agriculture in Brazil

In the name of economic development, agriculture in Brazil has become dominated by large-scale, industrialised farming. Vast areas of natural forest and Cerrado have been destroyed or converted into farms producing commodities for export. Large landowners have contributed significantly to Brazil's deforestation of 72 million hectares in just 50 years (Mesquita, 2011, p.60). The rate of deforestation has fallen considerably in the Amazon region since 2004, although it rose again between 2014 and 2016 (INPE-PRODES, 2016).

*'The current pace of the destruction of the Cerrado is about 20,000 km<sup>2</sup> a year ... driven by the expansion of sugar cane and soya plantations and livestock and charcoal production.'* (Governo, 2009)

The large farms focus on growing sugar cane, eucalyptus and soy, and raising cattle, often on areas that have been cleared of natural forest. This kind of farming (or agribusiness) does not meet local needs for food and employment, but generates profits for large landowners, transnational companies and others linked to financial capital. There are still people in Brazil without enough to eat, and the population is increasing.

Many large Brazilian farms are monocultures, producing just a single crop or product. Cattle-raising is the sole activity in large areas: more than half of the global market for beef is supplied by Brazilian companies (Schlesinger, 2008, p.19), and the total number of cattle in Brazil in 2006, at 206 million, was more than the total number of people (IBGE, 2006).<sup>1</sup>

Much of Brazil's crop production, especially soy, is exported to produce animal feed.<sup>2</sup> 'Europe has eliminated lots of its expensive harvesting of soy, sunflowers and canola, replacing it with soya-derivative imports' (Schlesinger, 2006, p.23). This means that most exports go to feed cattle, chickens and pigs in the EU and other countries, at very low cost to the buyers of the feed. This seems an irrational and unjust use of natural resources, driving deforestation, maintaining the concentration of wealth in the hands of a few, and increasing social divisions. A focus on export also contributes to domestic food insecurity, as the national economy is dependent on the international market.

Brazil is home to some of the largest landowners in history, and the existing pattern of large ranches and farms worked by peasants remains close to the latifundia system of colonial times. The last agricultural census of 2006 shows that small farms, under 10 hectares, occupied less than 3 per

1 The last official agricultural census in Brazil was carried out in 2006; there are no more recent official data on many topics, and some unofficial data are unreliable. In 2017, the Brazilian government is initiating a new farming census, with results expected during the next few years.

2 Export sales of soy beans, soybean meal and soybean oil in 2014 totalled USD31.4 billion, or 14% of Brazil's total exports (Agregar, 2015).



cent of total arable land, while ranches of over 1,000 hectares accounted for more than 43 per cent. These proportions have not changed significantly since 1985 (IBGE, 2006).

*'The cultivation of large areas – the predominant standard of the modernisation model – has increased the country's agricultural output. What it has not encouraged is the social welfare of most of the rural population; in fact, it has caused land ownership concentration, rural exodus, hunger and violence.'* (Sauer, 2010, p.30)

An agricultural system dominated by large-scale production for export is problematic and unsustainable in many ways. Conventional farms are dependent on fuel and other inputs derived from non-renewable resources such as oil derivatives and other minerals. Even the production of biofuels (such as ethanol produced from plant matter) is unsustainable within the latifundia system of concentrated land ownership and monoculture (Bravo, 2007, p.35).

The use of chemical pesticides, fertilisers and herbicides is high on large farms in Brazil, despite the increasing evidence of their harmful effects on human health and the environment (Pinheiro, 2005). Between 2000 and 2009, the sale of pesticides for example increased worldwide by around 95 per cent – and by around 170 per cent in Brazil (Anvisa, 2010). During the 2008 harvest, 'transnational companies ... celebrated that Brazil had become the world's number one consumer of pesticides' (Stédile, 2009).<sup>3</sup>

Monoculture in a country renowned for its biodiversity is highly alarming. Growing single crops in large areas leads to environmental imbalance, soil degradation and the loss of biodiversity and its potential. When crops are sick, they are treated with a technological 'remedy' (usually a biocide), increasing farmers' costs and contaminating plantations and water resources. Alternative, sustainable methods, such as biological correction of the soil or crop rotation, are ignored because they take more time and do not prioritise the more profitable crops.

Large-scale commercial agriculture in Brazil, with state support, is increasingly using transgenic seeds. These are modified by the artificial introduction of genetic material from other sources – a process also called genetic modification or bioengineering. This is different from the age-old improvement of seeds in traditional farming, which is gradual and not controlled by patents and commercial companies. Small-scale farmers may be unable to access transgenic seeds, which are expensive, especially when they depend on other artificial inputs such as chemical biocides (See also Box 7, page 22).<sup>4</sup>

Almost half of the farms that grew soy in Brazil in 2006 used transgenic soy – on four million hectares – without identifying which areas were contaminated by the seed. The use of transgenic seeds is highly controversial, given widespread concern about the possible ill effects of transgenic foods on human health. Another serious environmental risk from growing transgenic seeds is their potential for contamination of non-transgenic species. This can occur throughout the stages of agricultural production, including planting, pollination, harvesting, transport, storage and sale.

3 For more information, see: (in Portuguese) <http://www.ccst.inpe.br/brasil-lider-mundial-no-uso-de-agrotoxicos/>; (in English) <http://riotimesonline.com/brazil-news/rio-politics/brazil-is-largest-global-consumer-of-pesticides-shows-report/>).

4 [https://www.theepochtimes.com/gmos-a-global-debate-brazil-second-largest-gmo-producer-in-world\\_162906.html](https://www.theepochtimes.com/gmos-a-global-debate-brazil-second-largest-gmo-producer-in-world_162906.html)

## 2. Agroecology: a path to sustainable agriculture for all

Agroecology is an ecological approach to agriculture, based on small-scale family farming (Box 1, below). It provides farming communities with healthier food and a better living, and can contribute to socially fair and environmentally sustainable development. The agronomist Ênio Guterres argues that agroecology could be part of an anti-totalitarian, pluralist and evolutionist paradigm (Guterres, 2006).

### Box 1: What is agroecology?

**Agroecology is farming that is sustainable and appropriate to the local natural environment and to the needs of the people practising it. In contrast to large-scale, export-oriented agriculture, agroecology focuses on the needs of local farmers and consumers.**

#### **Agroecology:**

- **emphasises the connections between farming, local communities and the wider natural environment**
- **values and incorporates traditional knowledge and methods, such as the selection and collection of native seeds, foraging and small-scale forestry**
- **promotes social justice by enabling farmers to choose what they grow for their own consumption and for sale, and by providing more local employment**
- **produces a range of different crops and other products within a local area, generating a range of healthy food available to those producing it**
- **prioritises local food supply of good quality at fair prices, for both rural and urban communities**
- **avoids large-scale environmental damage or pollution by using crops and farming methods appropriate to local conditions, for example growing drought-resistant crops in drier areas**
- **is sustainable farming, using manure, mulches and fertiliser plants, for example, rather than depending on oil-based inputs such as chemical pesticides and fertilisers**
- **promotes and protects biodiversity, using low-impact farming methods able to co-exist with natural forests and grasslands.**

How could farming in Brazil transition from agro-chemical production to agriculture that incorporates principles and methods based on ecology and that has a social conscience? Increasing the use of agroecology could achieve this, focusing on land as the basic source for meeting food needs, and as a resource to be nurtured and protected. Agroforestry is a related approach, mixing different crops with local trees and fertiliser plants, preserving high soil quality and biodiversity. Principles of agroecology can be applied at the smallest scale, down to an urban garden (Box 2, next page).



### Box 2: **Micro-scale agroecology**

**Eugênia lives in the town of Rebouças, southern Brazil, but has always worked the land. She values the seeds she uses to produce food for her household, including some she brought from her mother's house when she married. In her garden she grows lettuce, carrots, chicory, broccoli, beetroot, two kinds of tomatoes, peppers, cucumbers, squash and garlic. She uses fertiliser plants and manure to enrich the soil. Eugênia says that seeds from the garden germinate much better than those that are bought.**

(Source: Cultivo, 2005)

The distinctive features of agroecology include environmental sustainability, respect for the land, the prioritisation of growing food and access to a greater number of people at affordable prices. This last characteristic distinguishes agroecological from organically produced food. Presently, organic food, grown without pesticides or transgenic ingredients, offers better nutrition while being prohibitively expensive for most people. To make better food available more widely will require re-organisation of production, away from the current focus on the most lucrative markets.

Specific steps to develop and expand agroecology include the following.

- **Soil recovery:** a gradual process to restore and maintain the quality of depleted or contaminated soil.
- **Replacement of most chemical biocides** with natural insecticides, biological herbicides or other methods.
- **Using locally suitable plants**, considering local environmental conditions and respecting biodiversity and production seasons.
- **Diversification of crops** within a single area, use of **fertiliser plants** alongside main crops, and **complementary planting** of adjacent crops (Tardin, 2006).
- **Appropriate technology:** on many small farms, the aim is not to avoid mechanisation but to use tools and machinery appropriate for small-scale sustainable farming.

Through agroecology, it is possible to escape monoculture crops and plant areas to feed the population. Other benefits include lower costs (due to reduced use of chemical fertilisers and biocides), increased employment opportunities and healthier, uncontaminated foods.

Agroecological development also involves reclaiming knowledge and basic understanding of farming and the environment, partly ignored by some large-scale farming methods. There have been some successful experiments in Brazil, such as the Agroecological Conferences held in Paraná State since 2002 (Carta, 2009). At these events, thousands of small-scale farmers can attend workshops and lectures, exchanging knowledge and experience. The Latin-American Agroecology School, also in Paraná, in the town of Lapa, was set up in 2005 to teach professionals committed to agroecology.

The development of medicinal plants is another area in which principles of agroecology can apply. 'It is likely that out of the 200,000 species of plants that may exist in Brazil ... at least half may have some

therapeutic property that is useful for the population, but only one per cent of these species with potential has been properly studied' (Martins, 2003, p.15). Unfortunately, most of these may become extinct without ever being studied. The great challenge is to maintain existing biodiversity and to democratise knowledge, not allowing it to be controlled by private commercial interests (see also Sections 4 and 6).

### 3. The constitutional lens: options for the use of national and international law

Agroecology is not specifically mentioned in the Brazilian Federal Constitution, although some national legislation does reference it. However, the first stated objective in the Constitution is 'to build a free, fair and inclusive society' (Article 3).<sup>5</sup> The dynamic of agroecological development offers a way to achieve this. In this section, we outline possibilities for legal interpretations of the Constitution, national law and principles of human rights to support sustainable agriculture, involving rural people currently marginalised or excluded from adequate rural employment.

Another objective stated in the Brazilian Constitution is 'to eradicate poverty and marginalisation and to reduce social and regional inequalities' (Article 3). Agroecology strengthens the domestic market, thereby enabling greater social inclusion by stimulating agrarian reform and reducing inequality. As domestic production increases, diversifies and involves more people, in line with Constitutional provision, this could lead to an improved and more accessible food supply, with consequent benefits for health. Increased agroecology is likely to lead to a reduction in the price of food, given the increase in supply; this does not happen in the agribusiness model, which directs production at the export market.

Observing recent constitutional experiments in Latin America, particularly those in Bolivia, Ecuador and Venezuela (Leonel Júnior, 2017), we can see the start of greater reflection on possibilities for change: 'New relationships and forms of power are built within this new context' (Leonel Júnior, 2015, p.103). This supports the understanding that the law can transcend a conventional, positivist analysis, going beyond what legislation explicitly includes and what it *should* cover. Agroecology can modify established structures and relationships, consistent with ideas of a new Latin American constitutionalism.

Key contributors to the theoretical debate about the legal force of the Constitution include Ferdinand Lassalle (1985), on the essence of constitutions, and Konrad Hesse, who developed the idea of the 'real' and the 'legal' constitution. For Hesse, when a constitution is in step with the social and historical reality of the people to which it is subject, it is embodied with legal force: 'there are achievable suppositions that, even in the case of confrontation, can ensure the legal force of the constitution' (Hesse, 1991, p.25). Therefore, an approved constitution that provides for the realisation of human rights through the development of agroecology, as the Brazilian one may be considered to do, must assert its legal force to impose these provisions. A constitution is not restricted to its text, but can be a 'political and legal instrument of this change, it points the way that must be followed for the constitutional subjects to act, particularly state officials who should be guided and directed by it' (Escrivão Filho, 2011, p.57).

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5 For all references to the Constitution, see Brasil (2002).



The Brazilian Constitution states that, with regard to international relations, the country must be governed by 'the supremacy of human rights' (Article 4). As detailed in Sections 4 to 6 below, the practice of agroecology fulfils the human rights to adequate food, rural land and the environment. We should understand human rights as cultural products arising from specific times and contexts: in other words, they go beyond legislated rules or natural rights.

Just as Sousa Júnior (2015) has described the 'rights found in the street',<sup>6</sup> we can identify the 'rights found in the countryside'. In practice, this could mean the swapping of seeds, and encouragement of the internal market between numerous small producers and not just a few large landowners. These 'fights from which we name and transform experiences are one of the most fundamental questions when it comes to ... what we conventionally call human rights' (Herrera Flores, 2009, p.86). The Federal Constitution, by assimilating these fights, as in the case of agroecology, acts as an instrument for implementing human rights – which is why it is so important.

Current political and legal practice in Brazil do not favour the more vulnerable agrarian groups, such as rural workers and traditional communities. Therefore, we need to emphasise their needs and interests by interpreting the role of law as an instrument to confront agribusiness and help to develop agroecology as a pillar of a popular social project based on human potential, not market forces (Box 3). Perhaps constitutional interpretation can be democratised? 'The more plural a society is, the more open the criteria of constitutional interpretation should be' (Haberle, 2002, p.13).

### Box 3: Brazilian law on organic agriculture

**Law 10.831/03 on organic farming states: 'the organic system of animal husbandry and industrial production covers the so-called: ecological, biodynamic, natural, regenerative, biological, agroecological, permacultural and other concepts'.<sup>7</sup>**

'Organic agriculture' generally refers to the replacement of chemical inputs with biological ones, but this still keeps the farmer dependent on these inputs. Although less harmful to the environment, these inputs are sometimes concentrated in the hands of companies that profit from the business and increase production costs. Further, organically produced foods are usually too expensive for most people in Brazil.

This law specifically mentions 'agroecology', although agroecology differs from organic farming because it focuses on the benefits to small producers and all consumers, as well as on environmental sustainability. The law contains articles intended to benefit those producing for export, but it is important because it also opens the legal framework for a legal defence of agroecology. The law covers the whole system of agricultural production and recognises the value of avoiding chemical inputs while stressing socio-economic aspects of agriculture. Law 10.831/03 could potentially be used to call for inclusive agroecological practice, as expressed literally in the Federal Constitution. The law is important for advancing the debate, but also insufficient, since it focuses on organic agriculture and not on agroecology.

6 'The right is born on the street, in the clamour of the dispossessed and oppressed until it is achieved, by the mediation of human rights, in the announcement of the principles of a legitimate social organisation of freedom' (Sousa Júnior, 2008, pp.87–88).

7 Law No. 10.831/03, Article 1, Section 2. See also Decree No. 6.323/07, which regulates Law No. 10.831/03, and Decree No. 7.794/12, which established the National Agroecology and Organic Production Policy.

Some argue that a complete rejection of the current social and economic order is necessary to realise a just society. However, even within the existing system, the national and international legal frameworks allow for a legal appreciation conducted to ensure fundamental rights. ‘Positivity of combat’ (Machado, 1997; 2011) is a way of using rules and laws to promote social justice and provide legal backing to society’s ‘excluded other’ (Rosillo Martínez, 2013). It is possible to transform the conventional legal framework within the boundaries of official state legality, to develop ‘alternative pluralist practices’ (Wolkmer, 2015). Legal pluralism can be used to represent the voices of disadvantaged groups such as small farmers, rural workers and traditional communities. We could use the law to promote agroecology and enable these groups to become new collective legal entities, fostering new social dynamics, establishing new political practices and affirming rights.

## 4. Protecting human rights to adequate food, work and education

The right to adequate food means having enough to eat, but also involves wider cultural issues including the choice and preparation of food. In addition, people have the right of consistent access to healthy, uncontaminated food. In the Brazilian Federal Constitution, Article 5, paragraph 2 on human rights expressly provides for international laws to be applied in Brazil. Therefore, the international agreements and guidelines listed in Box 4 apply in Brazil.

### Box 4: International protection for the right to adequate food

**Article 11 of the International Covenant on Economic, Social and Cultural Rights (ICESCR), drawn up in 1966, establishes the duty of government to provide resources needed to enforce rights to adequate food, stressing also that this involves nutrition education, agrarian reform and appreciation of natural resources.<sup>8</sup> Brazil ratified the ICESCR in 1992.**

**In 1999, the UN Committee on Economic, Social and Cultural Rights, which is responsible for monitoring ICESCR, defined the necessary access to adequate human food, stressing the importance of enforcing this right and the need for governments to meet this goal.<sup>9</sup>**

**In Article XI of the American Declaration of the Rights and Duties of Man of 1948, the right to health includes decent, healthy food.**

**Article 12 of the Protocol of San Salvador confirms the right to adequate food which, according to the text, can be realised by implementing agroecology.**

<sup>8</sup> Article 11, ICESCR (Zimmermann and Lima, 2008, p.09).

<sup>9</sup> General Comment No. 12: ‘the right to adequate food is realized when every man, woman and child, alone or in community with others, has physical and economic access at all times to adequate food or the means for its procurement. The right to adequate food shall therefore not be interpreted in a narrow or restrictive sense by equating it with a minimum package of calories, proteins and other specific nutrients . . . States have a core obligation to take the necessary action to mitigate and alleviate hunger as provided for in paragraph 2 of Article 11, even in times of natural or other disasters’ (Zimmermann and Lima, 2008, p.08).





Agroecologically produced seeds from a cooperative (Bionatur) for sale at a farmers' market.

Photo: Gladstone Leonel Júnior

The government of Brazil does not intervene directly by providing food to needy families, but should create mechanisms that facilitate the right to adequate food. This could include establishing conditions for planting healthy food, for example using agroecology, native seeds and agrarian reform.

In 2009, a special parliamentary commission approved the Constitutional Amendment Proposal (PEC) 047/2003, which includes adequate food among Brazilians' social rights. It was transformed into Constitutional Amendment 64/2010.

The Organic Law of Food and Nutritional Security (LOSAN), Law 11.346/06, created the National Food and Nutritional Security System, overseeing goals, directives and resources to guarantee the right to adequate food.

Decree 7.794/12 set up the National Agroecology Policy and seeks, among other goals, to ensure food sovereignty and security.

The law on seeds and saplings (10.711/03) still favours large companies, and there is considerable debate about how best to protect small farmers' rights to use native seeds (Packer, 2009; Londres, 2006).

Work is also a human and social right provided for in the Constitution of Brazil (Article 6). The human right to work is mentioned in international legal provisions including the Universal Declaration of Human Rights (Article XIII) and in various Conventions of the International Labour Organisation (ILO). In Brazil, agricultural industrialisation is leading to increasing rural unemployment and displacement, with some rural working conditions equivalent to slavery. Constitutional amendment number 81 on confiscation of rural properties that use slave labour is also important (Pereira Silva and Leonel Júnior,

2013, p.57). Legal developments to strengthen agroecology, enabling more people to work for the benefit of their own communities, include agricultural cooperatives and agrarian reform (discussed further in Section 5). As farms using agroecological practices tend to be more labour intensive, strengthening agroecological practices goes hand in hand with fulfilling international obligations on the right to work, which are currently negatively affected by Brazil's industrial agricultural system.

Education is another basic human right affecting agroecology. Most agronomy courses in Brazil, for example, focus on conventional agriculture, guided by the interests of large agro-chemical and food companies. Agroecology is largely overlooked. The Agroecology Conferences held each year in Paraná, as mentioned above in Section 2, are a counter-example of education about human rights and community practices. There are presently a few agroecology courses for small farmers, despite awareness that it is important to increase these activities and make this kind of training a benchmark for state education policy.

## 5. The social function of land: the legal basis for agrarian reform

The human right to adequate food can be realised through agroecology practised as family-scale farming on small plots of land. However, the system of large estates practising agribusiness throughout Brazil prevents many families from owning or using land as they choose and contributes to maintaining hunger, a lack of housing and inadequate work options for huge numbers of rural workers, condemning them to misery. In this section we consider the legal grounds for agrarian reform, including through expropriation of land.

Agrarian reform is central to enforcing human rights and the advent of agroecology, and will be necessary to give many people the chance to support themselves while remaining on the land. The established legal grounds that nowadays support the struggle for land first appeared in Article 5, item XXIII of the Brazilian Constitution, affirming that property must fulfil its social function. All rural property that does not fulfil its social role must be expropriated, as also established in the Constitution (Article 5, XXIV, and Article 184).

When legal, expropriation is based on a summary action and supersedes and surpasses all others, as provided for in Supplementary Law 76/93. Article 18 of this law states:

‘Claims concerning the expropriation of rural property for social reasons, for agrarian reform, are preferential and have priority in relation to other actions regarding property expropriation and that are independent of the payment of preliminary costs or fees.’

A central idea here is the ‘social function of land’, which belongs to the land itself and not to the owner. This supports the idea that ‘land has a social function to fulfil, regardless of the title deed that human beings in society may grant it, which partly justifies the defence of ownership of whoever cares for the land’ (Marés, 2003). As the Federal Constitution provides for compliance with the social function of rural property (Box 5), this provides the legal basis for agrarian reform. Furthermore, failure to comply with the social function of rural property will interfere with other people's access to land.

*'Anyone who does not comply with the social function of property loses the judicial and extrajudicial guarantees of the protection of ownership that are inherent in property, with immediate private retaliation (CC, Art. 502) and repossession claims.'*

*(Comparato, 2000, p.145)*

*'The owner of land that is not used in compliance with the social function is not protected by the law, cannot use the legal institutes of protection, with legal repossession actions and claims to recover the land from those who use it.'*

*(Marés, 2003, p.117)*

#### **Box 5: Article 186 defining the social function of land**

The Brazilian Federal Constitution includes an explicit judicial and social recognition of the social function of land in Article 186, as follows.

**'The social role is fulfilled when the rural property simultaneously meets the following requirements according to the criteria and degree of requirements established in law:**

- I rational and adequate use;**
- II adequate use of available natural resources and the preservation of the environment;**
- III compliance with the provisions governing the employment relationship;**
- IV operations that favour the welfare of owners and workers.'**

Clearly, agroecology complies with all four elements of Article 186, reinforced also in Article 9 of Law 8629/93, including the environmental considerations. Concern for social welfare is also integral to agroecology, which involves cooperation among rural workers in contrast to those in the conventional labour market. Use of cooperatives to sell agricultural products gives the producers direct access to consumers, avoiding intermediaries. With additional investment, producers can also develop agro-industries to carry out processing which adds value and, again, can generate more income directly for the farmers, helping to reduce poverty and inequality in rural areas.

There is an apparent conflict between Article 186 of the Constitution, on social function, and Article 185, item II, which states that 'productive property' cannot be expropriated for agrarian reform. Portuguese lawyer José Joaquim G. Canotilho has asserted that some elements of the Constitution may be 'unconstitutional', and that, in cases of conflict between elements of the Constitution, 'it is up to the legal interpreter to resolve them' (Canotilho, 1995, pp.235–236). Liberal-positivist lawyer, Norberto Bobbio suggests that 'in the case of a conflict between two rules . . . , the interpreter, whether they are a judge or a lawyer, has three possibilities in front of them: eliminate one, eliminate both of them, keep both of them' (Bobbio, 1999, p.100).



Article 185 therefore contradicts Article 186 and makes it difficult to carry out agrarian reform. Article 185, which states that productive property cannot be expropriated even if the social function of the land were disregarded renders article 186 ineffective.

Some authorities consider that Article 185 is a 'real constitutional obstacle for agrarian reform' (Escrivão Filho, 2011, p.78). 'Given the options listed by Bobbio, perhaps the best thing to do in a situation like this is to eliminate Article 185, II from the Constitution' (Leonel Júnior, 2007, p.62). Others conclude that there is no real contradiction here and that irrational exploitation of land that violates the environmental balance, sustainability or equity of labour relations would constitute 'illicit' productivity (Pinto Júnior and Farias, 2005). They argue that productivity must be 'rational' (as established in Article 6 of Law 8629/93), in terms of its environmental, labour and welfare functions. A 2016 legal opinion<sup>10</sup> corroborates the understanding that rural property complies with its social function only when it simultaneously meets the four requirements provided in Article 186 of the Constitution.

In short, all of the various paths and analyses agree that property, even if productive, must be expropriated if it does not comply with the other items in Article 186 of the Constitution. Therefore, despite analytical and theoretical diversity on the social function of land, there is agreement on the legality of agrarian reform and agroecology as compliant with this judicial-constitutional provision.

## 6. Agroecology and human rights to the environment

In addition to the human rights to adequate food and rural land, there is also a human right to a safe and balanced environment, in terms of climatic conditions, water, air and biodiversity. 'Understanding the environment as a fundamental human right means its realisation is a necessary condition to ensure a dignified and healthy life for any human being' (Lisboa and Barros, 2008, p.10). In terms of agroecology, there is a link here with the social function of land (as detailed in Section 5 above):

*'a rural property will comply with its social function when ... it follows the natural vocation of the land, which means planting in accordance with its potential, considering the crops that the land can receive and the periods when it should be left alone in order to be able to continue to bear fruit. Apart from this, respect for the environment also involves rational exploitation. This is called the sustainable development of agriculture.'* (Stefaniak, 2003, p.133)

Agroecology by definition is an agriculture that is sustainable. The term 'sustainable' is sometimes used superficially, but here we understand that:

*'sustainable is the society or planet that produces enough for itself and for the beings in the ecosystem where it is situated, that only takes from nature what it puts back, that shows a sense of solidarity among generations by preserving the natural resources that future societies are going to need.'* (Boff et al., 2001, p.14).

<sup>10</sup> Opinion 00004/2016/PFE/PFE-INCRA-SC/PGF/AGU, Regional Prosecutor's Office of PFE/INCRA/SC under the coordination of Valdez Adriani Farias, on INCRA Normative Ruling No. 83/201.

Sustainability should be applied to economic and social development, as well as to environmental issues. Economic development has long been measured in terms of 'growth', which can be at odds with sustainability. The economic model within agroecology favours diversified productivity in the context of local environmental conditions, avoiding the exploitation of human labour for economic gain. Some laws on intellectual property, such as patents, have been used to work against sustainability and the rights of local people (Box 6).

#### Box 6: **The role of law in protecting traditional knowledge**

**The andiroba is an Amazonian tree with many medicinal uses for its oil and bark. Local people have long harvested andiroba seeds, extracted oil from them and used this to repel insects, and as sun block and a medicine against foot parasites. Nowadays, andiroba candles are used to repel insects, especially the mosquitoes that transmit malaria (O Caso, 2009).**

**Several multinational pharmaceutical companies have registered patents in Europe, the USA and Japan for cosmetic and pharmaceutical uses of andiroba extract. This is a form of bio-piracy, since the ancestral, collective knowledge of the region's communities is disregarded and undermined by the modern practice of patenting, which benefits specific companies and scientists and prohibits patented uses of Andiroba by anyone other than the patent-holder.**

**However, it is illegal to patent traditional knowledge, according to Brazilian law,<sup>11</sup> because a patent should be granted to knowledge that is 'novel'. There is no novelty in traditional knowledge that has existed for generations and more. Patents must also comply with international standards, including the Convention on Biological Diversity (CBD), ratified by Brazil some twenty years ago.<sup>12</sup> The CBD establishes principles for fair and equitable sharing of benefits as well as appreciation of traditional knowledge,<sup>13</sup> although some countries such as the USA have not ratified the CBD.**

The progress of environmental rights is well developed in international law, arguably stemming from appreciation growing since the 1960s that environmental resources are finite and will not recover from unbridled exploitation.

- In the declaration of the UN Conference on the Human Environment, held in Stockholm in 1972, environmental rights are seen as a fundamental human right.<sup>14</sup>
- The Universal Declaration of Human Rights describes the quality of life in an environment, by ensuring an adequate level of life allowing for greater well-being and health.
- Further key international agreements and proposals include, among others: ECO-92 (the Rio declaration); Agenda 21, stressing the importance of publishing information on environmental questions; the Cartagena Protocol, concerning protection against adverse effects of modern biotechnology; the Climate Change Convention; and the CBD.

<sup>11</sup> Law 9.279/96, Article 8: 'An invention that complies with the requirements of novelty, inventive step and industrial application, can be patented.'

<sup>12</sup> Via Legislative Decree No. 2 of 1994 and Executive Decree No. 2519 of March 1998.

<sup>13</sup> CBD, especially Articles 1 and 8 (source/URL to add).

<sup>14</sup> Stockholm Declaration, Principle 1: 'Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations' (Lisboa and Barros, 2008, p.14).

There are some long-established legal-environmental principles relevant to agroecology. For example, the 'precautionary principle' arises in particular when environmental damage is possible but not certain (Milaré, 2004, p.144). When there is an action that could potentially cause environmental damage, the government must conduct impact studies and publicise their findings,<sup>15</sup> such as in the case of transgenic seeds (Box 7, see below).

### Box 7: **Transgenic seeds and commercial control**

**The controversial approval of transgenic seeds and the commercialisation of products made from them are having significant negative impacts on small farmers. In addition to concerns about the safety of transgenic foods, and risks of contamination by them, commercial companies are ruthlessly controlling their use.**

**One company has included a gene called 'terminator' in its seeds, which stops harvested seeds from germinating.<sup>16</sup> The farmer then has to buy new seeds for subsequent harvests. The ancient practice of farmers storing seeds and naturally selecting them, reproducing them freely, is gradually disappearing. The exchange of transgenic seeds among farmers is also becoming unfeasible and is prohibited under patent law.<sup>17</sup>**

**Farmers who do not use transgenic seeds run considerable risks. It is very difficult to prevent mixing of transgenic and other crops, especially during pollination which is determined by the movement of insects and winds. Apart from having their production contaminated, and the value of their crops reduced, farmers run the risk of being sued by companies owning the patent on the transgenic seeds and requiring payment of royalties for their use.**



15 Brazilian Constitution, Article 225, 'IV—require, by law, an environmental impact study, which it will publish for the start of works or any activity that could cause significant degradation of the environment.'

16 <https://monsanto.com/company/media/statements/terminator-seeds-myth>.

17 Law 9279/97, Article 42.



National legislation in Brazil also offers considerable support for environmental protection. For example, strengthening the constitutional precept embodied in Article 186, Law 8.629/93 (Article 9) establishes the legal concepts of the adequate use of natural resources and environmental preservation:

**Section 2:** ‘The use of available natural resources is considered to be adequate when the exploitation respects the natural vocation of the land so as to keep the property’s productive potential.’

**Section 3:** ‘The preservation of the environment consists of maintaining the characteristics native to the natural environment as well as the quality of the environmental resources as appropriate, in order to maintain the ecological balance of the property and the health and quality of life of neighbouring communities.’

Agroecology, involving crop rotation, polyculture and organic fertilising, can ensure there is a balance between the environment and production, which is needed for a modern, sustainable agriculture.

Aspects of the Constitution of Brazil demonstrate acceptance of international standards that ensure environmental preservation and that legitimise agroecology within the boundaries imposed by positive law. Article 225 of the Federal Constitution is the legal reference provided in the national framework:

*‘Everyone has the right to an ecologically balanced environment, an asset of the common use of the people and essential for a healthy quality of life, and this imposes upon the Public Power and the community the duty to defend it and preserve it for present and future generations.’*

The ‘common use of the people’ is important here, supporting fair and equal access to environmental resources. Other Constitutional provisions refer to conduct compatible with a balanced, sustainable environment, including Article 186 (as discussed above in this Section and in Section 5), and concerning air pollution,<sup>18</sup> water resources<sup>19</sup> and pesticides.<sup>20</sup>

18 Law 9605/98 covers environmental crimes such as setting forest fires and other breaches, and Law 8723/93 concerns reduction of pollution from vehicles.

19 Law 9433/97 implemented the National Water Resource Policy.

20 Law 7802/89 covers research, production, transport, storage, sale, advertising, use, inspection and supervision of pesticides, their components and purposes.

## Conclusion: towards sustainability and justice

*'There is no established truth of Human Rights without the end of exploitation; there is no real end to exploitation without establishing Human Rights. Herein lies the importance of critical review, even of socialist legislation. Our objective is to ask, in the broadest sense, what is Law (with or without laws) but one must equally clarify that nothing is finished and perfect and everything is fluid.'* (Lyra Filho, 2006, p.11)

Agroecology demonstrates that human rights can be implemented as a result of adopting a farming model not based on worker exploitation and large-scale deforestation and that is sustainable in all aspects – social, environmental and economic. The defence of agroecology, and consequently human rights, must start with the instruments offered by the legal structure and the current normative framework. Lawyers, engaged citizens and city dwellers can work with rural people to generate real gains for all, since the production and quality of food affects everyone. Beyond this, positivity of combat, the alternative use of the law and legal pluralism can develop agroecology as sustainable agricultural practice within a grassroots national project.

These reforms are essential to empower people within a Latin American context, who have found their rights on the streets and in the fields. Even though the barriers to agroecology are real and varied, its benefits are huge and essential for everyone who envisions a world that is essentially sustainable, consisting of people capable of looking after the living system that generates life for themselves and their descendants.



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Deforestation is increasing again in the Amazon. Big business is making big profits from land converted from tropical forests and grasslands. The demise of these ecosystems is a loss to global biodiversity – and traditional livelihoods – while industrial farming of soy and sugar cane, often using genetically modified seeds, increases rural unemployment and environmental pollution in Brazil.

Agroecology, by contrast, is ecological farming: small-scale and sustainable in every sense, with the main aim of producing food for the growers themselves and for local markets. Agroecology provides affordable good food, employment and environmental protection.

This Fern summary specifies how we can work within existing legal frameworks to support agroecology in Brazil, including through land reform and environmental protection. Constructive use of national legislation and international norms and standards can promote human rights to food, work and the environment. One way to combat the forces driving deforestation is to support the right to agroecology.

**Fern** has been campaigning to reduce the EU's deforestation footprint in its sourcing of soy and other commodities since 2015 ([www.fern.org/stolengoods](http://www.fern.org/stolengoods)). We propose to improve the Common Agricultural Policy ([www.fern.org/capreform](http://www.fern.org/capreform)) and introduce an EU Action Plan to protect forests and respect rights: ([www.fern.org/EUActionPlanSummary](http://www.fern.org/EUActionPlanSummary)).

**Fern** is a non-governmental organisation (NGO) created in 1995 to keep track of the European Union's involvement in forests and coordinate NGO activities at the European level. Our work centres on forests and forest peoples' rights and the issues that affect them such as trade, consumption, development aid and climate change. All of our work is done in close collaboration with social and environmental organisations and movements across the world. The name Fern was chosen because ferns are one of the few species that grow in all forests.



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