Evaluation of the resource programme and resource efficiency contributions for more sustainable agriculture

Federal Office for Agriculture

Key facts

The resource programme and resource efficiency contributions are two distinctly designed support instruments in Swiss agriculture that have the common goal of using concrete measures to produce more efficiently and ecologically. These include measures to reduce ammonia emissions and to preserve soil fertility.

Since 2008, innovative project ideas initiated by sponsors from the agricultural sector have been co-financed up to 80% by the Confederation within the framework of the resource programme, after review by the Federal Office for Agriculture (FOAG). These regional resource projects (RPs) have an experimental function in order to allow scientifically tested methods to be used in practice. The participating farmers receive technical support and financial compensation. To date, 44 RPs have been approved by sponsors from almost all cantons. The Confederation contributed around CHF 150 million to the 23 RPs that were completed by 2018.

Since 2014, resource efficiency contributions have been set up at the same time as or downstream of RPs for the application of the same or similar measures throughout Switzerland. Unlike RPs, resource efficiency contributions aim to ensure widespread application of the measures across the country. Up to and including 2019, the Confederation granted contributions totalling CHF 149 million. Both participation in RPs and the receipt of resource efficiency contributions are voluntary for farmers. Both instruments are financed from the direct payment credit.

The Swiss Federal Audit Office (SFAO) assessed the design, implementation, interaction and impact of the resource programme and resource efficiency contributions using the measures promoted to reduce ammonia emissions (mainly emission-reducing methods for spreading liquid manure) and to preserve soil fertility (low-impact, ploughless soil cultivation to promote humus formation and resistance to erosion). The resource programme is generally well received by those involved. However, the orientation of resource efficiency contributions lacks a clear focus on the impact of the measures promoted. This calls the subsidy into question in some cases.

Resource projects appreciated by all stakeholders and effective despite shortcomings

In principle, all stakeholders have a positive view of the resource programme concept. Farmers take advantage of the opportunity to test new sustainable production techniques on their own farms with minimal financial risk. They also receive expert advice and support that are independent of possible individual interests in the agricultural sector. RPs entail a great deal of time and effort on the sponsors' part in terms of personnel, administration and finances. This requires project managers with considerable resources and explains the high level of participation by cantonal agricultural offices.

One shortcoming identified by the SFAO, for example, is that in the initial phase, specifically in the case of measures to reduce ammonia emissions, more than a dozen practically identical applications were approved as RPs without requiring the innovation called for by the concept. However, this almost blanket support through many regional RPs has ultimately had a positive effect and contributed significantly to the fact that more than a third of the farms concerned used emission-reducing spreading techniques already in 2015.

Resource efficiency contributions for emission-reducing spreading techniques achieve hardly any added value

The resource efficiency contributions' lack of focus on impact is generally noticeable. This applies to soil conservation practices, but especially to emission-reducing spreading techniques.

Due to its high livestock density, Switzerland emits the second-highest amount of ammonia on its agricultural land when compared with other European countries. Against this backdrop, a guideline value of a maximum of 25,000 tonnes per year was set in the 2008 environmental targets for agriculture. The resource efficiency contributions, together with the resource programme, are the only instruments specifically named to reduce emissions to this level. However, the resource efficiency contribution concept lacks a measurable contribution target at the end of its term. Based on its own calculations, the SFAO estimated the reduction potential of emission-reducing spreading techniques to be just over 10% of total ammonia emissions from livestock farming. Around 40% is needed to reach the guideline value.

Stagnating user rates and indications of deadweight losses also suggest that, after almost blanket support under the resource programme, the resource efficiency contributions achieved hardly no added value. In view of the limited reduction effect, lack of target values and unclear coordination with the resource programme, the SFAO considered the resource efficiency contributions for emission-reducing spreading techniques to be inefficient.

As part of the new agricultural policy and with the corresponding amendment to the Air Pollution Control Ordinance, the Federal Council plans to make the resource efficiency contributions compulsory for the use of emission-reducing spreading techniques from 2022, although parliamentary opposition to this is emerging.

The SFAO recommends that the FOAG promote the reduction of ammonia emissions with measures that go beyond the use of emission-reducing spreading techniques. To this end, a targeted reduction path with a timeline must be defined and further measures must be envisaged in the event of non-achievement.

In general, the SFAO recommends that the FOAG carry out an analysis to identify in which resource efficiency contributions or follow-up programmes, according to AP22+, the efficiency of the subsidy can be improved by introducing clearly defined and measurable targets at the implementation and impact levels.

Potential loss of impact with resource efficiency contributions for soil conservation practices

When applying the measures supported by the resource efficiency contributions, farmers are confronted with conflicting aims in the area of soil fertility, for example. In order to limit possible yield losses, herbicides are increasingly used when no-till methods are applied. In addition, soil conservation practices are most effective when they are applied continuously

over a period of several years. In addition to a steady increase in use, the SFAO found that around half of the farmers concerned do not claim the corresponding resource efficiency contributions on a permanent basis, but rather make a new decision each year based on their current operational situation or meteorological conditions.

In the SFAO's view, there is a risk of the subsidy losing its effectiveness. The SFAO recommends that the FOAG examine whether additional measures are required to promote the permanent use of soil conservation practices.

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