

## **Ex-post Evaluation**

# **Rural Development Plan Hesse for the period 2007 to 2013**

## **Summary**

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## Summary

### 1 Context of evaluation

Hesse commissioned the evaluation of its Rural Development Programme (RDP) 2007-2013 jointly with six other federal states (Mecklenburg-Western Pomerania, Schleswig-Holstein, Hamburg, Lower Saxony, Bremen and North Rhine-Westphalia). The terms of reference comprised ongoing evaluation, drafting of annual evaluation reports, a mid-term evaluation in 2010, and an ex-post evaluation. The evaluation was conducted with the Thünen Institute of Rural Studies taking the lead, in cooperation with the Thünen Institute of Farm Economics, the Thünen Institute of International Forestry and Forest Economics, and the environmental planning office entera. A steering committee was set up to manage the evaluation activities. It was composed of the evaluators and representatives from the contracting federal states.

**Evaluation of the Hessian RDP 2007-2013 was carried out as part of a 7-state evaluation.**

Results from the ongoing evaluation were continuously prepared and presented to the steering and the monitoring committee, in briefing meetings and at conferences. Reports on specific evaluation issues were published as “module reports”. These module reports have been integrated into the ex-post evaluation.

**Evaluation results were communicated and discussed continuously.**

### 2 Programme structure and implementation

Of all the EU co-financed programmes in Hesse, the RDP received the largest public funding. With respect to total public expenditure (EUR 1.25 Billion), the RDP accounted for 39 %, followed by the ERDF and ESF programmes with 30 % each. In the Common Agricultural Policy (CAP), direct payments under the first pillar continued to dominate the financial contributions. The annual expenditure under the first and second pillars of the CAP accounted for approximately one fifth of all expenditures on policies with spatial impact in Hesse.

**The funding of the EAFRD programme in Hesse was higher than that of ERDF and ESF.**

According to the RDP, a total of about EUR 480 million of public funds was available for the programming period 2007 to 2013. This was supplemented by about EUR 250 million of national public funding for top-ups (Article 89 measures). About half (48 %) of the public funds were earmarked for Axis 2 “Improving the environment and the landscape”. About one quarter (27 %) was spent on Axis 3 “Quality of life in rural areas and diversification of the rural economy” and 20 % on Axis 1, “Improving competitiveness”. LEADER (Axis 4) accounted for 5 % of the public funds.

**Half of the funding was earmarked for Axis 2.**

**At large, the programme was focused on the agricultural sector.**

As a result of the Health Check and further financial adjustments, as of 2010 the available public funding for the Hessian RDP increased by EUR 43 million. The additional funds were allocated to Axis 2 and existing measures. As new sub-measure, the “use of mulch sowing, direct sowing or mulch planting procedures in arable farming” (MDM, 214 F) was introduced into the programme.

**The Health Check led only to small content-related changes of the Hessian RDP.**

The budgeted public funds were almost entirely used. Apart from Axis 2, all axes remained below the projections (status of 2009). The Health Check resources, which had to be accounted for separately, were also completely spent.

**The budgeted funding was almost entirely used.**

An analysis of paying agency data shows that most of the funds were distributed to the central and northern regions of Hesse. The three districts that received the largest amounts of funding from the RDP were the Vogelsberg district, Fulda and Waldeck-Frankenberg. This regional distribution resulted from the large number of farms taking part in agri-environmental measures (AEM) in the low mountain ranges and grasslands, the support for less favoured areas and the defined “area of assistance” for rural development measures.

**The geographical focus of the Hesse RDP was in the northern and central regions of Hesse.**

The main target group of the RDP were farms. In relation to the programme as a whole, about 62 % of the public funding went to farms, especially for measures under Axes 1 and 2. Axis 3 and LEADER measures were directed mainly at municipalities, private households and associations. Commercial enterprises were primarily supported under Axis 1 (measure “Support to processing and marketing”) and in the context of LEADER.

**Farms were the main target group.**

The implementation structure of the RDP remained largely constant in the programme planning period. In comparison to other federal states, Hesse was distinguished by the following features: (1) The paying agency was moved from the Ministry to an external bank (WIBank). This transfer included the setting-up of the IT-systems, establishment of the administration and control systems and technical supervision of the authorising bodies. (2) The approval procedure of the majority of the RDP measures was executed by 16 district authorities.

**Specific features in the implementation structure of the Hessian RDP**

### 3 Methodology

The ex-post evaluation builds on the structure and findings of the mid-term evaluation. The European Commission guidelines for the ex-post

**Ex-post evaluation is based on the mid-term**

evaluation introduced modifications to the structure of the report and to the 24 evaluation questions which were taken into account. Measure-based questions from the initial “Common Monitoring and Evaluation Framework” (CMEF) were retained where they appeared useful for the evaluation of the support measures.

**evaluation and takes account of the current guidelines.**

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

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

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

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

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

**A mixed-method-approach was applied for the impact analysis.**

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

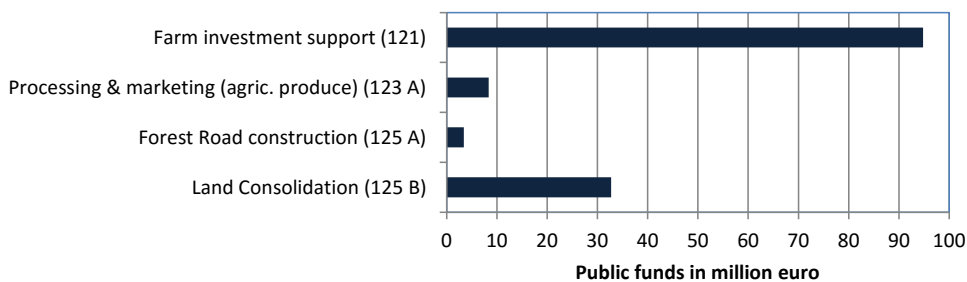
Under Axis 1, Hesse offered four sub-measures in three EAFRD codes. The measures were aimed at agriculture, forestry and the food industry.

**Axis 1: three EAFRD codes and four sub-measures.**

Including top-ups, about EUR 139 million of public funding (20 % of the total programme funds) was spent on Axis 1 from 2007 to 2015. The measure which had the largest share of the funds was Farm investment support (FIS, 121).

**20 % of the public funding was spent on Axis 1.**

**Public funds (top-ups included) for Axis-1-(sub-)measures (2007-2015)**



The final financial implementation reached 95 % of the 2009 planning. Implementation ran according to plan for the FIS (121), but was below the 2009 projections in all other measures. This led to re-alignment and adjustment of the financial plans in the various programme modifications up to 2015.

**The outflow of funds for Axis 1 measures varied.**

In terms of the output targets of 2009, the achievement levels varied between 22 % and 106 %. The number of projects and investment volumes was below the 2009 targets for some measures, while in others investment volumes lay above the targeted amount. While output-indicators are requested by the European Commission, their relevance for the evaluation of the impacts of a measure is limited.

**In terms of output targets, the 2009 planning was only met in part.**

The European Commission had specified five “common result indicators” for Axis 1, of which three were included into the analysis. These indicators could only be applied in a meaningful way to some of the measures. For instance the question ‘*how and to what extent has the measure contributed to promoting the competitiveness of the beneficiary?*’ was relevant for the evaluation of measures 121, 123 and 125, as these were aimed at improving competitiveness. The investments in infrastructure (125) had also some other targets and impacts and had to be evaluated using a broader approach.

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

The Farm Investment Support (FIS, 121) provided assistance to 808 farms, with investments eligible for support amounting to EUR 363 million. The focus of the support was on dairy farming (423 cases; 52 %), where about a quarter of the Hessian full-time dairy farmers were supported. The affected investments contributed to growth, rationalisation and increased productivity on the dairy farms that received funding. In contrast to these effects observed on the supported dairy farms, profitability decreased in pig farms that received support, although the investments on average had a positive impact on growth and productivity.

**121: Farm investment support focused on milk producers.**

**The supported farms have grown and increased productivity.**

While the level of milk production in Hesse remained largely stable in the programming period, the significant decline in pig farming continued despite the funding of investments. A similar discrepancy in impact exists in the area of animal welfare. There are clear indications that the newly built dairy cattle housing creates good conditions for animal welfare (especially with respect to behaviour). In the area of pig farming however, new housing is commonly constructed with fully slatted floors and does not provide favourable conditions for welfare friendly animal husbandry. It should be noted that even under favourable technical conditions the well-being of the animals depends to a large extent on management.

**The decline in pig stocks is continuing despite support.**

**New stables create good conditions for animal welfare in dairy farming but not in pig farming.**

It is recommended to focus FIS even more towards the provision of public goods. For the improvement of animal welfare a combination of investment support, premium payments, advice and vocational training would be a suitable approach.

**FIS should be directed even more towards public goods.**

A total of 34 investments were supported in the food industry under the measure “support for adding value through processing and marketing” (P&M, 123). The investment volume amounted to around EUR 33 million. The measure aimed at strengthening regional value chains by restricting the support to those enterprises which took part in regional quality systems. Only about 60 % (EUR 8.2 million) of the EUR 14 million funding budget programmed in 2009 was dispersed. The specific quality requirements partly contributed to the low demand for P&M.

**123: Funding for the processing/marketing of agricultural products (P&M) remained significantly below the projection.**

The investments supported with P&M funding led to an improvement in important performance indicators such as turnover, gross value added, quality and employment in the companies. Whether the measure improved structure and competitiveness of the entire agricultural and food sector could not be ascertained. Due to the limited number of supported enterprises, a substantial effect can be considered to be unlikely. The P&M funding was associated with significant deadweight and displacement effects which limit the effectiveness of the measure.

**Performance indicators of the supported companies were enhanced, but unintended side-effects reduced the impacts of the support.**

In some cases, participation in quality programmes, especially “Certified Quality - Hesse” was initiated due to the participation in the funding measure. Due to the requirements of these programmes regarding regionalism and quality, the support made a contribution to strengthening regional value added chains.

**The P&M support contributed to strengthening regional value added chains**

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

**Stronger focus on innovations makes sense**

introduction of recognised quality systems, even if this focus results in lower take-up rates. Furthermore, the funding should focus more heavily on innovations, which had little significance to date.

The forest road construction measure (125 A) mainly supported upgrading and basic maintenance projects. For the competitiveness of the forest enterprises, lorry accessibility of forest roads is a prerequisite. The objective formulated of improving 700 km of the road network was increased to 850 km during the programming period. This target was not quite reached, with 751 km actually covered.

**Forest road building (125 A): a total of 751 km of roads were improved or upgraded.**

The measure contributed to improving the competitiveness of the supported forest companies. This is the result of improved access and reduced pulling costs of about EUR 1/m<sup>3</sup> wood. In total, access to approx. 26,000 ha has been improved. The supported roads are now passable for 98 % of the year, compared to 58 % previously. The measure should be continued in view of its positive impacts.

**26,000 ha have benefitted from better access.**

Land consolidation (125 B) contributes to reducing costs of agricultural production through improved field structures and road building. It also aims at solving conflicting land-use interests in rural areas. The measure is able to provide farms with planning security in the case of such conflicts.

**125 B: Land consolidation is a measure with broad range of aims and impacts.**

The funding was largely attributed to ongoing procedures. Over the funding period, a total of 174 operations were supported in all 21 districts of Hesse, with a focus to the southern parts of the country. The total area covered was 95,000 ha or 4.5 % of the total area of the federal state. Of the EUR 54 million total costs, 44 % were spent on rural road building (336 km).

**Only a few new operations were supported in the funding period.**

As a result of improved field structures, measure 125 B led to a reduction in the variable production costs of farming, calculated at around EUR 1.1 million a year. Road building also led to annual savings of EUR 0.8 million. Depending on the objective of the project, conflicts resulting from the use of agricultural land for, among other things, residential development, traffic projects, flood protection, drinking water protection and nature conservation were resolved.

**Improvement in field structures and roads led to a reduction in the variable farming costs.**

Land consolidation and reorganisation should continue to receive support, because the measure is suitable for solving complex problems relating to conflicting land-use interests in rural areas.

**The measure should be continued.**



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

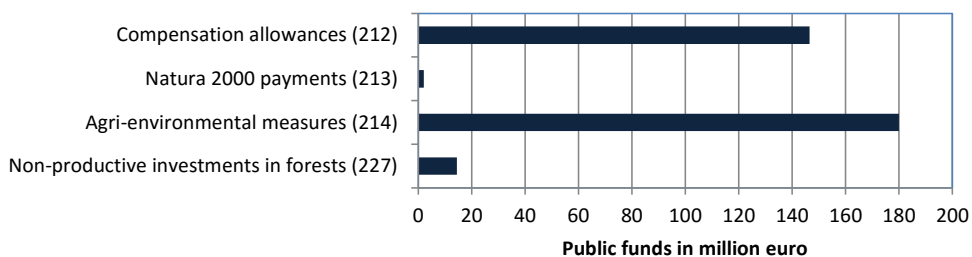
Hesse offered agricultural and forestry measures under five EAFRD codes (212, 213, 214, 226, 227) in Axis 2. Measure 226 for restoring forestry potential was initially programmed but not implemented since there were no damages. The funding was mainly focused on area-related measures; investment projects were only supported under measure 227.

**Axis 2:**  
land-based measures were in the foreground.

Including top-ups, about EUR 338 million of public expenditures were spent (49 % of the total programme funds). Agri-environmental measures (AEM, 214) and compensatory allowances for Less Favoured Areas (LFA-payments, 212) dominated. Compared with the indicative planning 2009, more funds were spent on measures under Axis 2, especially for CA.

**AEM (214) and LFA-payments (212) dominated in Axis 2. Expenditure exceeded the planned figures.**

Public funds (top-ups included) for Axis-2 measures (2007-2015)



Output targets set in 2009 were met by LFA-payments (212) and AEM (214), while Natura 2000-payments (213) and forest investments (227) remained below expected acceptance rates. However, it was difficult to interpret monitoring outcomes, since there was no consensus about whether to cumulate output targets of land-based measures.

**Set output targets were achieved only partially only**

The main focus of measures under Axis 2 was on the maintenance and improvement of water quality, followed by the protection of biodiversity and soil quality. Only a minor part of supported measures were tied to climate protection targets. Due to the financial importance of LFA-payments, the prevention of marginalization and abandonment of agricultural land“ was of high interest. Result indicators as compiled in the monitoring were in part implausible.

**AEM primarily focused on improving water quality and biodiversity. LFA-payments were meant to prevent marginalization and abandonment. w.**

The common evaluation question for Axis 2 (*How and to what extent has the measure contributed to improving the environmental situation?*) has been applied differently to the protected resources biodiversity, water, soil and climate. For LFA-payments (212), reference was made to the list of evaluation questions from the previous period of 2000 to 2006, which included a question of income compensation due to LFA-payments.

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

Planned spending for LFA-payments (212) amounted to EUR 120 million, excluding LFA-payments of mountain areas. The planned budget was significantly increased up to around EUR 129 million plus EUR 13 million for top-ups. Around 12,500 farms and 330,000 ha of agricultural land, of which 70 % was grassland, was annually supported on average. The amount of the LFA-payment per hectare mainly depended on the budget available. Therefore, annual payments varied strongly.

**212: The amount of the LFA-payments varied from year to year.**

The redefinition of LFA, which had been proposed by the EU for the funding period 2007 to 2013, was postponed to 2018. As a result, income compensation via LFA-payments remained a priority according to the EU. However, the magnitude of income compensation was not a LFA-objective for itself but rather a way to maintain land use in disadvantaged regions. The empirical findings based on German FADN data indicated strong variations in the contribution of the LFA-payments to close the income gap between farms inside and outside LFA. For some farms, substantially larger compensation than the amount of LFA-payments would have been required to offset the income difference, while other farms generated significantly higher income even without LFA-payments.

**Large differences in relation to the income situation of the farms and the compensation effect of the LFA-payments.**

The structural change regarding farm size and numbers went faster inside LFAs than in the rural districts outside LFAs. However, the analysis of district and municipality data indicated that the decline of farm numbers was not associated with the abandonment of land. Agricultural land was usually taken over by other farms. Thus, there is no empirical evidence that land has become fallow on a large scale. Further indicators for this were the small proportion of land that is being kept in "good agricultural and ecological condition" and increasing land rents over recent years.

**Structural change has not lead to land abandonment.**

LFA-payments were not linked to fulfilling environmental requirements beyond cross-compliance. In this context, neither direct nor indirect positive environmental effects are associated with LFA-payments.

**LFA-payments are not associated with positive environmental effects.**

The LFA-payments in their current design cannot achieve their objectives. It is therefore recommended to review and revise the objectives of the LFA scheme with regard to clearly defined problems and in order increase the effectiveness of LFA-payments.

**Objectives and design of LFA-payments should be revised.**

The Natura 2000 measure (213) was offered for the first time in 2010. Financial compensation was given to grassland in nature conservation areas in Natura 2000 networks. For the reduction of input use to increase yields, a compensation of EUR 200 per ha and year was offered under a five-year obligation. Up to 2014, 456 farms received payments for a total

**213: Natura 2000 payments were awarded from 2010.**

of 3,625 ha of grassland. This corresponds to about 43 % of the area targeted for support.

In the majority of supported projects, no additional farming obligations beyond the restrictions of existing administrative legislation were associated with the Natura 2000 support. As a consequence, the compensation payment led only to a slight improvement of the environmental situation. Positive impacts on vegetation and flora resulted from the combination of Natura 2000 payment with extensive grassland use under AEM, both inside and outside of nature conservation areas. The same applies to the nature conservation value of the supported areas, which could be maintained against the the general trend of impoverishment of species driven by increasing farming intensity over the corresponding period.

**The measure had hardly any positive environmental effects.**

Hesse cancelled Natura 2000 support after 2014 and integrated it into the agri-environmental and climate measures (AECM) of the new funding period. In this way, Hesse was responding to the difficulty of reconciling protection of biodiversity using the instrument of payments for agricultural land under management restrictions with reduction in the error rate of measure implementation, as demanded by the European Court of Auditors.

**The support measure was cancelled in 2014 and integrated into other measures.**

The AEM (214) comprised six sub-measures. The sub-measures were used to pursue water protection, biodiversity and soil protection objectives. In 2012, the area receiving support under AEM under Hesse's agri-environmental programme (HIAP) was around 157,000 ha (19.7 % of agricultural land). The AEM that covered the largest area was organic farming, with around 71,100 ha of supported land (9 % of agricultural land) and 1,576 farms.

**214: AEM were implemented on around 20 % of the total agricultural land, with organic farming accounting for the largest share.**

The AEM were extremely important in terms of achieving biodiversity objectives. The central measure was the support of extensive grassland use adapted to local habitats on 42,000 ha, of which 30,000 ha had explicit nature conservation objectives with special nature conservation payments. Organic farming also achieved a good broad impact on biological diversity in significant areas. Overall, good to very good impacts were achieved by AEM, but in many cases effects presumably extended only locally or regionally with limited impacts, if any at all, on the state-wide baseline indicators.

**Good to very good impacts regarding the protection of species and habitats.**

All sub-measures aimed at water protection (organic farming, intercropping, flowered and buffer strips, mulch sowing and direct sowing procedures) contributed to the maintenance and improvement of water

**Water protection measures with significant positive**

quality in Hesse. On average, around 108,000 ha per year were supported with listed AEM, while only just under 5 % of the AEM funding targeted on arable and permanent crop land. The uptake was significantly below expectations, with the result that the targets for improvement in water quality were not achieved. The contribution of AEM to reducing the nitrogen balance was 5.2 kg N/ha. This was attained from support for organic farming. Furthermore, the AEM also improved the retention of soil and nutrients on agricultural land.

**impact per funded area, but limited uptake.**

As far as soil protection is concerned, organic farming again is comparatively efficient. The costs in organic farming for preventing one ton of soil erosion were EUR 81, while flower and buffer strips incurred costs of EUR 271 and mulch sowing, direct sowing and mulch planting procedures had costs of around EUR 460.

**Organic farming is the cheapest way to avoid soil erosion.**

In the funding period 2014 to 2020, the range of AEM supported under the EAFRD has been significantly cut back in the Hessian RDP. Organic farming and the newly introduced varied crop rotation is continued. Other AEM are funded purely nationally, in part with a modified content. Organic farming, which accounted for significantly more than 50 % of the AEM budget in the funding period 2007 to 2013. This measure is characterised by a high degree of administrative efficiency and multifunctionality in its environmental impacts. For some of the other AEM very high implementation costs incurred which were considerably higher than the subsidies. In this context, the decision of Hesse to do without EAFRD funding for administratively complex AECM, some of which are susceptible to errors, is understandable.

**As of 2014, the AEM have been cut back considerably in the RDP and will now be continued outside the RDP.**

Non-productive forest investments intended to improve the ecological stability of forests by increasing the number of tree species. In addition, the impacts of ongoing discharge of pollutants from external sources should be attenuated.

**227: Non-productive forest investments.**

Output targets were generally achieved. In the course of the programme, the area targeted for forest restructuring and soil liming was increased, while the area for maintenance of young stock was reduced. A total of 4,937 ha of forest were restructured (target 5,000 ha), young stock maintenance took place on 6,179 ha (target 7,500 ha) and soil liming on 37,554 ha (target 32,000 ha).

**Output targets were achieved.**

An extremely large amount of documentation and administrative work was involved in the support process. This had a detrimental effect on the acceptance of the measures among forest owners and among the supporting agencies, which are important for the implementation of forest support.

**Large amount of documentation and administrative work limited acceptance.**

The impacts of the measure were heterogeneous. Forest restructuring had a directly positive impact on the objects of protection of biodiversity, water and soil, and climate. However, there was some deadweight, which offset the positive effects to some extent. Soil liming has only a minor positive impact in relation to soil/water; as far as biodiversity and climate are concerned, the impacts are negligible. Maintenance of young stocks had an indirectly positive impact on all conservation areas through stabilisation of the stocks, although relatively large deadweight effects occurred.

**The impacts were heterogeneous; there were large deadweight effects in young stock maintenance.**

Forest restructuring and soil liming should continue to form part of forestry funding. A critical view should be taken of the range of support for young stock maintenance due to the deadweight and it should no longer be offered in future.

**Forest restructuring and soil liming should be continued.**

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

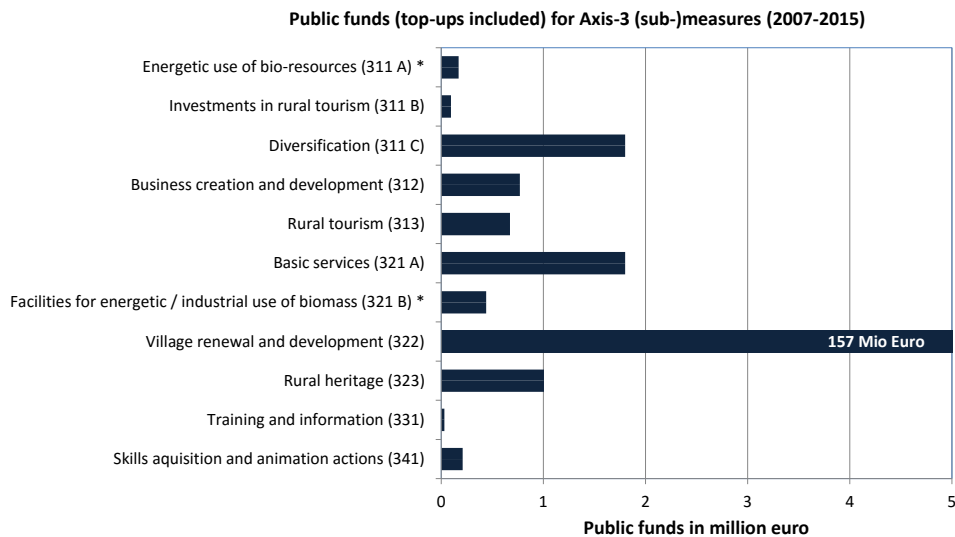
Hesse offered a wide spectrum of measures under Axis 3. With the exception of a few sub-measures (322, 311 C, support was provided exclusively in areas with Regional Development Concepts, the so called HELER regions. Measures 331 and 341 were also available in the 20 LEADER regions. The five HELER regions were organised in a similar way as the LEADER regions, but they did not have their own budgets. Hesse thus pursued the approach of integrated rural regional development virtually across the whole state.

**A wide range of measures in Axis 3 was aimed, in particular, at areas with Regional Development Concepts.**

Including top-ups, about EUR 164 million was spent on Axis 3. The top-ups accounted for 84 % of the total expenditure and were used exclusively in village renewal and development (322). Accordingly, this measure was by far the most significant measure in Axis 3 with expenditure of EUR 157 million. All other measures were of only minor financial significance.

**Most of the Axis 3 funds were earmarked for village renewal (322).**

The measures (except for 311 C and 322) were also offered for the implementation of the Regional Development Concepts via LEADER (Axis 4). In total, Axis 3 accounted for 24 % of the total public funds spent under the Hessian RDP.



\* largely implemented in LEADER

In relation to the 2009 financial planning, the flow of funding was 98 % as of Dec 12, 2015 (without top-ups). More funding than planned was spent on Measures 311, 312, 321 and 323, although the absolute differences were small.

**The financial budget for Axis 3 was largely exhausted.**

The common output indicators specified for Axis 3 are not very meaningful. Essentially the indicators were restricted to the number of beneficiaries or projects and the investment volume. Whether targets set on the basis of the common output indicators were not reached or were surpassed is not particularly meaningful on its own for assessing the effectiveness of the measures. This is especially true in Hesse because the distinction between Axes 3 and 4 was difficult and the same measures were implemented in both HELER and LEADER regions.

**Common output indicators with limited significance.**

Five of the six result indicators intended for Axis 3 were also relevant for the Hessian RDP. Target values were specified for only two indicators in the programme planning document (as of 2009). The indicator "Population in rural areas benefiting from the services" was only used very fragmented/incomplete.

**The common result indicators have large gaps in them.**

There were three Common Evaluation Questions (17 until 19) for specific Axis 3 measures that relate to economic factors, quality of life and development of capacity and which were relevant for the most of the (sub-) measures. Where the measures had impacts beyond these, they were described under question 20.

**Common evaluation questions match well with the main objectives.**

Under measure 311 B, participation in standard classification systems was intended to enhance the standard of quality. With five projects, the support was significantly below expectations, which is mainly the result of the prerequisite for the support, such as participation in classification systems, and the restriction to agricultural holdings.

**311 B: Investment in rural tourism should contribute to improve the tourism profile of rural regions.**

The support did not meet the requirements of the target group of rural tourism service providers and should therefore be adapted with respect to its objective and form.

**The output from the support was clearly below expectations.**

Measure 311 C was aimed at support for farms in the development of alternative agricultural and agriculturally related income sources in order to extend the means of income of rural areas and develop employment potential. On the one hand, many farms have good opportunities for diversification because of their proximity to the Rhine-Main metropolitan region and other cities (Gießen, Kassel). To obtain bank financing for profitable investments of this sort was not a fundamental problem. On the other hand, many farms are increasingly dependent on new sources of income because of the limited opportunities for growth. They compete for employees and tend to be confronted with a reluctance of banks to provide credit for innovative and riskier areas of activity.

**311 C: Diversification of income sources is sensible and essential for many farms in view of the structural transformation in agriculture.**

Overall, just 57 projects were supported under measure 311 C in the funding period. This corresponds to about 0.3 % of all agricultural holdings in Hesse; in relation to farms already displaying a combination of incomes, the proportion is about 1.3 %. The support focused on animal boarding facilities with 38 % of the instances of support (44 % of the funding) and direct marketing with 36 % of instances (37 %).

**The scope of the measure was limited.**

The number of funding applications remained significantly below the original expectations at the beginning of the programme period (only 38 % were implemented). The reasons for the low take-up rate included the format of the support, such as the limitation to rural areas as the setting, the specification of certain quality programmes, a lack of information and the relatively large amount of administrative work involved.

**The number of instances of funding remained significantly below the projected numbers.**

The impact of the support on the extent and direction of the diversification of agricultural businesses in Hesse is marginal because of the limited number of instances of support and the deadweight. The small number of farms that were supported roughly doubled their revenue on average over the observation period and thus grew significantly more strongly than farms that were not supported. The farms supported already showed clearly higher revenues at the outset (2007).

**The overall impact of support for diversification was small.**

The effect on jobs from supported investments tended to be positive. Information suggests that in 40 % of cases there was an increase in employment, while 60 % of those surveyed reported no change or a slight decline in jobs. Based on available information, the average increase per farm was 0.39 of a full-time equivalent job (FTE) or 1.1 people.

**Effect on employment tended to be positive.**

A survey of farms with a combination of incomes showed that central factors in the success and hindrance of diversification can only be influenced in part by investment funding measures. At the same time, 59 % of those surveyed said the support had a positive effect on the decision to invest in diversification in the first place.

**Financing diversification investments was not a hindrance to investment.**

In all areas of diversification, significant factors hindering investment and growth were said to be bureaucracy and regulations, disadvantages resulting from the tax classification as a trade and – despite numerous investment events and internet presentations – a lack of transparency in the range of support available and the administrative responsibilities. Other inhibiting factors cited were the difficulties of the working situation, the necessity of extensive investment or too high a risk, and in isolated cases the competitive situation.

**Bureaucracy, regulations and above all the working situation often had a counteracting, inhibiting effect on development.**

If it remains politically desirable to encourage the diversification of farm incomes in future, support for investment should be restricted to those starting out on a combination of incomes, and the funding of small investments (entry programme) should be strengthened by combining them with more training and advice.

**Modify funding for diversification.**

Measure 312 was implemented almost exclusively in HELER regions. A total of 39 small enterprises (19 business premises and 12 existing premises) were supported, allowing a range of services (medical, care and social services) in particular to be created or extended. The development of additional income or partial livelihoods and common marketing projects or initiatives had hardly any significance, with just 6 and 2 projects respectively.

**312: Business creation and development.**

Consequently, the direct employment effects were small overall. A total of 40 FTEs new jobs were created, of which 27 FTEs were in newly created businesses and 13 FTEs in expansions. Measure 312 also had a positive impact on public services.

**Employment effects were small overall, but very positive in cases receiving support.**

More PR work and better range of information and advice could increase the up-take of the measure. There should be a stronger focus on

**Stronger focus on support for extensions**



extensions to support small businesses in their development and adaptation to changing markets. **in small businesses.**

The up-take rate for measure 313 was also low. The intended target group was hardly reached at all. A total of 28 projects were supported, of which 23 investments were in active vacations (17 public bodies and 6 private beneficiaries), for examples the establishment and certification of eco trails, hiking and cycle paths. **313: Support for tourism: low take-up rate for the measure.**

The employment and income effects of the support were difficult to measure. Support for tourism also made a contribution to tourist development, in particular by linking certified long-distance and premium hiking paths, and setting up rest and information facilities. This also benefits the local population. **Employment effects were difficult to measure.**

Support for tourism should continue to be seen as part of an overall package of various instruments and funding programmes and it should follow the action framework for tourism policy of the Hesse state government. **Continue measure 313 as part of an overall package.**

Measure 321 A was aimed at maintaining or improving the quality of life and housing by sustaining and ameliorating basic provision in the areas of regional culture, information, communication, support and everyday goods. **321 A: Basic services.**

In these areas, a total of 30 projects were implemented. The support led to positive impacts especially through the improvement in quality of residential conditions , the development of social relationships and the utilisation or upgrading of leisure and recreational facilities. In this context, the projects contribute to dealing with the demographic change and the particular needs of an ageing population. **Measure had a positive impact on housing, social relationships and leisure and recreational facilities.**

The demands in the rural regions in relation to utility services went beyond what was offered by the support measure. The measure was therefore only able to act as one component in sustaining and ameliorating the vitality of rural areas as places to reside and live in. The emphasis on inter-village or inter-community focus in the context of the regional approach is regarded as effective. **The demand exceeds what the measure offers.**

In future, support for regional service provision should be retained integrated into the Regional Development Concepts (REKs) and regional processes. Although the basic conditions and modes of support should be communicated clearly and reliably as soon as possible before the application is open, the objectives of the funding should always be adapted to the demand. **Continue the measure, but regulate modes of support more clearly.**

Village renewal and development (322) was focused on the negative population trend and loss of appeal of many villages, e. g., as a result of abandonment of village centres and withdrawal of services. The re-organisation of the measure to allow overall municipal implementation (as of 2012) built an appropriate basis for preparing villages for the future.

**322: Village renewal and development.**

Based on the creation of village development concepts with the participation of the local population, the support of village renewal and development includes different funding objects: investments in the renovation of buildings worth preserving, to shape the appearance of a locality, the functional re-organisation and design of open places, and investment in community facilities.

**Village development concepts were the basis for implementation of the measure.**

In total, 7,326 projects were supported in 504 main areas of support with around EUR 114 million (without municipalities' own funds). The majority of projects were implemented by private beneficiaries, while municipalities received most of the funding. The key area of impact was in measures to shape the appearance of a locality through public and private projects, which mainly concerned residential attractiveness. Investments in community facilities were attached to social life in the villages, e. g., through the village community centres. Through the participation of the local population and the large voluntary commitment, the projects were adapted to future needs and a high degree of identification was achieved.

**Many projects were implemented by private beneficiaries with the object of making living in villages more attractive.**

The measure should still be offered in future. In the context of the complex structures of the participation and coordination processes, transparency and a flow of information between the levels involved is crucial. The authorities should be provided with adequate resources for the implementation of the targets and projects drawn up.

**Continuation of the measure with adequate resources.**

The objective of the measure 323 was to preserve knowledge of the distinctive features of the regional natural and cultural heritage and to increase regional value, in particular in the area of (rural) tourism.

**323: Transfer of knowledge of the rural cultural heritage.**

In the 37 projects, paths and trails relating to local culture, the history of the landscape or other distinctive regional features were created and developed. Museums, information centres and similar establishments were also supported.

**Distinctive regional features were created or developed.**

Impacts in the area of quality of life were therefore achieved in the educational context through transfer of knowledge about the regional cultural heritage and in the area of leisure and local recreation. The tourist appeal increased in many regions thanks to these new opportunities, which was apparent in the increasing numbers of visitors.

**Education through knowledge transfer and an attractive range of local recreational opportunities.**

<p>In future, support for rural cultural heritage should be retained in this form, with integration into the Regional Development Concepts and processes.</p>	<p><b>The measure should be continued.</b></p>
<p>Measure 331 was aimed at economic stakeholders in the areas of business start-ups, tourism and bio-energy. The aim is to improve their personal skills and target them towards regional demand and requirements. The measure was regarded as a complement to Measures 311, 312 and 321 B.</p>	<p><b>331: Training and information.</b></p>
<p>In fact, the take-up rate was very low (four projects). This was the result, above all, of the funding conditions (e. g. a minimum of twelve participants, at least six teaching units), which were adapted in 2010 but still did not bring about any further implementation thereafter. The measure “competed” with other training and advice programmes (e. g., courses by employment agencies and the Chambers of Trade and Industry).</p>	<p><b>Hardly any projects because of the funding conditions and alternative training and advice programmes.</b></p>
<p>Measure 341 was intended to contribute to developing the skills of stakeholders in regional development. The aim was to support the development and implementation of regional development strategies in this way. Acceptance and involvement in the regions should be strengthened through PR work (internal marketing).</p>	<p><b>341: Developing skills and raising awareness.</b></p>
<p>The opportunity to make use of Measure 341 and its funding options was available to all HELER and LEADER regions. 31 projects were funded under Axis 3 and 78 under Axis 4. In HELER regions, however, the measure was hardly used at all.</p>	<p><b>Measure was available to all HELER and LEADER regions.</b></p>
<p>The focus of the support was internal marketing, whereas less use was made of training courses. The training courses for leading stakeholders related more to the overall management process, less to the development of competences in regional management. Courses for voluntary stakeholders were run in all relevant areas (e. g., nature tourism, support/maintenance, strengthening of voluntary work).</p>	<p><b>Focus of the funding was internal marketing.</b></p> <p><b>Training for stakeholders fell short of the mark.</b></p>
<p>Internal marketing contributed to raising awareness of the Regional Development Concepts, regional management and the Local Action Groups (LAGs). However, the actual project selection process remained unclear to the beneficiaries in part.</p>	<p><b>Project selection process requires greater transparency.</b></p>
<p>Measure 341 was fundamentally aimed at the demand for approaches to regional development. The development of stakeholder competences and internal marketing are ongoing and inherent tasks of regional development. This demand should therefore continue to be met by the</p>	<p><b>The measure should be continued and administrative efficiency increased.</b></p>

support. At the same time, adjustments to the design of the support objects are necessary. The recommendation is to strengthen the PR work further with the aid of internal marketing. In this process, better use can be made of opportunities to bundle the projects to be implemented in the regions in order to increase administrative efficiency.

In implementing the measures (313, 321 A, 323, 331), there were deficiencies in interpretation and communication at the interfaces between the funding guidelines, funding manual, LAGs and awarding bodies, especially at the outset, which often required subsequent clarification. In future, the basic conditions and modes of funding should be communicated as clearly and reliably as possible at an early stage.

**Basic conditions and modes of funding communicated clearly and reliably at an early stage.**

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

In Axis 4 (LEADER), twenty regions were selected by means of a competitive process in 2008. EUR 41.1 million of public funding was spent by these in the funding period, which is a little below the 2009 projection. The five regions not selected were able to make use of individual support options as HELER regions.

**20 LEADER regions were selected in the competition.**

At the beginning of the funding period, new organisation and re-organisation of LEADER implementation took place at all levels, as a result of which few projects were completed in the early years. Since 2011, implementation has taken place continuously at a level of 150 to 200 projects a year, with funding of EUR 4 to EUR 5 million.

**Project implementation at a high level since 2011.**

The majority of funds (94 %) went on improving quality of life (413), for the implementation of which Axis 3 measures (except 311 C, 322) were intended. The areas of bio-energy, utility services, cultural heritage and micro-companies received the most support.

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

National public co-funding was mainly provided through the municipalities. State funding that was made available was used primarily for bio-energy and micro-companies.

**State funding mainly for bio-energy and micro-companies.**

A relatively small budget was made available to the LEADER regions. At the same time, the requirements of the regional management and the Regional Development Concepts were relatively high. In some regions resources for management and for projects were disproportionate. Larger projects could hardly be implemented at all with the available budget.

**Low budget and high requirements.**

The close connection between administrative processing of the measures of the RDP limited the implementation options in comparison to LEADER+

**EAFRD administration**

in the previous period. This applies in particular to innovative approaches. The focus on Axis 3 measures and on budgeting for bio-energy projects resulted in further restrictions on the scope for action in the regional processes.

**limited the options.**

Overall, implementation of the specific features of LEADER was largely successful in Hesse. In individual aspects, however, there were differences between the regions. Some of the groups of stakeholders were hardly represented in the LAGs. This was in particular true for women and young people, while stakeholders in the economy were relatively well represented.

**The establishment of the LEADER approach was successful.**

The capacity of the stakeholders to steer and take action for local development was improved. This was evident in improvements in relationships, contacts, knowledge and capabilities, as well as in the extension of cooperation and networking. Economy-related stakeholders assessed the LAG work more positively than stakeholders in civil society and municipalities. This became particularly clear in relation to the decision-making processes in the LAGs.

**Good governance arrangements.**

**Economy related stakeholders were more satisfied than other stakeholders.**

The targets set in the Regional Development Concepts were largely met in the view of nearly two thirds of the LAG members. The LAG members estimated impacts of LEADER largest in the areas of tourism and development of villages. In part, it was possible to link development in tourism to distinctive regional features and to highlight it with the range of information and experiences on offer. In addition, regional approaches to improving the range of service provision in the social, cultural and leisure areas were set up increasingly.

**Positive impacts in relation to tourist and village development and the range of service provision.**

The contribution of LEADER to the development of the regional economy was regarded slightly smaller by the LAG members. Direct employment effects came above all from Measure 312. In addition there were indirect effects, which resulted in particular from investment in the infrastructure and contributed to improving the quality of residential conditions.

**Direct employment effects were created especially by supporting micro-companies.**

Recommendations focus on optimisation of the support process with regard to the specific requirements of a participatory approach such as LEADER. This involves retaining the provision of state funding for co-financing and the communication of clear and simple "rules of the game". This would open up wider scope for the regions to select projects, separately from the measures. The regional budget provided for project implementation should be based more closely on the guide value of the EU.

**Retain state funding for public co-finance.**

**Clear "rules of the game" at an early stage.**

In the LAGs, the composition of the membership and the transparency in

**The Local Action Groups**

decision-making should be improved. In view of the large number of stakeholders and levels, good information and a high degree of networking is required for a constructive organisation of the essential work processes, which should be met by new forms of events and communication.

**require a great deal of coordination and transparency.**

## 8 Programme impacts

In relation to economic growth, the Hessian RDP as a programme directed at the primary sector, environmental issues and rural areas, had only limited scope to stimulate it. There was essentially a conflict of interest between the balancing objective of rural development policy and the objective of economic growth of the new Lisbon strategy.

**Question 1:  
Contribution to the growth of the whole rural economy?**

The RDP had no significant effect on the development of gross value added in the economy as a whole or on the non-primary sectors. At the level of recipients, impacts of the support may well have been observed, but they were mostly too small to be measurable at regional level. Gross value added in the primary sector increased slightly due to the RDP. This was the result, above all, of Axis 1 measures (121, 125 B).

**Hardly any impact on gross value added.**

There was no major need to reduce unemployment rates in rural districts of Hesse. In any case, the RDP offered only limited options for creating jobs in rural areas, both financially and in terms of content. The financial importance of the RDP for the objective of creating employment was small in comparison to other instruments of economic promotion and the active employment policy.

**Question 2:  
Contribution to the creation of new jobs?**

An analysis of written surveys and monitoring data showed that about 385 full-time equivalent jobs (FTEs) outside the primary sector were created. In the primary sector, however, there was a tendency towards a reduction of jobs due to investments in rationalisation (-56 FTEs). Overall, the influence of the RDP on employment in Hesse was negligible.

**Only slight impact on employment.**

In the context of the ongoing negative trend for biodiversity indicators and in view of international conservation obligations, there was a strong need for action to protect biodiversity. However, the potential of voluntary measures – such as those of the EAFRD – is limited, as incentive systems are not permitted and, as a result, relevant areas cannot be reached sustainably to the extent required.

**Question 3:  
Contribution to the protection biodiversity?**

Nearly a third (29 %) of all the public funds were paid for measures with positive impacts on biodiversity (as measured by the indicators of field birds and high nature value, HNV). Only around a quarter of these

**Extension of grassland had a very positive impact on biological**

measures had significant impacts on species and habitats. The latter are mainly based on the agri-environmental measure “extensive use of grassland”.

**diversity.**

The continuing decline of biodiversity could not be stopped by the RDP, but presumably slowed down. This seems to be the result of the relatively small amount of agricultural land managed under measures with high-quality impacts and of the overriding impacts of external drivers that led to an overall intensification of land use.

**No reverse in the negative trend in biological diversity.**

Production of renewable energies was promoted in the RDP through Measures 311 A (diversification) and 321 B (local heating networks). The aim of these measures was to partly replace supply of electricity and heat from oil and gas by renewable raw materials. On average, around 88,000 MWh and 54,000 MWh of electricity was generated respectively by the 50 biogas plants and 54 biomass incineration plants supported by the RDP. This quantity is negligible in relation to the total annual electricity generated in Hesse (14.8 million gigawatt hours). As the plants are subsidised by consumers under the legally regulated feed-in tariff payments of the renewable energy act (EEG), it can be assumed that significant deadweight effect occurred.

**Question 4:  
Contribution to the provision of renewable energies?**

**Significant deadweight with no relevant impacts.**

Labour productivity of the agricultural sector in Hesse is relatively low compared to national figures, which indicates a need to increase the competitiveness of the sector. Demand existed in particular in the maintenance and improvement of the rural infrastructure (roads and bridges). On farm level, adjustment requirements were related to the existing pressure for farm growth and rationalisation and to society's requirements for a modern and competitive agricultural sector (e. g. resource efficiency, climate protection and animal welfare).

**Question 5:  
Contribution to improve the competitiveness of the primary sector?**

As important factors affecting competitiveness lie outside the sphere of activity of the EAFRD support, the potential of the RDP to promote competitiveness in the agricultural sector was limited. Positive impacts on the competitiveness were observed for approximately 17 % of the overall funding. The funds were spent on public investments (125 B) and investment to individual businesses (121, 123, 311), of which the measures FIS (121) and land consolidation (125 B) were most important. Overall, the RDP had a small effect on labour productivity and gross value added of the primary sector, although road construction (125 B) made a clearly discernible positive contribution. Funding for individual farms, on the other hand, had little impact on labour productivity and competitiveness, because – among other things – of the significant

**No significant influence on the competitiveness of the agricultural sector.**

deadweight and displacement effects.

Over the funding period, the basic political and economic conditions for farms keeping dairy cattle changed significantly. A considerable structural change in milk production towards fewer dairy farms with larger herds was the consequence. The RDP had heterogeneous impacts on this process. It was possible to modernise or extend production capacities through the FIS (121) without significantly increasing the total production volume in rural areas. The overall effects of the Health Check funding on development in the dairy sector is considered to be marginal in comparison with other developments, such as support for producing renewable energy in particular. With the RDP, it was hardly possible to counteract market forces that led to significant price and income volatility.

International, community and national climate protection strategies are in place to protect the world's climate and to reduce greenhouse gases. These strategies are pursued with a multitude of regulatory provisions, incentive-based components and market-orientated instruments. In this context, the RDP offered only a small bundle of instruments.

In accordance with the climate objectives, most of the measures offered aimed to reduce greenhouse gas emissions. AEM had particularly positive impacts on the climate through avoidance of nitrogen fertilisers, increase in nitrogen efficiency, development of humus (156 kilotonnes of CO<sub>2</sub> equivalent (kt CO<sub>2eq</sub>)), forest construction and infrastructure measures (together avoiding annually 112 kt CO<sub>2eq</sub> of greenhouse gases). As an average of the projected scenarios, a total of 287 kt CO<sub>2eq</sub> of emissions (gross) were prevented by the RDP measures. This corresponded to about 0.7 % of emissions from primary energy consumption in Hesse or 12 % of the agricultural emissions in 2011. The majority of the impacts were achieved under codes 214 and 227. Compared with other, much more effective instruments, the EAFRD support is not particularly suitable as a strategic instrument for climate protection. Nevertheless positive secondary effects should be strengthened. However, the EAFRD can effectively be used to promote climate change adaptation as well as for vocational training and business consultancy purposes.

As far as water protection is concerned, there is a need to tackle the pollution of bodies of water caused by intensive farming in Hesse. Problems result from nitrate pollution into the ground water and deposits of nitrate, phosphate and pesticides in surface water caused by erosion. Other problems regarding the structure and permeability of watercourses were dealt with in Hesse entirely outside the RDP. The central instrument to achieve the objectives set by the water framework directive (WFD) was

**Question 6:**

**Contribution to the restructuring of the milk sector?**

**The RDP has only a marginal effect in relation to market forces.**

**Question 7:**

**Contribution to climate protection and adjustment to climate change?**

**There are more effective instruments for protecting the climate than EAFRD measures.**

**Question 8:**

**Contribution to better water management?**



AEM (214). Forestry measures (226, 227) and the Natura 2000 payments (213) also pursued secondary objectives in relation to water protection.

These measures contributed to a reduction of the nitrogen balance in Hesse by around 5,880 t N a year on average, which corresponds to a reduction of 7.5 kg N/ha utilised agricultural area or 11 % of the nitrogen surplus. The reduction came only from the AEM, of which organic farming (B1) made by far the largest contribution, followed by low input grassland management (B5) including special nature conservation payments.

**The reduction in N of 11 % was achieved exclusively by AEM.**

It was virtually only land consolidation (125 B) in the Hessian RDP that contributed to improving the ecological condition of watercourses, by making land available for water management purposes. Measures to improve the structure of water bodies were implemented only to a limited extent by public bodies of participants.

**Hardly any significance of the RDP for ecological development of watercourses.**

Economic, employment and social policy measures at national, state and municipal level were primarily able to improve the quality of life. Compared with those instruments, the importance of the Hessian RDP in improving the quality of life in rural areas was small. The RDP support mainly improved the residential conditions in rural areas, the development of social relationships (meeting places, club life) and the possibility to participate in regional decision making processes. However, in the EAFRD there is no definition or clarification of the term “quality of life”. This deficit should be addressed with discussions about “good life in rural areas”, concentrating on concrete and specific targets.

**Question 9: Contribution to improving the quality of life and promoting diversification?**

Since the employment effects of the RDP support were rather small, the quality of life dimension “personal and economic insecurity” was only marginally improved. Conditions of residential locations, primarily the appearance of villages and quality of residence, were positively influenced by measures 321 A, 322 and LEADER. The integrated approaches of rural development under Axes 3 and 4 were directed to the development of an entire region and had a particular impact on strengthening the endogenous potential in rural areas. Although the measures were not able to counteract demographic change, they were able to react on it at project and community level.

**Effects on material prosperity and employment were limited.**

It was possible to identify innovative approaches in the RDP under Measures 121, 123, 125 B, 311, 312 and LEADER. However, the measures were based on different conceptions of innovation, since a clear definition was missing. In contrast to the important role of innovations in some descriptions of measures, it was primarily “standard projects” with little innovative content that were implemented. However, an entirely new instrument was introduced in relation to land consolidation projects with

**Question 10: Contribution to introducing innovative approaches? Mostly just standard projects with no innovative content.**

the “Focus-Orientated Integrated Rural Development Concept” (SILEK).

The demand for the development of faster internet connections is high in many rural regions of Hesse. Support would have been possible in the EAFRD under Measure 321, but it was not included in the Hessian RDP as the development of fast broadband is being driven forward in various ways in Hesse outside the RDP, via the initiative for more broadband in Hesse (“Mehr Breitband in Hessen”) of the Ministry of Economics and other support programmes.

**Question 11:**  
**Contribution to providing access to fast internet? No impact could be identified.**

Animal welfare in agriculture is an increasingly important issue in societal debates. From the portfolio of measures in the EAFRD potentially suitable for improving animal welfare, only the FIS (121) was offered in the Hessian RDP. This measure was primarily used to build housing for dairy cattle, which generally meet the requirements of animal-friendly husbandry. The Hessian RDP had a limited impact on animal welfare, as it did not improve the situation for relevant animal species (i.e., pigs) and offered no measure to compensate for the increased current costs associated with many welfare-friendly animal husbandry systems (i.e., straw bedding). The equally important animal welfare training and advice measures were not programmed in the Hessian RDP, but took place in the context of the official extension service from the Hessian State Office of Agriculture (Landesbetrieb Landwirtschaft Hessen - LLH).

**Programme-specific question of animal welfare: hardly any impacts.**

So-called “gender budgeting” showed that around 39 % of the funds went into measures which were potentially relevant for equality policy objectives. More targeted measures to equal opportunities issues accounted for 6 % of the funding. The remaining funds went on gender-neutral measures. Especially measures supported under Axis 3 and LEADER created new employment opportunities for women on a small scale. Furthermore there were efforts to reconcile family and work through measures 312, 321 A and projects enhancing the social infrastructure under measure 322. Participation in decision-making processes was possible at various points in the Hessian RDP, such as in the HELER and LEADER regions, in the context of village renewal and on the RDP monitoring committee. In parts, the participation of women was significantly below the goal of 40 % set by the EU. Despite the limited potential of the EAFRD for supporting equal opportunities objectives, there are starting points from which aspects of gender equality can be addressed in future in a more specific way.

**Some efforts for equal opportunities objectives could be identified.**

## 9 Implementation of the Hessian RDP and funding efficiency

Hesse spent a total of approximately EUR 3.65 million of public funds on Technical Assistance (TA) (511) and was thus below the 2009 projection. Expenditure was processed up to the end of 2014. The focus of TA was on the support of the RDP implementation. Around half of the expenditure went into studies and reports primarily related with the evaluation. Hesse placed significantly more emphasis on participation in exhibitions and trade fairs than other federal states, with 27 % of the expenditure going into this area. Another large budget item was funding for software and software adjustments. Due to the central position of the Managing Authority at the interface with the paying agency in the WIBank, TA should be used more intensively to support the work of the Managing Authority in future, in particular to strengthen their personnel capacity.

**Broad use of Technical Assistance in Hesse.**

Evaluation of the efficiency of the use of resources comprises the following dimensions: (1) Implementation efficiency, (2) Extent of deadweight, additionality, (3) Occurrence of synergies and (4) Funding efficiency. In order to illustrate the costs, reference was made to the results of an implementation cost analysis of the Hessian RDP, and considering the impacts to the results of the measure related evaluation. The implementation cost analysis comprised quantitative cost-analyses (for the year 2011) and qualitative analyses of explanations of the extent of the implementation costs and of the strengths and weaknesses of the implementation framework. Absolute and relative implementation costs were shown. The latter are expressed by the percentage of implementation costs in relation to disbursed funds and are used as measure for the implementation efficiency. This value alone is not sufficient in order to assess the excellence or effectiveness of the measures. For this further cause analyses in combination with the impact evaluation are needed (funding efficiency or cost-effectiveness).

**Assessment of the efficiency of the use of resources: this was carried out on the basis of an implementation cost analysis and the evaluation of impacts in the context of the measures and detailed topic areas.**

Overall in 2011, around 283 full-time equivalent jobs (FTE) were involved in the implementation of the Hessian RDP within the state administration and the 16 district administrations, the WIBank and the regional managements. Implementation costs of nearly EUR 26 million were associated with this. About 15 % of the implementation costs or around EUR 4 million went on programme overheads, half of which were expenses for information technology. The majority of the measure-related implementation costs (50 %) went on the district administrations. The

**Half of the implementation costs went on district administrations.**

**Village renewal and HELER/LEADER were particularly costly.**

WIBank came next with EUR 7.9 million<sup>1</sup> or a 31 % share of the costs. In relation to the (sub-) measures of the programme, the largest sources of costs were village renewal, measures for integrated rural development (HELPER/LEADER), the AEM sub-measure “site specific grassland extensification” as well as the compensatory allowances (212) and the farm investment support (121).

The relative implementation costs related to the average of disbursed funds in the years 2010 to 2012 reached about 30 %. As far as the group of investment measures (EAFRD-invest) are concerned, the relative implementation costs were on average 31 %, the area-related measures amounted to 19 % and the forest support schemes, which comprised both investment and area-related measures, accounted for 45 % relative implementation costs. The forestry measures were among the measures with the highest relative implementation costs in all examined federal states.

**The forest funding measures had the highest relative implementation costs.**

The relative implementation costs of the investment measures ranged from land consolidation (125 B) with just under 17 % through to diversification (311 C) with relative implementation costs of more than 100 %. The integration of LEADER into the programme had a significant influence on the amount of implementation costs. The setting-up of a wide range of measures via regional processes (LEADER and HELPER) and the associated multitude of involved participants lead to high costs.

**LEADER made programme implementation more expensive.**

The range of relative implementation costs in the group of area-related measures was wide. Organic farming and the compensatory allowances had the lowest relative implementation costs with 9.5 % and 10.3 % respectively. However, there were also some sub-measures with relative implementation costs of over 100 %. If the supported area is chosen as the reference value for implementation costs, compensatory allowances, erosion protection and organic farming were the most cost-efficient. The above-average implementation costs per hectare of the AEM winter greening, viticulture on steep slopes and flowered areas and strips resulted on the one hand from the small extent of the support and the associated high fixed costs. On the other hand, they could be explained by the targeted design of the (sub) measures.

**The relative implementation costs of organic farming were below those of the compensatory allowance.**

Compared to the implementation cost survey of 2005, the relative implementation costs have increased again, on the one hand due to the

**Implementation of the RDP became more**

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<sup>1</sup> Including the paying agency audit service.

slightly increased absolute cost and on the other due to the decline of the total RDP funds. The costs on the programme overhead side have risen significantly, e. g., because of a higher demand for personnel in the Certification Body as a result of the increased control requirements. Regarding the measure related costs, a significant reason for the negative trend in costs also lay in the compliance with the rising paying agency requirements, especially in the area of EAFRD-invest. State-specific causes also mattered.

**expensive in comparison to the previous period.**

The qualitative cause analyses showed that the complex organisational structure strongly influenced implementation costs. In comparison to other federal states, Hesse had the highest relative implementation costs. Fundamental organisational decisions with far-reaching effects on the functioning of programme implementation and financial management were crucial. These decisions included the complete outsourcing of the paying agency function from the Ministry to the WIBank and the transfer of the granting function for a large proportion of the measures in the Hessian RDP to the 16 district administrations. The distribution of responsibilities to a large number of independent types of institution within the programme delivery was a unique characteristic of Hesse and brought with it a significant amount of consultation and coordination work. In the context of the EU support, a critical view of municipalisation should be taken because fragmented, dysfunctional organisational units were created in part.

**The amount of the implementation costs can be explained by the organisational structure.**

On the basis of recent experience and despite the evident weaknesses, no fundamental restructuring should be carried out, but opportunities for improvements within the existing structure should be pursued. Central areas of action are highlighted in the report. These include specification in the contract on which the appointment of the WIBank is based. In the area of municipalisation, options for stronger centralisation or for pooling expertise in relation to single measures or tasks should be explored.

**Large potential for improvement in the organisational structure.**

The suboptimal organisational structure also manifested itself in information technology (IT). Overall, IT emerged as a real trouble spot in the course of the implementation cost analysis. IT was even rated as the central problem in processing funding by some key stakeholders. This criticism related both to the SAP system used for the investment measures and, in particular, to the inefficiencies in the IT system for the area-related measures. The higher implementation costs in the area measures in comparison to the other federal states are also the result of deficiencies in the IT support for the 16 authorising bodies.

**IT systems are in need of improvement.**

The EU regulatory framework proved to be extremely problematic because of its inconsistency, increasing complexity and retrospective application of modifications. The legal framework conditions should therefore be kept stable in the next funding period. Individual regulations that turned out as inadequate should be abolished. Thus for example, the sanction regulation for EAFRD investment should be reconsidered. The requirements for monitoring, documentation and reporting obligations should be critically reviewed.

**Simplify the EU regulatory framework and then stabilise it.**

Deadweight effects reduce the efficiency of funding, as the money spent is not associated with impacts. Avoiding them completely is hardly possible. Whether the level of occurring deadweight effects can be tolerated depends in particular on the relevance of a measure for policy aims. Overall, it can be assumed that there are deadweight effects in a third of the public funding given to private recipients. These are largely attributable to the compensatory allowances (212). This measure reduced income disadvantages for farmers in less-favoured areas. But it can be assumed that there were very significant deadweight effects in relation to the maintenance of land use objective, as the scenario of surrendering use applies only to very few marginalised areas.

**Occurring deadweight effects are largely attributable to the compensatory allowances.**

There were also quite significant deadweight effects in the group of measures for investment support in farm holdings. However, these were lower than in the other federal states examined because of the measure design. With the regional orientation of the support for processing and marketing of agricultural produce (123), and its smaller scale approach in comparison to the other federal states, new areas of business were opened up in some cases. This holds also true for the funding for diversification (311 C). Some of the funded projects carried a high entrepreneurial risk, which led to less significant deadweight. In the AEM (214), deadweight was largely excluded, apart from the mulch and direct sowing and mulch planting process, as the design of the AEM was more demanding than the national framework regulation. In the forestry measures (227), maintenance of young stock was associated with full deadweight.

**In other measures, it was possible to reduce deadweight effects by means of a specifically targeted design of the funding.**

Overall, the problem of a lack of additionality in funding measures for public beneficiaries played an extremely subordinate role. Rather, the aspects of additionality and knock-on effects of the support were highlighted in the surveys. This applied in particular to support for tourism (313). In many cases, critical sizes for (regional) effects were only achieved in the first place through the support. Even core areas of public services could often only be run with (EU) funding programmes because of municipal budget restrictions. In the context of an efficient use of

**Additionality: public beneficiaries would not have implemented most of the projects without EAFRD funding.**

resources, for some basic infrastructure measures the main question arises as to whether they are hosted adequately in a funding system which drives high transaction costs. Fundamentally, the entire system of municipal financing of public services should undergo a thorough revision.

The budgetary situation of many municipalities is precarious. Coupled with the need for public co-funding of projects that is anchored in the EAFRD, this generally increased the risk of geographical or content-related misallocation. This did not occur to the same extent as in other federal states because of the co-funding of LEADER with state funds in Hesse. But there were problems here, too. Financially weaker municipalities had problems in finding the co-funding (their own share) and the human resources to manage the whole application procedure.

Synergies between measures could be identified, but their extent had no significant effect on funding efficiency. The largest potential lay in funding measures with a bundling function and in the integration of many support measures via the funding condition “integration into a Regional Development Concept”. Basically, the LEADER process is an appropriate way of bringing together projects at a regional level and creating a coherent coordination and decision-making framework. However, this assumes that the regions are not too fragmented. The synergy potential of LEADER/HELER is limited by the restriction to Axis 3 measures and by the small amount of funding assigned to the single regions. Besides that, there is greater significance for funding efficiency in providing multifunctional measures with synergetic effects, such as organic farming, which have positive impacts on several fields of activity at the same time.

The relationship between total costs (implementation costs and funding) and effectiveness was discussed in the topic areas of biodiversity, water and climate protection and outlined in the overall funding strategy of the Hessian RDP. The problem here was that a (comparative) evaluation of the efficiency of different measures was only possible in part in relation to topic areas.

In the field of biodiversity, it was possible to show that there is a close relationship between relative implementation costs, overall costs and effectiveness. Overall, the implementation costs per ha for all measures with high biodiversity impacts were above those with low impacts. As a result, the cost structure of the measures reflects the intensity of impact and the extent to which the measures met their target. Support for steep-slope viticulture had the least favourable cost-impact ratio. Despite targeting biodiversity, this measure achieved only little impact whereas total costs per ha were high at the same time.

**Risks of geographical or content-related misallocation because of co-funding bottlenecks.**

**Synergies are possible through bundling effects of LEADER and multifunctional measures.**

**Efficiency of the use of resources could only be quantified to some extent for environmental impacts.**

**In biodiversity there is a close relationship between costs and effectiveness.**

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

**For water protection organic farming is most efficient.**

In the area of climate protection, efficiency indicators (costs per reduced tonne of CO<sub>2</sub> equivalent) could only be calculated in part. They covered a wide range. The calculated efficiency indicators showed significant scattering between zero and EUR 42. The lowest values included use of biomass (321 B), non-productive forest investment (227) and some AEM (214). Significantly lower efficiency was apparent in building renovation and measures to provide thermal insulation in the context of village renewal (322) under Axis 3. However, climate protection was set only as a secondary objective in all of the measures considered and should therefore be regarded as a side-effect of the measures offered.

**Climate protection – cost-efficient to some extent, but low impacts in the context of EAFRD support.**

Along with the significant organisational effects on implementation costs, a measure with an ambitious design also led to higher implementation costs, simultaneously enhancing the effectiveness of the funding and therefore the overall funding efficiency. The measures under Axes 3 and 4 were characterised by a broad and ambitious approach and pro-active, development-orientated administration. Almost all of Axis 3 was implemented by means of administratively complex regional or local processes which strengthened the appropriateness and target orientation of the projects. The complexity of the stipulations and the intensity of advice and support also had a significant effect on the implementation costs of the AEM (214). But they were at the same time an expression of the efficient targeting and accuracy of the support and were therefore closely linked to the extent of the impacts achieved.

**Support strategy and measure structure: high implementation costs and high effectiveness.**

In the context of the LEADER support, high demands were placed on the quality of the Regional Development Concepts. The support guidelines underlying the measures were extremely detailed in their sub-division into individual project areas. Although this led to effective integrated approaches to support, it also created fragmented specifications and complex support management. Flexibility and creativity were partly restricted by this and the administrative burden was large. In addition, a relatively small budget was allocated to the regions. It seems that requirements, effort and funding volume were not in a right balance. While the compensatory allowances (212) accounted for 21 % of the programme volume alone, only 12 % went to all measures in Axes 3 and 4 (without 322 and 311 C).

**Limitations to funding efficiency because of a discrepancy between ambitions and allocated funds to LEADER/HELPER.**



Discussing the global funding efficiency of the Hessian RDP, the amount of money that went to measures called top performers and those which missed their targets was determined in relation to programme relevant fields of activities. Top performers were defined as measures with secure interdependencies and particularly positive intensities of impact. These made it possible to implement targets and achieve significant (possibly local) impacts. Around 75 % of the implementation costs and 61 % of the disbursed funding went into the implementation of particularly effective measures (top performers) in at least one field of activity. This shows that effective measures tend to be associated with higher relative implementation costs than measures that are less effective or not effective at all.

**Global funding efficiency in the Hessian RDP is characterised by a high proportion of resources for top performers.**

Costs of missing targets were created, however, by measures which, despite having an objective, achieved negligible impacts or none at all. On the one hand, these were measures that made no significant contributions to impacts (212, 331, 311 B) because of a lack of precision, significant deadweight or (almost) no take-up, among other things. On the other hand, inflationary targets that overestimated the actual potential of measures contributed to missed targets, in particular in the impact areas of growth and employment. The village renewal measure 322 was also affected by this, as, although a top performer in the area of “quality of life”, it had no impact on growth and employment worthy of mention.

**Missed targets were largely created by inflationary strategic targets in connection with growth and employment.**

Various levers in the funding strategy can be pulled to enhance funding efficiency. On the one hand, the implementation costs can be reduced and, on the other hand, effectiveness of the support measures can be increased. A carefully considered decision should always be taken as to which measures are offered with EU co-funding and which without. Micro-measures in the programme significantly increase the cost at the level of programme overheads. Measures that cannot be standardised easily should be supported outside the RDP. An adjustment of de minimis thresholds and maximum support thresholds could improve administrative economy and the effectiveness of the measures and their acceptance.

**Implementation costs fall as a result of avoidance of micro-measures, adjustment of de minimis thresholds and offering measures that can be standardised.**

Effectiveness could be increased by excluding certain measures with significant deadweight from the funding. This applies, for example, to the not target-oriented compensatory allowance. The profile of farm investment support should be sharpened and directed towards public goods.

**Improve effectiveness by reducing measures with significant deadweight.**

## 10 Overall assessment and general recommendations

A simplified approach was chosen to present the overall impacts of the programme. This approach allocates the funding of measures with positive impacts to specific impact fields and intervention types. The financial focus of the programme was on the environmental issues: A third of the programme funding was spent respectively on measures with positive impacts on biodiversity and the protection of water and the climate. Areas of socio-economic impact (the economy, jobs, the agricultural sector and quality of life) – measured by the funding with positive impacts – were of secondary importance. About a fifth of the programme funds spent had no discernible impact on any of the areas considered relevant at programme level.

**A third of the RDP funding was spent respectively on measures with positive impacts on biodiversity, water and climate.**

The financial focus of the programme matched the urgent need for action in the areas of biodiversity and climate protection. The RDP was one of the most important financial instruments for measures to protect biodiversity. The effectiveness of the portfolio of measures is also considered to be high. This underlines the high importance of the RDP in achieving biodiversity targets. However, the potential of voluntary measures is limited as relevant target areas cannot be reached in a sustainable way.

**Urgent need for action exists in the protection of biodiversity and climate.**

The impact of the mix of measures in the Hessian RDP on other areas can be regarded as moderate (employment, competitiveness of the agricultural sector, climate protection and quality of life) or even small (economy and water). This is due to several reasons: on the one hand, the EAFRD and the RDP does not provide the set of instruments required to achieve substantial effects in these impact areas. Other instruments, such as the ERDF or the active labour-market policy are better equipped in terms of content or funding with regards to the areas economy or employment. On the other hand, measures for water protection which are basically eligible for EAFRD support are funded exclusively with state funds, as these can be managed and processed more flexibly without EU co-funding.

**The effectiveness of the RDP in the other impact areas is limited.**

A fundamental problem is the dominance of factors that cannot be influenced by the RDP. For example, in the area of biodiversity, no reversal of the trend of biodiversity loss could be identified in the impact indicators although implemented measures were effective. In this case, positive RDP impacts are overlaid by external drivers as market developments, the effects of the Renewable Energy Act, overall economic or demographic trends or deficits in the enforcement of regulatory laws. Often the impacts achieved through the RDP are too small to be measurable against the background of the basic trends.

**Other factors obscure the impacts of the RDP.**

The productive investments in individual farms were relevant in particular in relation to the impact areas of economic growth, employment and the agricultural sector. Unfortunately, their funding efficiency was reduced by deadweight and displacement effects. As expected, land-based measures focused on environmental issues. Unlike investment measures, the duration of the impact of land-based payments was mainly restricted to the duration of the support.

**Sustainability of the impact and deadweight varied depending on the type of intervention.**

In comparison to other federal states, the relative implementation costs for the overall programme in Hesse and for comparable measures was above average. When discussing and evaluating the amount of implementation costs for funding programmes, a distinction must be made between various cost components. The manifestations of those components were associated with a variety of implications in respect to funding efficiency and deduced recommended actions.

**High implementation costs for the programme have several explanations.**

The unavoidable costs are higher in an EU-funded programme than in a national funding regime. This is mainly due to 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 basic costs in an EU-funded programme.**

The high implementation costs can be explained to a large extent by organisational effects resulting from inadequate organisational structures and IT solutions. In addition, the significant increase in complexity and rigidity in the EAFRD-specific legal framework has partly led to disproportionately high costs. Along with the urgent need for fundamental changes to the EU regulatory framework, there is great potential for improvement in the organisational structure in Hesse.

**Negative organisational effects have a significant impact.**

The third component of the implementation costs is the proportion that can be regarded as an investment in greater effectiveness of the support. Many of the support measures in the Hessian RDP were characterised by an ambitious design and pro-active, development-oriented administration in both the area-related and the investment measures. Many of these “cost-driving” features in the support strategy have increased precision and reduced deadweight. In the future, this ambitious approach to funding should be supported by appropriate human resources at all levels.

**Some of the implementation costs can be regarded as an investment in a high level of effectiveness.**

The analyses show that the regulatory framework of the EAFRD support hindered an efficient support aimed at achieving impacts and enhanced a process-oriented approach. The even more complex legal framework in the funding period 2014 to 2020 will not ease the situation but will have a

**Outlook: complexity of the EU legal framework threatens to increase risk of missing targets.**

negative effect on the implementation of EAFRD programmes and their strategic direction. The implementing administrative bodies have already put a lot of effort into avoiding procedural errors. They have increasingly avoided measures that may be highly effective but are prone to errors. On the other hand, measures that can easily be standardised are less target-orientated and tend to be marked by lower intensity of impact and larger deadweight. Both effects increase the risk of missing targets.

A fundamental revision of the legal framework conditions is therefore essential and should be tackled promptly. The crucial points are greater legal clarity, reinforcement of the single audit principle for the EAFRD, greater emphasis on the principle of proportionality, a ban on retrospective application of changes in legal framework and its interpretations, and greater toleration of the risk of errors in the field of EAFRD.

**The legal framework must be fundamentally revised.**

## 11 Conclusion

Hesse has used second-pillar EU funding to offer a wide range of measures in a consistent strategic framework in the RDP. The ex-post evaluation identified positive impacts for most measures. The objectives and impacts of the measures went far beyond the programme questions and indicators prescribed by the EU, which were heavily restricted to the EU 2020 objectives. Especially 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 pattern. Narrow limits were therefore inevitably set for the aggregation of overall effects. The potential of a rural development programme was too small in order to achieve a measurable effect on the impact indicators for economic growth and employment set by the EU. In the environment sector, impacts were measurable, but the influence of counteracting factors outside the programme was too strong to maintain the desired status described by the respective impact indicators. More effective levers were often to be found outside the scope of the rural development policy.

**The framework for the RDP was consistent. Heterogeneous projects and impact pathways required a nuanced evaluation of the impacts.**

The implementation of the recommendations that emerged in the evaluation could lead to a programme with a more clearly focused and more effective use of funds in the future.