

Organic farming on areas with pesticide restrictions

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Abstract

The Danish government has high ambitions for organic farming with a target of 510.000 hectares in 2030 constituting roughly 21% of the Danish agricultural area. At the same time, the government also wants to ensure the protection of groundwater in areas where drinking water is extracted (i.e. *boringsnære beskyttelsesområder*) and ascertain that organic farming practices are key in pursuing this goal (Ministeriet for Landbrug, Fødevarer og Fiskeri, 2024). However, whilst the use of pesticides may be prohibited in such areas, it is also not possible for farmers to get income support under the subsidy scheme for organic farming (i.e. *Økologisk arealstøtte*). Other eco-schemes such as *Biodiversitet & bæredygtighed*, meanwhile, are fully eligible for subsidies on areas with a pesticide ban.

The reason for this seems to be a questionable interpretation of the rules for EU financed subsidies under the common agricultural policy (CAP) with concerns of double compensation of landowners that may have already received a lump sum payment for the ban of pesticide use on their land. The scope of this theoretical analysis, meanwhile, does not concern the ambiguities of the interpretation of the rules for EU financed subsidies, but instead focuses on the social welfare implications of this interpretation.

The ban of pesticides in specific areas effectively reduces the productivity of those areas in terms of conventional farming. On the other hand, the area becomes no more or no less productive in terms of organic farming.

From a social cost perspective, farmers should ideally be incentivized to place agri-environmental initiatives in areas where the costs are the lowest, if there is no way of assigning and incentivizing the placement with respect to the benefit. In effect, however, the zero organic subsidy policy in areas with a pesticide ban creates incentives for a sub

optimal agricultural utilization of those areas. As such, organic farmers do not have an incentive to cultivate areas with a pesticide ban, as they forgo the inevitable information rent, which they can receive for farming areas without a ban. For areas with a pesticide ban, the owners are therefore incentivized to set aside the land in other less productive eco-schemes, at the expense of setting aside areas truly on the margin.

If organic farming were also subsidized in areas with a pesticide ban, the propensity of using these areas for organic farming would increase. This would push set-aside utilization to truly marginal areas, and thus free productive areas for conventional use, whilst at the same time, reducing the overall social cost of reaching the same effect.

References:

Ministeriet for Landbrug, Fødevarer og Fiskeri, 2024. Strategi for økologi. Available via: https://fvm.dk/fileadmin/user_upload/MFVM/Publikationer/Strategi_for_økologi.pdf