

## **Ex-post Evaluation**

# **North Rhine-Westphalian Rural Development Programme 2007 - 2013**

## **Summary**

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## Summary

### 1 Introduction

The ex-post evaluation report of the North Rhine-Westphalian Rural Development Programme (RDP) 2007 to 2013 consists of a printed EU report in which all evaluation questions are answered, and an electronic appendix with more detailed module reports on individual measures and evaluation questions.

### 2 Context of evaluation

North Rhine-Westphalia (NRW) commissioned the evaluation of its RDP for 2007 to 2013 in conjunction with six other federal states (Mecklenburg-Vorpommern, Schleswig-Holstein, Hamburg, Niedersachsen, Bremen and Hessen) in one package. The terms of reference comprised the ongoing evaluation, drafting of annual evaluation reports, a mid-term evaluation in 2010, and an ex-post evaluation. The evaluation was conducted by the Thünen Institute of Rural Studies as lead partner, in cooperation with the Thünen Institute of Farm Economics, the Thünen Institute of International Forestry and Forest Economics, and the environmental planning agency entera. A steering committee composed of the managing authorities of the federal states and the evaluators was set up to manage the evaluation activities.

**Evaluation of the NRW Rural Development Programme 2007 to 2013 as part of the seven-state evaluation**

Results from the ongoing evaluation have been prepared continuously and presented in committees such as the steering committee, the monitoring committee, in briefing meetings, at specialist conferences, and/or published as a written module report. These module reports are also incorporated into the ex-post evaluation.

**Evaluation results have been communicated and discussed continuously within the state**

### 3 Programme structure and implementation

In the context of the different EU programmes in NRW in the funding period 2007 to 2013, the funding provided by the EAFRD was approximately the same as the funding of the European Social Fund (both slightly more than a fifth of public funds). Over half of the public funds of the EU programmes came under the programme of the European Regional Development Fund, which was therefore significantly better equipped financially. At the same time, the EAFRD programme was the only EU programme with a focus on agriculture, forestry and rural areas.

**Funding for the EAFRD programme is about the same as for the ESF**

In relation to the Common Agricultural Policy (CAP), three times more

**CAP continues to be**

funding was used for direct payments under the first pillar than for rural development under the second pillar.

**dominated by the first pillar**

According to the planning, a total of around €0.9 billion of public funding was available for the funding period 2007 to 2013, plus €22 million of national public funding for top-ups (Article 89 measures). Most of the public funds were earmarked for Axis 2 “Improving the environment and the countryside” (58%), followed – by some distance – by Axes 1 “Improving competitiveness of the agricultural and forestry sector” and 3 “Quality of life in rural areas and diversification of the rural economy” with 23% and 16% respectively. LEADER accounted for 4% of the public funding.

**Most of the funding was earmarked for Axis 2; overall, the programme was strongly oriented towards the agricultural sector**

Many of the measures were implemented on the basis of the National Framework (NF) and co-financed with funds from the Joint Task for the Improvement of Agricultural Structures and Coastal Protection (GAK). In Axis 2 measures were co-financed by the federal state to a greater extent. As in other federal states, LEADER was implemented entirely outside the NF.

**The National Framework provided a basic structure for the NRW programme**

As a result of the Health Check and other financial adjustments, the NRW RDP was increased by a further €99 million of public funding in 2010. The additional funds were allocated to Axis 2. New sub-measures were added to Measures 214 and 215. By shifting original EAFRD funds, it was also possible to raise the budget for Measures 121 and 212.

**The Health Check led to only small changes in terms of content**

By the end of 2015, the planned public funds were almost entirely used up (99.7%). There were small shifts between the axes compared to the original plans. The almost complete utilisation of the funding also applied to the HC funds (reported separately).

**The planned funding was almost entirely used up**

The NRW programme was characterised by area-based measures with a spatial focus on the low mountain range. If investment measures in agriculture are also taken into account, the average annual funding intensity was in part significantly above €100 per ha of agricultural land (NRW average €56/ha of agricultural land). Axis 3 and LEADER were distributed more evenly throughout the state.

**The geographical focus of the NRW-Programme was on the low mountain range**

Around three quarters of the public funding went to farms, especially for measures under Axes 1 and 2. Axis 3 measures, on the other hand, were directed mainly at municipalities and private households/associations.

**Farms were the main target group**

The implementation structure remained largely constant in the funding period, apart from changes in the departmental structure at the level of the ministry and the EU paying agency, which was located at the Director

**Largely stable organisational structure for implementation of the**

of the State Chamber of Agriculture (LWK) as state representative. Characteristic of the implementation structures of the NRW RDP was the outsourcing of the tasks of the paying agency to the Director of the LWK as the state representative, who himself was the awarding authority for some of the measures and otherwise delegated the awarding power to bodies such as the local authorities or the state Forestry and Timber Agency.

**NRW-Programme**

## 4 Methodology

The ex-post evaluation was based on the structure and findings of the mid-term evaluation. The modified report and question structure of the guidelines for the ex-post evaluation have been considered. Measure-based questions of the original CMEF useful in evaluating the measures and relevant in the original study design have been retained.

**Ex-post evaluation builds on the mid-term evaluation and takes account of the current guidelines**

Evaluation was realised at three different levels: 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). Outstanding obligations were not included in the evaluation. At the axis level, the measure-based findings were brought together with reference to the common output and result indicators. At programme level the impact related Questions 1 to 11 were answered in specific in-depth-analyses. An implementation cost analysis was at the heart of the evaluation of the programme implementation (question 14).

**Analyses at measure, axis and programme level**

The target figures established in the third programme modification were chosen as reference values for the analysis of target achievement as these reflect the strategic focus after the Health Check changes. For information purposes, however, the adjustments to the actual programme implementation and strategic re-alignments made in the subsequent programme modifications were described and discussed.

**The reference point for the target achievement analysis is the planning status in 2009**

The evaluation was based on existing secondary data. For the agricultural and environmental measures in particular, high-quality data was available, which also allowed for with/without comparisons. The most important were the German Farms Accountancy Data Network, the "ökologische Flächenstichprobe" (ecological area sample) and the recording obligations under the Fertiliser Ordinance. For measures under Axis 3 and LEADER, but also for forestry measures and issues related to programme implementation, the secondary data proved insufficient. Additional data had to be obtained by various survey methods, for example surveys with beneficiaries, experts interviews or case studies.

**A wide variety of secondary and primary data was used in the evaluation**

The impact analysis comprised a wide variety of qualitative and quantitative methods that were applied in accordance with the measure or evaluation question to be answered. Among others, descriptive/associative analyses, econometric approaches at the micro and/or macro level, analysis of documents/literature, and GIS analyses were used. The methods were combined in such a way that complex interdependencies could be mapped as well as possible (mixed method approach).

**The analysis of impact is based on a mixed method approach**

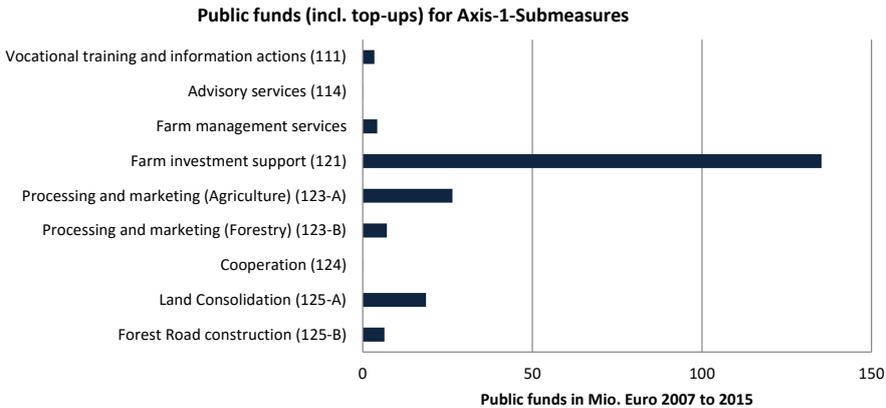
### 5 Measures, outputs and results in Axis 1 “Improvement of the competitiveness of agriculture and forestry”

NRW offered a total of nine sub-measures in seven EAFRD codes. The Farm management services measure (115) was funding of outstanding obligations only. The measures were aimed at agriculture, forestry and the food industry. Most important were investments in individual farms.

**Axis 1: seven EAFRD codes, nine sub-measures**

Including top-ups, about €202 million was spent on Axis 1 between 2007 and 2015 (22% of the total public funds spent). The financially strongest measure was Farm investment support (FIS, 121).

**22% of the public funding was spent on Axis 1**



In relation to the 2009 planning, the implementation level was 83%. Significantly more funds were spent only on the FIS (121), while in all other measures financial implementation was below the 2009 projections. There are diverse reasons for this. The cause analysis led to re-alignment and adjustment of the financial plans in the various programme modifications up to 2015.

**In a few smaller measures the implementation targets fell significantly short of the projections**

Regarding the output targets set in 2009, the target achievement level was between 7% and 136%. Output-related achievement of targets was largely in line with the financial implementation level. In Measures 114 and 124 in particular, the targets set could not be achieved. With the adjustments to

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

the financial plans, the output targets were also adjusted and consolidated.

For Axis 1 the EU had specified five common result indicators, of which three were relevant. The three result indicators were: R1 (Number of participants who successfully participated in a training session), R2 (Gross value added (GVA) in supported farms) and R3 (Number of farms with new products and/or processes). These result indicators could be applied in a meaningful way to only some of the measures. Moreover, there was no definition of the terms “successful” or “new”, for example, with the result that both the targets set ex ante and the description of what has been achieved are difficult to interpret. However, the various topics represented by the result indicators were discussed in detail in the evaluations of the measures.

**The common result indicators were not particularly suitable for assessing the success of the programme**

The question *“How and to what extent has the measure contributed to promoting the competitiveness of the beneficiary?”* had to be answered for the Axis 1 measures. However, only Measures 121 and 123 were aimed at improving competitiveness. In Measure 121 more emphasis was put on animal welfare in the course of the funding period. The training and advice Measures 111 and 114 and the investment in infrastructure under 125 had a wider spectrum of objectives and impacts. Therefore a broader approach to evaluation had to be adopted to reflect the varied objectives of the measures.

**Competitiveness was not the focus of all Axis 1 measures**

In the funding period, approximately 8,700 people took part in 585 courses. This corresponds to about 10% of the workforce on farms. About 60 to 70 courses were run each year with an average of 15 participants. Courses in the topic areas of “Business management, administration and marketing” were most frequent. Surveys indicated that the subsidised course fees were an important incentive for taking up the vocational training courses. Designing courses appropriate to the target groups and including topical issues promptly was a significant challenge for providers.

**Vocational training (111) funded many courses in the area of “Business management, administration and marketing”**

The course surveys carried out at the end of the courses indicated that the benefits of participation in the courses were perceived to be greater for the participants’ own careers than for the development of the businesses. Those surveyed stated that the greatest benefits to their personal careers were in the four areas of “Motivation”, “Technical knowledge and skills”, “Professional training” and “A better understanding of business processes”. Around a fifth of respondents stated that participation in the courses resulted in “more extensive use of environmentally friendly production methods”.

**The participants saw the training as providing significant personal benefit**

The training measures should continue to receive funding. The most important areas remain diversification strategies to secure income, the creation of market-orientated quality products, professional training for the increasing number of non-family employees, and social skills for those with management roles (employee management).

**Continue to fund training measures**

In the funding period 2007 to 2013, a total of just 83 farms took part in 85 advice sessions for individual holdings. Due to the low uptake rate the ministry tried to make the funding conditions more attractive with the sixth programme modification, with moderate success. An analysis of questionnaires from the farms that received advice indicates that most of the recommendations were made in the area of business management. Improvements, therefore, were related to economic factors in particular: improvement in production and marketing (higher milk production), cost cutting through optimised business processes, better piglet prices through direct purchase and lowering of energy costs.

**Implementation of support for advisory services (114) remained well below expectations**

Advisory services remain an important component for better enabling farms to meet new challenges. Interlinking the advisory services with the content of the programme more closely is recommended. Animal welfare could be an important topic, for example. Aspects of nature conservation should also be covered more thoroughly. A modular structure for the advice, with introductory modules and basic and specialist modules building on them, could be effective. The majority of the advisory services have been provided outside the programme. If there is no greater demand in the future, funding should not be provided from the EAFRD.

**Advisory services continue to be important, but whether it should be funded by the EU remains to be seen**

In the context of FIS funding, a total of 1,778 farms received support in NRW in the funding period 2007 to 2013. This amounts to a quota of 10.3% of the full-time farms. The focus of the funding was in the area of dairy farming (975 projects), with the result that the proportion of full-time farms funded, at about 16.5%, was significantly higher here. In 2007, 2008 and 2013 there was a significant oversubscription for the funds available, so temporary stops were put on applications. However, from 2011 on the number of funding applications went down, not least because of the increased requirements of the FIS. Nevertheless the budget for the measure was increased several times and it was also fully spent.

**The focus of farm investment support (121) was on dairy farms**

The impacts of the funding cannot be determined clearly using the analytical approaches chosen and the available data. However, it can be ascertained that the investments supported with funding have led on average to significant growth in individual farms and a rationalisation or increase in productivity in the farms supported. These gross effects of the funding

**Significant effects identifiable for individual farms, but effects on the sector difficult to determine**

were partly reduced by deadweight and displacement effects. Whether a structural improvement and an increase in the competitiveness of the sector were brought about as a result of the funding could not be proved.

In the area of animal welfare, there are clear indications that the newly built dairy cattle sheds create good conditions for animal-friendly farming. In the area of pig farming, on the other hand, it cannot be said that the sheds, built largely with regular funding, provide welfare conditions on the cutting edge of technology. In general it should be noted that, along with good accommodation, the well-being of the animals depends significantly on management.

The FIS has already been directed more heavily towards the provision of public benefits in the current funding period (especially animal welfare and environmental protection). This arrangement should be retained and further adjusted. With properly functioning capital markets like in Germany, general funding for improvement of the competitiveness of farms is not appropriate.

With the funding of Processing and marketing (P&M) of agricultural products, a total of 82 projects received support in the funding period 2007 to 2013. Most of the funding projects were in the fruit and vegetable sector, while most of the eligible costs and therefore public funds were spent on cereals and seeds. The funds originally planned were not completely spent and were therefore redirected to other measures.

The investments supported with funding have led on average to significant growth in individual enterprises and a rationalisation or increase in turnover, GVA, quality and employment. This suggests improved competitiveness for the businesses supported. On the other hand, it was not possible to demonstrate whether a structural improvement and an increase in the competitiveness of the sector was brought about as a result of the funding, as displacement effects and synergies between enterprises could not be investigated. Deadweight effects suggest little net impact. Moreover, the primary sector, the original target group of the funding of Axis 1, benefited mainly indirectly and overall in a way that is barely detectable. Increase in the producer benefits is only indirectly affected by contractual obligation (guaranteed sales). The effects of P&M funding vary greatly by sector.

Focussing the funding more on innovations (and public goods) is recommended. Largely non-specific funding should be avoided, as there is a risk of distorting competitiveness and significant deadweight effects.

**Better animal welfare conditions for dairy cattle, no improvements apparent for pigs**

**The re-alignment of the FIS that has already been introduced should be retained**

**Processing and marketing of agricultural products (123-A) supports many projects in the fruit and vegetable sector**

**Impacts of supported investments on individual enterprises – structural improvement in the sector cannot be ascertained**

**Critical review of funding objectives and alignment of 123-A recommended**

The P&M funding in forestry covered two areas: a) investment in processing and marketing of forestry products, including concentrating the offers across enterprises and b) developing and introducing (demonstration projects) new products, procedures and technologies in connection with forestry products. Funding was only provided from 2010 on. Ninety-nine small and micro forestry enterprises were supported. The majority of the funding was spent on the first funding area, in particular setting up business premises for the first time.

**Focus of P&M of forestry products (123-B) was on initial set-up of business premises**

The focus of the funded projects was on the supply of wood as fuel. In particular the production, drying and storage of fuel wood was funded. The objectives formulated regarding the increase in gross value added can be regarded as clearly achieved. The employment development in the funded businesses was positive; but the targets regarding employment could not be achieved. The measure contributed to strengthening the competitiveness of the supported enterprises. The impact on the overall cluster of forestry and timber in NRW was limited.

**The measure improved the competitiveness of the individual enterprises but did not achieve the ambitious employment target**

In the future, the measure should be directed more strongly towards dealing with the weaknesses identified in the programme (in particular the small-scale structure of forestry holdings) and the development of new sales opportunities.

**Align more effectively with new sales opportunities**

The originally planned budget of the measure was cut significantly in the course of the funding period. Only two projects were completed, both approved in 2013. The measure was intended to promote innovation in the food industry and competed with its approach with similar funding opportunities of the ERDF. The measure should not be continued, especially since similar approaches will be pursued with funding from the European Innovation Partnerships in the future.

**The Cooperation measure (124) was hardly used at all**

The funds originally planned could not be completely spent and were therefore redirected to other measures. The main reason for this lay in the shortage of personnel in the land consolidation authorities, who were working to a great extent on third-party financed procedures outside EAFRD funding. The funds were deployed in 87 land consolidation procedures. Road construction accounted for a large proportion (57%) of the eligible costs.

**Land consolidation (125-A): implementation suffered under limited human resources**

According to model calculations, optimisations of field structures led to a reduction in the variable management costs. Extrapolated to the active procedures, an annual added value benefit of €0.4 million results from savings in the production costs due to land readjustment only. Road build-

**Cost savings through land readjustment and upgrading of roads**

ing in the respective areas also led to cost savings of a comparable amount for the agricultural sector. Almost 30 percent of the upgraded roads will also be used extensively by non-agricultural population groups.

According to the analyses carried out, for at least 4% of the land consolidation areas legal ownership regulations were put in favour of nature conservation or water management. In addition, the landscape was enhanced both with linear habitat structures and with parts of the landscape not used or only used extensively.

**Land consolidation serves to implement nature and water conservation objectives**

The instruments of land consolidation offer comprehensive opportunities to optimise and develop rural structures and thus to reconcile the requirements of the various interests. From the perspective of the evaluation, the measure is an appropriate and, in many cases, the sole means of solving land use conflicts.

**Continue to fund land consolidation**

The launch of the measure was hindered by the effects of storm “Kyrill”, with the result that the output targets were adjusted downwards in the course of the programme. Despite the delayed start, it was possible to exceed the targets. A total of 750 km of roads were funded, of which 65 km were new roads.

**Forestry road building (125-B) started late because of Kyrill**

According to information from beneficiaries, the logging on the better accessed areas could be increased. The road construction work reduced transport costs, which moved closer to the “standard market” level. Transport distances could also be reduced significantly. As a result, the measure contributed to improving the added value of the enterprises supported.

**Added value in the enterprises could be increased**

The funding of forest road construction, focusing on upgrading and basic maintenance, should continue to be part of the forestry measure portfolio.

**Continue to fund forest road construction**

## **6 Measures, outputs and results in Axis 2 “Improvement of the environment and the landscape”**

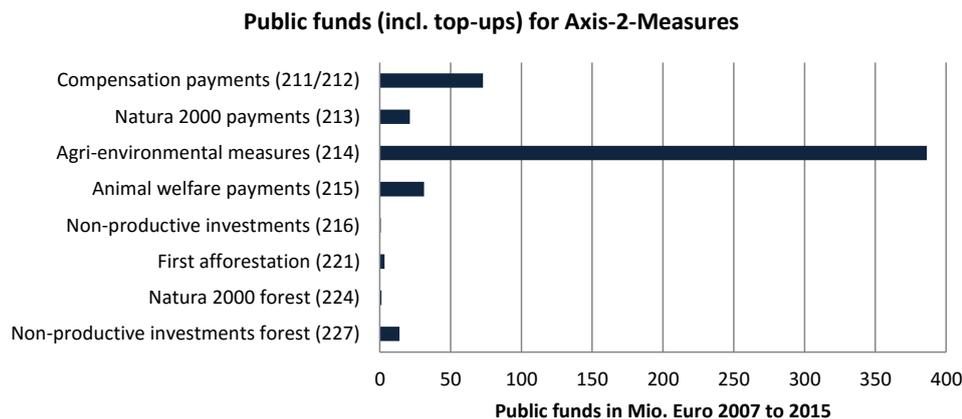
NRW offered a wide spectrum of measures for farmers and foresters under Axis 2. In total nine EAFRD codes were programmed with measures. The agri-environmental measures (AEMs) were broken down into numerous sub-measures.

**Axis 2: nine EAFRD codes, numerous sub-AEMs**

Including top-ups, about €531 million was spent (59% of the total programme funds). The dominant measure were -- by some distance -- the AEMs (214), followed by compensation payments (211/212) and animal

**AEMs as the dominant measure in Axis 2**

welfare (215).



The funding planned for Axis 2 was entirely spent. Compared with the 2009 planning, more funds were spent on 214 and 215. In the forestry measures, there was a shift towards non-productive investments (227), while the Natura 2000 payments for forests (224) were hardly taken up at all.

**Planned funding was spent in full, with differences between the measures**

The material output targets of 2009 had largely been met by 31.12.2015. There were larger discrepancies in the forestry measures which were in line with the financial redistributions. In the area of the AEMs, subsidies were increased in the course of the funding period. As a result, slightly more funds were spent, but the expected increase in area was not achieved.

**Output targets largely achieved**

NRW largely exceeded the targets in Axis 2 in agriculture. All resources were addressed by successful land management measures with an approximately equal scope. The large size of the area covered is mainly due to the fact that NRW not only allocated the measures to resources according to their primary objective, but also considered the anticipated side effects as a so-called integrated objective. From the perspective of the evaluation, the indicator "successful area" is therefore not particularly meaningful. Concerning the forestry measures, the area targets in the various resources were not reached and were already adjusted downwards by a significant margin during the course of the funding period.

**Result indicators reflect the very broad objectives of the NRW programme**

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 protected resources of biodiversity, water, soil and climate. For the compensation payments (CP), reference has been made to the questions from the previous period 2000 to 2006. For animal welfare a separate evaluation concept had to be developed.

**The common evaluation question is applied differently according to the environmental resources**

For the CPs, public funds of €4 million were planned for the mountain regions and around €70.3 million for the less favoured areas that are not mountain regions. The planned budget was entirely spent and around 150,000 hectares with 7,649 farms were supported, primarily in the low mountain ranges. NRW funded not only grassland but also areas growing animal feed crops.

**The compensation payments (211/212) as a traditional measure in the programme**

The redefinition of the less favoured areas, which had been planned for the funding period 2007 to 2013, was postponed for 2018. As a result, the question of income compensation through the CPs still remained in the foreground, as in the previous period. The empirical findings based on the Farm Accountancy Data Network indicated significant variation in the contribution of the CPs to compensation for income disadvantages or losses. This means that for some farms the CPs were far from sufficient to offset the income difference to farms outside the area. Other farms, by contrast, already generated a significantly higher income without CPs. This extreme distribution shows that the current format of the CPs is not suitable to offset income differences in a targeted and efficient way and thereby to ensure permanent land use.

**Significant variations in the compensating effect of the CPs**

The analysis of NRW district data for less favoured districts and districts with a small proportion of less favoured areas also shows that, both in the short term (from 2007 to 2010), and in the long term from 1999 to 2010, the decline in permanent grassland (GL) in the less favoured districts has been attenuated. Evaluations of Integrated Administration and Control System (IACS) data confirm this tendency. The contribution of the CPs to this development cannot, however, be seen as the central explanation. In the period under consideration, the Grassland Preservation Directive was enacted, and the level of direct payments under the first pillar was aligned between fields and grassland. Moreover, the proportion of AEMs in the low mountain range regions is high and a large proportion of the Natura 2000 areas overlap with the less favoured areas. The main impulses for the preservation of grassland come from these measures and factors.

**The contribution of the CPs to permanent land use is almost impossible to separate from other factors**

As the problems in the less favoured areas are highly varied, our recommendation is to adapt the funding more clearly to specific natural disadvantages, such as climatic conditions or geo-physical characteristics of the landscape, and to focus the objectives of the CPs more precisely.

**Tailor compensation funding more to local characteristics and sharpen the objectives**

Financial compensation was given to grassland areas in the Natura 2000 sites. The amount of the Natura 2000 payment was determined by the regulatory conservation category of the funded area. Apart from a few exceptions, only areas protected under regulatory law were funded.

**Natura 2000 payment (213) differentiated according to regulatory conservation categories**

The measure was largely implemented as planned. The grassland in Natura 2000 areas that could be accounted for on the land use register of the IACS covered 49,800 ha at the start of the funding period in 2007. Up to 2012, the potential application area was extended to 58,730 ha. In terms of the 2012 base, the Natura 2000 payment reached around 57% of the grassland eligible for funding in the Natura 2000 setting. As payments only compensated for the meeting of legal requirements, positive environmental effects going beyond those required were identified only on around 5 % of the nature conservation areas. This aspect should be taken into consideration in the evaluation specifications of the EU.

**Compensation provided for requirements under regulatory law, additional environmental impacts therefore small**

The Natura 2000 funding has its justification in the mix of instruments with regulatory and voluntary approaches, forms the basis for participation in AEMs, and can contribute to the acceptance of designation as a conservation area. Continuation of the funding is recommended.

**Retain as a basis for AEMs**

The AEMs comprise eight sub-measures. According to calculations based on the IACS in 2012 that were part of the evaluation, “Diversified crop rotation”, at 63,700 ha, was the sub-measure that covered the largest area, followed by “Organic farming” at 57,800 ha. The extensive use of grassland in the branch (52,000 ha), intercropping (25,000 ha) and contractual nature conservation measures (26,700 ha) also covered large areas. The other sub-measures reached only small areas. As a result, 15.5% of the total agricultural land – with a clear emphasis on grassland – was reached by the AEMs in 2012. Local breeds of farm animals threatened with extinction were also funded.

**Just over 15% of the total agricultural land was reached by Agri-environmental measures (214)**

Positive impacts on species and habitats were achieved on over 13% of the total agricultural land (8% of fields and 27% of grassland). A largely moderate (++) impact could be attributed to the sub-measures organic production, diversified crop rotation and flower and buffer stripes, which covered a comparatively large area of land. The contractual nature conservation measures, with a less extensive surface area, had a high (+++) impact assessment. The analyses indicate that, on arable land in particular, across the state only slightly positive impulses for an improvement of biodiversity could be expected. Examples are the birds on arable land and fields with HNV quality (associated field flora worth protecting). On grassland, on the other hand, it was possible to maintain population levels in larger areas covered by contracts over many years. Despite the comparatively small proportions of the total agricultural land covered, overall the large significance of the AEMs for the achievement of biodiversity targets should be emphasised, even if the underlying negative trend could not be reversed.

**Good to very good impacts on species and habitats**

As an annual average, an area of 171,200 ha (gross) received funding via measures with water protection objectives. Most of the effective area supported was grassland (70%). Nearly all of the funding opportunities with water protection objectives fell below expectations, partly because of the limited uptake. On average, in relation to the total agricultural area, the contribution of AEMs to reducing the nitrogen balance in NRW was four kg/ha N. Measured against the average balance published by the State Agency for Nature, Environment and Consumer Protection in the funding period, it was 4.5%. The AEMs could do relatively little to solve problems in areas with particularly high nutrient surpluses; overall, the N-surpluses actually increased slightly. It was possible to determine by means of a statistical with-without comparison that the impact per funded area was significant for most measures.

**Water protection measures with significant positive impact per funded area, but limited uptake**

An average of 128 kt CO<sub>2eq</sub> of greenhouse gas emissions a year were prevented (approx. 1.7% of the emissions from agriculture), also in part due to humus formation, which was funded to the extent of at least 9 kt of humus carbon a year by the measures. However, quickly reversible effects of humus formation were also taken into account here. As far as soil protection is concerned, soil stability was maintained by preventing erosion events. It was possible to prevent soil loss of approx. 4.8 kt per year.

**Less significant effects of AEMs in climate and soil protection**

All sub-measures should be continued with some modifications. Our recommendation is to continue the ambitious format of the sub-measures and the direction towards target areas. The size of the area is a factor that is critical for success. To reverse existing negative trends, it would be necessary to significantly increase the area covered by effective sub-measures: in hot spots of biodiversity as well as in the normal agricultural landscape, with water protection in the target areas of the Water Framework Directive (WFD).

**Continue all sub-measures with some modification**

Animal-friendly livestock farming, which covers the factors of animal health, animal behaviour and emotions, is unsatisfactory from both a social and a scientific perspective. Measure 215 aimed at establishing animal-friendly behaviour with compensation for higher variable costs.

**Payments for animal welfare measures (215) address a problem in current livestock farming**

With the "Pasture grazing" sub-measure, a contribution is being made to the preservation of grazing operations on dairy farms. Pasture grazing is particularly important for animal behaviour and positive effects have been proven scientifically. Pasture is (still) widespread in NRW. A significant proportion of farms was covered by the measure (28% of farms and 19% of dairy cattle).

**More than a quarter of dairy farms were covered by the "Pasture grazing" sub-measure**

With the sub-measure “Farming with straw”, cattle and pig farmers with straw bedding areas were funded. Straw-based livestock keeping has a positive effect on animal behaviour and is rare in beef cattle and pig farming. Only a small proportion of farms/animals were reached by the funding (< 5%). The proportion of organic farms was around 40% on average over the different types of production.

**The uptake of the sub-measure “Farming with straw” was restrained**

The funding creates relatively good conditions for the “behaviour” aspect of animal welfare. During a survey and assessment of animal welfare on dairy farms (“Pasture grazing” and “Farming with straw” measures), good results were found for animal behaviour but also problematic indicators for health factors relating to animal welfare (e.g., lameness, udder infections).

**Positive effects on animal behaviour, some problematic findings for animal health**

Additional instruments or an extension of funding should be considered to improve the animal welfare factors of “health” and “emotions”. Alongside an extension of the range of advisory services available, elements of results-based funding could be integrated. To include the area of “emotions”, the option of prescribing local anaesthetics, sedation and the use of painkillers should be explored when carrying out painful interventions such as dehorning calves.

**Check the format of the measure and combine with other instruments**

In NRW, there are about 90,000 ha of FFH or EC bird reserves in privately and publicly owned forest. To offset additional costs or reduced income from designation as Natura 2000 areas, the option of area-related compensation payments was offered. The recently introduced measure has not achieved its targets. The flat-rate area-based funding was attractive only to a few forest owners (owners of large forests who did not have to implement any measures as part of an emergency concept during the funding period). Project-related nature conservation funding under code 227 was more attractive to most forest owners. The Natura 2000 compensation payment did have some indirect positive impacts on the conservation area of biodiversity. The objective of compensating income losses resulting from conservation area designation could not be achieved with the measure. The flat-rate, area-based funding should be cancelled. Concentration of the funding on project-related nature conservation funding is recommended.

**Natura 2000 forest (224) largely failed to meet its targets; a switch to project-related nature conservation funding is recommended**

The launch of the measure was hindered by the effects of storm “Kyrill”, with the result that the output targets were adjusted downwards, in particular in the 2011 amendment. Forest restructuring and soil liming were well accepted and ran according to plan. It was possible to restructure a total of 2,556 ha, of which 1,442 ha was in conservation areas; soil liming

**Non-productive forestry investments (227) went to plan after initial difficulties because of Kyrill**

took place on approx. 17,000 ha. Structural forestry measures were implemented on approx. 640 ha within Natura 2000 areas.

A direct and positive impact can be ascribed to forest restructuring in relation to all protected resources. Soil liming had a minor positive impact only in relation to soil/water; as far as biodiversity and climate are concerned, the impacts are negligible. The funding elements Forest edges and Nature conservation measures in forests achieved positive impacts above all concerning the biodiversity of forest habitats.

**Forest restructuring has positive impacts on all areas of conservation**

Forest restructuring and soil liming should continue to form part of forestry funding. In forest restructuring, the funding should be equivalent to the establishment of mixed and deciduous stocks. As far as funding for nature conservation in forests is concerned, concentration on project-related nature conservation is recommended. For nature conservation funding in particular, a feasible administration and control procedure is extremely important when seeking acceptance by forest owners and forest wardens.

**Continue to offer non-productive investments in forests with minor modifications**

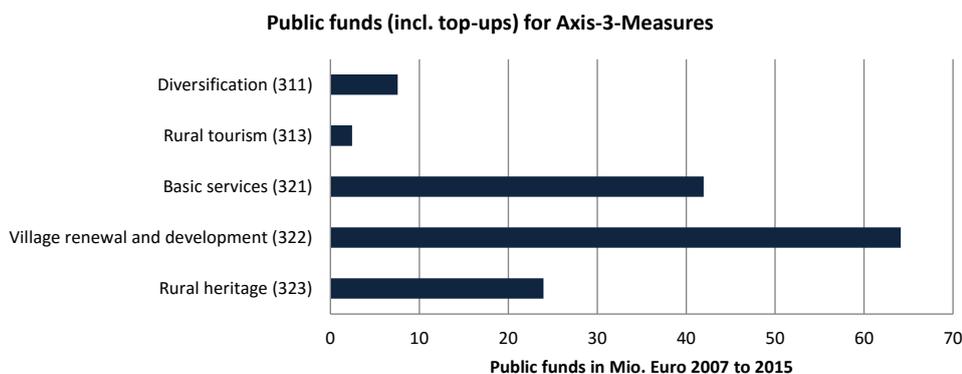
## 7 Measures, outputs and results in Axis 3 “Quality of life in rural areas and diversification of the rural economy”

NRW offered five measures under Axis 3. Funding for broadband was included as a new sub-measure in the programme in 2008. In terms of content, improvement of the rural infrastructure, better basic/public services and nature conservation/preservation of the countryside were significant.

**Five measures in Axis 3**

Including top-ups, around €140 million was spent on Axis 3. Measures 321, 322 and 323 dominated financially. The share of Axis 3 in the total funding spent was 16%.

**Most funding spent on village renewal**



Significantly more funds were deployed in Axis 3 than planned in 2009. In

**Compared to the 2009 planning, more funds**

Measures 321 and 322, the planned budget was continually adapted in the course of the various programme amendments in order to meet the increased demand, particularly in the area of broadband. In the three other measures, by contrast, the planned budget had to be reduced. In Measures 311 and 323, only around half of the funds planned in 2009 were spent and the money was redistributed to other measures.

**were spent on Axis 3**

The common output indicators specified for Axis 3 and quantified ex-ante are not very meaningful. Essentially the indicators were restricted to the number of beneficiaries or projects and the overall investment volume. Whether targets were not reached or were surpassed according to the specified indicators is not particularly meaningful for an assessment of the effectiveness of the measures.

**Common output indicators have limited significance**

The common result indicators for Axis 3 were to some extent less attuned to measures that were related primarily to infrastructure and construction. Thus, direct effects on GVA, employment and tourist accommodation were only to be expected for investments in individual businesses, which was only funded in 311 and, to a limited extent, in 322. The population in rural areas who benefited from the services is an indicator that is difficult to delineate, in particular when the structures created are in principle open to everyone. The indicators were entirely unsuitable for the nature conservation investments under measure 323.

**The common result indicators provided an inadequate reflection of the portfolio of Axis 3 measures**

Two common evaluation questions (17 and 18) are relevant to the NRW Rural Development Programme. These questions address diversification and contribution to the quality of life. Measure 323 was a special case as it had primarily environmental objectives. Its contribution to achieving the environmental objectives was described under Question 20 (side effects).

**The common evaluation questions for Axis 3 were extended to include environmental factors**

Regarding diversification (311), a total of 132 projects were supported. As a proportion of all farms, this amounts to 0.4%, or 1.3% of farms with income combination. The focus of the funding was on animal boarding facilities which accounted for around half of the beneficiaries of funding (or approx. 43% of the total funding). The number of funding applications remained significantly below the original expectations. The budget was therefore successively adapted to the low demand. Reasons for the low uptake rate lay, among other things, in the restriction on funding to rural areas demanded by the EU, to a lack of clarity in the funding rules for different legal forms of beneficiaries, and in the complex administration of wage cost subsidies and the accompanying qualification.

**Diversification funding (311) fell below expectations**

The impact of investment funding on the extent and direction of the diversification of agricultural businesses in NRW is marginal because of the lim-

**Funding was a crucial factor for a third of**

ited scope of the measure. A survey of farms with income combination also showed that central factors for the success and hindrance of diversification can only be influenced in part by investment funding measures. Nevertheless, around a third of those surveyed ascribed a positive effect to the funding on their investment decision; a quarter of those surveyed stated that they were able to implement a larger project with the help of the funding (growth and quality effect) and just under a fifth reported that the project was implemented more quickly (pull-forward effect). 15% of those surveyed would have made exactly the same investment without funding.

**respondents in getting involved in diversification at all**

Start-up aid (subsidies for expenditure on staff) was rated positively by many of the beneficiaries in terms of the decision to get involved in diversification and employ external staff for the purpose. It contributed to creating a total of around 118 full-time equivalent jobs in the funded projects. Hardly any jobs were created, however, in the focal area of animal boarding facilities.

**Start-up aid as an appropriate instrument to break down obstacles to the appointment of personnel**

Support for profitable investments in enterprises with no financial difficulties should stop as a matter of principle. If support for income combination continues to be politically desirable, the investment funding (grants, securities) should be limited to those starting out on income combinations for the first time. Funding for the appointment of external staff (aid for wage costs) should continue to be available. Funding of investment in animal boarding facilities is only justified if the funding conditions make special requirements for the provision of public assets, such as animal welfare, as is required for investments in the area of the FIS.

**Continue to offer diversification funding in a modified form in future**

Funding for tourism was a small measure in the canon of Axis 3 measures.. Although, at 49 projects, implementation was above the projected 30 projects, at approx. €3 million total investment this accounted for only about 90% of the planned volume, even though the state took action to increase the uptake (increase of the funding rate). The smaller outflow of funds was primarily the result of restricted financial scope of municipalities and the competition with other funding programmes. The projects to support tourism relate largely to investments in infrastructure. About 70% of all projects related to investment in lighting and signage measures on roads and squares. A survey of funding beneficiaries showed that the offers created were primarily attributable to the active holiday segment as an important sector of the NRW tourism master plan. The funding was directed towards projects that were integrated into a conceptual context, in particular LEADER.

**Tourism (313): smallest measure in Axis 3**

Funding of tourism should continue to be seen as part of a comprehensive package consisting of various instruments and funding programmes, and should be based on the action framework for the tourism policy of the NRW state government. In this context, concerted implementation of investment projects and strategies is very important. LEADER regions can play a coordinating part here. Tourist infrastructure of largely public interest is not created exclusively by municipalities and districts. The circle of beneficiaries should be extended to include private actors (e.g., associations) and therefore adapted to the National Framework.

**Continue tourism funding with adjustments**

The funding of investment in broadband provision in rural areas was included as a funding object of Measure 321 in 2008. Initially, funding was at a purely national level through GAK funds (as a top-up). Only from 2011 on was EU funding used. A total of 266 projects were supported. The restrictions on funding via GAK with, among other things, a threshold of two to six Mbit/s, were very large. Overall, 62,748 households were given the opportunity for a better Internet connection (about 1.3% of the households in NRW). The contribution of funding was negligible, in view of the large and growing demand.

**Broadband funding under 321 bound by the restrictive GAK framework**

The recommendation is to integrate the EAFRD broadband funding into a concerted overall concept and use beyond GAK the new sources of finance that offer more effective development options.

**Do not restrict broadband funding to GAK**

With one exception, the funded projects were community centres. One project concerned a decentralised supply of renewable energy. Village shops were not funded, even though this was an intention. Therefore the contribution to local supply as a sub-area of the provision of services of general interest did not occur. The effect on employment which was also an objective of the measure could not be achieved. With the funding of community centres, however, an important contribution was made to social services. Community centres mainly functioned as meeting places for the local population with regular events or as premises for celebrations. In the view of those surveyed, this contributed to strengthening local identity.

**The Basic services measure (321) focused on community centres**

Overall, Measure 321 should be strengthened and further developed, for example by opening it up to non-public bodies and including projects for social and cultural facilities. If funding continues to only be open to municipalities, it should be considered whether the municipalities could just create the structural shell and otherwise control use via lease agreements with third parties, e.g., as a facility for local amenities.

**The measure should cover a wider range of projects and also appeal to non-public beneficiaries**

Village regeneration and development (322) represented the measure with the most funding in Axis 3. In the period 2007 to 2015, 1,433 projects were implemented with the aid of approx. €62 million of public funding. Private beneficiaries accounted for 78% of the projects and 58% of the overall costs eligible for funding. The focus lay on work on structures that shape the appearance of locations. A total of 68 projects related to a change of use of agricultural and forestry buildings. The focus of the public projects was on operations to reorganise traffic.

**A large number of private beneficiaries were supported under Village renewal and development (322)**

With its focus on social and technical infrastructure, on renovation work on buildings relevant for the appearance of the village and the elaboration of village development concepts, the measure contributed to improving quality of life in the dimensions 'Residential location conditions' and 'political participation/social relationships'. The results of the village study show that the importance of the measure for development of village centres and their appearance was rated very highly. Even if the participation processes were less developed and formalised than, for example, in Hesse or Lower Saxony, a specific dynamic of cooperation (between citizens, villages or municipalities) was initiated by the (prospect of) funding in NRW. The income and employment-related objective of the funding for reutilization could not be achieved. Rather, the priority was the maintenance and use of buildings, particularly for residential purposes.

**Improvement in the conditions of residential locations, implementation with the involvement of the local population**

A further strengthening of the concepts for development of the village centre and the establishment of inter-village concepts (such as the integrated municipal development concepts) could enhance the relevance of the funding for the local and regional circumstances and needs. For this approach, the resources required must be built up and maintained both in the relevant department of the ministry and the granting authorities as well as and in the paying agency. The prerequisite for this is an awareness of the added value of more complex projects albeit the time-consuming administrative procedures.

**Strengthen village renewal conceptually**

The funding of reutilization should not focus on the objective of employment creation but instead on preservation of the building and "revitalization" of villages. In addition, not only agricultural and forestry structures are affected by vacancies. Funding for reutilization should also be possible outside the agricultural and forestry context; adaptation of GAK is required for this.

**Do not foreground employment objectives in reutilization**

The focus of Measure 323 was on projects to protect species and habitats. In addition, conservation and management plans were drawn up for Natura 2000 areas. Land purchases were also realized in Natura 2000 areas.

**Preservation and improvement of the rural heritage (323): focus on**

Outside the Natura 2000 areas, mainly measures to preserve cultural landscapes were implemented. A little over 80% of the funding was spent by districts and municipalities. Further beneficiaries included nature conservation associations and federations with 8% of the funding and, from the second half of the funding period, biological stations which implemented projects accounting for approx. 5% of the funding. Towards the end of the funding period, it was possible to improve the very limited outflow of funding in the initial years significantly as a result of an increase in public relations work and the inclusion of VAT in the funding.

**projects to protect species and habitats**

Direct (habitat management) or indirect positive impacts (purchase of land) on biodiversity are to be expected in different forms in all project areas. The impacts were described based on case studies of examples of the very different projects. 58% of funding was deployed directly in Natura 2000 areas or in areas with species listed in Annexes II and IV of the FFH Directive. Funding projects without direct connection with land (e.g., purchase of machinery and equipment) sometimes also impact FFH areas, with the result that the proportion of FFH areas covered can be put at over 60%. A further 20% was implemented in coherence areas (nature conservation areas). Accordingly, the funds were concentrated overall in the Natura 2000 areas and the coherence areas (approx. 80% together).

**Focus on Natura 2000 areas and coherence areas**

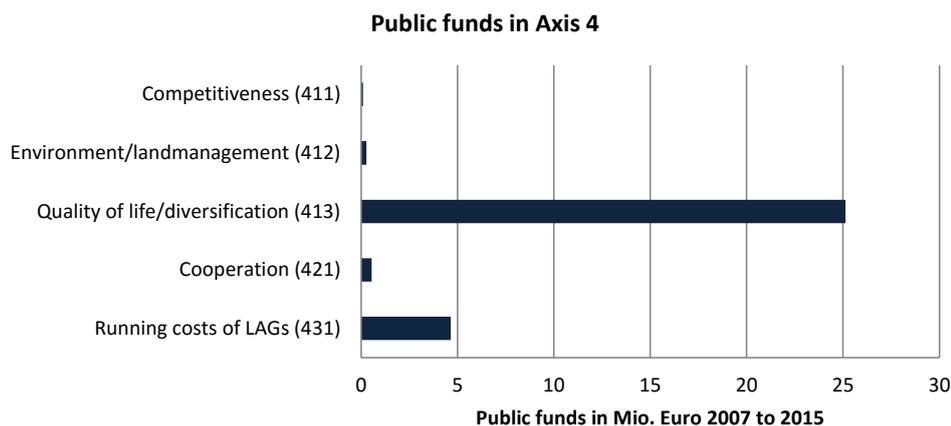
In terms of content, the measure should be continued as it represents an important instrument for the implementation of Natura 2000. But it is questionable whether the additional effort resulting from EU-funding is justified in view of the often small amounts of EU funds per project. The possibility of funding certain groups of applicants (private persons, nature conservation associations) in general with national funding only should be investigated.

**Continuation of the funding, but supplemented by purely national funding**

## **8 Measures, outputs and results in Axis 4 “LEADER”**

In Axis 4 (LEADER), ten regions were selected by means of a competitive process in 2008. At the end of 2009 and in mid-2010, two further regions were nominated. This went along with an increase in the planned budget. Around €16 million of EU funding was available, which had to be co-financed by the LEADER regions, in other words by the municipalities (initially at 50%, from 2011 at 55%). Overall, LEADER accounts for three per cent of the public funds spent.

**12 LEADER regions were selected in 2008 to 2011**



Project implementation started slowly. Reasons were the necessary familiarization period especially for the relatively large number of new LEADER-stakeholders, (only two regions were involved in LEADER+) and new administrative structures. The constitution of the LAGs and of regional management and the establishment of decision-making procedures also required time. Many projects were not approved until 2013, and accordingly project implementation peaked in 2014 and 2015. Beneficiaries were essentially municipalities, associations and the LAGs themselves. Thematically, the projects covered a wide range of subjects, with a concentration on tourism, settlement development, culture and leisure/recreation/sport.

**Implementation initially very slow, most projects not concluded until 2014 or 2015**

The various components of the LEADER approach were largely well-implemented in NRW. Even if the implementation conditions were difficult, it was possible to realize some innovative approaches at the project level. The bottom-up approach was delivered successfully by, among other things, the strong emphasis on participation. Starting points for improvements can be seen in the composition of the Local Action Groups (LAGs). Economic stakeholders were under-represented, as were women, young people and non-academics. The multi-sector approach, on the other hand, can be regarded as successful. The stakeholders came from various thematic backgrounds; cross-topic projects and working groups were created.

**Components of the LEADER approach largely well implemented**

The capacity of the stakeholders to steer and take action for local development was improved. This was also evident in improvements in relationships, contacts, knowledge and capabilities, as well as in the extension of cooperation and networking. Approaches to collaboration between municipalities, e.g., on the basis of joint project development, were also developed further through LEADER.

**Local governance was improved by LEADER**

Most frequently the impact of the LEADER projects was in the area of quality of life. As a result, the targets set in the local development strate-

**Wide range of impacts through the LEADER**

gies were, in the view of the LAG members, largely met. Direct employment effects were hardly associated with any of the projects. This is largely due to the fact that investments in individual enterprises played a minor role. Only a tenth of the beneficiaries surveyed stated that employment opportunities were created in the region through their respective projects.

**projects supported**

Additional state funds should be made available to solve the problem of the national public co-financing. The simplification options resulting from the ESIF Directive should be used, also in coordination with the other structural funds. To reduce the initial difficulties of new LAGs, the groups and regional managers should be informed clearly from the outset about the “rules of the game”. As the LAGs have even greater decision-making competence, the participation and decision-making processes should have quality assurance mechanisms. The composition of the LAGs should represent the orientation of the strategies thematically and institutionally. In addition, the participation of more than 50% of private stakeholders should be ensured and the issues of gender equality and the participation of young people should be strengthened.

**Change the implementation framework and quality assurance for the participation processes**

## 9 Programme impacts

As a result of the programme orientation, the contribution of the NRW programme on overall economic growth was limited. According to estimates, the additional GVA was below 0.01% of the economic power of NRW. The impacts emerged predominantly in the primary sector, as a result of measures such as the FIS (121) and land consolidation (125-A). The financially strong area-based measures of Axis 2 had both positive and negative impacts which cancelled each other out and existed only for the duration of the funding. The contribution of the programme to the implementation of the Lisbon Objectives was small. The results reveal the fundamental conflict between the objective of growth and a simultaneously strong emphasis on environmental objectives and on balanced territorial and sectoral development which is inherent to the EAFRD Directive itself.

**Contribution of the NRW programme to the growth of the overall rural economy is small**

The employment objectives set in the NRW programme were not achieved. Although there were measures in the programme that had an impact on employment, e.g., diversification funding (311), their scope was limited. Positive impacts were opposed by rationalisation effects on the farms supported by the FIS (121). The number of additional jobs created in the primary sector was therefore virtually zero. Funding for rural development measures (313, 321, 322, LEADER) led occasionally to new jobs, but in negligible numbers. This was also a result of the focus on infrastructural and organisational measures which triggered no directly measurable

**Positive employment effects were offset by rationalisation effects**

employment effects.

In the context of the ongoing negative trend in biological diversity and in view of international conservation obligations, there is a strong need for action to protect and improve biodiversity. Along with regulatory legislation, the NRW programme was of considerable importance. A wide range of measures in the area of agriculture and forestry with impacts on biodiversity were implemented. Contractual nature conservation, individual components of the AEMs, investment in nature conservation and forest restructuring to create near-natural mixed forests should be highlighted as particularly positive. There are starting points for increasing (more effective, high-quality measures) and disseminating (more advice and support lead to optimised implementation of measures in terms of quality) the impacts on biodiversity in the NRW programme, but their wider impact is always limited by the powerful drivers outside the programme that tend to bring about the loss of biological diversity.

**Urgent need for action on biodiversity and a focal point of the programme**

Overall, a small positive effect of the NRW Rural Development Programme was identified on development of the working productivity and gross value added in the primary sector. Measures 121, 125-A and 111 were relevant in this context, although the last two were of minor importance in terms of budget. In terms of content, the programme would offer the opportunity to support the rural infrastructure and human resources even more effectively. The stronger focus of the FIS (121) on the provision of public goods, which started in 2011 and will be continued in the new funding period, can also be regarded positively in the context of society's requirements for a modern and competitive agricultural sector.

**Rural infrastructure has a significant effect on the competitiveness of the agricultural sector**

During the funding period 2007 to 2013, the basic political and economic conditions for farms keeping dairy cattle changed significantly as a result of the end to the milk quota planned for 2015. Milk production increased and the markets became more volatile. This led to a significant structural change in milk production. The additional funds provided in the framework of the Health Check went directly or by shifting money into measures from which dairy farms could also benefit. The FIS (121) relevant for supporting the restructuring should be highlighted, although it had ambivalent impacts. On the one hand, it was possible to modernise or extend production capacities, on the other hand the increased quantities of milk led to price falls. Along with the FIS, the CPs (211/212), AEMs (214) and grazing subsidy (215) were also taken up by some of the dairy farms in NRW. The CPs had the greatest impact on income, as they are hardly tied to any conditions, but they were only used in selected settings. As the strongly funded AEMs and the grazing subsidy were tied to conditions in-

**Contribution to restructuring of the milk sector marginal in relation to market forces**

creasing production costs, they did not provide for any income transfer, unlike the CPs. So these measures could only contribute little to the new challenges in the milk sector.

Potential contributions of the RDPs to climate protection comprise the production of renewable energy, avoidance of greenhouse gases and adaptation to the consequences of climate change. While the NRW programme made no contributions to renewable energy, as an average of the calculated scenarios in 2012 0.06% of all of the greenhouse gas emissions of North Rhine-Westphalia or 2.5% of the agricultural greenhouse gas emissions in the state were avoided by an extensive portfolio of measures. Significant but temporary contributions to greenhouse gas reduction come from the AEMs. Forestry measures, in particular those with a cascaded utilisation of timber products, can make a longer-term contribution to climate protection. SP 3 and LEADER measures also made a small contribution to climate protection, for example via building renovation. Forest restructuring can also be regarded as a measure contributing to adaptation to climate change.

**Small contribution to climate protection**

The AEMs were by far the most important high performers, only part of the Vocational training (111) had an additional effect. AEMs accounted for almost 100% of the reduction in nitrogen surpluses achieved through the NRW RDP. The impact of the EAFRD on nutrient surpluses tended largely to stagnate in the funding period. Overall, an increase in the nitrogen surplus was recorded because of contradictory developments determined by exogenous factors. AEMs contributed to improving the ecological condition of watercourses by reducing the input of pollutants. No funding was offered to improve the morphological water structure through the EAFRD; the corresponding 'Lebendige Gewässer' (Living Waters) programme is financed completely by the federal state. From the NRW RDP, land consolidation is worth mentioning for its complementary effect in providing land for the implementation of a small number of projects for the development of watercourses.

**Contribution of the programme to water protection not sufficient to prevent increase in N surplus**

In view of the absence of definitions and methodological specifications, the term "quality of life" first had to be operationalised. A concept developed in the social sciences was used, according to which quality of life can be sub-divided into several dimensions. Most of the funds used in the area of quality of life can be classified under the dimensions "Conditions in residential locations" and "Personal activities (e.g., leisure)". One of the core measures was village renewal. It is possible to extend the way in which the NRW programme covers quality of life. The concept- and participation-orientated planning and implementation of projects in LEADER and also in

**Quality of life improved above all in relation to conditions in residential locations and personal activities**

parts of village renewal provide an appropriate starting point.

Approaches to innovation were described in the programme but were anchored in only a few measures as a condition for funding or a selection criterion. In terms of practical implementation, only a few innovative projects could be identified, however the categorisation “innovative” depends on the operationalisation of the term. As a result of the open conditions in Leader, new ideas and approaches to taking action were carried out in the LEADER regions according to the surveyed stakeholders, for example. However, innovative approaches which also carry the risk of failure are difficult to implement because of the restrictive conditions on EAFRD funding.

**Innovative approaches can be identified in the context of LEADER in the form of new ideas and starting points for action in the region**

Broadband extension was funded as part of Measure 321 on the basis of GAK. The GAK threshold was very low. In other words, funding was only considered in areas below this figure. However, broadband provision that will be suitable in the future is not assured in areas with, e.g., 16 Mbit/s. Along with the issue of extension, the question of usage is also relevant. Extension alone does not guarantee that wide commercial and social use will take place. In the NRW programme, there were individual accompanying activities, e.g., in vocational training (111) and LEADER.

**Broadband funding to date based on GAK with a very low threshold**

In view of the large and growing demand in broadband development, an overall approach for the extension of fibre optic broadband infrastructure at the national level would be the best solution. But this recommendation is not feasible due to the distribution of competences in the federal state. In any case, support within the state of NRW requires a modified overall approach and funding beyond GAK. In addition to the extension of the networks, better use by business and the population is also a topic that must be addressed and for which the EAFRD also offers opportunities as a starting point

**Push forward with extension and use of broadband**

NRW offered measures in the area of farm investment support (121) and subsidies for “pasture grazing” and “farming with straw” in the area of animal welfare. No specific use was made of the training and advisory measures (111/114) in connection with improvement in welfare in livestock farming, although management and training of managers can be a crucial lever for reducing animal welfare problems. Starting with a concept for all types of animal and usage, consideration should be given in a targeted way in future to which measures should be funded through the EAFRD in which combinations.

**Animal welfare addressed in the programme through 121 and 215**

The funding measures were largely gender equality-neutral in design; only a minority were potentially directed at gender equality. In the areas rele-

**Equal opportunities: most of the measures in**

vant to equal opportunities of “employment and entrepreneurship”, “training and gender competence” and “reconciliation of family and career”, it was possible to identify contributions to gender equality. 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 LAGs.

**the NRW programme were equality-neutral**

## 10 Implementation and funding efficiency of the NRW Rural Development Programme

NRW spent a total of approximately €3 million of public funds on Technical assistance (511). The funds were used primarily for mandatory work in connection with implementation of the programme, such as external evaluation and explanatory plaques. Funding for personnel in the certifying body, activities to support LEADER and external drafting of the annual monitoring reports can be seen as a state-specific “option”. Against the background of an increase in the requirements for the implementation of Technical Assistance in the new funding period, financing of mandatory tasks should continue to be the priority. Small amounts in particular should be financed from state funds.

**Use of Technical Assistance with a clear focus should continue**

An implementation cost analysis was carried out to evaluate the efficiency of the use of resources. This comprised quantitative analysis of the costs for service provision and qualitative analyses on explanations of the level of the implementation costs (ICs) and on strengths and weaknesses of the implementation framework. Assessment of the costs included personnel, material and IT costs. Absolute and relative ICs were identified. The relative ICs are a measure of the administrative effort of paying one euro of funding for a specific measure (implementation efficiency).

**Response to the question on the efficiency of the use of resources is based on an implementation cost analysis**

In 2011, a total of approximately 215 employees were involved in the implementation of the NRW Rural Development Programme within the state administration and the EU paying agency, the Lower Landscape Authorities and the LEADER regional managements. Costs of €18.9 million were associated with this. 40% of the ICs are accounted for by the EU paying agency, followed by the Lower Landscape Authorities at 21%. The dominant cost was the AEMs at 44% of the measure-related ICs.

**40% of the implementation costs went on the EU paying agency, the dominant cost object were the AEMs**

Measure-related ICs (14%) and programme overhead ICs (approx. 3%) together reached a volume of approx. 17% of the funding spent on average per year in the period 2010 to 2012. The relative ICs varied depending of the group of measures. As far as the investment measures are concerned, the relative ICs were on average 12.1%, the area-based measures came to

**The forest funding measures had the highest relative ICs**

14.3% and the forest funding, which comprised both investment and area-based measures, accounted for 27.1%. The forestry measures were among the most expensive measures in all federal states.

Excluding the outliers, the relative ICs for the investment measures ranged from 5.2% (121) to 30.9% (323). The integration of LEADER into the programme had a significant influence on the ICs in the group of EAFRD investment measures. The implementation of measures via regional processes and the associated multitude of participants are associated with higher cost.

**LEADER made programme implementation more expensive**

The range of relative ICs between the area-based measures was smaller compared to the investment measures. The average of about 14% was determined, on the one hand, by the compensation payments, which were very cheap to implement (relative IC 2%), and, on the other hand, by contractual nature conservation, which was dealt with by the Lower Landscape Authorities and had relative ICs of 43%. Organic farming had very low relative ICs at 4.5%.

**Along with the compensation payments, organic farming had very low relative ICs**

Compared to the survey of 2005, the absolute and relative ICs have increased. This is the result, inter alia, of the larger number of measures, the integration of LEADER and the increased complexity of implementation in compliance with EU regulations. At the programme level, new institutions had to be established with the competent authority and the certifying body had to employ significantly more personnel for EAFRD audits.

**Implementation became more expensive than in the previous period**

The factors affecting the ICs were examined in the context of qualitative analyses. These included groups of factors such as the legal framework, the organisational structure and IT support. Thanks to efficient organisational structures and IT systems, it was possible to for the most part implement the programme efficiently. Negative organisational effects on the cost structure or functionality of the implementation could be identified, however, in particular in the area of the measures delegated by the EU paying agency. The resulting problems were multiplied by the partly disproportionate EU regulatory framework and its application. An increasing bottleneck in NRW was also the availability of personnel, in the EU paying agency for example. A large proportion of the recommendations are intended as optimisations of the existing system. Further steps should be considered for contractual nature conservation.

**Generally efficient programme implementation, but isolated problem areas identified**

The EU regulatory framework proved to be inadequate in parts and caused inefficiencies in implementation. Its volatility, continuous differentiation, and retrospective application, were problematic. The legal framework of EAFRD funding must therefore undergo fundamental simplification. This is

**Purge the EU regulatory framework and keep it stable**

a challenge primarily for the EU-COM. Approaches to optimisation include, e.g., introducing de minimis thresholds for reclaiming funds, rethinking sanction regulations, and critically analysing the specifications for controls, documentation and report obligations. In part, the quality of reports is questionable (the control statistics, for example) and their evaluation is hardly possible in view of their sheer quantity. Indeterminate legal terms should be clarified before the new funding period begins and the simplified legal framework should be kept consistent throughout the funding period.

Deadweight effects reduce the efficiency of funding, as the money spent is not associated with impacts. Whether deadweight effects can be tolerated depends on the technical “importance” of a measure and the costs incurred for their avoidance. Approximately 84% of the programme volume went to private beneficiaries. About 19% of this was associated with a full deadweight effect, i.e., the land use procedures or projects would also have been implemented in an identical way without any funding, so that no additional effects were created by the funding. The group of measures supporting productive investments in enterprises and farms was affected most by full deadweight effects. These deadweight effects are directly relevant for competitiveness and should therefore be regarded as particularly critical. The more funding was spent on other than “mainstream” projects or was directed towards public assets, the smaller the deadweight effects.

**Deadweight effects**

**could be avoided in part by ambitious design of funding measures and conditions**

According to the survey results, the majority of funded measures realized by public beneficiaries would not have been implemented or would have been implemented differently. For 85% of the funds flowing to public beneficiaries, it can be assumed that there was almost a full additional benefit. Even core areas of public services can often only be addressed with funding programmes because of municipal budget restrictions. Concerning the efficient use of resources, for some measures it is questionable if they are in the right place in funding legislation which drives transaction costs. Fundamentally the entire system of municipal funding of public services needs a thorough review.

**Additionality: public**

**beneficiaries would not have implemented most of the projects without EAFRD funding**

It was possible to identify synergies between measures, but the extent of these had no significant effect on funding efficiency. There is greater potential in providing so-called multifunctional measures with synergetic effects, such as organic farming, which have positive impacts on several fields of activity at the same time.

**Synergies between**

**measures had no significant effect on funding efficiency**

The link between costs and effectiveness was discussed for the topic areas

**Efficiency of the de-**

of biodiversity, water and climate protection and the overall funding strategy of the NRW RDP based on the funding efficiency of measures. The problem here was that a (comparative) evaluation of the efficiency of different measures in relation to topic areas was only possible in part.

**ployment of funding only quantifiable in part for environmental impacts**

In the field of biodiversity, it was possible to show that there is a close relationship between relative ICs, total costs and effectiveness. The relatively high costs of the highly effective measures are evident looking at both the ICs per ha and the total costs (IC and subsidies) per ha. Overall, the ICs/ha for all measures with high biodiversity impacts were above those with low impacts. Thereby, the cost structure of the measures reflects the intensity of impact and the extent to which the measures hit their target: precise targeting (low costs for missing the target) tends to be associated with higher ICs/ha and total costs. Contractual nature conservation was therefore among the more expensive measures, even if part of the ICs can be traced back to less than optimal organisation of the implementation.

**Biodiversity – close connection between costs and effectiveness**

An efficiency calculation showed that there were large differences in the cost-effectiveness of the various measures aimed at protecting water by reducing the N balance. The best cost-effectiveness was apparent in organic farming.

**Water – organic farming the most efficient**

In the area of climate protection, it was possible to calculate efficiency performance indicators (costs per saved CO<sub>2</sub> equivalent) only in part. The indicators covered a wide range. The calculated efficiency performance indicators showed sizeable distributions between €0.07 of public funding invested per kg of CO<sub>2</sub> equivalent saved and about €42/kg CO<sub>2</sub> equivalent. AEMs (214) had the lowest greenhouse gas avoidance costs. Significantly lower efficiency was evident in the measures from Axis 3. However, none of the measures had climate as a main objective, which must be taken into consideration when interpreting the results.

**Climate protection – overall less effective and efficient in the context of EAFRD funding**

An ambitious format for a measure led in some cases to higher ICs, simultaneously enhanced the effectiveness of the funding and therefore the overall funding efficiency. This applied in particular to the AEMs but also to the animal welfare measure (pasture grazing). There is still potential for optimisation in the area of Axis 3 and 4 funding by further strengthening integrated and “more complex” funding approaches and LEADER. Potential for efficiency gains lies in particular where there was a negative effect on the ICs without a corresponding positive effect on the impact side. This refers primarily to decisions on financial management at programme level like, for example, not offering any national funding alongside the EAFRD

**Funding strategy and measure structure do not have the same effect on implementation costs and effectiveness**

programme.

Altogether, the resources available were used efficiently in the NRW programme. Only in the case of a few measures target achievement was inadequate (missed targets). Most of the missed targets are associated with the impact areas of employment (creation of jobs) and climate protection. This can be explained in part by the “inflationary” target setting for these impact areas due to their high political relevance. Almost two thirds of the ICs were used for the implementation of particularly effective measures – in at least one impact area. However, these two thirds received just 53% of the funding. This ratio underlines the fact that effective measures are associated with relatively high ICs.

**The resources (funding including ICs) were used efficiently overall**

To enhance funding efficiency, various levers can be pulled. On the one hand, the ICs can be reduced, and on the other hand effectiveness can be increased. 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 cannot be easily standardised should be supported externally, especially if nothing changes fundamentally in the legal framework. The effectiveness of measures could be increased easily by excluding from the funding certain funding objects that are suspected to have significant deadweight effects. This applies, for example, to the less precise compensation payments, non-specific investment funding (Processing & Marketing) and funding for reutilization with a residential purpose.

**Use levers to increase funding efficiency further**

## 11 Overall assessment and general recommendations

To present the overall impacts of the programme a simplified approach was chosen that allocates the funding of measures with positive impacts to specific impact fields and intervention types. The focus of the impact – and this was to be expected because of the programme structure – was clearly on environmental issues. Almost half of the programme funding was spent on measures with positive biodiversity impacts, followed by measures with water and climate protection impacts.

**Half of the programme funding was spent on measures with positive biodiversity impacts**

The need for action was high in the environment-related impact areas in particular. In the socio-economic areas and in quality of life, the need for action was assessed as moderate on the basis of the general situation in NRW.

**Need for action high in the environmental area in particular**

The EAFRD offers a varied mix of instruments in particular for environmen-

**EAFRD offers a varied**

tal impact areas and – with limitations – the agricultural sector, by means of which the factors relevant to the impact can be influenced. The intensity of land use, for example, which has an influence on both biodiversity and nutrient surpluses, can be affected by farming requirements. Advice provides the opportunity to improve management skills on farms. By creating suitable planning principles, by buying land or supporting stakeholder structures, it can be possible to place areas very precisely. Basically the EAFRD is thus suitable for playing an important part in solving problems in these impact areas.

**mix of instruments suitable for solving problems in environmental impact areas in particular**

A fundamental problem 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 measures in the NRW Rural Development Programme are effective. Drivers include, for example, market developments, the effects of the Renewable Energy Act and the first pillar of the CAP, overall economic or demographic trends or failure to fulfil obligations of regulatory law which overlap the positive impacts of the NRW programme. Measures in the impact areas of biodiversity and water worked against the negative trend but could not reverse it.

**Developments outside the scope of the programme are extremely dominant**

The NRW Rural Development Programme was important as a source of funding in the impact areas of biodiversity and water in particular. In all other impact areas, the EAFRD was just one financial instrument among many. Thus, for example, there were significantly more funds available for the impact areas of economic growth and job creation through the ERDF and ESF programmes and the Active Employment policy than in the EAFRD. For the agricultural sector, payments under the first pillar of the CAP were extremely important. The area of quality of life covers many dimensions that are addressed by various funding programmes, but especially by national policy at federal, state and municipal level.

**Significance of the NRW programme as a source of finance varied according to impact area**

NRW offered a selection of measures available in the EAFRD. In the environmental impact areas and in the agricultural sector, the mix of measures was largely successful, measured against the intended impacts. It was possible to identify particular “high performers”. As far as other measures are concerned, there is the potential to make them more suitable for specific impact areas by changing requirements, removing or adding funding objects, and combining measures more effectively. In the socio-economic areas and in the area of quality of life, the impact potential of the EAFRD was limited in principle. However, not all of the measures offered by the EAFRD were used (e.g., funding of business start-ups) or the measures offered were aimed less at direct growth and employment effects because

**Mix of measures good for biodiversity**

of their specific format.

The analyses of the implementation structures and the ICs showed that the NRW Rural Development Programme had, in large part, efficient implementation systems. Compared to other states, the overall programme and the measures comparable to those in other states were in the mid-range of implementation costs, with the exception of contractual nature conservation, investment in nature conservation, and forestry funding.

**Implementation system  
efficient in large part**

The unavoidable costs are higher in an EU-funded programme than in a national funding regime. This is, in particular, because of the administrative and monitoring systems that must be set up and the requirements of the IT systems. These costs must be considered when including a measure in an EU funding programme.

**Higher unavoidable cost  
base in an EU-funded  
programme**

The strong increase in differentiation and rigidity in the EAFRD-specific legal framework has led in part to disproportionate costs and has made efficient implementation of ambitious and effective measures increasingly difficult. The implementing administrative bodies are already putting a lot of effort into avoiding procedural errors (charges). Measures that may be highly effective but are prone to errors fall by the wayside. Measures that can be standardised and are less differentiated seem to be well suited but tend to be marked by lower intensity of impact and deadweight effects. This will make the risk of missing targets increase further in future.

**Complexity and dynamic  
of the EU legal frame-  
work increase the risk of  
costs for missing targets**

A fundamental resetting of the legal framework conditions is therefore essential and 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 treaties, a ban on retrospective application of changes to legal framework and legal interpretations, and a higher tolerable risk of errors in the policy field of rural development.

**The legal framework  
must be fundamentally  
revised**

## Conclusion

NRW has used second-pillar EU funding to offer a wide range of measures in a consistent strategic framework in the NRW Rural Development Programme. It was possible to identify positive impacts of the funding in most measures in the ex-post evaluation. The objectives and impacts of the measures went far beyond the programme questions and indicators prescribed by the EU, which are heavily restricted to the EU 2020 objectives. In line with the problems in rural areas, NRW placed strong emphasis on environmental issues. Funding in the agricultural sector was restructured

further in the direction of animal welfare. In addition, rural development gained in importance compared to the previous period, especially through the LEADER approach. Particularly in the area of rural development, the measures were directed at specific local needs, potentials and strategies, and led to extremely heterogeneous projects and impact pathways. Narrow limits were therefore set inevitably for the aggregation of overall effects. The potential of a rural development programme is too limited to have a measurable effect on the impact indicators for economic growth and employment set by the EU, and in the future RDPs should also be assessed more realistically ex ante. In the central funding area of environmental measures, impacts were measurable, but the counteracting factors outside the programme had too strong an influence to maintain the status quo, which was the aim of the global impact indicators. Substantial and partially more effective levers often lie outside funding policy.