



Ex-post Evaluation

Rural Development Programme Schleswig-Holstein 2007-2013

Summary

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Editorial:

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1 Introduction

The ex-post evaluation report of the Rural Development Programme (*Zu-kunftsprogramm Ländlicher Raum* 2007 bis 2013 = ZPLR) consists of an EU report and an appendix with more detailed module reports (both only available in German).

2 Evaluation framework

Schleswig-Holstein commissioned the evaluation of the ZLPR jointly with six other federal states (Mecklenburg-Western Pomerania, Hesse, Hamburg, Lower Saxony, Bremen and North Rhine-Westphalia). The terms of reference comprised ongoing evaluation, drafting of annual evaluation reports, a mid-term evaluation in 2010, and an ex-post evaluation. The evaluation was conducted with the Thünen Institute of Rural Studies taking the lead, in cooperation with the Thünen Institute of Farm Economics, the Thünen Institute of International Forestry and Forest Economics and entera (Environmental planning and IT). A steering committee comprising the administration authorities of the federal states and the evaluators was set up to control the evaluation activities.

Evaluation of the ZPLR was part of a joint 7-state evaluation.

Results from the ongoing evaluation were prepared continuously and presented to the steering and monitoring committee, in briefing meetings, at conferences. Reports on specific evaluation issues were published as "module reports". Those module reports have been integrated into the expost evaluation.

Evaluation results were communicated and discussed continuously.

3 Programme structure and implementation

In *Schleswig-Holstein*, all EU funds were linked in a joint strategy, the *Zukunftsprogramm Schleswig-Holstein*. A total of around €1.39 billion of EU funding, including public national co-funding, was available for the funding period 2007 to 2015. Of these funds, 39% was attributable to the ZPLR. Despite the redistributions from the first pillar of the Common Agricultural Policy (CAP) to the second pillar, direct payments continue to be of major financial significance.

In Schleswig-Holstein, all EU funds were included in a joint strategy.

According to the RDP, a total of around €543 million of public funds was available for the programming period 2007 to 2015. This was supplemented by around €339 million of national public funding for top-ups (Article

Most of the funds were earmarked for Axis 1, coastline protection is

89 measures). Taking into account the top-ups (44%), most of the public funds were earmarked for Axis 1 "Improving competitiveness of agriculture and forestry" with a strong focus on coastline protection (126). Axis 3 "Quality of life in rural areas and diversification of the rural economy" followed with 26% of the public funds. 18% of the public funds were earmarked for Axis 2 "Improving the environment and the countryside" and 12% for Axis 4 (Leader).

of special relevance.

The federal government (via Germany's Joint Task for the Improvement of Agricultural Structures and Coastal Protection - German abbreviation: GAK), the state of *Schleswig-Holstein* and the regional authorities cofinanced the funds of the ZPLR. State funds comprised 39% of the cofunding, federal government funds 34% and municipal funds 27%.

The EU funds were cofinanced by the state, federal government and municipalities.

As a result of the Health Check (HC) of the CAP and other financial adjustments, a supplementary sum of €78 million was available for the ZLPR from 2010 onwards. The additional funds were distributed among all Axes. The set of measures reported in 2009 was supplemented by the measure 126/2-II, Dyke Reinforcement "Climate Profile" and Leader 413-II, New Challenges in AktivRegionen.

The additional Health
Check funds were distributed among all Axes.

The planned public funds were almost entirely used up. Axes 3 and 4 remained below the projections (of 2009) that indicated an implementation rate of 81% or 92% (without taking the top-ups into account), while a higher utilisation occurred in Axes 1 and 2. The HC funds had to be accounted for separately and used with priority.

The planned funding was entirely used up.

Evaluation of the paying agency data (i.e. without taking into account the nationally financed top-ups) shows that the largest part of the funds went to North Frisia – for the measure coastline protection. In absolute terms, the least funds went to the surrounding districts of Hamburg. At €20 per hectare and year, the general funding intensity of the agricultural EAFRD measures was extremely low compared to other federal states. In the first instance, this was due to the discontinuation of the Farm investment support (FIS, 121) and the geographical concentration of the less favoured area payments (212). The funding intensity was above average in North Frisia, *Rendsburg-Eckernförde* and *Segeberg*. The funding intensity of rural development measures in relation to population was on average €11 per inhabitant.

The geographical focus of the ZPLR was in the northern parts of the state.

Of the public funds, 72% went to public bodies of which municipalities accounted for 27%. Enterprise funding was primarily focused on Axis 1, around one fifth of the public funds went to farms.

Most of the funds went to public bodies.

The durability of the RDPs measures is determined by the type of intervention. While the impacts of area payments are frequently limited to the duration of the contract, the effects of investment support continue over an extended period of time. 72% of the public funds were attributable to public investments and 6%to investments in individual enterprises. The principal focus of investment support was on improving the production conditions, public services and risk provisioning.

Public investments were the focal point of the ZPLR interventions.

With the exception of changes affecting details, the institutional framework for the implementation of the ZPLR remained constant over the programming period. The organisational structure was lean both horizontally and vertically. Most of the programme was implemented by state administration institutions, mainly the State Agency for Agriculture, Environment and Rural Areas (LLUR).

Implementation structures remained largely constant.

4 Methodology

The ex-post evaluation was based on the structure and findings of the mid-term evaluation. The European Commission guidelines for the ex-post evaluation introduced modifications to the structure of the report and to the 24 evaluation questions which were taken into account. Measure-based questions from the initial "Common Monitoring and Evaluation Framework" (CMEF) were retained where they appeared useful for the evaluation of the support measures.

The ex-post evaluation is based on the midterm evaluation and takes account of the current EU guidelines.

The evaluation was structured according to the three levels of the RDP: measure, axis and programme. At the measure level, either individual measures or groups of measures were examined in terms of their results and impacts (questions 15 to 24). At the axis level, the measure-based findings were aggregated on the basis of the common output and result indicators. At the programme level, questions 1 to 11 relating to impacts, were answered in an measure overarching in-depth approach ("Vertiefungsthemen"). An analysis of administrative costs was at the heart of the evaluation of programme implementation (question 14).

Analyses were carried out at measure, axis and programme level.

The evaluation was based on existing secondary data. For the agricultural and environmental measures in particular, high-quality data was often available, which facilitated with/without comparisons. Examples are the Farm Accountancy Data Network (FADN), the results of impact controls and the Integrated Administration and Control System (IACS). The available secondary data was not sufficient for the evaluation of the measures under Axis 3, Leader, forestry measures and issues relating to the imple-

A wide range of secondary and primary data was used for the evaluation.

mentation the programme. Additional data had to be collected in these areas.

The impact analysis comprised a variety of qualitative and quantitative methods. Among others, descriptive and associative analyses, econometric approaches at the micro or macro level, analyses of documents and literature, and GIS analyses were used. The methods were combined in such a way that complex interdependencies could be depicted as effectively as possible (mixed method approach).

A mixed-methodapproach was appliedfor the impact analysis.

Axis 1 "Improvement in the competitiveness of agriculture and forestry"

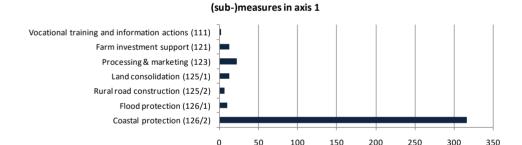
The ZPLR offered seven sub-measures under five EAFRD codes in Axis 1. The measures were mainly aimed at public bodies and in second place at farmers and companies in the food industry.

Axis 1: Five EAFRD codes, seven submeasures.

Including top-ups of €204 million, €178 million was spent on Axis €382 million of public 1accountingfor a share of 43% of all the public funds. The most heavily money was spent (43% of funded measure by far was coastline protection (126/2 I).

Public expenditure (incl. national top-ups) 2007 to 2015 for

the programme funds).



Mio. Euro

In relation to planning, the implementation level was 122%. The financial implementation of vocational training (111) was according to plan. More funds than programmed were spent on coastline protection (126/2), while financial implementation was below the 2009 projections in all other measures. There are various reasons for this: lack of demand, insufficient co-funding and strategic reorientation as in the case of the FIS (121) and rural road building (125/2).

Varying flow of funds into the Axis 1 measures.

The output targets set in 2009 were only partly achieved. In most cases, output followed the lines of financial implementation. The number of projects and investment volumes was below the 2009 targets for some measures, while in others investment volumes lay above the targeted

Measured against the 2009 planning, the output targets were only achieved in part.

amount. While output-indicators are requested by the European Commission, their relevance for the evaluation of the impacts of a measure is limited.

The EU had specified five "common result indicators" for Axis 1, of which three were included into the analysis. These result indicators could only be applied in a meaningful way to some of the measures (121 and 123). For instance the question 'how and to what extent has the measure contributed to promoting the competitiveness of the beneficiary?' was only relevant for the evaluation of measures 121 and 123, as only these were aimed at improving competitiveness. The vocational training measure (111) as well as investments in infrastructure, in particular coastline protection (126/2) had a much wider range of targets and impacts and had to be evaluated using a broader approach.

Three out of five common result indicators were applied to assess the success of the axis.

The measure vocational training (111) uses the lever of personal and business development and comprised a broad range of topics. According to the information in the project lists, 1,230 education events were attended by around 12,600 participants. Mathematically, this corresponds to around 35% of the farming workforce (excluding seasonal labour; participants attending more than one event have not been deducted).

1,230 events were funded by the measure vocational training (111).

According to the participants surveyed, the measure had less impact on business development than on personal professional development. The participants stated that the largest benefits to their personal careers were in the areas of "Technical knowledge and skills" (85%), "Motivation" (70%) and "Professional training" (65%). In all three groups (employees, managers and women) surveyed, more than 90% stated a high level of satisfaction with respect to their personal expectations of the contents of the training course.

High level of satisfaction in all three groups addressed (employees, managers and women).

The most important areas of vocational training remain diversification strategies, the creation of market-orientated quality products, professional training for family and external employees as well as the development of social skills for those with staff leadership. Courses on business transfer and stress management are becoming increasingly important. Of almost 60% of the surveyed, the reduced course fee was a major factor in taking part in the training measures. The reduced fee for training courses should be continued in order to encourage those farmers who either do not or only very rarely participate in training to participate in these courses.

The training programs should continue to stimulate personal development and strengthen independent thought and action.

Besides the Farm investment support (FIS), a milk funding programme (MFP) was set up in the course of the Health Check in 2009 in order to overcome the new challenge "Restructuring of the Milk Sector". Building

647 farms were supported with the FIS/MFP funding (121).

investments by farms were funded with EAFRD funds in the period 2007 to 2009. At the beginning of 2010, the state suspended the application process due to a lack of state funds and a generally good structural situation at the farms. A total of 647 farms were funded in the context of the FIS/MFP programs, of which 188 farms were funded in the context of sugar diversification. This amounts to 7.7% of full-time farms, or 4.6% of all farms.

The impact of the support was not uniform. Although the supported investments resulted in a significant growth, rationalisation and a productivity increase on the farms, the changes are primarily due to the investment and not to their (low) fixed-amount funding, which mainly caused deadweight effects. In the area of animal welfare, it can be assumed that the newly built dairy housing create good conditions for animal welfare (especially with respect to animal behaviour). In the area of pig farming however, new housings are commonly constructed with fully slatted floors and do not provide favourable conditions for a welfare friendly animal husbandry.

Investments supported growth in individual farms and a rationalisation, but this is primarily due to the investment and not to their (low) fixed-amount funding.

The FIS should be strictly directed towards the provision of public goods (mainly animal and environmental protection); as a general funding for improvement of the competitiveness of farms is neither necessary nor efficient. This path was taken at the beginning of the funding period 2014 to 2020. However, care should be taken at the national level to ensure uniform funding conditions in order to avoid distortions between federal states.

Focus of funding consistently on the provision of public goods.

In the context of the funding for processing and marketing (P&M), a total of 46 investment projects were supported with €21.8 million of public funds. The utilisation of the measure met the expectations.

46 projects were supported for processing and marketing (123).

The objectives of the P&M support were unspecific and the measure was not implemented in a targeted way. The increase in the producer benefit — one goal of the measure — is only indirectly affected by contractual obligation (sales protection). With respect to the effects of the support it could be determined that the investments supported with funding have led to significant growth at the level of the supported enterprise and a rationalisation or increase in key economic figures such as turnover and gross value added. This suggests improved competitiveness for the supported firms. Whether the measure improved structure and competitiveness of the entire agricultural and food sector could not be ascertained. Due to the limited number of supported enterprises, a substantial effect can be considered to be unlikely. The P&M funding was associated with signifi-

The impact of the support is not clear: while positive effects have been measured on the level of the supported firms, no sectoral effects could be assessed. cant deadweight and displacement effects which limit the effectiveness of the measure.

An unspecific support of investments in P&M projects is not advisable as the respective companies can finance themselves on the capital market. The funding should therefore be focused on innovations.

Modify aid significantly focus on innovations.

Land consolidation is an instrument that is suitable for solving complex problems relating to the use of land. It can provide farms with the necessary planning security in the case of such conflicts and, in addition, contribute to cutting costs for agricultural production through efficient field organisation. The funding was largely spent on ongoing operations. Only around half of the originally budgeted funds were spent, as processes in connection with large road construction projects were unexpectedly delayed.

Within the framework of Land consolidation (125/1), 40 processes on a total of 79,000 ha were funded (5% of the area of the state of *Schleswig-Holstein*).

40 processes on a total of 79,000 ha were funded (this corresponds to 5% of the area of the state of *Schleswig-Holstein*). Of the funding used, 59% related to road construction; 135 rural roads were developed with this funding.

Road building in the operation areas also led to cost savings of €0.3 million per year for the agricultural sector. Almost 80 percent of upgraded roads are also used more extensively by non-agricultural population groups.

For 4% of the operation area, legal ownership regulations were put in place to support nature conservation or water management. This also affected the environmental resources.

The decision of supporting land consolidation in the future only from GAK and state funding is expedient if these funds can also be made available according to need.

The need for rural roads has increased sharply in recent decades due to the continuing structural change in farming. Road building measures in the context of ZPLR were implemented via Axis 1 until 2009. Roads were developed to a length of 129.5 km. The total public funds spent on these projects amounted to around €6.2 million overall. In 2009 and 2010, the road building measures were financed in the context of stimulus package II. As of 2011, road building was again funded via ZPLR, but now via Axis 4 (411). 60% of the funds made available at the outset were spent. 51.1 km of roads were built via Axis 4; in total the funds were used to develop 180.6 km of rural roads. The lower level of applications received was in the first instance due to the changes in the German Municipal Charges Act

Road building resulted in cost savings, land consolidation solved conflicts of use and also had positive impacts on environmental resources.

Future funding via GAK/state funding makes sense.

129.5 km of roads were built via rural road construction (125/2); funding via Axis 4 since 2011.

(Kommunalabgabengesetz) and the related compulsory financial participation of adjacent owner.

With respect to the advantages for farming, model calculations show the significant impacts that the development status of roads have on transport costs and thus on the profitability of land management. There is a cost benefit to the agricultural sector alone of at least approximately €0.45 million a year. The attractiveness of rural areas increased due to the multifunctional use of the roads (tourism) and the quality of life improved (local recreational opportunities).

Positive effects in many impact areas.

Road building projects of particular supra-regional interest can't be realised if the relevant municipality is unable to contribute its own funds. Attention should be paid to the question, whether there can be a sharper differentiation of funding rates based on a municipality's financial strength. The existing regulations on financial participation of adjacent owner should be reviewed.

Review differentiation of funding rates and the regulations relating to participation of adjacent owner.

The floods of past decades have clearly shown that flood defence in *Schleswig-Holstein* continues to have a high need for action. In the funding period, a total of just under €9.7 million of public funds (incl. associations' and municipalities' funds) were invested in 23 flood defence projects (according to the project lists); of these €0.82 million in EAFRD funds were invested in two EAFRD projects.

Flood protection (126/1) was primarily funded via GAK (in two projects in the EAFRD).

The flood defence and flood prevention measure has far-reaching objectives in terms of protection and impact; the impacts however only appear after the end of the investments if and when it comes to floods. On the whole, the level of protection of the people living and working in the protected areas as well as the farms is increased step-by-step as a result of the project.

A higher level of protection reached step-bystep.

The safety standards of the protection of facilities must also be reviewed regularly in the future given the climatic changes. Flood defence is still a relevant issue, requiring large financial efforts in the potential flood areas. In future, appropriate funding will continue to be required.

Flood defence remains a relevant issue requiring public financing.

The requirements for coastal protection increase with climate change and the rise in the sea level as well as potentially more dangerous storms. Coastal protection therefore is and will remain a pertinent issue.

EAFRD funding only represented a small part of the overall financing of this measure. In the funding period, public funds of around €317 million were spent in *Schleswig-Holstein* for a total of 49 coastal protection projects (of these €70 million were EAFRD funds and €187.2 million top ups).

For coastal protection (126/2), a total of around €317 million of public funds were spent in 49 projects; the height of around 50 km of dyke was increased in

HC funds of €20 million (of these €15 million were EU funds) were included in the expenses, which were spent as part of the newly introduced dyke protection measure (126/2 II Dyke Reinforcement Measure "Climate Profile"). The height of around 50 km of dyke was increased in 14 projects supported with EAFRD funds.

14 EAFRD-funded pro-

The impacts of the measure only appear after the end of the investments if and when it comes to floods. They are presented based on measurespecific indicators:

Extensive protective impacts realised for areas, inhabitants and property.

Protected area: The total shown (more than 51,000 ha) is based on the information in the general plan on coastal protection for the respective dyke sections of the EAFRD project.

Protected inhabitants: The agreed upon level of protection was realised step-by-step for more than 53,000 inhabitants based on the supported EAFRD project.

Protected property value: The property value protected by the coastal protection project in the protected areas was estimated to be more than €8 billion. This total exceeds the funding used for coastal protection measures many times over.

As the primary coastal protection measures to achieve a consistently high standard of safety on the coast have not yet been completed and will continue to be needed due to the current increase in sea level alone, appropriate funding from the public will also continue to be necessary in the future.

Appropriate funding will continue to be required from the public purse.

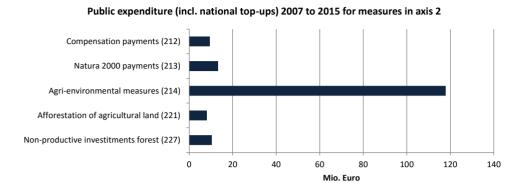
Axis 2 "Improvement of the environment and the landscape"

In Axis 2, Schleswig-Holstein offered agricultural and forestry measures in Axis 2: Area-related five EAFRD codes. The agri-environmental measures (AEM) (214) comprised five sub-measures. Investment measures were only offered in forestry, the agricultural measures related exclusively to area-related measures.

measures were in the foreground.

Including top-ups, about €159 million was spent (18% of the total pro- The agri-environmental gramme funds). AEM (214) were the dominant measures, with much less measure (214) was the public expenditures allocated to the other measures.

dominant measure in Axis



Altogether the budget initially allocated to Axis 2 in 2009) was spent in full. Whereby the expenditures for the Less-favoured-area (LFA) scheme (212) and afforestation (221) have been higher and slightly less funds were spent on AEM.

The planned funds in Axis 2 were spent in full.

The output targets set in 2009 were reached in the easily forecastable measures 212 and 213. For the AEM (214), the output indicators were significantly below target, similar to afforestation, whilst non-productive investments in the field of forestry realised higher output values. However, the EU requirements for quantifying objectives for the area-related measures were unclear due to the cumulative approach.

Output targets were only partly achieved.

Objective quantification was carried out based on the extent of funding and the main resource target of the various Axis 2 measures. The focus was more on agricultural than on forestry land. In the agricultural measures the focus was on farmland biodiversity and water quality. The LFA schemes focused on the "avoidance of marginalisation and abandonment of land use". The range of objectives for the forestry measures was broader, all resources were to be addressed to the same extent.

Biodiversity as a significant objective in Axis 2.

The common evaluation question for Axis 2 (How and to what extent did the measure contribute to improving the environmental situation?) has been applied differently to the public goods farmland biodiversity, water quality, soil functionality and climate stability. For the LFA schemes, reference was made to the evaluation questions from the previous period 2000 to 2006.

The common evaluation question is applied differently according to the protected areas.

For the LFA payments, public expenditure of €7.94 million were planned. The projected budget increased, with the result that around €9.5 million had been spent by 31/12/2015. At the beginning of the funding period islands without connection to the mainland as well as dykes and dyke forelands were eligible for funding. The eligible area was reduced to the islands as of 2010. The supported area was therefore most recently at

The LFA payment (212) was limited to islands without connection to the mainland.

around 8,000 ha.

Limiting the payments to islands without connection to the mainland was an appropriate approach. Only those farms received support that had a factual disadvantage compared to farms on the mainland (higher production costs due to the transport costs). The decision of not offering funding in all LFA is appropriate and also justified for the future.

The concentration of the LFA payments on islands without connection to the mainland is appropriate.

Compensation for grassland in Natura 2000 areas and in nature conservation areas (NSG) as coherence areas pursuant to article 10 of the Habitats Directive (conservation of natural habitats and of wild fauna and flora) was paid with the payment from measure 213. During the funding period, the supported area based on the Integrated Administration and Control System (IACS) data rose continuously from around 8,450 ha (2007) to around 18,260 ha (2014). The reasons for the positive development were the expansion of the Natura 2000 setting as well as the discontinuation of alternative area funding (compensation payment) which previously allowed higher payments for agricultural land.

Natura 2000 compensation payments (213) spent for 18,260 ha of grasslands

The primary objective of the measure pursuant to Article 38 of the EAFRD Directive, namely financial compensation for existing administrative regulations for grasslands in Natura 2000 and coherence areas was achieved in full. However, no, or only very few, additional environmental or biodiversity impacts resulted from this compensation. Impacts arose on supported areas where NSG regulations did not provide for cultivation conditions that were defined in the conditions for the compensation payments. When projected, positive effects arouse in *Schleswig-Holstein* e.g. in NSG with prohibition of drainage on 3,430 ha as well as on 9,040 ha with prohibition of deep turning soil cultivation.

The objective of financial compensation for existing regulatory cultivation restrictions was fully achieved; very few additional impacts.

The aim of the Natura 2000 payment was to provide financial compensation for restrictions in land use determined by administrative law. Against this background, and also as a basis for AEM, continuation of the Natura 2000 support is fully recommended.

Continue support.

AEM in the ZPLR comprised five components: the permanent grassland programme (214/1), the Hallig programme (214/2), the reduction of water pollutants (214/3), organic farming (214/4) and the contractual nature conservation (214/5). Biodiversity and water protection objectives were the only objectives set. *Schleswig-Holstein* reached a supported area of 60,150 ha via the ZPLR with AEM on average during the funding period. This corresponded to over 6% of the total agricultural area or 4% of arable land and 10% of grassland.

On average, agrienvironmental measures (214) reached 6% of total agricultural land.

Concerning the biodiversity objectives, there was a mix of measures with highly positive to medium impacts. These measures addressed a comparatively narrow range of targets, in particular meadow birds/migrating birds and amphibians on areas traditionally used as grasslands. In contrast, supported species and habitats on agricultural land played a subordinate role in terms of area. In all cases, good to very good local (on supported land) and partly regional impacts were recorded. However, given the small area of supported land it is unlikely that state-wide negative biodiversity trends could be stopped. On the whole, it can be seen that additional efforts on agricultural land and grassland are required for comprehensive biodiversity protection in *Schleswig-Holstein*. Protection efforts implemented outside of the ZPLR are also a contributing factor.

Regarding biodiversity: good to very good local impacts, which did not however stop the negative state-wide trends.

The target for AEM with a contribution to maintain and improve the quality of water was clearly failed. The mitigation effects in N balances and nutrient losses were also less than expected. Despite partial steering of the measures in problem areas related to water protection (WFD target setting) the mitigation effect there was only as high as in the rest of the state. With respect to the highest level of funding, the contribution of measures to reduce the nitrogen balance in *Schleswig-Holstein* was at just under 2,500 t N. Mathematically, this results in a reduction of 2.5 kg/ha N in relation to the agricultural area or, measured by the balance surplus calculated by Taube et al. (2015), a share of some 3%. 73% of the reduction was achieved by organic farming procedures.

Regarding water protection: the highest contribution was from organic farming procedures, however, reduction effects in N balances and nutrient losses were lower than expected.

The ambitious funding organisation of measures with a water protection objective was accompanied by cautious acceptance in the sub-measure 214/3. Nevertheless, the content of the AEM's high funding level should be continued. However, the discontinuation of support for buffer strips due to low impact and poor support efficiency is welcomed. It must be assessed whether AEM's offer of support for water protection can be supplemented by further offers of measures to increase the overall effect on the environment. The dissemination of ambitiously structured funding offers requires more support, which is expected from the WFD advices in the new funding period. The organic farming procedures realise positive contributions for all protected natural resources. We recommend continuing funding without restriction.

Continue funding with modifications, the dissemination of ambitiously structured funding offers requires more support.

This measure is relevant due to the extremely low forest cover in the region. In total, 270 ha of forest could be established. The measure had a positive impact with respect to biodiversity, soil/ water and climate. However, the state-wide impact was very limited due to the small area. The

270 ha of forest were established via afforestation (221) and thus very limited impact state-wide structure of the ZPLR afforestation support was not sufficiently attractive in financial terms compared to alternative options for land use (e.g. leasing) and afforestation instruments (e.g. compensation/ replacement measures).

Under the current conditions, support for afforestation should be suspended. An investigation should be carried out to determine whether the state can support afforestation better via managed compensation and replacement measures or projects similar to the "forest shares" in Mecklenburg-Vorpommern.

Discontinue funding and review alternatives.

The objective of measure 227 was to make forests more natural and to stabilise them ecologically by converting existing forests not appropriate to the location into stable deciduous and mixed forests. In total, approx. 1,735 ha (target: 1,600 ha) were converted. Forest restructuring was responsible for a directly positive impact on the public goods: farmland biodiversity, water quality /soil functionality and climate stability. The high level of documentation and administrative work for this measure during the funding process had a detrimental effect on acceptance of the measures among forest owners and among the supporting agencies, which are important for the implementation of forest support.

With non-productive investments in forestry (227), 1,735 ha of forest were converted to be more natural.

Forest restructuring should continue to be part of forestry funding. The establishment of deciduous and mixed forests should be funded under the same conditions.

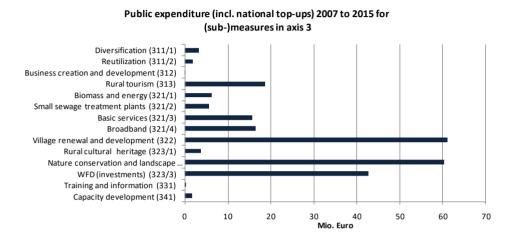
Continue funding for forestry structuring.

7 Axis 3 "Quality of life in rural areas and diversification of the rural economy"

In all EAFRD codes of Axis 3 measures were programmed by *Schleswig-Holstein*. In the ZPLR, the funding for rural development was subjected to a change in strategy. Due to a comprehensive introduction of the Leader method, almost all rural development measures were gradually implemented via the LAG *AktivRegionen*. The measures for Integrated Rural Development (IRD) programmed with their own financial budget in Axis 3 were primarily forseen for implementing the Rural Structural and Development Analysis (LSE) set up in the previous funding period. Up to 2009, project implementation was managed centrally by the LLUR and from 2010 the *AktivRegionen* were responsible for project implementation for most of the IRD measures (including rural road construction (125/2)).

Change of strategy in Axis 3: far-reaching implementation via AktivRegionen.

A special feature of the ZPLR was the high financial significance of Implementation of reinvestment measures in nature conservation and water protection in Axis 3 quirements from Natura which increased in the context of the Health Check. In total, €3,238 million 2000 and WFD via Axis 3. were spent in Axis 3; of this amount €127 million weretop-ups. This corresponds to a share of 27% of funds spent.



Compared with the budget allocation planned in 2009, the funding outflow was 81% (without top-ups). At the level of budget lines, it was only in village renewal and development (322) that more funds were used compared to the 2009 planning. The expenditures as of 31/12/2015 were below the 2009 budgets in all other measures. However, in addition a considerable amount of projects were financed solely nationally.

Fewer funds spent than planned in Axis 3.

Few common output indicators were specified for Axis 3, which had to be quantified ex ante: the number of beneficiaries or projects and the overall investment volume. These indicators are intrinsically already of low significance. In addition, targets were initially set without taking top-ups into account. It was therefore difficult to interpret the results.

Common output indicators have limited significance.

All the result indicators under Axis 3 were to be quantified in the programme planning document and used in the monitoring. It was difficult to interpret the results achieved at times. This applied in particular to gross value added (GVA). The employment effects were somewhat higher than originally planned. The additional number of tourists is difficult to determine and causal links can hardly be detected given that the projects were primarily focused on infrastructure. The population in rural areas benefiting from the services, as a common results indicator in measures 321, 322 and 323, is of little significance given the heterogeneity of the projects. The increase in Internet penetration was stated to be around 65,000 households.

Result indicators difficult to interpret.

There are three common evaluation questions (17 to 19) for specific Axis 3 measures that relate to economic factors, quality of life and capacity development, and are also relevant for most of the (sub-)measures. Questions related to the environment (biodiversity, water, climate) had to be supplemented for the (sub-)measures that were highly significant financially.

Common evaluation questions in Axis 3 must be supplemented by questions related to the environment.

The key objective of the diversification funding was to support investments in farms for creating additional income in the areas of specific services, offers in the area of recreation and tourism as well as space used commercially or shared spaces. In the context of measure 311/1, a total of 56 farms received support in the funding period. The uptake of measure 311/1 was therefore extremely low. The measure was hesitantly accepted at the beginning of the funding period. After 2010, the application numbers increased as a result of increased consultation activity and public relations work by LLUR and MELUR.

56 farms were funded via diversification (311/1); uptake was thus low.

Measured by GVA, the supported businesses showed extremely dynamic development on average. Around 45 jobs(gross) were created. However, some of these developments would likely have happened also without funding as there is generally no shortage of financing for such projects. Deadweight effects were observed.

Positive impacts for businesses but deadweight effects were relevant.

General support for profitable investments in enterprises with no financial difficulties should stop as a matter of principle. The situation may be different regarding the provision of public goods (e.g. animal welfare or environmental/climate protection, local supply, age-appropriate living). Entry in income combination is frequently associated with higher financial risk at the outset. Entry assistance may be meaningful to compensate for this hurdle. Depending on the problem, different instruments such as capital subsidies, sureties, ongoing payments, funding for training or advice may be appropriate. Modified funding concepts should be developed which become effective through creating synergies between coordinated measures.

No funding of investments in businesses that are in any case profitable but support entry in income combination.

Measures 311/2, 312, 313, 321/3, 322, 323/1, 331 and 341 have several special features: They were all implemented via the Integrated Rural Development guideline; their purpose was to finalise the "Ländliche Strukturund Entwicklungsanalysen" (LSE) created in the funding period 2000 to 2006. As of 2010, relevant projects have to be implemented via the AktivRegionen and their budgets; for these measures, there was no further funding of individual project budgets via Axis 3.

The measures for rural development (311/2, 312, 313, 321/3, 322, 323/1, 331 and 341) were only supported in the years 2007 to 2009.

Two measures were implemented in a different mode than planned: For measures 311/2 and 322, individual projects were still implemented after 2010. There were different reasons for this: For measure 311/2, the implementation of funding of farms via the *AktivRegionen* was shown to be inappropriate and, for measure 322, short-term funds were used for projects relating to sports fields.

In total 1,500 projects were implemented; of these 220 projects with EU funds.

In total, around 1500 projects were implemented in the IRD measures; of these around 220 were funded by the EU. Almost half of the implemented projects came from measures 322, a quarter from measure 313. The remaining quarter is attributable to the other measures.

An overall view of the projects (of these measures) supported by EU funds shows that their impacts were primarily in the area of village-based communal buildings and other institutions significant for the cultural and social life in rural areas (e.g. village community centres, youth facilities, local basic services (e.g. *MarktTreffs*), multifunctional buildings, sportsfields). In addition, special infrastructure projects were supported (tourist routes, public spaces in villages). The funding impacted the aspects of attractiveness of the residential location and social life. The variety of projects resulted in very different impacts in the regions, which are therefore difficult to quantify.

Diverse impacts on the cultural and social life in rural areas and on the attractiveness of residential environments.

The approach of the Integrated Rural Development that began with the LSE has been transferred to the *AktivRegionen*. However, in the mid-term evaluation it already became evident that certain larger investment project types (for example local basic services - *MarktTreffs*) were implemented to a lesser degree. They adressed more local needs but would have significantly tied the budget of the *AktivRegionen*. It would be appropriate to additionally earmark the funding of such projects in addition to the *AktivRegionen*.

Integration in Leader has proven to be successful but this should not be the only funding option for certain project types.

17 projects were implemented. Of these, half related to biogas facilities with agricultural substrates and the other half related to facilities for the use of biogenic solid fuels (wood). In view of the funding landscape, focusing on innovative facilities was an appropriate contribution to the further development of biomass/energy use. 95% of beneficiaries were private bodies. Not all projects were sustainable successful.

17 projects focused on innovative facilities for biomass and energy (321/1) were implemented.

It was evident that the application of technologies partly required a high level of further development work in order to reach the planned output. The effect on income was one third positive and one third negative (unable to estimate for the others). Nine facilities contributed to energy supply and 13 to heat supply (from renewable energies).

Positive and negative income effects.

Small sewage treatment plants (SSTPs) are always operated in environments where it is not technically possible or not cost-effective to connect to the public sewage canal system. Ageing SSTPs were refitted with a biological treatment stage so that they are in keeping with the current technical standards. SSTPs were funded with EU funds in 54 municipalities for around 3,200 residential units (information according to the project lists). This created a treatment capacity that corresponds to around 11,700 population equivalents.

With small sewage treatment plants (321/2) treatment capacities for around 11,700 inhabit-

ants were created.

The projects were mainly realised in municipalities where a larger number of SSTPs had to be refitted. Measurement results for eliminating pollutants were not available for the ex-post evaluation. Refitted small sewage plants, for instance, contribute to improving the quality of water as carbon is eliminated in accordance with the generally recognised rules of technology or must at least be complied with. In addition, a certain amount of nitrogen elimination is seen in the SSTPs.

There are no specific figures on the elimination of pollutants, but eliminating carbon and nitrogen improves the quality of water.

If there are indications of poor operation of the facilities or poor conditions, based on the large number of SSTPs it must be considered whether support for improving the operation of small sewage plants is beneficial outside of the EAFRD. Provision of targeted information and advice, on proper maintenance for example, is conceivable for the owners operating the small sewage plants and for maintenance companies.

Targeted information and advice offers should be provided in the event of problems.

The need for improving broadband access in rural areas is large and cannot be covered without funding. Funding options in the GAK were limited but could not result in comprehensive development of a high-speed network and also offered few options to cover the need based on their financial capacities. In total, 46 projects were supported with €5.1 million of EU funds.

For broadband (321/4), 46 projects for just under 65,000 households created better Internet access.

All the projects supported with EU funds included support for the profitability gap. With 35 projects and around €4 million in EU funds, the geographic focus was in the district of *Schleswig-Flensburg*. There was no information on the development status after the support, but with 16 to 50 Mbit/s it is significantly over the maximum 2 Mbit/s that was previously available. According to information received as part of the monitoring, 64,817 households received the option of getting a better Internet connection, i.e. approximately 5% of all households in *Schleswig-Holstein*.

Approximately five percent of all households in Schleswig-Holstein were reached.

Funding approaches coordinated by the various political levels (EU, federal government, state), supporting applicants and the use of additional funds are important for the future. A state-specific funding approach was intro-

With the LPLR 2014-2020, a better, country specific funding approach is in-

duced with the LPLR 2014-2020, which offers significantly more appropriate expansion options.

troduced.

Some 63% of the funds utilised in sub-measure 323/2 were for safeguarding land. Approx. 29% of the funding went in measures to create and regenerate natural environmental settings. The FFH management planning only used up just under one percent. It was funded outside of the EAFRD in the first instance. Cooperations (so called Local actions (*Lokale Aktionen*)) were supported with 6.6% of the funds used. Some 58% of the funds went to the state-wide foundation, *Stiftung Naturschutz*. 14% of the funds were spent in land consolidation areas.

The purpose of the projects relating to nature conservation and maintenance of the countryside (323/2) were in particular for safeguarding land (63%).

Directly (habitat management) or indirectly (purchase of land, safeguarding land), positive impacts on biodiversity are apparent in different forms in all project areas. The case studies described in the module report show the contribution that individual funding projects have made. 67% of funding was deployed directly in Natura 2000 areas. A further 10% of funding was used for EU species protection measures. The funds were thus used in a highly focused way for the implementation of Natura 2000 (jointly approx. 80%). Impacts regarding the "environmental awareness of the rural population" are also to expect, due to the work of the Local actions.

The funds were used in a highly focused way for the implementation of Natura 2000, impacts regarding the "environmental awareness of the rural population" are also to expect.

In many areas there is a significant need for linking nature conservation objectives and measures to local and regional development activities. In this connection, the local actions were highly successful in *Schleswig-Holstein*. This funding approach is regarded as best practice and should be expanded further.

Funding of Local actions should be expanded further.

652 projects were funded in sub-measure 323/3 (WFD (Water Framework Directive) – near-natural structuring of watercourses, re-wetting of bogs); these related to a stretch of some 1,120 km and an area of approx. 741 ha. Bog growth was initiated on approx. 85 ha. Just under 44% of the funding was used to restore river continuity. 24% of the funding went to improvement of river structures. The same applies to the purchase of land and the establishment of edge strips. On the whole, the amount of the funding used was not as high as originally planned. In the first instance, this was due to a lack of available land as a result of increasing usage competition (land is required e.g. for energy corn cultivation).

For the projects relating to watercourse development/investment measures (323/3WFD), 44% related to the restoration of river continuity and 24% to the improvement of river structures.

The measure served the improvement of water quality and the physical restoration of water bodies. Projects relating to the restoration of river continuity were primarily focused on improving habitat qualities with respect to fishes and macrozoobenthos. Sediment and nutrient input in watercourses was lowered due to the establishment of buffer strips. This

The funding measures contributes in its entirety to the meeting of the targets of the EC-WFD, positive effects combat-

improved the quality of water as well as the habitat conditions for animal and plant communities. The funding therefore contributes in its entirety to the meeting of the targets of the WFD. Impacts on climate protection can be expected in individual projects due to the re-wetting of low moors on approx. 85 ha.

ing climate change can be expected.

In the context of the objectives of the EC-WFD, there is an ongoing high demand for funding in watercourse development. Given the expected further increases in technical and administrative requirements for applicants, including in the funding period 2014 to 2020, solely national financing of smaller projects in particular or those with maintenance associations or other initiatives should be continued or even expanded.

Funding instrument continues to be important for implementing the WFD.

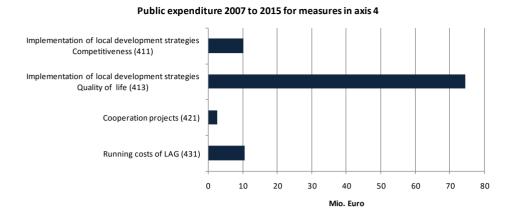
8 Axis 4 "Leader"

In Axis 4 21 AktivRegionen were selected on the basis of an approval-process as of the second quarter of 2008. Schleswig-Holstein thus implemented Leader as an almost state-wide approach. Around €62 million of EU funding was available (based on 2009 figures), which had to be cofinanced by the AktivRegionen. The EU funds were allocated to the AktivRegionen as their own budget. The majority of the funds were earmarked for the implementation of local development strategies — quality of life (413). With Health Check, funds were allocated that were to be used specifically for climate protection, renewable energies and innovation. Over and above the budgets of the individual AktivRegionen, a state-wide selection process of additional flagship projects (so called "Leuchtturm-Projekte") was additionally funded. It was therefore possible to also fund larger projects.

Almost state-wide Leader approach, additional flagship projects.

92% of the public funding planned in 2009 was spent, amounting to €97 million. A low implementation rate was only reached in measure 411. As a result, Leader accounted for eleven percent of the public funds spent (including top-ups). Around €74 million went into projects under 413 (76% of total Leader expenditure). €16.1 million were HC funds.

The focus of implementation was on projects to improve quality of life (413).



Around 40% of the public funds for measure 41 went to village renewal with these projects being very varied in *Schleswig-Holstein* and often going beyond traditional village renewal. In addition to structural projects, feasibility studies and, to a large extent, also community facilities were funded. For the HC measures (23% of public funds for implementing development strategies), energetic renovations were focused on. New technologies were also funded. In tourism (20% of public funds), there were smaller infrastructure projects but also some visitor centres such as the "*Wattenmeerhaus*" and the climate pavilion.

Only 90% of the HC funds allocated to the *AktivRegionen* were spent. There were even more significant implementation deficits in the area of rural road construction (411). The reason for this was the difficult budget situation of some municipalities and, in particular, the now changed legal basis regarding the collection of resident contributions. By contrast, the cooperation projects (421) were largely realised as planned.

The establishment of Leader features (such as participation, cooperation and networking) was very largely successful in the *AktivRegionen*. Positive aspects worth mentioning include very good communication across the state, the large number of cooperation projects in *Schleswig-Holstein* and the coordinating function of the regional management.

On the question of the extent to which the establishment of Leader features was able to contribute to the desired Leader added value, positive impacts emerged through participation and the regional approach.

Altogether improvements in relationships, contacts, knowledge and the capabilities of the stakeholders were noted. As a result, there was an improvement in regional cooperation between public and private stakeholders, in particular, and across regional areas.

The *AktivRegionen* focused on village renewal, HC projects and tourism.

Successful establishment of Leader features and positive impacts on regional cooperation.

The projects addressed a wide range of problems depending on the regional needs for action. A large proportion of the projects were aimed at tourism. As an overall regional concept is important for supporting tourism, including the projects in the *AktivRegionen* processes was a positive sign. Further impacts were noted in the improvement of quality of life in rural areas. Here, impacts arose due to the funded leisure and social infrastructures in the form of village community centres, multi-generational social centres and institutions for assisting seniors or the youth. The Leader approach offers particular opportunities for the area of demographic change. Thus, it was also possible to implement innovative ideas e.g. in the form of local supply, health, care and mobility projects.

Wide range of impacts through the projects supported, particular opportunities due to innovative ideas and projects modified appropriately to the region.

Implementation of the HC funds via the *AktivRegionen* was a good approach to entrench the topic of climate protection in the regions. However, the (initially changing) formal requirements prevented optimal utilisation. The integration of rural road construction in the *AktivRegionen* approach was less appropriate on the whole.

Deficits in the implementation of HC funds and road construction.

Creative and committed regional actors from different sectors of society are required in order to identify appropriate solutions for the challenges in rural development. One of the strengths of the *AktivRegionen* is the generation of ideas that can also be transferred to other regions via networking. For this purpose, the LAGs should increasingly dedicate themselves to finding innovative solutions in the various fields of action. In order to use the creative potentials for non-standard projects, open funding conditions should be provided accordingly. This was implemented in the new funding period following the principle that all projects are eligible for funding that contribute to the objectives of the respective Integrated Development Strategy (IDS). In particular in the first half of the funding period intensive exchange and support by the approval agencies required in order to strengthen decision-making confidence in the conflicting area between legally sound project administration and use of the new options towards "use of options".

Change implementation frameworks and use new options.

In the new funding period, the co-financing problem was countered with support of regional funds by the state. The issues addressed by the LAGs are based on the need for regional action, but the state can "promote" certain issues in the future (through information, opportunities to share ideas, thematic competitions).

9 Programme impacts

The ZPLR resulted in a negligible effect on economic growth. Although the analyses proved that the ZPLR had a low and positive effect on the gross value added of the primary sector, from a macroeconomic view, these effects are however marginal. Furthermore, non-quantifiable value added effects in the non-primary sectors arose due to the funding of P&M (123), tourism (313) as well as *AktivRegionen* (411, 413). Due to the low economic growth effects throughout the state, the ZPLR made a negligible contribution to achieving the Lisbon objectives. In contrast to the ERDF with its focus on economic and employment growth, the EAFRD contributed to infrastructure, public services and regional development processes and thereby supported the economic and employment development in rural areas more indirectly.

areas more indirectly.

The results reveal the fundamental conflict of objectives which is created by the EAFRD Directive itself, namely between the growth objective of the the Lisbon strategy and the (regional and sectoral) balancing objectives of the EU rural development policy. It would therefore make sense to modify

the formulated objectives of the EAFRD to reflect their real strengths.

The employment effects of the ZPLR were low ranging between 103 to 170 new full-time equivalent jobs and remained below the target of 450 new permanent workplaces. New workplaces were created almost exclusively in the non-primary sectors due to the funding of P&M (123) as well as *AktivRegionen* (413). The net employment effect inside the primary sector was close to zero as of workplaces created (diversification, 311) and workplaces reduced due to rationalisation effects (FIS, 121) are about the same.

During its term, the ZPLR increased the demand for capital goods and services. Mathematically, this means about 1,683 additional full-time workplaces per year due to economic employment effects.

In the context of ongoing negative trends for biodiversity indicators and in view of international conservation obligations, there was a strong need for action to protect and improve biodiversity. Looking at the two impact indicators (areas with a high nature value (HNV) and farmland birds), it was evident that the contributions coming from the ZPLR for maintaining biodiversity in *Schleswig-Holstein* were not sufficient to stop or even to reverse the negative development of the indicators. Therefore, negative trends for farm birds and HNV areas continued during the term of the programme. However, if the ZPLR had not been implemented, even stronger negative trends in the impact indicators would have been expected. The

Positive impacts but marginal influence on economic growth.

Employment: Temporar employment effects exceeded the few directly created permanent workplaces.

Despite the ZPLR's positive impacts on biodiversity, a negative trend throughout the state continues. lack of a trend reversal in the indicators was on the one hand due to too little extent of supported agricultural land and investment measures with high-quality impacts and, on the other hand, strong external impact factors such as the loss of grasslands, intensification of land use due to constricted crop rotations, grassland that can be mowed multiple times a year and energy crop cultivation played a significant role in the development of baseline indicators.

Funding for individual farms achieved little, among other things because of the significant deadweight and displacement effects in relation to labour productivity and competitiveness in the agricultural sector. As a consequence, the FIS was discontinued. However, growth and rationalisation pressure as well as social requirements will continue to raise new challenges for business management in the future. In the context of funding a modern and competitive agricultural sector, the EAFRD funding should be focused on targeted support of human capital and the provision of public services (animal welfare, environ, infrastructure). For this purpose, funding options that link targeted investment incentives for improving resource efficiency, climate-related aspects, animal welfare as well as regional value creation chains with specific consultation measures should be examined. In the future, particular attention should also be placed on rural infrastructure. Improving the condition of roads and bridges remains an important factor for developing the competitiveness of the agricultural sector.

Funding of individual farms achieved little for the competitiveness of the agricultural sector, future focus on public services and rural infrastructure is recommended.

Over the funding period, the basic political and economic conditions for agriculture and in particular for dairy farms changed significantly; the markets became more volatile. The FIS meant to accompany the restructuring process had ambivalent impacts as the proven funding rates were very low resulting in considerable deadweight effects. The production capacities of farms would have been modernised or expanded even without funding. The additional HSC funds (for the FIS) on primary sector development may have had a negligible effect. In contrast, the P&M support may result in the significant rationalisation and diversification effects among farms, which could also have a positive effect in the future.

Contribution to restructuring of the milk sector: marginal in relation to market forces, however positive effects for P&M funding expected in the future.

Potential contributions of the programme to climate protection were distributed across the production of renewable energy, avoidance of greenhouse gases and adaptation to the consequences of climate change. Regarding the latter, significant effects are noted due to the coastal protection strategy. Forestry measures (227) and the AEM sub-measures of organic farming, environmentally friendly application of slurry and winter greening proved to be particularly efficient for saving greenhouse gas

ZPLR contains efficient measures, overall impacts on climate protection are limited, focus expectations and evaluation on appropriate fields of action.

emissions with annual costs below $\in 0.1/kg$ CO_{2Äq}. Even if climate protection is only a sub-objective in the EAFRD, measurable results were still achieved with the programme. Fields of action in climate protection that can be appropriately addressed via the EAFRD, in particular adaptation to the consequences of climate change, are in the area of flood defence and coastal protection as well as vocational training and business advice. One option would also be to use the *AktivRegionen* to induce and spread innovation both for networking and consultation projects. Forestry and fen protection measures represent important activities for which significant synergies with other resources (biodiversity, water protection, soil and cultural landscape protection) can be triggered.

European guidelines for water management that the EAFRD funding also refers to, are set out in the regulatory framework of the Water Framework Directive (WFP). On the whole, Schleswig-Holstein is one of the federal states with the highest nutrient surplus in Germany. A further problem are nutrient inputs in surface water and in particular coastal waters. In the ZPLR, the AEM primary helped to reduce nutrient surpluses and to avoid nutrient inputs in waters. The effectiveness of the various AEM offered was clearly proven for the supported individual site. If the positive impacts of AEM in the WFD scenery are meant to be increased, an increase in the acceptance of existing measures should be aimed for. Water protection advice takes a key position here. In addition, the range of measures could be expanded and focused more appropriately on the problems. Due to the investment support in water protection in connection with the provision of land via land consolidation, important funding contributions to improve the water structure were made. Furthermore, relevant WFD objectives were realised.

Positive impacts on water management through AEM but WFD objectives not met.

Due to the absence of methodological concept, the term "quality of life" first had to be operationalised. A concept developed in social sciences was used, according to which quality of life can be sub-divided into various dimensions. Under the various dimensions of quality of life, the mix of measures in the ZPLR mainly contributed to the dimensions "personal activities (leisure)", "political participation", "social relationships" and "local residential conditions". Supported community facilities improved the availability of meeting places for social life and community activities in villages. Local services and the recreational infrastructure were also improved. Required region-specific actions were addressed with the concept- and participation-focused approach of the *AktivRegionen*.

With respect to quality of life, projects in various dimensions were effective and region-specific requirements were addressed through the AktivRegionen.

Approaches to innovation were described in the programme but were anchored in only a few measures as a condition for funding or a selection

Numerous innovative approaches within the

criterion. In terms of practical implementation, only a few innovative projects could be identified in which the categorisation "innovative" depends on the definition of the term. In the *AktivRegionen*, for instance, many new approaches were implemented for the respective region. However, innovative approaches which also carry the risk of failure are difficult to implement because of the restrictive conditions on EAFRD funding. The approach in the new EAFRD funding period, e. g. the European Innovation Partnerships (EIP) measure with cooperation with businesses and science place a stronger emphasis on the objective of innovation and should be regarded as a more target oriented approach.

meaning of "New in the region" were implemented but better funding conditions are required for more and
more far-reaching innovations.

The funding contributed to developing the broadband networks in *Schleswig-Holstein*. The contribution was negligible, in view of the large and growing demand. In order to keep pace on a global comparison, an overall approach to develop the broadband infrastructure at the Federal level would be the most appropriate solution. In any case, support within the *Schleswig-Holstein* requires a modified overall approach and funding beyond GAK. In addition to the extension of the networks, there is a need to encourage the use of broad band technologies by business and the population. This topic also offers a starting point for EAFRD support.

Push forward the extension and use of broadband, design a master plan for this purpose

As *Schleswig-Holstein* did not offer specific support measures for the improvement of animal welfare in livestock farming, the animal welfare effect of the ZPLR was negligible. The topic of animal welfare will further challenge agriculture and the agricultural policy in the years to come. The focus of FIS on welfare friendly housing, introduced by *Schleswig-Holstein* for the programming period 2014 to 2020 is thus a step in the right direction. Further measures (i.e. extension, animal welfare payments) are required in order to achieve substantial improvements in animal welfare.

The topic of animal welfare remains important in the future, adjustments in funding required.

Even if measures of the ZPLR were primarily classified as equality-neutral, in the relevant impact areas of "employment and entrepreneurship", "training and gender competence" and "compatibility of family and career", it was possible to identify contributions to objectives relating to gender equality policy. There is still a need for improvement in the area of "participation in decision-making processes" in relation to the quota of women involved in the various committees, e.g. in the Local Action Groups (LAG). Despite the limited potential of the EAFRD in terms of support policy for implementing equal opportunities objectives, there are starting points from which aspects of gender equality can be addressed with greater impact in future. Measures with a potential for gender equality should be profiled more consistently by means of specific (quantitative) objectives, indicators and selection criteria for the horizontal objective in

Profile measures with potential contributions to gender equality and intensify activities.

order to make valuation benchmarks more visible and to intensify the active work done by the administrations.

10 Implementation of the ZPLR and funding efficiency

Schleswig-Holstein spent a total of approximately €2.4 million of public expenditure on Technical Assistance (TA, 511) and was thus below the budget initially allocated in 2009. TA had a share of 0.4% of total public expenditure spent. Most of the TA expenditure were spent for the evaluation (71%). The extent to which TA contributed to capacity building depends on the reflection of evaluation findings and recommendations. Supporting elements were certain in the formative character of the evaluation and the focus on implementation aspects. The use of TA expenditure for database systems (17.5%) was in second place. Essential functions in the implementation of programmes are functional and user-friendly database systems, as they support and guide the work of the administration. The IT financed by the TA however only represented a small portion as the majority of IT costs were borne solely by the state. In future, the TA should be used more frequently to eliminate bottlenecks at the programme steering. Minor amounts should be financed by the state to simplify the administration.

71% of the public funds for Technical Assistance (511) were used for the evaluation.

Evaluation of the efficiency of the use of resources comprises the following dimensions: (1) Implementation efficiency, (2) Extent of deadweight, additionality, (3) Occurrence of synergies and (4) Funding efficiency. In order to illustrate the costs, reference was made to the results of an implementation cost analysis (ICA), and to the results of the measures and detailed topic evaluation in considering the impacts. The ICA comprised quantitative cost analyses and qualitative causale analyses regarding the extent of the implementation costs (ICs) and the strengths and weaknesses of the implementation framework. Absolute and relative ICs were shown. The latter are expressed by the percentage of implementation costs in relation to disbursed funds and are used as measure for the implementation efficiency. This value alone is not sufficient in order to assess the excellence or effectiveness of the measures. For this further causal analyses in combination with the impact evaluation are needed (funding efficiency or cost-effectiveness).

Evaluation of the efficiency of the use of resources was carried out on the basis of an implementation cost analysis and the evaluations of impacts in the context of the measures and detailed topic area evaluation.

In total, around 210 APCs within the state administration, the designated institutions and the funded regional management of the *AktivRegionen* were needed for implementing the ZPLR in 2010. Costs of €9.45 million were associated with this. Round about 24%, or €2.3 million of the implementation costs went on programme overheads. Of the measure-related

Measure-related implementation costs arose mainly with the LLUR and the specialist departments in MELUR. ICs, 38% were attributed to the LLUR, followed by the departments in ME-LUR at 31%. The rest was distributed to the *Landgesellschaft* (18%), the regional managements (10%), the Chamber of Agriculture (2%) and the Agency for Coastal Protection (0.3%).

The five largest cost drivers in the ZPLR in 2010 were contractual nature conservation, Leader, the measure for implementing WFD (323/3), the agricultural investment funding programme and organic farming within measure 214. A good two thirds of ICs, but only 38% of funding, are attributable to these measures.

Two thirds of absolute ICs were attributed to 5 (sub-)measures.

In relation to the average public funding in 2009 to 2011, the relative ICs of ZPLR accounted for 14% of the funding disbursed (without coastal protection accounted for 18.2%). The measure-related ICs made up around 10.4% of the public funds disbursed. The program overheads costs were around 3.4%. The relative ICs of the group of area-related measures (EAFRD_IACS), at 16.4%, were above those of the group of investment measures at 8.5% (without coastal protection, at 12.6%). Of the area related measures, the highly site specific contractual nature conservation (214/5) had the highest IC/ha at €97 per ha of funded agricultural area.

The relative ICs for arearelated measures were on average higher than the ICs for investmentmeasures.

The investment measures rural road construction, forest restructuring, the sub-measure WFD (323/3) as well as Leader showed above-average high relative ICs. For Leader, this is certainly also explained by the below-average disbursement level of the measure, with simultaneously high expenses for the start-up phase, prevailing at the time of the survey. In all federal states, forestry funding measures were above the average of the measure-related relative ICs due to intrinsic factors.

High relative ICs partly also explained by delayed implementation.

The programme implementation costs increased compared to the previous period. The reason for this is a significantly higher expense on the part of programme overheads, for example more manpower in the managing authority and the certifying body. Cost developments differed at the measures level. In many measures, absolute ICs decreased due to the partially significantly lower scope of funding. However, relative ICs increased frequently as expenses were significantly higher per project due to the greater processing requirements. In contrast, measures such as contractual nature conservation (214/5) as well as nature conservation and land-scape maintenance (323/2) improved their implementation efficiency compared to the previous period.

In general, the implementation became more expensive compared to the previous period, however heterogeneous development at the measures level.

The qualitative causale analyses tackled with the factors affecting the ICs. These included groups of factors such as the legal framework, the organisational structure and IT support. When comparing the Federal states, it became clear that *Schleswig-Holstein* found pragmatic solutions for the problems generated by the EU requirements, which resulted in high implementation expenses elsewhere. Responsibilities were clearly allocated and the processes effectively organised in the ZPLR organisational structure on the whole. However, staff shortages due to the sharp reduction in personnel in the state's public service is evaluated as critical in terms of management. In IT, *Schleswig-Holstein* participates in a joint state initiative that was evaluated as positive due to the exchange of technical expertise but is still not adequately agile due to the time-consuming coordination. A significant problem was found in the time management of IT modifications required. The time given for test runs was frequently inadequate due to staff shortages.

Generally efficient programme implementation with only isolated problem areas identified.

The EU regulatory framework proved to be problematic in principle because of its inconsistency, continuous differentiation in the complexity of regulation and retrospective application of modifications. The legal framework conditions should therefore be kept stable in the next funding period. Individual regulations that turned out as inadequate should be abolished. Thus for example, the sanction regulation for EAFRD investment should be reconsidered. The requirements for controls, documentation and reporting obligations should be critically reviewed as the quality of the reports is questionable in parts and their evaluation is hardly possible in view of their sheer quantity.

Simplify the EU regulatory framework and keep it consistent.

Deadweight effects reduce the efficiency of funding because the money spent is not associated with impacts, as projects would also have been realised in an identical way without any funding. Avoiding deadweight effects completely is virtually impossible. Whether the extent of deadweight effects can be tolerated depends in particular on the relevance of a measure for policy aims. On the whole, *Schleswig-Holstein* was characterised by low deadweight effects in a comparison of states examined. A significant portion of the deadweight effects arising had investment funding for holdings. In the AEMs, deadweight effects were largely excluded, apart from the permanent grassland programme (214/1), as the design of the measures was more demanding than the national framework regulation (GAK). *Schleswig-Holstein* is expected to focus the alignment of the funding in investments more strongly on public services in the 2014 to 2020 programme. For the AEMs, the path of an ambitious measures design already taken should be continued.

Efficiency losses caused by deadweight effects were minimised by an ambitious funding design. Overall, the problem of a lack of additionality in funding measures for public beneficiaries played an extremely subordinate role. Rather, the knock-on effects of the support were highlighted in the surveys. Through the EAFRD support, the municipalities' capacity to take action increased, especially in projects for which financing would otherwise have been impossible despite the demand. In *Schleswig-Holstein*, for instance, this related especially to projects for the youth target group. In the context of an efficient use of resources, for some basic infrastructure measures the basic question arises as to whether they are hosted adequately in a funding system which drives high transaction costs. Fundamentally, the entire system of municipal financing of public services should undergo a thorough review.

Additionality: Public recipients of funding would not have implemented most of the projects without EAFRD funding.

The precarious budgetary situation of many municipalities, coupled with the need for public *co-financing* of projects that is anchored in the EAFRD, generally increased the risk of (geographical or content-related) misallocation. Significant problems relating to the co-financing came to the fore in Leader. Some projects of private bodies were not realised because the municipalities were not prepared to provide the support for co-financing and no other sources were available. In the view of regional actors, the mandatory requirement of public co-financing for EAFRD funds prevented projects that would have been important to the regions from being realised. Financially weaker municipalities in addition had problems in finding their own share of human resources to manage the EAFRD application procedures.

Risks of geographical or content-related misallocation because of cofinancing bottlenecks.

Synergy effects between measures the scope of which had a positive effect on funding efficiency without being able to be quantified in more detail were identified. There is great potential in providing so-called multifunctional measures with synergetic effects, such as organic farming and moorland regeneration as well as the realisation of integrated, concept-based funding approaches (e.g. LDS). Strengthening the Leader approaches and the full integration of all IRD measures in these regional processes was linked to synergies for regional development impulses and improving the quality of life. Fundamentally, the Leader process and the IDS proved to be appropriate ways of bringing together projects at a regional level and creating a coherent coordination and decision-making framework through the LAG committee. This also applies in relation to quality enhancement of *Schleswig-Holstein* as a tourist location, to which a whole bundle of measures in the ZPLR contributed.

Synergies are possible through bundling effects of Leader and multifunctional measures.

In the discussion of the global funding efficiency of the ZPLR, the amount of money that went to measures called top performers and those who missed their targets was determined in relation to areas of impact relevant to the programme. Top performers were defined as measures with secure interdependencies and particular (local) intensities of impact. Around three quarters (76%) of the implementation costs and 80.5% of the funding (69.5% without coastal protection) went into the implementation of particularly effective measures (top performers) in at least one impact area. It was possible, in the first instance, to identify top performers for all environment-related impact areas and for improvement in the quality of life.

The funding efficiency of the ZPLR is characterised by a high proportion of resources for top performers.

Missed targets were more frequent in particular in the impact areas of growth and employment relevant to politics. Here, targets were formulated at the level of the programme strategy that partly exceeded the measures potentials (among others, in Axes 3 and 4) and were not the focal points of their implementation. Original targets defined on measure level were only not achieved by a few measures. Only 2.3% (3.7% without coastal protection) of the funds used had no proven impact for original measures targets.

Missed targets were largely created by inflationary targets in the areas of growth and employment.

On the whole, the ZPLR had a sophisticated programme design with a differentiated funding structure and a high level of precision. Classifying measures according to the types "individual" (single-case specific) and "standardised" implementation resulted in the ZPLR having the highest portion of public funds, of all the state programs examined, that were individually implemented. This applies to both EAFRD-investment as well as area-related measures. Although many features of the selected funding strategy and the measures structure resulted in higher implementation expenses, the effectiveness of the funding, and thereby the funding efficiency, was increased simultaneously. In a Federal state comparison, the comparatively low relative ICs of the ZPLR could therefore not be realised through content-related cutbacks but despite the ambitious programme design. In part, this was associated with (too) many demands made of the low level of staff.

ZPLR pursued a sophisticated programme design with a differentiated funding structure and a high level of precision.

There are various starting points for further enhancement of funding efficiency. A carefully considered decision should always be taken as to which measures are offered with EU co-financing and which without. Every micro measure in the programme significantly increases the cost at the level of programme overheads. Measures that are difficult to standardise should rather be supported externally, especially if nothing changes fundamental-

Use levers to increase funding efficiency:
Lower ICs and ...

ly in the legal framework. An open discussion regarding the relatively low de minimis thresholds in the funding period 2007 to 2013 should be held with all the authorities involved. Potential trade-off relationships between administrative economy, the effectiveness of the measures and their acceptance should be evaluated against the background of the respective measures targets.

An ambitious programme design accordingly requires appropriate human resources, especially also in State Agency for Agriculture, Environment and Rural Areas (LLUR). Due to the often specific configuration of the projects and beneficiaries, the Leader approach is often linked to additional expenses in the project completion for the granting authorities. Given this background, a good line-up of regional managers is a determinant factor of success.

... secure and increase effectiveness.

To reduce deadweight effects even further, the profile of farm investment support should be sharpened and directed towards public goods (e.g. animal welfare, innovation). Along with this, advisory offers should be established that optimise this investment both in the conceptual phase and throughout the operating phase. This can be carried out either through corresponding EAFRD support or via the state's advisory services. This approach could strengthen the up-take of the measures and the sustainability of their effects. For effective water protection, AEMs must be developed with greater acceptance and, in principle, the balancing of voluntary instruments and regulations should be revisited.

Consistent focus of support on public services and "distribution of tasks between regulations and voluntary instruments" should be readjusted.

11 Overall assessment and general recommendations

The main effects of the ZPLR were in the impact areas of biodiversity, water and quality of life. Impacts realised in relation to biodiversity are regarded as high, in the impact areas of water, climate, quality of life and the agricultural sector as moderate and, in relation to the economic and employment growth, as low. There are various reasons for the partly limited effectiveness of the ZPLR: On the one hand, the relevant levers for reaching the targets lie outside of the programme's scope and, on the other hand, there is still optimisation potential in the ZPLR for individual measures that are shown in the respective measures evaluations.

The focus of the efforts was on the impact areas of biodiversity, water and quality of life.

The predominant type of interventions in socio-economic impact areas was public investments in infrastructure and public services. For environmental impacts, both area-related interventions as well as public investment support, in particular for the purchase of land, were of great significance. Un-

Adequate intervention types for the various areas of impact.

like measures that support investments, however, the impact of arearelated support was limited in time, i. e. the impacts achieved only persisted for the duration of the support in most cases.

Schleswig-Holstein has a high need for action for environmental topics as biodiversity, water and climate protection as well as climate adaptation. With the exception of climate protection, the ZPLR was one of the most important financing instrument for measures in these areas of impact. For climate protection, economy, agricultural sector and employment as well as for the quality of life in rural areas, the ZPLR was only one of many possible sources of financing and instruments. Other instruments were more relevant to achieve these objectives than the ZPLR support.

High level of significance of the ZPLR in the areas of biodiversity and water, in other impact areas other instruments were more important.

A challenge in achieving and measuring impacts is the dominance of drivers outside the programme. This means that there is often no trend reversal apparent in the indicators relating to the impact area, even though the ZPLR measures are effective (example: biodiversity).

Developments outside the scope of the programme are extremely dominant.

The analyses of the implementation structures and the ICs showed that the ZPLR had efficient implementation systems. When discussing and evaluating the ICs, a distinction must be made between various components, which's characteristics are associated with a variety of implications with respect to funding efficiency and recommended actions.

Implementation system efficient in large parts.

The unavoidable costs are higher in an EU-funded programme than in a national funding regime. This is because of the administrative and control paths that must be set up, in particular, and the requirements of the IT systems. These costs must be considered when including a measure in an EU funding programme. A "review and concentration recommendation" applies in principle to ZPLR (sub-) measures with a financing volume of less than € 1 million/year.

Higher fixed costs in an EU-funded programme.

The significant increase in complexity and rigidity in the EAFRD-specific legal framework has led in part to disproportionate costs. On the other hand, only a few cost-driving weaknesses were identified in the implementation structure and the framework conditions prevailing in *Schleswig-Holstein*. The lean organisational structure, both horizontally and vertically, was a characterising feature. The level of staffing, however, is critical. Among others, the coordinating and higher level authorities were lacing resources which would have enable them to act with greater impact and at an early stage. A need for improvement in terms of cost reductions is therefore seen for these IC components, mainly at the European level, whilst the state should "invest" more in sustainable and appropriate staff development.

EU framework and organisational effects.

The third component in the IC is the proportion that can be regarded as an Costs of the impacts. investment of "additional expense" in greater effectiveness of the support. A positive path was set here in the ZPLR via many strategic funding decisions: a lower portion of the sector-related mainstream funding, high significance of the human resource-intensive Leader approach and the integration of new soft funding approaches such as the local actions. Despite this, the IC was kept comparatively low.

For the funding period 2007 to 2013, the analyses show that the regulatory framework makes efficient, impact-oriented support more difficult and has forced a procedure-oriented programme implementation. The even more complex legal framework in the funding period 2014 to 2020 will not ease the situation here but will have an additional negative effect on implementation of the EAFRD programmes and their strategic direction.

Outlook: Complexity of the EU legal framework threatens to increase costs of missing targets.

A fundamental resetting of the legal framework conditions is therefore essential and it must be tackled promptly. The central points are greater legal clarity, the implementation of the single audit principle for the EAFRD, greater emphasis on the principle of proportionality enshrined in the contracts, a ban on retrospective application of changes to the legal framework and legal interpretations, and greater toleration of the risk of errors in the policy field of rural development.

The legal framework must be fundamentally revised.

Conclusion

The ex-post evaluation showed positive impacts for most of the measures supported. The objectives and impacts of the measures went far beyond the programme questions and indicators prescribed by the EU, which are heavily restricted in theme to the EU 2020 objectives. In the ZPLR, the focus was on environmental topics and questions relating to rural development. This is consistent with the problems in the rural areas. Especially in the area of rural development, the measures were well-directed at specific local needs and potentials due to the strong role of the Leader approach, and led to extremely heterogeneous projects and impact pathways. Narrow limits were therefore inevitably set for the aggregation of effects. The potential of rural development programmes is too small to have a measurable effect on the impact indicators for economic growth and employment set by the EU, and in future they should also be assessed more realistically ex ante. In terms of environmental measures, impacts were more clearly measurable, but the influence of counteracting factors outside the

Consistent framework for the ZPLR, nuanced evaluation of the impacts

programme was too strong in order to achieve set target values of the global impact indicators. Important and, in part, more effective levers often lie outside aid policy.

Altogether *Schleswig-Holstein* has used second-pillar EU funding to offer a wide range of measures in a consistent strategic framework in the ZPLR and successfully implemented them. By taking into account the recommendations that emerged in the evaluation, an even more clearly focused and more effective use of funds could be achieved.