AEEU opinion on the Water Resilience Strategy

Agroecology Europe supports the writing of a European Water Resilience Strategy. Nowadays, water availabilities and water access are important challenges, especially for the agricultural sector.

First, Agroecology Europe (AEEU) would like to recall that access to water and sanitation are recognized by the United Nations (UN) as human rights[1]. Agroecology Europe also recalls the UN Declaration on the Rights of Peasants and Other People Working in Rural Areas[2], that stresses the rights for peasants and other people living in rural areas to have access to, sustainably use and manage water bodies (see Art. 17, 21).

The agricultural sector is facing systemic challenges related to water scarcity or excess due to the effects of climate disruption (droughts, heavy rainfall, …)[3]. Indeed, problems and solutions depend on regions and should be addressed accordingly[4].

Moreover, as recalled by the European Environment Agency in its 2024 report *Europe's state of water*[5], conventional agriculture is the most significant source of pressure on both surface and groundwater, as a result of water use and pollution from the intensive use of chemical inputs (fertilizers, pesticides, …) and is the largest net consumer of water in the EU. Conventional agriculture is also responsible for the deterioration of soils and nature hindering their capacity to ensure ecosystem services related to good water management[6].

In that context, it is paramount to transform the European agriculture and food system towards an agroecological European agriculture and food system.

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[1] United Nations General Assembly (UNGA). (2010). Resolution adopted by the General Assembly on 28 July 2010 64/292. The human right to water and sanitation. New-York: Author - The human right to water and sanitation :

[2] United Nations Human Right Council. (2018). Resolution adopted by the Human Rights Council on September 2018 3912. United Declaration on the Rights of Peasant and Other People Working in Rural Areas. Geneva: Author - United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas :

[3] European Environment Agency. (2024). European Climate Risk Assessment. Denmark: Author - European Climate Risk Assessment | European Environment Agency's home page

[4] MedECC (2024). Interlinking climate change with the Water-Energy-Food-Ecosystems (WEFE) nexus in the Mediterranean Basin. [Drobinski, P., Rivera-Ferre, M.G., Abdel Monem, M., Driouech, F., Cramer, W., Guiot, J., Gattacceca, J.C., Marini, K. (eds.)]. MedECC Reports. MedECC Secretariat, Marseille, France, 24 pp., http://dx.doi.org/10.5281/zenodo.13365388, ISBN: 978-2-493662-09-5
Grandry M., Gailliez S., Brostauxa Y., Degré A. (2020). Looking at trends in high flows at a local scale: The case study of Wallonia (Belgium) Journal of Hydrology: Regional Studies (31) - https://doi.org/10.1016/j.ejrh.2020.100729

[5] European Environment Agency. (2024) Europe's state of water 2024 – The need for improved water resilience. Denmark: Author - Europe's state of water 2024: the need for improved water resilience | European Environment Agency's home page

[6] Choden, T., & Ghaley, B.B. (2021). A Portfolio of Effective Water and Soil Conservation Practices for Arable Production Systems in Europe and North Africa. Sustainability, 13(5), https://doi.org/10.3390/su13052726

Agroecology has demonstrated, through its practices and research, its capacity to restore water cycles and to be more resilient in the face of climate change impacts[7]. The Water Resilience Strategy should emphasize agroecology as the most promising agricultural approach for water management and resilience.

In parallel to bringing agroecological practices in the fields, the EU food system must adapt to climate change and its effects by also reconsidering the type of crops and other products to produce. More adapted and resilient types of production must be integrated in the EU food system[8].

Moreover, the current EU food system is dependent on imports[9] and relies on exports to maintain its current form[10], and this globalized food system has a major impact on water availability and water management all over the world[11]. By transforming the EU food system towards agroecology, it might be possible to reduce the pressure on other ecosystems in other parts of the globe, and ultimately the pressure on water. For instance, industrial production and consumption of livestock are to be addressed and transformed as they pose a major threat on water[12]. Territorial and agroecological livestock systems[13] are to be considered while promoting diet changes at the consumption level.

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[7] Kremen, C., & Miles, A. (2012). Ecosystem Services in Biodiversity Diversified versus Conventional Farming Systems: Benefits, Externalities, and Trade-Offs. Ecology and Society, 17(4), 40 - http://dx.doi.org/10.5751/ES-05035-170440
DeLonge, M., & Basche, A. (2017). Leveraging agroecology for solutions in food, energy, and water. Elementa: Science of the Anthropocene (2017) 5:6 - https://doi.org/10.1525/elementa.211
Choden, T., & Ghaley, B.B. (2021). A Portfolio of Effective Water and Soil Conservation Practices for Arable Production Systems in Europe and North Africa. Sustainability 2021, 13(5), 2726 - https://doi.org/10.3390/su13052726

[8] Poux, X., & Aubert, P.M. (2018). An agroecological Europe in 2050: multifunctional agriculture fir healthy eating - Findings from the Ten Years For Agroecology (TYFA) modelling exercise. Paris: Institut du développement durable et des relations internationales (IDDRI) - 201809-ST0918EN-tyfa.pdf

[9] Loi, A., Gentile, M., Bradley, D., Christodoulou, M., Bracken, J., Knuuttila, M., & Wejberg, H. (2024). *Research for AGRI Committee - The dependency of the EU's food system on inputs and their sources.* Brussels: European Parliament, Policy Deparment for Structural and Cohesion Policies - Research for the AGRI Committee - The dependency of the EU's food system on inputs and their sources | Think Tank | European Parliament

[10] EU Commission: DG AGRI. (2025). EU agri-food exports and imports reached record levels in October 2024. Retrieved from EU agri-food exports and imports reached record levels in October 2024 - European Commission

[11] Dalin, C., & Outhwaite, C.L. (2019). Impacts of Global Food Systems on Biodiversity and Water: The Vision of Two Reports and Future Aims. One Earth, Vol1(3), 2019: 298-302 - https://doi.org/10.1016/j.oneear.2019.10.016

[12] Wisser, D., Grogan, D.S., Lanzoni, L., Tempio, G., Cinardi, G., Prusevich, A., & Glidden, S. (2024). Water Use in Livestock Agri-Food Systems and Its Contribution to Local Water Scarcity: A Spatially Distributed Global Analysis. Water 2024, 16, 1681 - https://doi.org/10.3390/w16121681

[13] Bonaudo, T., Burlamaqui Bendhan, A., Sabatier, R., Ryschawy, J., Bellon, S., Léger, F., Magda, D., & Tichit, M. (2014). Agroecological principles for the redesign of integrated crop-livestock systems. European Journal of Agronomy, Vol 57, 2014: 43-51 - https://doi.org/10.1016/j.eja.2013.09.010
FAO. (2018). Livestock and agroecology: How they can support the transition towards sustainable food and agriculture. Rome: https://openknowledge.fao.org/server/api/core/bitstreams/ded6e1c7-68cf-4401-8bb6-2bde2156e144/content

The governance and management of water is a complex dynamic as it involves various stakeholders[14]. Nevertheless, solutions must be science-based, respect human rights related to water management and use, consider the water cycle as a common good[15] and serve the objectives of making the EU food system resilient. Still along with that argument, agroecology must be prioritized and solutions that are already promoted and implemented should be reconsidered (e.g. huge reservoirs[16])[17].

The Water Resilience Strategy should call for the EU to make use of the CAP budget to support the transition towards agroecology by supporting advisory services dedicated to agroecology, and by supporting farmers in their transition (risk management, specific infrastructures, …). Farmers groups and other organizations engaged with agroecology are paving the ways for the implementation of agroecology in Europe and to restore the water cycle. The EU should take stock from their experience and support them in developing and sharing their knowledge and experience.

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[14] OECD. (2015). OECD Principles on Water Governance. Paris: Author - The OECD Principles on Water Governance and implementation strategy | OECD

[15] Global Commission on the Economics of Water (2024). The economics of water. Valuing the hydrological cycle as a common good. https://economicsofwater.watercommission.org/report/executive-summary-economics-of-water.pdf

[16] Reservoirs ("Megabassines" in French) are huge water storage infrastructures designed to meet the agricultural (or agro-industrial) needs, particularly during the summertime. They are huge artificial basins, plastic-coated and waterproof. An average megabasin covers an area of eight hectares. The largest of these extend to 18 hectares. These reservoirs are supposed to be filled during the winter period, to enable farmers to continue irrigating their crops during periods of drought and high water demand. They require pumping operations, whether from (ground)water tables or rivers. By storing water that would have infiltrated the soil or run-off into watercourses, they deprive the surrounding ecosystems of a vital resource, enabling wetlands and soils to replenish themselves during the winter. They also transform a living, flowing resource into stagnant water, which evaporates and degrades.
Megabasins are mainly used to supply water-demanding crops such as corn, which is mainly used for industrial livestock production. Above all, they serve the interests of agro-industrial players, to the detriment of local and rural solutions. By subsidizing such structures, the public authorities are further contributing to the industrialization of agriculture and the increased use of chemical fertilizers and pesticides... substances which are subsequently found in water and in the natural environment.
Translated from Mégabassines : pourquoi s'y opposer ? - Greenpeace France

[17] Dal Molin, G. (2024). Adopting System Thinking to Explore Maladaptation: A Case Study of "Mega-Bassines" in France. Uppsala: Uppsala University, Department of Earth Sciences - Adopting System Thinking to Explore Possible Maladaptation: A Case Studyof "Méga-Bassines" in France
Guetté, C. (2023). Rapport fait au nom de la Commission du développement durable et de l'aménagement du territoire sur la proposition de loi visant à instaurer un moratoire sur le déploiement des méga-bassines (n1766). Paris: Assemblée Nationale Française - r1902