CHAPTER VI:
REVIEW OF AGRICULTURE AND FOOD POLICIES THAT CAN HAVE NEGATIVE IMPACT ON ORGANIC DEVELOPMENT

The measures presented in this chapter are general agriculture and food policy measures that have shown a detrimental effect on organic development. Although policies in other sectors such as education, trade or health are not covered in this document, they may also have an impact on organic development.

A good comprehensive national strategy to develop organic agriculture should not only develop pro-organic policies and programs, but also mitigate the negative effects of policies and programs that are harmful to the organic sector. This could be done either by cancelling or reducing the importance of the negative measure (e.g. stopping subsidies on chemical fertilizers) or by providing a compensation scheme that balances it with a disincentive for organic alternatives (e.g. subsidizing equally the use of organic fertilizers). This chapter presents only a quick overview of such harmful measures and cases where such measures have been mitigated or even reversed.

It is essential that organic policy development consider the broader policy framework as that could negate efforts to develop the organic sector. To review the overall policies affecting the agriculture sector is therefore an essential part of organic policy development. That said, it might be much more difficult to change overall policies, than to introduce specific organic measures.

1. Subsidies on chemical fertilizers or synthetic pesticides

Many countries subsidize agricultural inputs, and particularly fertilizers, in an attempt to increase agricultural production. When the structure of the subsidy program is such that only commercial chemical fertilizers are subsidized and organic commercial fertilizers and on-farm produced fertilizers are not, the policy environment works against organic agriculture. Similarly, when the country applies reduced value-added tax (VAT) for commercial fertilizers and pesticides, this works as a quasi subsidization of conventional agriculture, at the expense of organic agriculture.

It is therefore crucial that, in a comprehensive strategy to promote organic agriculture, the issue of subsidies for conventional inputs is considered, and ideally reversed. This has been successfully done in a few countries, either in a deliberate attempt to promote organic agriculture (e.g. Bali) or simply as part of a strategy to decrease the use of toxic and environmentally damaging substances in agriculture (e.g. Scandinavian countries).

Generally, there is a positive global trend (especially in developed countries) towards phasing out subsidies (or reduced VAT) for pesticides and fertilizers, and to shift towards the opposite policy instruments, namely taxes on synthetic pesticides and fertilizers and/or preferential fiscal treatment of organic fertilizers and biopesticides.

In the EU, a few countries (especially Poland, Portugal, Slovenia, Cyprus and Spain) still apply reduced VAT for pesticides but the EU Commission is advocating that those countries reexamine those policies in order to help achieve the objectives of reducing pesticide use in the EU. Other EU countries are more advanced towards sustainable

policies, such as France and Italy, which apply a lower VAT to organically approved pesticides compared to conventional pesticides (respectively 10% against 20% in France and 4% against 22% in Italy).

A few European countries introduced taxes on nitrogen fertilizers as early as 1976, 1985 and 1986 for Finland, Sweden and Austria respectively, with rates of taxation varying from 10% to 72% of the fertilizer price. A study from 2001[139] evaluated the impact of such tax packages and concluded that the greatest impact (reduction of negative externalities caused by use of nitrogen fertilizers) is obtained when the tax system is combined with other policy instruments (advice, incentives and regulations) and when the revenue raised through the taxes is being reinvested solely to promote sustainable alternatives. Other European countries joined the trend of chemical fertilizer taxation in the following decade, but the history of fertilizer taxation in Europe is overall quite complex. There is a wide variety of approaches and several countries, after having implemented such programs for several years, are led by EU policy and court decisions to abolish or modify them. In general, in the EU, the national fertilizer control policies are now being dealt within the framework of the EC Nitrate Directive (91/676/EEC), which applies equally to all member states. Nevertheless, there remain disparities, for example in the VAT levels for fertilizers. Italy, Germany, France and Austria apply reduced VAT to organic fertilizers compared to chemical ones.

In other developed regions of the world, the trend is also to phase out subsidies on chemical fertilizers. South Korea abolished subsidies to chemical fertilizers in 2005 and is now subsidizing the use of organic fertilizers and soil conditioners. Other countries such as Australia, New Zealand or the US do not subsidize fertilizers.

In the developing world, the fertilizer subsidy situation is still mostly unfavorable to organic agriculture, with many/most countries (especially in Africa, Latin America and India) still subsidizing chemical fertilizers (and not subsidizing organic fertilizers), or exempting them from import taxes. However, things are beginning to change, and sometimes rapidly. A case in point is the history of fertilizer subsidies in the province of **Bali in Indonesia**. In 2009, the Bali government started a stepwise approach to annually reduce subsidies to conventional fertilizers and started, in parallel, to subsidize organic fertilizers with an annual amount of EUR 69.7 million. The budget allocated to the subsidy for organic fertilizers was gradually increased every year (EUR 278.9 million in 2013, EUR 697.2 million in 2014) and the government altogether stopped subsidizing chemical fertilizers in 2012. Hence Bali has successfully transitioned from a system subsidizing only chemical fertilizers to a system subsidizing only organic fertilizers within the course of three years. The State of Sikkim, in **India** underwent a somewhat comparable process, having progressively phased out subsidies on chemical fertilizers from 2003 to 2008 and having a deliberate policy to convert the State's agriculture to organic. **Sri Lanka**, in the context of its Toxin Free Nation Program (see below) also embarked on an ambitious plan to phase out the use of chemical fertilizers in the country in a step-by-step process that starts in 2016 by subsidizing

[139] C. W. Rougoor, H. van Zeijts, M. F. Hofreither & S. Bäckman, Experiences with Fertilizer Taxes in Europe, Journal of Environmental Planning and Management, 44(6), 877–887, 2001

organic fertilizers to the same extent as chemical ones. In some countries like Nepal that still subsidize chemical fertilizers, there is a trend to revise existing policies in order to subsidize organic fertilizers as well. Nepal has been subsidizing companies to produce organic fertilizers since 2011 and in 2015 revised its fertilizer policy to subsidize both the establishment of organic fertilizer producing facilities, and to subsidize farmers' purchase of organic fertilizers.

With regard to pesticides, environmental taxes are also an effective measure to encourage the reduction of their use, as their price elasticity is relatively high. Herbicides seem to have the higher price elasticity, followed by fungicides and insecticides. Indeed, herbicides can easily be replaced by mechanical weed control measures if the farm economics so dictate. Similarly to fertilizers, studies have shown that the most effective pesticide reduction programs are those that combine tax measures with advice to farmers and regulation (e.g. stricter criteria to authorize pesticides, or mandatory farm-level record-keeping).

The three pioneer countries in terms of pesticide reduction programs are Sweden, Denmark and Norway, which adopted national action plans to reduce pesticide use as early as the late 1980s. Those plans included taxes on pesticides, levied on sales price or kilograms of active ingredient used. Taxes were paid directly by the agrochemical distributor or by importers (manufacturers are few). The pesticide reduction plans also included education, extension and research programs to promote good practices and alternatives to pesticides. In those three countries, the taxation system for pesticides has been continuously refined and improved over the past 30 years, offering a wealth of lessons learned on the topic. An important evolution has been the shift from ad valorem to banded[140] taxes, allowing for greater attention to the actual threat posed to the environment by various chemical compounds.

The set-up of an effective pesticide taxation system is quite a complex exercise, and there is much to learn from the experience of Scandinavian countries, France, Italy, or Mexico. Valuable overviews in this regard are the 2005 Briefing of Pesticides Action Network Europe on *Pesticide Taxes- National Examples and Key Ingredients* and the 2016 scientific paper *European Pesticide Tax Schemes in Comparison: An Analysis of Experiences and Developments*. Despite its complexity, it is a policy instrument worth using, and it can also bring substantial tax revenues to the state (e.g. in Denmark in 2013, pesticide tax revenues amounted to EUR 88.5 million), which can then be reinvested for organic agricultural development. For example, in the case of Italy, revenues from pesticide tax were earmarked to the fund for research on organic and quality agriculture. In Denmark and Sweden some revenues were also channeled to organic farming support.

[140] Banded taxes differentiate products according to their hazards on human health and environment, according to some objective indicators.

2. Approval of pesticides imports and pesticide use

Mass pesticide spraying is one of the government decisions (together with GMO approval, see Chapter VI, section 7) that can have the single most sudden detrimental impact on a national organic sector.

A case in point is the story of DDT spraying to combat malaria in **Uganda** in 2008. That year, the Ugandan Ministry of Health took the decision to apply Dichlorodiphenyltrichloroethane (DDT) to control malaria on a large scale. Each house, in an entire region, received compulsory DDT spraying, and even though the spraying was indoor residual spray, the contamination impact on organic products that are stored in-house after the harvest was significant and expected to last many years after the spraying. Indeed, any detectable trace of DDT on organic products makes their certification invalid for their target market, namely the EU market. The 2008 compulsory spraying led to the permanent loss of organic certification status of more than 16,000 organic farms in Uganda, and had a serious and long-lasting impact on the Ugandan organic sector, as shown by the graph below:

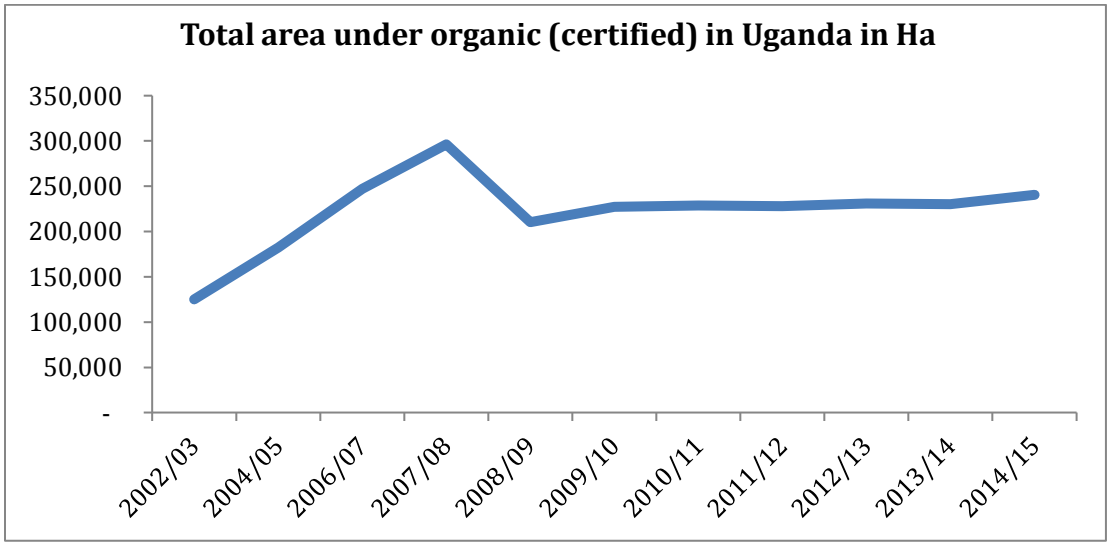

Fig. 10: *Certified organic area in Uganda between 2002 and 2015 (Source: FibL and IFOAM)*

Since 2008, the court battle has been ongoing between the Ugandan government and the opponents of DDT use (amongst which are the organic companies and the Uganda Network on Toxic-Free Malaria Control), so the future of DDT use in Uganda is uncertain.

Government-ordered aerial spraying of synthetic pesticides can also be a disaster scenario for organic farming. **Egypt** is an example of a country that had a chemically-intensive approach to pest management in cotton, whereby the government, starting in the 1950s, organized a program of intensive aerial spraying of chemical insecticides three to four times a season.

The government's approach changed radically in the early 1990s, after SEKEM, an organic company, demonstrated the effectiveness of organic pest control. The Egyptian Ministry of Agriculture sponsored further and more extensive tests. Within three years, the ministry agreed that organic pest suppression was superior for cotton farming and began converting nearly the entire area of Egyptian cotton, 4,000 square kilometers, to organic methods for controlling pests (including pheromones). Aerial spraying of pesticides on cotton became prohibited. The conversion took two years. It resulted in a reduction in the use of synthetic pesticides in cotton by 90 % and an increase in the average yield of raw cotton of 30%. In 1997, the government cancelled all conventional insecticides used to control the cotton leaf worm in vegetable and other crops, and several products were banned due to possible carcinogenesis. In the following years, the Ministry of Agriculture supported the mass production and use of a number of biological controls and biopesticides (including Trichogramma evanescens, Chrysopa vulgaris larvae and mites, Bioeanza, Protecto, Virotecto).

The best scenario to protect the organic farming sector from economically damaging contamination is an outright ban on the most problematic synthetic pesticides. This happened for DDT in most developed countries as early as in the 1970s and 1980s for agricultural use and was expanded to nearly worldwide after the Stockholm Convention had entered into force in 2004, although the chemical is still used in certain countries against mosquitos (like Uganda above).

The health impact of synthetic pesticides regularly comes to the spotlight and the concerned products are being banned in certain countries as a result. The latest product in the spotlight is the herbicide glyphosate, of which the first country to implement a complete ban on imports and use was Sri Lanka in June 2015. The decision followed the election of the new president, Maithripala Sirisena, a farmer and previously the country's Health Minister. Following the classification of glyphosate as a probable carcinogen by the WHO in 2015, other countries are following with partial bans and restrictions.

3. Support for energy crops (biogas and biofuel plants)

Studies[141] have shown that biofuels and biogas competitiveness depends heavily on government subsidies, exemption from petroleum taxes and other policy instruments (such as obligatory blending or 20 years payment guarantee).

Excessive policy support towards energy crops has a negative impact on organic farming development, through land and price competition. This effect was particularly visible in recent years is **Germany**. Since 2004 and the adoption of its Renewable Energy Sources Act (EEG), Germany vigorously supports energy crops and biogas. As a result, the demand for energy crops has considerably increased and led to high crop and land prices. This has had, according to most experts' opinions, a negative impact on

[141] E.g. Banse M. et al, 2008, *Impact of EU Biofuel Policies on World Agricultural and Food Markets*.

organic farming development, with the government's targets for organic growth not being met[142]. Organic farmers have limited possibilities to integrate the main energy crops in the organic crop rotation and therefore cannot benefit from this support measure in the same way as conventional farmers. Also, the high prices for energy crops improved the profitability of conventional farms, acting as barrier to convert to organic farming. There is a strong pressure on land and land prices (for example the area of land under silage maize has increased by over 60% in the last ten years) which has resulted in large increase in land rental costs. Although competition for land with energy crop cultivation (especially for biogas production) is not the main cause of slower-than-expected organic production growth in Germany, it has certainly contributed to the problem. For a more detailed analysis of how support for biofuel competed with support for organic in Germany, read the 2012 report from the Office of Technology Assessment at the German Bundestag: *Organic farming and bioenergy production – conflicting goals and approaches to a solution*.

In other countries, such as **Brazil**, the fast growth of very pesticide-intensive energy crops (such as sugarcane for ethanol) is also creating pressure on land use, as well as contamination problems for neighboring organic farmers.

4. Competing environmental schemes

There are diverging opinions on the extent to which non-organic environmental schemes compete with organic. There are a variety of agri-environmental schemes that support certain practices that go in the direction of organic, but which are not fully organic. Those can either support producers directly (policy measures such as subsidies) or they can be consumer-oriented labels that aim to influence consumers' choice in favor of more environmentally friendly production systems.

No general position can be taken on whether all such schemes are good or bad for organic. On one hand, they promote (and sometimes mainstream) practices that often go in the direction of organic agriculture. On the other hand, they can compete with the choice of going fully organic, either at the level of the producer's choice or at the level of the consumer choice. Depending on the scheme, the balance might be judged more or less positively. But even for a single scheme, there is not always an agreement between all organic experts on whether the scheme is overall desirable or harmful from an organic perspective. This section nevertheless raises awareness of this issue and presents several cases where consensus has emerged on the competing nature and negative impact of the scheme towards organic. Advocates and policy makers are subsequently encouraged to pay attention to this aspect and review schemes in their countries/regions to judge whether they impact organic negatively or not.

Domestic demand for organic produce goes in line with the fact that consumers are

[142] Meyer R. and Priefer C., 2012, *Organic farming and bioenergy production – conflicting goals and approaches to a solution*.

aware of organic labels and it is possible for them to easily recognize organic products in the market place and to make a clear distinction between organic and non-organic labels. The general greening of the non-organic sector ("half way" labels), as well as local food initiatives, make it difficult to explain the differences to the consumer and a general dilution of organic through non-organic trademarks might occur. In Austria and in the United Kingdom for example, it was assessed that non-organic trademarks that guarantee that food products are for example, environmentally friendly, GMO free or pesticide free, without being organic, compete with organic products in the market place, and that they counteract the development of the organic market in these countries [143]. Government programs that encourage such schemes may therefore indirectly harm the development of the organic market.

Some of the agri-environmental measures under the EU Common Agriculture Policy (EC 2078/92) were judged to have competed with incentives for organic production at the producer level. Those were typically measures that could not (by CAP rules) be combined with support for organic agriculture and which tried to address input reduction without going as far as organic practices. For example, the measure for input reduction and integrated production scheme in Austria, the measure for integrated and zero chemical farming systems in Germany, the input reduction scheme for cereals in France, the integrated farming measure in Portugal, and the input reduction scheme in Italy, were judged to have competed with organic in terms of incentives for the farmers.

As another example, in Italy, both Reg 2078/92 and Reg 1257/99 introduce subsidies to reduce the use of chemical inputs as part of the agro-environmental payments. The requirements and the control system for those schemes were less demanding than the subsidies for conversion to and maintenance of organic agriculture. The subsidy for pesticide reduction was slightly less than for organic, but the difference in payment was generally not sufficient to compensate for the extra burden deriving from the more demanding organic requirements and control system, except in a few regions where the difference in subsidies was set higher. Hence many more farmers in Italy chose to apply for the subsidies for the reduction of chemical inputs rather than to the subsidies for the introduction and maintenance of organic agriculture, especially in regions where conventional agriculture was very intensive. This effect somewhat persists under the current regulation 1305/2013 where Measure 10 (agri-environmental-climate payments) of the RDP 2014-2020 in many cases generates competition with organic agriculture subsidies by funding competing schemes like integrated production systems, climate smart agriculture or minimum tillage systems.

Also, in France under the previous CAP period, a subsidy for extensive pasture could bring more to the farmer than a subsidy for conversion of pasture to organic agriculture (and those were not combinable measures), which was a disincentive to conversion, as the extensive pasture requirements were sustaining existing practices rather than promoting a change. Payments for reduction of livestock density in Austria and Belgium in 1995 had the same effect, where it was not combinable with OA payments.

[143] *Sanders J. et al, 2011, Use and efficiency of public support measures addressing organic farming*.

In the Estonian Rural Development Plan 2014-2020, there are several measures that are deemed to compete with the support to organic farming, in particular wide and shallow agri-environmental measures, animal welfare measures with just very few requirements, and environmentally friendly gardening measures with high support rates.

In Japan, the Ecofarmer Program (see Chapter V, section 2.f) whose main requirement was not to use more than 50% of chemicals than the amount commonly used in the region, is considered having an ambiguous effect on the organic sector in Japan. While the general effect in reduction of chemicals, and the fact that organic farmers can also benefit from the program at no extra cost (record keeping was very easy and inspection was carried by the prefectures and free of charge), are considered very positive, the program has also given a environmentally friendly image to Ecofarmers (even if they still use very toxic chemicals in large quantities) and has contributed to consumer confusion. Moreover, the program had much lighter paperwork requirements and a free certification system provided by the prefectures, which made it comparatively much easier than the highly bureaucratic and costly Japanese organic certification system. Like for the "greening" of the first pillar of the EU CAP, it also contributes to the political focus being on marginal improvements rather than on more comprehensive approaches like organic. As a result, according to the government figures from 2016, there were only 4,000 JAS-certified organic farmers in Japan, whereas at least 8,000 farmers were organic but not certified, and 160,000 farmers were certified under the Ecofarmer scheme.

Similar effects can result from donor support to various schemes deemed as environmentally friendly in developing countries. For example, in Zambia, donors have strongly promoted no-till farming using chemical inputs at the expense of organic, even if there are options to do organic no-till farming. In Vietnam the efforts to promote VietGAP (Vietnamese Good Agricultural Practices) has competed with organic.

5. Unfavorable regulations on farm-made and organic fertilizers, plant protection products and farmers seeds

Governments undertaking a strategic plan for organic agriculture and markets should always undertake a review of current fertilizer and pesticide regulations and rectify any provisions that deter use of organic inputs. This includes any provision that would deter the on-farm preparation and use of organic inputs. In some developed countries with complex registration requirements, it is technically illegal for farmers to use any unregistered pesticide or fertilizer, even if it is biologically based and prepared on farm. Attention should also be placed on the legal requirements linked to the registration of crop varieties, as registration requirements can be too complex and unsuitable to the need of the organic sector.

Recognizing the danger of chemical pesticides on human health and the environment, and therefore the need to regulate their approval before they are placed on the market,

many governments have developed stringent registration procedures for pesticides. Big agrochemical companies have no problems meeting those registration requirements. However, when the same requirements are applied to organic plant protection products that cannot be produced in the same scale, the registration costs can become a hindrance to wider adoption of organic agriculture. Similarly, when fertilizer-testing requirements (for heavy metal content or other toxic hazards) are also applied to animal manure coming from the farm or a neighboring farm, the regulation becomes an unaffordable burden. Also, when requirements for commercial fertilizers demand full exact labeling of nutrient content, this becomes unfeasible for composts and other natural origin fertilizers. Regulations should permit such fertilizers to give indicative figures based on average values (and labeled as such).

An example of an unfavorable legislative framework in this regard is the EU system, which has no differentiated legal provisions for non-chemical plant protection products: they currently fall under the same regulation as their synthetic counterparts. The data requirements are partly inappropriate or difficult to interpret for biopesticide active substances such as microorganisms. In general, the registration procedures described in Regulation (EC) No 1107/2009 are suited to synthetic substances, which are usually single molecules with high effectiveness against specific pests or diseases. Although specific guidance has been developed for several categories of naturally occurring substances including microorganisms, semiochemicals (pheromones) and botanicals (plant extracts), there are still some inadequacies that would, for example, incentivize purified single-compound botanicals, as opposed to more unrefined preparations. In general, the EU, compared to the USA, has higher costs and a slower approval system for organic plant production products to enter the market. Under current EU regulations, substances need to be first approved in the general legislation before they can be added to the organic regulation list. The process can take years, even if the product is already recognized as food (this is for example currently the case with sucrose as a plant protection substance – stuck in years of registration process).

Registration fees are usually high, but they not yet harmonized at EU level. In most EU Member States the fees for microbials (biopesticide products made of viruses, bacteria, nematodes and fungi, which are acceptable in organic production) are still much lower than the fees requested for the evaluation of chemical active substances, which somewhat limits the problem. Below are a few examples:

In **Denmark** the fees for the microbials accepted for biocontrol are half those required for the evaluation of chemical active substances (110.000 € versus 220.000 €).

In the **UK** the fee for microbials is 22,500 £, whereas the fee for chemicals is 110,000 £. This follows a project launched in 2003 that aimed at encouraging the registration of alternative pest control products such as pheromones, plant extracts and biological organisms, with registration fee reduction being an essential component of the project. The success of this project led to the creation of a permanent Biopesticide Scheme in 2006.

In **Belgium**, a special procedure was launched in 2007 in the framework of the program

for reduction of pesticides, in order to improve the availability of biopesticides on the market. The projects aims to give special consultancy for the applicant, a separate fast-track procedure for biopesticides, lower fees and improved communication. Fees for new active substances have been reduced from EUR 100,000 to EUR 10,000 for biopesticides and EUR 300 for national product authorization.

In 2016, the EU Commission launched an initiative to revise the EU Fertilizer regulation (EC) No 2003/2003, as well as to evaluate the regulation on plant protection products (EC) No 1107/2009 and to propose implementing measures regarding low-risk substances. In 2016 at the AGRI Council, the Agricultural Ministers of EU Member States have endorsed an implementation plan on the 'acceleration' of sustainable plant protection. There is therefore possibility of improvement in this policy area at the EU level in the coming years.

The **USA** has a bio-pesticide registration program similar to the approach of Belgium. The US Environmental Protection Agency (EPA) has a fast track, streamlined bio-pesticide registration program that is supported by the IR-4 program based at Rutgers University. IR-4 was started in 1982 and considerably expanded in 1994. IR-4 facilitates registration of sustainable pest management technology for specialty crops and minor uses. Working closely with and advising the EPA, IR-4 has completed 43 registration projects since 1994 at a cost of EUR 2.7 million, and also gives regulatory advice to manufacturers.

In **Switzerland**, the Swiss government (as part of the mandate/contract with the Federal Office for Agriculture) is one of the funders of the FiBL organic input review program (the program is also co-funded by organic stakeholders and applicant input companies).

In general, if governments require natural preparations to be registered, they should invest public money in supporting applications for naturally occurring substances because those are still of limited economic interest for the industry (due to the small size of the market and the limited possibility to obtain intellectual property rights). For example, which company would want to pay the registration fee for nettle-decoction to be used as a farm input? If nobody pays, nettle-decoction then becomes illegal to use. Separate and very simplified registration procedures should therefore be developed for well-known low-risk substances with high natural background (e.g. rock powders) and/or commonly used for other purposes (e.g. sodium bicarbonate, calcium hydroxide). Regulations should also take into account the fact that natural preparations or substances can have multiple uses (plant protection and fertilizer at the same time, for example).

Brazil, for example has made some legislative provisions to facilitate the registration of organic inputs. The 2003 law on organic agriculture specified that the inputs with regulated use for organic agriculture should be subject to a differentiated, simplified and streamlined registration process. Subsequently, several decrees and normative instructions detailed the approval procedures for organic fertilizers and pesticides and exempted them from certain requirements applying to conventional inputs, such as the

need for agronomic, toxicological and environmental studies, or the Temporary Special Registry and from registration of components. Farm-made products are exempted from registration. Under its 2013-2015 national plan for organic production, Brazil supported and facilitated the registration more than 50 different inputs for organic production through the financing and contracting of studies and tests for potential products and the development of reference for specifications, allowing for faster and cheaper registration of these products.

A similar concern applies to general legislation concerning seed marketing and crop variety registrations, which can be highly detrimental to organic farming. One characteristic of organic farming is that it should be site-specific and promote and take advantage of biodiversity. Hence, it is important for organic farming that farmers have access to a wide range of locally adapted plant varieties, including farmer-saved seeds and old and non-mainstream varieties. However, there are a number of general legislations related to seed use, seed exchange and seed marketing that restrict the possibilities for farmers to use such varieties.

The main problems with many general seed legislations are:

- Registration costs for varieties and certification costs for seeds are too high[144] and procedures too complex to enable small enterprises and farmers that maintain old and local varieties to register and certify them, and without registration they are often made illegal to sell. Therefore, registration requirements reduce biodiversity on the seed market and the variety choice, thereby reducing the chances for organic farmers to find varieties adapted to their local conditions.
- Among the technical requirements for registering a variety, it should be demonstrated that the variety is distinct, uniform and stable. Particularly the requirement of uniformity is difficult to meet for old and farmers' varieties that are more genetically diverse. Moreover, for varieties to be best suited to organic production, it is often desirable that they are less uniform in order to have higher adaptation and overall yield stability under stress conditions.

For example, according to the EU seed legislation, all seeds that are sold or exchanged need to be inscribed in national variety registers, and this means expensive tests. New varieties of agricultural crops in Europe must be tested for distinctability, uniformity and stability (DUS) and for their value for cultivation and use (VCU) before they can be accepted on the National List of Varieties and the Common European Catalogue of Varieties. VCU tests are carried out nationally to evaluate the local value for cultivation and use in the concerning member state. According to a 2010 study, some EU countries have no organic VCU testing at all and some of these have no organized organic variety trials either. In such cases farmers must rely on exclusively conventional tests for variety choice, while the ultimate "test" is in the farmer's organic field. Other countries supplement conventional tests with organic variety trials. Some countries have specific organic VCU-tests (e.g. Denmark, Germany, Norway, Austria).

[144] E.g. the Dutch authorities estimated that costs of registration and seed certification amounted to around EUR 1,000 per variety in 2008.

The application fees can cost a few hundred euros, to which one needs to add the variety testing fees and the maintenance fees. This can be a hindrance, especially when the fee for organic varieties is higher than for conventional varieties (e.g. in Denmark, where organic varieties have to pay for supplementary organic trials in addition to the conventional VCU testing, which adds up to EUR 3,900). The maintenance fees can be as high as EUR 900 per year (in Germany). On the other hand some countries have lower fees for organic varieties than for conventional varieties (e.g. Austria), which is certainly helping.

Some legislations exempt local and traditional varieties from cumbersome registration and testing requirements[145]. However, the multiplication of those so-called "conservation varieties" is limited to 0.3-0.5% (depending on crop) of the total seed market of the crop concerned or the amount needed to sow 100 hectares, whichever the greater quantity, which basically restricts their significant commercial use and doesn't make them viable options for most organic farmers. Moreover, only a few varieties (mostly vegetables) have been listed to date in a few EU member states.

The example of Brazil is more conducive to the promotion of local and traditional varieties: Article 12 of the law that establishes the national policy on organic agriculture or PNAPO (Decree Nº 7.794, 2012) introduces an important change to the Decree nº 5.153 of 2004 on the National System for Seeds and Seedlings. It relieves family farmers and traditional groups, as well as their cooperatives or association, from the obligation to register varieties in the national registry. This change has removed a previous obstacle to the right of farmers to keep and exchange seeds and is a proof of recognition of the important role played by family farmers and traditional communities in maintaining biodiversity through conservation and propagation of local varieties.

Some progress can be noted recently on legislation related to seed exchange. For example, in 2015 and 2016 the states of Minnesota, Nebraska, Illinoi and California passed laws that exempt non-commercial seed activities (such as seed exchange) from regulatory requirements. Since 2016 in Denmark seed exchange, since it is a non-commercial activity, is exempted from compliance with the EU regulations, meaning that all types of seeds can be exchanged and not just conservation varieties. The Danish legal interpretation also exempts the sale of non-commercial seeds (seeds intended for private gardeners) from compliance with the EU seed legislation.

In some countries, there are also regulations for compulsory seed treatments that are not compatible with organic standards and pose a problem to organic operators.

[145] such as the EU Commission Directive 2008/62/EC of 20 June 2008 and the Commission Directive 2009/145/EC of 26 November 2009.

6. Unfavorable agricultural risk management programs (crop failure compensation schemes, etc.)

Some countries manage a government-sponsored farm insurance program to help their farmers to cope with risks such as catastrophic weather. Other states give financial compensation (using calamities funds or ad-hoc aids) to farmers in cases of calamities or natural catastrophes, in order to save a particular sector. Such risk management programs are generally a positive thing for agriculture, including organic agriculture. However, some of those programs disadvantage organic farmers compared to conventional farmers, for example, by not taking into account that the market price for organic products is higher (applying the same price level to all farmers), or by focusing on a few commodities (when organic farms are more diverse). This is for example the case for the German system of compensation to farmers in case of outbreaks of animal diseases under the Animal Disease Act promulgated in 2001. A fixed amount is paid per animal dead or killed because of a notifiable disease. However, the same amount is paid whether the animal is conventional or organic, and even worse, for certain species (e.g. cows), intensive breeds get a higher compensation than extensive breeds, which disadvantages organic farmers.

The Kenya National Agricultural Insurance Program launched in 2016 is the largest government-sponsored agricultural insurance program in Africa and is one that is clearly unfavorable to organic farming. The program is a partnership between the government and the private sector, particularly the Syngenta Foundation with its own insurance company. The program is a package that ties crop insurance to input purchases and extension messages that promote the use of those inputs.

USA is an example of a country whose crop insurance program was disadvantaging organic farmers, but which has rectified it in recent years to make it fairer to organic farms. Until 2014, the crop insurance program managed by the USDA Risk Management Agency has paid for individual commodities, making it very complicated for diversified organic farms especially vegetable growers that might have 30-50 distinct crops. In addition, until 2012, the federal crop insurance charged an extra 5% surcharge for organic farms and then paid out in conventional farm prices, rather than organic prices.

In 2011, the USDA began offering crop insurance for organic producers, which reflects organic market prices. However, originally, only four crops had a recognized organic premium price under the program. In 2014, the USDA made new crop-insurance pricing options available to organic and transitioning producers, including those who grew crops under guaranteed contracts. This contract price option allows organic producers who receive a contract price for their crop to get a crop insurance guarantee that is more reflective of the actual value of their crop. By 2016, the USDA finally eliminated most inequalities with regard to the compensations. The Whole-Farm Revenue Protection insurance policy became available to producers. This policy allows producers to insure between 50 to 85 percent of their whole farm revenue. This makes application easier and more affordable for a diversified farm. The organic premium prices now apply to 57 crops, providing organic producers the opportunity to protect their crops at

organic market levels. The crop list contains a diversity of crop types, including vegetables and fruits that are grown in diverse plantings and rotations. In 2017 more crops will be added to the list, which is available online.

A move in the same direction can be observed in the **Canada** agricultural insurance system, in the various provinces (prices are defined at province level). In the past five years, some of the systems have changed from one applying conventional commodity prices to one that increasingly foresees a price premium for organic crops (although the lists of crops covered by the premiums are still very short). Also, at the federal level, the Canadian Agricultural Income Stabilization program, based on a farm's production margin, is a whole-farm program available to eligible farmers regardless of the commodities they produce. Government subsidizes the program by a 60% coverage of the negative margins.

At the EU level, the importance of crop insurance schemes in the overall national agricultural risk management strategies is much lower, with more focus being placed on special calamity funds and ad-hoc aids. Nevertheless, some countries like Spain give most of their financial support in the form of subsidies for agricultural insurance schemes. In the Spanish system, there are special subsidy provisions for the insurance of certain organic productions. Moreover, certain regions like Extramedura, give an extra 5% subsidy to organic farmers for agricultural insurance.

One aspect of crop insurance schemes and eligibility for calamity funds is that the producer is asked to fulfill certain minimal technical cultivation requirements in order to qualify for compensation. For the case of organic producers, these technical cultivation requirements must be aligned with the requirements in organic standards. For example, to qualify for compensation from losses due to extraordinary pest damage, producers are required to demonstrate that they used recommended pest treatments, but for organic producers, these should be treatments in line with organic standards.

Another aspect specific to organic agriculture is the coverage of risk linked to GMO or pesticide contamination from neighboring farms that leads to decertification of the organic product. This should ideally be recognized in crop insurance programs as an insured cause of loss, even though it is not caused by a "natural disaster".

Some governments have set up public crop loss compensation schemes that are reserved for organic farmers. This is for example the case of the canton of Vaud in Switzerland, where, during the first five years of organic management, the canton gives financial support to selected crops when those are affected by certain listed pests/diseases to an extent that the average loss of harvest is more than 80% as compared to average harvest obtainable under organic management (provided that the farmer demonstrates that he implemented permitted measures to try to combat the pest/disease). The amount of the compensation is calculated by an expert assessment, which uses as reference the grading scale of compensation given by the agricultural services in case of damages cause by hail. Such a system is an additional risk mitigation factor for farmers converting to organic.

7. Allowance of GMO crops

One of the most detrimental general policies, for the organic sector, which a country can pass, is the allowance of a genetically engineered crop, particularly when this crop is also a significant organic export commodity for the country. Widespread GM contamination is a major factor in increased costs, loss of reputation, and loss of market for an organic supply chain.

A case in point in this regard is the story of allowance of Bt Cotton in **Burkina Faso** in 2008, which led to a collapse of the organic cotton sector in the country in 2009-2010 (in addition to being a commercial disaster for the country's conventional cotton sector). The damaged is being reversed now, with Burkina Faso cotton companies having declared the phasing out of GM cotton by 2018, but financial damages are estimated at EUR 205 million for the conventional sector alone. The national organic sector development suffered the worst setback of its history, which will have repercussions and missed opportunities for many years to come. Read more about the Burkina case study here.

In order to protect their organic sector and as a response to general civil society concerns about GMOs, a growing number of national governments, regions and municipalities take a firm stand against GMO cultivation on their territories and/or sale of genetically modified seeds and foods. In 2010, in the EU, 169 regions, 123 provinces/departments, and 4713 local governments (municipalities and districts) passed decrees and resolutions to ban GMO cultivation from their territory, effectively becoming "GMO-free regions"[146]. Worldwide, by the end of 2015, 37 countries[147] have officially banned the cultivation of GM crops. There are also many countries in which GMO cultivation is not banned but is currently not practiced yet. Even in countries that haven't banned GMO cultivation at the national level, some provinces and municipalities[148] have banned it.

If GMOs are allowed and food that contains GMOs can be sold in the country, then compulsory GMO labeling provides the needed transparency to consumers and, by raising awareness about GMO presence in food, can incentivize consumers to choose organic products in order to avoid GMOs. Compulsory GMO labeling (above a certain threshold of GMO presence, usually at 0,9 or 1%) has been passed as a law/decree in 64 countries[149] (data from 2013). A very good overview map is available at

[146] Full list available at http://www.gmo-free-regions.org/fileadmin/files/gmo-free-regions/full_list/List_GMO-free_regions_Europe_update_September_2010.pdf.

[147] Those are: Algeria, Madagascar, Turkey, Kyrgyzstan, Bhutan, Saudi Arabia, Belize, Peru, Ecuador, Venezuela, UK (for Scotland, Wales, and Northern Ireland), Germany (partial opt-out in order to pursue more GMO research), France, The Netherlands, Malta, Cyprus, Greece, Bulgaria, Russia, Serbia, Croatia, Italy, Denmark, Hungary, Moldova, Latvia, Lithuania, Austria, Poland, Slovenia, Azerbaijan, Bosnia and Herzegovina, Luxembourg, Belgium (Wallonia region), Ukraine (although there is massive GM contamination in the country), Norway and Switzerland.

[148] A good example is the Davao Municipality in The Philippines.

[149] Those are: Algeria, Madagascar, Turkey, Kyrgyzstan, Bhutan, Saudi Arabia, Belize, Peru, Ecuador, Venezuela, UK (for Scotland, Wales, and Northern Ireland), Germany (partial opt-out in order to pursue

http://www.centerforfoodsafety.org/files/cfs-ge-labeling-map-march-2013_38812.pdf.

Also, in the absence of GMO culture prohibition (if that is not achievable in the given political context) there should at least be some GMO co-existence regulations, aiming at ensuring that non-GMO crops will stay uncontaminated, or at least show less than 0,9% contamination in order to meet the typical thresholds for labeling in most countries. Coexistence regulations can be of different nature, including ex-ante (preventive) coexistence regulations, which GM farmers must follow if they want to plant a GM crops, and ex-post coexistence regulations defining liabilities for contamination. Ex-ante coexistence regulations can include, for example, isolation distance (fixed minimum distance between GM and non-GM crop fields of the same specie, imposed on the GM growing farmer) or temporal isolation (differences in corn sowing dates or in maturity class used).

A good coexistence system for organic agriculture is one that will effectively prevent contamination by having strict ex-ante regulations as well as ex-post liabilities to ensure compensation of organic farmers if their crop becomes contaminated despite the ex-ante regulation measures. One example of such system is **Portugal**, which has a comprehensive system of coexistence regulations (ex-ante and ex-post). The ex-post regulations include a GMO contamination compensation fund, whereby the Ministry of Agriculture and the companies that sell seeds have agreed to cover the cost of damages to neighboring fields. The seed supplier pays into the compensation fund at the rate of €4 per 80,000 seeds. In practice however, between 2007 and 2015, no requests by farmers for compensation have been made, and this can be attributed to the effectiveness of the strict ex-ante regulations which keep GM contamination values well below the 0,9 % EU legal threshold and overall extraordinarily low[150].

8. Food safety and other health requirements

When reviewing the country's regulatory and other requirements for provisions that may be unfavorable to organic farmers and processors, provisions for food and environmental hygiene and the phytosanitary requirements for imports and exports should be included.

Some of the food and environmental safety requirements relate to avoiding disease outbreaks from food-borne or water-borne pathogens. Use of manure and compost is one possible avenue of microbial contamination, and in some countries there are strict regulations.

The USA, where there is a high degree of political sensitivity to food-borne illnesses, is a

more GMO research), France, The Netherlands, Malta, Cyprus, Greece, Bulgaria, Russia, Serbia, Croatia, Italy, Denmark, Hungary, Moldova, Latvia, Lithuania, Austria, Poland, Slovenia, Azerbaijan, Bosnia and Herzegovina, Luxembourg, Belgium (Wallonia region), Ukraine (although there is massive GM contamination in the country), Norway and Switzerland.

[150] Quedas and Carvalho, 2012 have found that adventitious presence was 0.1 and 0.5% in 70 and 97% of samples, respectively; and none was above 0.8%.

source of several examples. In the USA, industrial composting regulations aimed at pathogen reduction were inserted into early drafts of the organic regulation. These industrial composting provisions were ultimately relaxed, but the current composting requirements in the organic NOP regulation are still considered by many organic sector actors as too rigid, especially for small-scale farms. The current requirements are that raw animal manure must be composted except in very strict exceptions. Also, compost must be produced though a process that is strictly regulated in terms of initial C:N ration, temperature, and production method.

More recently, in 2015, the United States Food and Drug Administration (FDA) enacted the Food Safety Modernization Act, whose original draft in 2013 was heavily criticized as being unfavorable to organic farmers, particularly by making the use of manure virtually impossible for farmers, and the use of compost very difficult, as well as by definitions of "farms" and "facilities" that would lead many diversified small farms to be considered processing facilities and hence have to comply with overburdening food safety requirements. Advocacy by the Organic Trade Association and other organic sector and sustainable agriculture groups was successful to create some flexibility in the regulation for small scale and organic farmers, but it took a great effort.

In the EU, implementation of food hygiene regulations by some Member States, for example in the Netherlands or some German states, have created requirements that are quite inflexible and overwhelming for small operators including farmers and food processors. This includes specific inflexible requirements for the design of production facilities, or the management of all types of old and new contaminants and the administrative procedures to detect them. There is also an increasing concern over certain toxic substances that occur naturally in many plants of certain taxonomic families. For example, Tropane alkaloids (TAs) and Pyrrolizidine alkaloids (PAs) are categories of substances that are found in weeds of crop fields and which can end up contaminating the harvest. EU regulations have set a maximum limit to TA content in certain foods and require product sample analysis. EU Member States are required to take and analyze samples for TAs in foodstuffs and product combinations, including foods for infants and small children and products originating from organic farming. It is particularly difficult for organic farmers to ensure no contamination by these substances, as organic fields can hardly be weed-free. Furthermore, such a requirement may contradict the biodiversity objectives of organic farming. No legal limit values currently exist for PAs in foods and feeds, but the Codex Alimentarius Commission has prepared recommendations on the subject and it is likely that regulations will follow.

Another effect of some of the EU food hygiene rules is that they tend to make on-farm or small-scale processing difficult and lead to greater consolidation of processing facilities. There are flexibility provisions for small processors in the EU regulation, which permit adapted rules and derogations for primary producers engaged in direct supply chains involving small quantities of primary products, or for local retailers supplying directly to consumers. However, the EU Member States often do not properly implement the flexibility provisions[151].

[151] *Organic in Europe, Prospects and Developments*, IFOAM EU, 2014, available on http://orgprints.org/25649/1/willer-meredith-2014-organic-in-europe.pdf

Requirements to prevent epizootic diseases can also represent insurmountable constraints for organic production. An example is the set of bird flue-related measures imposed on poultry farmers in Japan after 2004. Aside from the chemical disinfection requirements, the main problems for organic farmers is that the measures required that poultry should not come in contact with wild bird or wild bird excrements (even those potentially falling from the sky), which makes it very difficult to give poultry outdoor access according to organic standards. Another example is the prohibition to exchange and spread manure in the fields during foot & mouth epidemics (such as recently in Mauritius & Rodrigues), which disproportionally affects organic farmers. Although such measures may be unavoidable on a temporary basis, they should be time-limited and government compensation schemes could cover for such secondary types of losses (not just for the loss of animals killed under compulsory sanitation campaigns).

Another category of requirements that can pose problems to the organic sector are phytosanitary requirements for agricultural products, or related to agricultural activities. The requirements imposed by countries to protect their agriculture and environment from pests and diseases can pose (sometimes insurmountable) trade barriers for organic producers, exporters and importers. These requirements apply to all kinds of products ranging from seeds, horticultural products, spices and other organic products that are commonly traded. The critical barriers are when there are mandatory requirements for irradiation or fumigation with materials that are prohibited in organic production. For example, there are virtually no organic mangos exported from India to the US, due to the requirements of the USDA's Animal and Plant Inspection Services for both irradiation and fumigation of the fruit. Governments should consider waiving such requirements. In some cases, alternative treatments acceptable in organic, e.g. with carbon dioxide, exist but are not recognized by the authorities or the technology is not available in the country. In those cases government could support the introduction of treatments acceptable under organic standards.

Governments seeking to support their producers for export and the growth of their domestic organic markets via import should work with their organic producers and exporters to identify the potential bottlenecks for key exported organic products. Although it may be difficult to change the importing country's requirements, it is possible to assist the organic sector to avoid pursuing export opportunities that will dead-end with a phytosanitary trade barrier. In the case of imports, particularly for seeds, Governments may identify opportunities to include alternative "organic" treatments when such are required for imports. In this respect it is essential to work closely with the organic stakeholders to ensure that effort is expended on the most important export and import products.

Regulatory flexibility may not be impossible for phytosanitary requirements. In Mexico, many organic farmers rely on seed supplies, including organic seeds from US companies. Until recently organic farmers were unable to access organic seeds due to the mandatory fumigation requirements for export of seeds to Mexico. The issue was raised by the United States during discussions about equivalence of the US and Mexico organic regulations. As a result, Mexico has published guidelines that are more flexible

to allow some approved organic materials for treatment of some seeds with conditions. However, strict requirements such as for a government verification unit to inspect six times during the production cycle the fields where organically treated seeds are planted, are likely to raise another kind of barrier for imported organic seed. The likely effect is that organic seed access continues to be unattainable for all but the largest producers. However, a precedent was set, which may, with modifications, function to reduce the technical trade barrier.

9. Laws related to farmland access

In many parts of the world, increased population and urbanization pressure and the need for more agricultural products (whether food, fibers, biofuel, biomaterials or for other usage), as well as new restrictions on clearing new land (positive for biodiversity) have led to land access becoming an increasing problem for anyone interested to start farming or to expand their farming area. In many areas, the price of land (even agricultural land) has skyrocketed to the extent that it has become impossible to recover the money invested in land purchase through an agriculture activity, be it conventional or organic agriculture.

Existing farmers who own their land and are not planning to expand their farm area are not affected by this trend, but young farmers who want to start a farming business without a family farm land, or farmers who want to expand in order to meet increasing market demands, face severe problems to buy land. They can, of course, become tenants instead of owners, but this raises other problems as explained below.

Sometimes, national land use laws are complicating the land access problem even further. One example was Japan, which enacted in 1952 the Agricultural Land Act aiming at eliminating landlordship and doing so by restricting heavily the buying and leasing of land, allowing virtually only existing farmers to acquire farm land (and even that was made rather difficult), which makes it very difficult for any newcomers to start farming. Such policies disproportionally affect the development of organic farming because most people interested in starting organic farming are young newcomers (Conventional farming is otherwise a rather unattractive declining sector). In effect, policies that limit land acquisition and leasing are favoring the status quo (old farmers continuing to farm as they used to), and not encouraging transformation within the agricultural sector. In Japan, the restrictions were gradually loosened after 2009 and it is now easier to lease and buy land, but the rules are still quite restrictive as compared to other countries.

In France, a set of agricultural and land policies called “Structures policy” were adopted in the late 1960s in an effort to modernize French agriculture. Although the ambition of those policies was good – directing farmland for viable, family farm-size farming – some of the instruments used, such as the definition of minimum land acreage deemed viable for farm establishment, tended to limit the entry of new farmers with projects of smaller, high added value farms or pluriactivity (e.g. agrotourism).

However, in most countries, land-related policies are much more liberal than in the Japanese example. In fact, they can often be too liberal: for example, the free and unrestricted movement of capital into land acquisitions enables the trend which is now called "land grabbing" and the massive foreign accumulation and speculation on agricultural land of many regions around the world. This contributes to the increased price of land and therefore feeds the same problem of difficulty for new comers, especially young people with agro-ecological business projects but not enough capital.

There have been some attempts to establish legal instruments to counteract the trends of farmland concentration, although of limited success. One example is the SAFERs in France, the Land Management and Rural Establishment Agencies created in 1960 and still operational today. These always have the priority right of intervention on the land market with a primary goal to limit farmland price escalation and favoring establishment of new farmers. Still, there is only that much they can do against the power of capitalism encroaching on the sphere of agriculture and land.

The status of tenancy can be a stressful one for organic farmers. There have been cases where certain practices required by organic farming have brought the landlord to end a lease. As organic farming requires building soil fertility over the long term, planning multi-year crop rotations, etc., farming a given area in organic farming has to be part of a medium to long-term business plan. If landlords can suddenly terminate land lease, this is very bad for organic farmers (more than for conventional farmers).

Land policies can however mitigate the risks faced by (organic) tenants. France is an example of a country where tenant farmers' rights are extremely secure (about 80% of French farmland is leased). This is a result of the regulations adopted in the 1940s. They give tenant farmers the conditions needed for developing and benefiting from their farm work: time, foreseeability, limited cost of land, return on investment:

- In the French land law, the minimum lease duration is nine years. Other leases are 18, 25 or career-long. Unless one of the party requests it, it is automatically renewed. The tenant farmers therefore have time to invest, experiment and reap the benefits of their work.
- Land rent prices are state-controlled: in each county, a price range is set in reference with the value of agricultural output per ha. This results in current rent average much lower than in all neighboring EU countries.
- Improvements to the land done by the tenant farmer (e.g. building hedges) is recognized and must be compensated by the landowner when the contract ends.
- The tenant farmer has a preemption right when the land is put for sale.
- Leases are transferable within the family: after the farmer's death, the spouse, children or parents who participated in farm work can claim to take over the lease.
- Written and oral leases are both valid, and must equally comply with the tenant farming statute. Dispute resolution takes place in ad hoc rural lease courts, composed on par of landowners and tenant farmers.

More details on the French land tenure system is available at http://www.agter.org/bdf/en/corpus_chemin/fiche-chemin-54.html.

France also created, in 2006, an innovative environmental rural lease status that promotes environmentally friendly production practices. Under this scheme, landlords can include in their lease contract clauses prescribing certain environmental practices (including organic farming).

Another innovative approach can be observed in Italy, where, over the past few years, a few Italian regions (Liguria, Tuscany, Umbria, Puglia and Molise) have approved regional laws in order to support the creation of local "Land Bank" or new governance systems. These allow for better management of publicly owned land through a direct involvement of the social and private sectors. The proposed process is what, in general terms, can be defined as PPP, "Public Private Partnership", where the public authorities own the property, but are no longer able to guarantee the management of these assets, and therefore call for private intervention. A useful tool in this regard is the selection criteria for the identification of the private subjects that will be in charge of the management of these properties. There are cases, such as in the Latium region, where those selection criteria require that the production system be organic. In that region, publicly owned land still represents more than 25% of the regional agricultural surface (more than 220,000 ha), hence the application of pro-organic criteria for the access to this land could represent a significant boost to organic.

In Thailand, the government agency in charge of the Land Reform is about to launch an organic agriculture development scheme giving preferential support to organic farmers. The agency has run pilot projects with a gradually increasing scale over the past 3 years and has been developing its staff capacity to implement such measures, first by training its officers throughout the country. The upcoming scheme will have a target of supporting conversion of 2,000 farmers to organic agriculture. In some cases, commitment to organic agriculture will be a condition for access to land, with new farmers getting land allocated for free if they agree to practice organic farming. The scheme also includes some extension support, input and infrastructure support and guarantee system elements.

In terms of facilitating the purchase of land for organic farming, there are currently not many examples of specific policies. However, the Tunisian government reimburses the contract expenses incurred when purchasing organic farmland.

Access To Land, the European network of grassroots organizations securing land for agroecological farming, has a website rich of resources and intends to develop more materials addressing national policies through case studies, good practices, and reports in the coming years. Their website (http://www.accesstoland.eu/) provides more up-to-date information on this topic.