



Rationale and supporting arguments to

A manifesto for agricultural transition to address systemic climate crises

Farmers and civil society call the EU to prepare for unavoidable climate crises through 13 urgent actions

European Coordination Via Campesina, together with civil society organisations, calls on the European Institutions to work on an ambitious and fair agricultural transition to ensure that European agriculture is able to face the climate challenge and that its impact can be radically reduced. This must focus on food sovereignty, global solidarity and guaranteeing the rights of farmers and citizens are respected. The European Union must begin an inevitable agricultural transition, which must be fair and robust, work with nature and support life-enriching systems.

The thirteen urgent actions that follow need to be implemented at this crucial crossroads for European agriculture.

1. Act to guarantee a profound change in European agriculture to respond to the climate emergency, respecting the Green Deal commitment to leave no one behind.

Why?

At the moment, the European Union has set a target of a 55% reduction in net greenhouse gas emissions by 2030 in its Green Deal. Aiming for a *net* emission reduction means that large polluters (usually multinationals) offset their emissions. Most often, this is done by buying carbon credits to store carbon in forests, soil, *etc.* However, nature cannot absorb all current greenhouse gas emissions. Basing the climate strategy on offsetting emissions is therefore a complete oversight.

At the EU level, we were hoping for real measures related to agriculture. But the carbon farming initiative, based solely on carbon sequestration, does not provide the emission reductions we need. This logic has proven ineffective with forests (see the example of the global REDD initiative)ⁱ and in agriculture in the United Statesⁱⁱ, where initiatives have already been in place for a number of years. We must learn from these lessons. This initiative claims to address the climate crisis, but in reality, it allows polluters to maintain the *statu quo* and greenwash.

Furthermore, carbon markets related to land lead to unacceptable social injustices (such as land grabbing against indigenous peoples and communities, human rights violations, *etc.*). In short, the rich continue to pollute while the poor, whose CO₂ emissions are minimal, suffer massively from the consequences of climate policies.

How to proceed

In order to achieve the Green Deal goals and especially those of the Farm to Fork Strategy, the EU institutions must adapt all their climate measures towards direct emissions reductions, including reductions in the agricultural sector, and avoid launching any related carbon market.

The EU must base its climate policy on climate justice. This requires policies that guarantee people's social and economic rights (access to drinking water, food, heating, health, education, *etc.*), while drastically reducing consumption and pollution (linked to over-consumption by the wealthiest), and also recognising the historical role and responsibilities of the EU in this crisis. Taxation must play a central role in climate justice.

2. Double the number of farmers in Europe by 2040, by supporting existing farmers and setting up 10 million new farms.

Why?

Having more small- and medium-scale farms will allow us to make profound changes. They are more resilient; they cultivate biodiversity rather than undermine it; are highly adaptive; protect and preserve habitats better than larger farms; and create more high-quality jobs.ⁱⁱⁱ

However, the data speaks volumes: between 2003 and 2016, the number of farms in the EU-27 decreased by 32%, with the largest decrease among farms of less than 5ha (38% reduction). In the projection for 2040, the EU could lose an additional 6.4 million farms, leaving a total of about 3.9 million farms across the EU (a loss of 62% in 24 years).^{iv}

The means and resources must be provided to maintain existing small farms, including to support farm transmission for retiring farmers, and to set up 10 million new farms in Europe. This is key to the production of fresh, diversified and seasonal food in all territories, as well as to ensure the vitality of rural areas and the preservation of climate and biological diversity. This is also key in order to close the gap between urban-rural areas and make work in agriculture attractive for young people.

How to proceed

In order to ensure the profession is both attractive and viable, all active farmers must be able to earn a fair living from their labour. As a priority, European agricultural

policies must aim to set stable and remunerative agricultural prices for farmers. It should use the Unfair Trading Practices to ensure that the prices of products are not below production costs. Agricultural subsidies must be better distributed to benefit small and medium-sized farms and to encourage more sustainable agricultural practices. Furthermore, proactive policies must help young people who want to start farming and enable them to overcome the obstacles. Training, access to land, income support in the early years and access to credit should be prioritised as areas of support for new farmers.

3. Guarantee access to farmland and ensure generational renewal.

Why?

Europe's farming population is ageing: half of all farmers will reach retirement age within the next 10 years. They will then have to pass on their land, but to whom? Only 7% of farmers are under 35, and younger generations face many difficulties in setting up as farmers. This is due to the highly coveted nature of land, which leads to speculation, land grabbing, concentration of land and subsidies, and soil grabbing for construction. This common good is becoming increasingly scarce and financially inaccessible. Ensuring that land is actually affordable but also accessible and therefore can be passed on to younger farmers, new entrants and farm workers is key to ensuring a sustainable future for European agriculture and food. These are the very people who can implement sustainable agricultural practices and ensure the vitality of the countryside.

The EU also committed to the UN Food and Agriculture Organisation (FAO) Voluntary Guidelines on Tenure^v and therefore has a responsibility to act in this regard.

How to proceed

Although the EU does not have direct land policy, it does influence the state of land through several related policies, be that through the CAP or through free trade agreements that put pressure on prices. The EU must start working on a European directive that will create a common framework to protect agricultural land.

This European land governance project must put an end to speculation and financialisation, land grabbing and concentration. It should favour access to land for youth, women, and new farmers, promote the agroecological use of land and ensure that agricultural land is primarily used to produce food. Potential tools to achieve these goals are pre-emption rights to land, control of land-use and land price, redistribution of land and the capping of Common Agricultural Policy support. It is about guaranteeing the collective management of land by affirming that it is not a commodity but a common good serving public interest.

4. Protect the rights of peasants on seeds and cultivate agrobiodiversity.

Why?

The increasing privatisation of seeds by a handful of companies is detrimental for the adaptation of crops to climate change. Indeed, peasant seeds and traditional animal breeding are the most efficient system to adapt plant and animal breeds to local growing conditions, renew agrobiodiversity and ensure resilience to climate stresses. Industrial seeds and GMOs, on the contrary, are standardised for global market and unable to adapt to such stresses. They furthermore have a disastrous environmental impact, since they require an industrial package to grow, reliant on synthetic fertilizers, pesticides, fossil fuels, *etc.*

Today, the collective rights of peasants to use, re-use, save, exchange and sell their seeds is threatened, both at EU and international level, by the growing corporate control of seeds through intellectual property rights covering industrial seeds and GMOs. Peasant seeds systems, *i.e.*, the sale and exchange of seeds between peasants, is criminalised both in the EU and at national level.

How to proceed

Peasants' rights on seeds are recognized both in the United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas (UNDROP), as well as in the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA). To implement these rights, the EU must ensure a coherent EU legal

framework and ensure that farmers can produce, use, exchange and sell their own seeds^{vi} and can carry out adaptable and resilient animal breeding. This includes the recognition peasants' seed systems, strictly maintaining current legislation to keep GMOs regulated and working towards long term prohibition, as well as the alignment of intellectual property rights regulations with peasants' rights on seeds.

5. Support, advise and train existing and future farmers towards more sustainable practices and agroecology.

Why?

Research shows that agroecology can produce fresh, healthier and more local food in sufficient quantities to feed the EU population^{vii}, using a limited amount of resources and with little to no emissions and inputs while ensuring a fair access to food and decent revenues for farmers and farm workers^{viii}. As we have seen during the COVID 19 pandemic^{ix} and the war in Ukraine, diversified and agroecological farming is more resilient to crises and shocks than the more industrialised models, which are extremely vulnerable in such contexts.

Indeed, agroecological farms that use sparing amounts of energy, do not rely on synthetic pesticides and fertilizers, have autonomous seed breeding systems and are closely connected to their community, have been able to continue working efficiently. As the FAO's High-Level Panel of Experts on Food Security and Nutrition outlines, agroecological approaches play a greater role in contributing to achieve global food security and nutrition in which co-creation of knowledge between local and scientific innovation and farmer-to-farmer learning processes can indirectly impact food security and nutrition^x.

How to proceed

Through the CAP and the forthcoming law on sustainable food systems (SFS law), the European Union must ensure agroecological farms in the EU are able to survive, as well as establishing mechanisms to train farmers on using agroecological approaches and more sustainable, resilient and autonomous practices. It must also prepare advisory services to continue supporting them through the transition.

Farmer-to-farmer, intergenerational, and experiential learning processes adapted to local conditions must be particularly supported. This kind of training is also affordable and offers greater efficiency and increased possibilities of solidarity and collaboration.

6. End factory farms within 10 years.

Why?

Factory farms are hyper-specialised agricultural enterprises that are not controlled by farming families, but instead by capital investors. These enterprises do not produce food with the objective of feeding the local population, but rather with the aim of producing goods for the international market. Factory farms exist both in crop production (e.g. mega-crops of cereals or soil-less fruit and vegetables) and in animal production (e.g. dairy, chickens, pigs, calves).

The model of industrialised agriculture controlled by national or multinational companies bears a fundamental responsibility for the climate and environmental crisis. It consumes huge amounts of energy, often responsible for CO₂ emissions. It depends on huge amounts of water and uses synthetic chemical inputs that destroy soil life. It removes hedgerows and other landscape infrastructure that is essential for biodiversity, such as ponds and wetlands. The high concentration of polluting inputs often leads to the localised pollution of ecosystems. This model poses risks to the health of local populations, such as the uncontrolled use of synthetic pesticides, antibiotic resistance and risks of zoonoses. Finally, it is not true that peasant farming can coexist with factory farms as this industrialised model grabs resources, and monopolises markets and public subsidies. It competes with peasant farming by proposing to reduce labour costs as much as possible, by destroying peasant employment and using an underpaid workforce with no social rights. It also inflicts poor standards of animal welfare and fails to respect basic animal needs.

How to proceed

Factory farms must be banned. First, public subsidies to these companies must be stopped immediately. Secondly, caps on farmland and animal numbers must be imposed to limit agricultural concentration (see point 6). The largest structures must be dismantled.

Sound transition plans need to be developed in conjunction with workers to ensure that they have adequate and dignified alternative work options, including transitioning towards more sustainable and agroecological farming. As part of the transition, the EU must set up rules to protect the rights of workers that face deteriorating working conditions as a direct result of climate issues, such as unsafe high temperatures.

7. Rebalance the presence of livestock farmers in all territories across Europe so that by 2035, the size of EU herds matches the capacity of the land to provide local fodder.

Why?

More than 50% of agricultural emissions are attributed to livestock farming. However, this figure does not consider the differences between livestock farming models. Greenhouse gas emissions are mainly emitted by industrialised livestock production, which is dependent on external inputs and in particular imported animal feed (soya, corn, *etc.*). On the contrary, peasant livestock farming is directly linked to the local land and territories. For example, herbivores like cattle and sheep feed on pastures, which are key for the sequestration of a lot of greenhouse gases, play an important role in maintaining biodiversity and significantly help in fire control.^{xi} Livestock farming is also absolutely crucial to the balance of agricultural ecosystems, as manure and legumes and pulses (which partially make up livestock feed) help to fertilise the soil without synthetic inputs. Thus, farms that combine crop and livestock production

achieve a high level of autonomy and ensure environmental quality. In fact, the gradual withdrawal from synthetic fertilisers is only possible through a redeployment of peasant livestock farming in all territories.

Farmers have been forced by public policies, trade globalisation and the race for competitiveness to move towards an increasingly concentrated and specialised model, which is harmful to social, health and environmental conditions. These policies must be radically changed to reverse the trend and allow the re-territorialisation of livestock farming as part of a locally adapted mixed farming approach.

How to proceed

The EU, probably via its Common Agricultural Policy and National Strategic Plans, must put in place a transition and territorial plans to balance the number of livestock herds with the available land and needs for fodder. We should aim to limit how many animals livestock farmers can rear in order to benefit from subsidies. Fodder should ultimately be produced locally and pasture grazing should be favoured. This plan should re-territorialise agriculture in the EU and ensure that ultra-specialised regions move towards a sufficient balance of animals. This transition will take time, but it is essential that we set this new direction immediately.

A key element of this equation is locating sufficient slaughterhouses in the territories and facilitating the creation of local and mobile slaughterhouses. This is essential to reduce herd size and to ensure the highest possible animal welfare standards.

8. Maintain and enforce the target of reducing synthetic fertilizers by at least half and phasing out synthetic pesticides by 2035.

Why?

Soil quality in Europe is declining dramatically: 60–70% of the EU's soil ecosystems are unhealthy and suffering from continuous degradation^{xii}. This is due to many factors such as compaction, salinisation and poor waste management, but also as a result of the use of synthetic pesticides and fertilizers. Producing and using pesticides and

fertilizers causes considerable greenhouse gas emissions (carbon dioxide, methane and nitrous oxide), often from fossil fuels. It also promotes an agricultural model and agricultural practices that release high emissions and pollute water sources. Finally, these phytosanitary products also deplete soil quality, thus weakening the capacity of soils to sequester carbon. At the very least, we must meet the Green Deal target of reducing the use and risk of synthetic pesticides by 50% by 2030.

How to proceed

This must be done within the framework of the European directive on pesticides and the future law on soil health. Concrete anticipation and a well thought-out transition are needed to guarantee the effectiveness of this shift, which will happen sooner or later. On a local level, we must recognise and take advantage of the value of livestock manure as an organic fertiliser and this is only possible through the re-territorialisation of agriculture throughout Europe, and the support of mixed polyculture and livestock farming.

The reduction in the use of synthetic pesticides must be accompanied by strong trade regulations that prevent unfair competition from products that do not respect the EU's internal rules. It is also high time for the EU to ban the production and exportation of pesticides which cannot legally be used on EU land.

Finally, the EU must also put in place stringent control mechanisms and ensure that these standards are enforced.

9. Ensure that healthy food is made affordable through a transition to territorialised food systems across the EU.

Why?

A fair agricultural transition cannot take place without a fair transition in EU food systems. Current market power relationships in food chains are dominated by multinational companies and/or dominant national capital corporations. There is a lack of representation of small-scale farmers, solidarity economy structures and citizens in

decision-making arenas. This obliterates demands for change by farmers and citizens at various level and especially the local level.

The EU must always prioritise food production above energy production regarding the use of land and agriculture outputs. The EU must ensure there are many, adequate and diverse food chains across the various territories of the EU, and guarantee the right to healthy, fresh and local food for all. This will encourage the production and consumption of more seasonal food, and thereby limit the use of greenhouses that are heated with fossil fuel energy, and this should start within school canteens. Short food chains also enable efficient energy consumption by reducing and streamlining food transportation and transit refrigeration.

We must move away from high energy consuming processed food and transition towards fresher, more agroecological and sustainable products. Thus, there is an urgent need to promote local, fresh, and seasonal food, with an increased consumption of meals centred n only good quality vegetables, pulses and animal products.

How to proceed

The EU must implement an ambitious SFS framework that facilitates territorialised food systems and in particular territorialised public procurement, meaning food systems and procurement that are coherent within a territory, including with a high level of supply autonomy. 50% of public procurement should be local and from small and medium farms. This framework must also encourage short supply chains and strengthen local and regional markets instead of supermarkets and intermediaries, and move towards an enhanced connection between rural and urban areas and reducing the carbon footprint of the entire chain.

Work must be undertaken to ensure all citizens' right to healthy, high quality food is respected, regardless of their income and with particular attention being paid to the rights of poorer population sectors. Tasty, seasonal and local products must be more affordable than highly processed food.

An adequate system of governance must be applied to these diverse and different level food systems, promoting genuine food democracy and food justice. Special attention should be paid to the inclusion of vulnerable groups, to gender diversity and youth.

Finally, improvement of food systems and the Sustainable Food Systems law must be addressed coherently with the CAP and other trade laws.

10. Ban unproven and dangerous technologies and stop public subsidies for harmful products and practices.

Why?

Most EU funds are designed for large structures and massively prioritise so-called innovative high technologies. Small organisations cannot access any of these funds and are forced to disappear in the face of this unfair competition. This current trajectory is geared towards maximising short-term profit for corporations, whilst minimising social and environmental responsibility.

Building on the false “feed-the-world” narrative, those promoting digitalisation, automation, synthetic biology, and molecular technologies pose potentially significant threats to the vitality and even existence of peasant food systems.^{xiii} High-tech agriculture, so-called precision farming or highly processed so-called food produced in laboratories also claim to be solutions to climate change. However, all of them continuously use fossil fuels, emitting large amounts of CO₂, and none of them has shown significant results so far. On the contrary, they are developing technologies that are dangerous to health, the environment and/or our social fabric, such as Genetically Modified Organisms (GMOs)^{xiv}, so-called cellular "agriculture", geoengineering, synthetic pesticides, mega basins and others. Their upstream promoters are a handful of financial investors making empty promises in order to increase their capitalisation endlessly.^{xv}

At the same time, on a farm level, farmers are being bullied into using expensive technological practices that entangle them in debt, and are ill-suited and ill-adapted to their territorial contexts. Often these farms simply disappear because they can't afford or do not wish to invest in this transition. However, the droughts of 2022 also serve to prove the need to move towards more local and citizen-based innovation. They remind us of the need for greater caution and restraint in the use of natural resources.

How to proceed

We need research and innovation that is embedded within agroecological systems and away from corporate control. We must properly reflect on and address these practices within European debates by seeking a real definition of sustainability without giving in to the pressure of powerful lobbies.

The aforementioned dangerous practices – in particular the cultivation of plants derived from the cultivation of genetically modified organisms, including new generation GMOs (CRISPR, *etc.*) – must be strictly regulated under the current legislation, working towards long term prohibition.

Once again, the CAP and the SFS law must ensure that all farmers are trained in agroecology, advised and supported towards a fair agroecological transition.

11. Ensure equitable water sharing and encourage water-efficient agricultural practices.

Why?

Each year, droughts are more intense and their impacts increase^{xvi}. Available water resources are limited and are likely to become increasingly scarce. Agriculture consumes a very large part of available water resources, which is justifiable because of the need to produce food. However, a non-negligible part of current agricultural water use can and should be questioned. Is it reasonable to massively irrigate maize for cattle feed, when it is perfectly possible to feed cattle with grass from pastures? Why waste precious water to grow crops that will then be used to produce methane. The distribution of water use across the EU remains unfair, with large companies taking too much of the resource while food-producing farmers are deprived of it.

So far, there is little encouragement towards water-efficient practices, while massive public subsidies allow a few large agricultural and food companies to build infrastructure to hoard huge amounts of water.

Yet solutions do exist. There are less water-intensive crops. Farmers are working to select seeds to make them more resistant to drought. Mulching soil prevents evapotranspiration. Hedges and agroforestry promote more protective micro-climates, just to name a few.

How to proceed

We must set up an assessment of best practice in water management in Europe as soon as possible, followed by a democratic definition of priorities for water use and allocation. All stakeholders who use water should be involved, but care should be taken to ensure that companies are not over-represented and that the common interest prevails over private interest and profit. The EU must act to stop the capture of water by the most powerful actors. Crops and agricultural practices that require less water and those that are essential for a healthy diet, such as fruit and vegetables, should be encouraged.

12. Develop a ten-year plan to phase out soy and palm oil imports into Europe, starting with a ban on GMO imports.

Why?

The import of palm oil or mostly genetically modified soybeans for animal feed leads to the destruction of ecosystems in third countries and worsens climate change, both in terms of the transport consequences but especially as a result of production. The destruction of the Amazon and the forests in South-East Asia are infamous examples. All over the world, this destruction of ecosystems in order to produce for export is accompanied by human rights violations and displacement of populations. While they drive people into despair and distort the market, international companies continue to make huge profits from these abuses. It is time for the EU to prioritise people and the environment, not private interests.

How to proceed

In connection with the re-territorialisation of livestock farming in Europe (see point 7), a plan must be established to end the EU's dependence on imported products and ensure a local supply of animal feed. This, together with strong pressure against land grabbing and for land reform worldwide, will free up land in the global south so that local markets are strengthened and more resilient in the event of food crises.

Regulations on deforestation must implement the highest standard possible.

13. Adopt public policies to regulate and protect agricultural markets and the right to food.

Why?

Current levels of economic globalisation and the domination of mostly multinational companies is weakening local food systems, both in the south and the north. The dogma of economic competitiveness pushes for ever lower production costs, to the detriment of employment rights, social rights, the environment and public health. Because there is a push to reduce food prices to a minimum, societies are being forced to pay the difference in exorbitant consequential costs.

The EU has played a very negative role in recent decades in imposing neoliberal globalisation on other countries, especially in the south. Through its strategy in the WTO and through bilateral free trade agreements, it has forced countries to open their markets, to orient their production towards exports and to stop supporting local producers. This strategy has dramatic effects: it destroys rural jobs, it pushes millions of people into migration, it leads to the plundering of natural resources, and ultimately it has led to a widespread food crisis. This must stop.

The EU, along with other countries, has the right and the responsibility to protect and support its farmers in order to ensure a stable and healthy food supply for its population: that is what food sovereignty is about. The EU must prioritise local food and or-

ganise its production according to the needs of its populations. This does not necessarily mean ceasing all international trade, but ceasing to prioritise export-oriented agricultural production that is highly dependent on imported inputs.

The EU has a responsibility to ensure that European agricultural exports do not harm or destroy localised agricultural production and the livelihoods of farmers in other countries.

How to proceed

The EU must support a radical reform of international food trade policy based on the principles of food sovereignty, and social and environmental justice, starting with a ban on food speculation, phasing out free trade agreements and allowing countries to build up public food stocks to prepare for times of crisis. Investment funds within the agricultural sector must be limited.

The EU should ensure the proper implementation of the EU Directive on Unfair Trading Practices, to make sure corporations are not allowed to buy agricultural products from farmers at prices below the true cost of production (*i.e.* the cost of production including decent revenues for farmers and agricultural workers and sustainable practices). The EU should support international mechanisms so that the price paid to small-scale food producers worldwide allows for stable and decent farm revenues.

i 'Campaign statement', Real Zero Europe, available online from the 30/11/2022: <https://www.realsolutions-not-netzero.org/>

ii B. Lilliston, 'Lessons for the EU's carbon farming plans', Institute for Agriculture & Trade Policy, Jun. 2022. Accessed: Nov. 21, 2022. [Online]. Available: <https://www.iatp.org/documents/lessons-eus-carbon-farming-plans>.

iii R. Rossi, 'Small farms' role in the EU food system', European Parliament Research Service, Brussels, Briefing, Sep. 2022. [Online]. Available: [https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI\(2022\)733630](https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2022)733630).

iv B. Schuh *et al.*, 'The Future of the European Farming Model: Socio-economic and territorial implications of the decline in the number of farms and farmers in the EU', Policy Department for Structural and Cohesion Policies, Directorate-General for Internal Policies, Brussels, Research for AGRI Committee PE 699.620, Apr.

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v Food and Agriculture Organization of the United Nations, *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security*. Rome, 2012. doi: [10.4060/i2801e](https://doi.org/10.4060/i2801e).

vi For more information on peasants' rights to seeds, see C. Mathurin, 'Incorporating Peasants' Rights to Seeds in European Law'. European Coordination Via Campesina, Oct. 2021. [Online]. Available: https://www.eurovia.org/wp-content/uploads/2021/10/Publication_Incorporating-Peasants-Rights-to-Seeds-in-European-Law_EN.pdf

vii P.-M. Aubert, M.-H. Schwoob, and X. Poux, 'Agroecology and carbon neutrality in Europe by 2050: what are the issues? Findings from the TYFA modelling exercise', Institut du développement durable et des relations internationales, Paris, Study 02, Apr. 2019. [Online]. Available: https://www.iddri.org/sites/default/files/PDF/Publications/Catalogue%20Iddri/Etude/201904-ST0219-TYFA%20GHG_0.pdf. This scenario leads to a 40% reduction in GHG emissions (35% for direct emissions excluding CO₂), offers a soil carbon sequestration potential of 159 MtCO₂eq/year until 2035, and a reduction in bioenergy production to zero.

viii For a definition on agroecology and experiences: 'Peasant agroecology according to ECVC'. European Coordination Via Campesina, 2020. [Online]. Available: https://www.eurovia.org/wp-content/uploads/2022/04/Agroecology_EN.pdf

ix '7° Censimento generale dell'agricoltura', Istituto Nazionale di Statistica, Jun. 2022. [Online]. Available: <https://www.istat.it/it/archivio/272404>

x 'Agroecological and other innovative approaches for sustainable agriculture and food systems that enhance food security and nutrition', High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome, Report 14, 2019. [Online]. Available: <https://www.fao.org/3/ca5602en/ca5602en.pdf>.

xi European Committee of the Regions' NAT Commission, 'Pastoralism: A crucial tool to tackle with sustainability challenges in EU and beyond', Webinar, Jun. 14, 2021. Accessed: Nov. 21, 2022. [Online]. Available: <https://cor.europa.eu/en/events/Pages/pastoralism-a-crucial-way-to-tackle-sustainability-challenges.aspx>

xii European Commission, *COMMISSION STAFF WORKING DOCUMENT [...] Accompanying the document COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS EU Soil Strategy for 2030 Reaping the benefits of healthy soils for people, food, nature and climate*. 2021. Accessed: Nov. 21, 2022. [Online]. Available: <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52021SC0323>

xiii 'Future technologies and food sovereignty: Small-scale Peasant Organisations' Perspectives From Eastern Europe and Central Asia'. European Coordination Via Campesina, Jun. 2022.

xiv The denomination "GMOs" also includes most recent techniques of genetic modification ("new GMOs"). GMOs and new GMOs both pose serious concerns in terms of risk of contamination and interaction with biodiversity and cultivated biodiversity. Furthermore, GM seeds are standardized industrial seeds that cannot adapt to local growing conditions and are not resilient to climate changes. They consequently require the use of chemical pesticide, fertilizers, etc. to grow. To find out more information on the threats posed by GMOs and industrial seeds, see p. 16 and pp. 25-32, C. Mathurin, *ibid*.

xv H. Shand, K. J. Wetter, K. Chowdhry, and ETC Group collective, 'Food Barons 2022: Crisis Profiteering, Digitalization and Shifting Power'. ETC Group, Sep. 20, 2022. Accessed: Nov. 21, 2022. [Online]. Available: <https://etcgroup.org/content/food-barons-2022>.

xvi European Commission Joint Research Centre, 'Drought in Europe: July 2022: GDO analytical report.', Publications Office of the EU, Luxemburg, 2022. Accessed: Nov. 21, 2022. [Online]. Available: <https://data.europa.eu/doi/10.2760/014884>.