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Technical Assistance for the Evaluation of 2014, 2015 and 2016 **Turkey** Annual Programmes

THEME REPORT

Agriculture



Energy



EU-Turkey Dialogue



Civil Society



Fundamental Rights



Border Surveillance



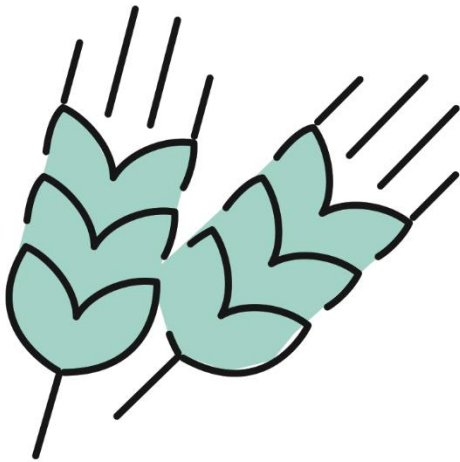
Removal Centers



Judiciary System



Penitentiary System



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PROJECT SYNOPSIS

Project title:	Technical Assistance for the Evaluation of 2014, 2015 and 2016 Turkey Annual Programmes EuropeAid/140793/IH/SER/TR
Beneficiary Country:	Turkey
Location	Base of operation will be Ankara. The geographical area to be covered is the whole territory of Turkey since the evaluation activities will be organised to the cities where projects are implemented.
Contracting Authority	Central Finance and Contracts Unit (CFCU), Ankara, Turkey.
Responsible Body	The Central Finance and Contracts Unit (CFCU) is the contracting authority of the project. The beneficiary of the project is Directorate for EU Affairs (Department of Monitoring and Evaluation).
Target groups:	<ul style="list-style-type: none">▪ NIPAC Office;▪ The EC/EUD;▪ OSs and LIs of the projects involved at central and local level;▪ Decision and policy-makers in the ministries involved;▪ Project beneficiaries, end beneficiaries, grant beneficiaries and their co-applicants;▪ The Final Beneficiaries of the activities implemented;▪ Members of the Evaluation Reference Groups (ERG) including CFCU members;▪ Other social partners and CSO representatives.
Commencement date:	9 August 2021
Duration	14 months

ABBREVIATIONS

AD	Action Document
CFCU	The Central Finance and Contracts Unit of the Ministry of Treasury and Finance of Turkey
EC	European Commission
EU	European Union
EUD	European Union Delegation to Turkey
EQ	Evaluation Question
ERG	Evaluation Reference Group
FAO	Food and Agriculture Organisation
GDP	Gross Domestic Product
GDPR	General Data Protection Regulation
IFAD	International Fund for Agriculture Development
IPA	Instrument for Pre-accession Assistance
JC	Judgement Criteria
LI	Lead Institution
LSD	Lumpy Skin Disease
MoAF	Ministry of Agriculture and Forestry
NAO	National Authorising Officer
NIPAC	National IPA Coordinator
ROM	Results Oriented Monitoring
TA	Technical Assistance
ToR	Terms of Reference
VCI	Veterinary Control Institute

EXECUTIVE SUMMARY

This report provides evaluation of Instrument for Pre-accession Assistance (IPA) II actions for Disease Control and Prevention in Farm Animals in Turkey. The evaluation is designed to improve the strategic link between the planning, programming, monitoring, and evaluation activities of National IPA Coordinator (NIPAC) office. The evaluation of Theme 1 Agriculture consists of the 2 activities and 4 projects/interventions (one of them with 2 lots, i.e., 5 contracts).

The methodological approach comprised initial desk review of available documentation to gather secondary data from the provided documents and other available sources. Further data collection methods were mainly semi-structured interviews collecting primary data from the relevant stakeholders – representatives of the Lead Institution/Ministry of Agriculture and Forestry, contractors, NIPAC, CFCU, and EUD; focus groups with the final beneficiaries and surveys to collect the necessary data about the gained benefits and effects of the interventions. Field visits were conducted to see the progress of interventions and supplement information on wider picture. Triangulation of sources or data was applied to ensure data validity and reliability.

The implemented activities have been relevant as the needs identified at the planning stage were, and still are, valid despite the significant time lag between initial design and its implementation. The IPA assistance covered by this evaluation reflected the initial needs and was in line with EU and national strategies at the time of programming. The interventions are aligned with the national and EU sector policy priorities and the EU assistance is the main source of support in the area covered by this evaluation. While both Lumpy Skin Disease and rabies activities have been in principle well designed some shortcomings were identified in the design of the interventions, but the underlying logic of the IPA support is sound.

The expected results of the interventions have been achieved as both, Lumpy Skin Disease outbreaks and rabies cases were decreased to a minimum. The most notable supportive factor influencing the effectiveness of the IPA assistance has been the good cooperation between stakeholders and beneficiaries' ownership of the interventions. The negative factors are linked with the selection of the target group for the awareness raising activities, which involved very small proportion of the overall farmers' population, and the relatively limited capacities for the administration of Lumpy Skin Disease vaccines.

Despite some efficiency problems, planned activities and outputs were delivered within planned budgets. The competitive tendering managed by the CFCU in compliance with the IPA rules ensured the costs proportionate to the achieved benefits and followed IPA procurement standards. There were some delays but did not cause any substantial difficulties. The available resources, with one minor exception, were well utilised to produce the planned results. The monitoring arrangements for the assistance covered by this evaluation may meet formal requirements, but in practice they do not facilitate a proper assessment of IPA performance and show some room for improvement. The provision of information and project documents for the evaluation has been cumbersome and limits proper functioning of the monitoring system.

All the projects encountered some implementation difficulties, but ultimately it did not have any significant negative effect on the delivery of the IPA-funded activities and outputs. In general, the coordination mechanism within the IPA management structure has worked well. Except for one long administrative approval, the quality of day-to-day management did not encounter any substantial

difficulties. The planned outputs of the Lumpy Skin Disease and rabies activities have been delivered and were nearly fully translated in the successful results. The change expected from the activities is the control and eradication of animal diseases (in this case Lumpy Skin Disease and rabies) in line with the EU rules and requirements to avoid economic loss. The control and eradication measures including the mass vaccination of Lumpy Skin Disease resulted in very significant decrease of outbreaks and rabies baits distribution has managed to reduce the number of rabies cases. The institutional capacities were also strengthened and the Ministry of Agriculture and Forestry together with the Veterinary Control Institutes and other relevant institutions are well equipped to address Lumpy Skin Disease and rabies more effectively.

The capacities built within the projects at the central level are very likely to be sustained. The sustainability of the achieved benefits in both Lumpy Skin Disease and rabies vaccination depends on the vaccination programmes continuing after IPA support is over. The missing confirmation of the Ministry of Agriculture and Forestry's budget allocation for the continued vaccination is therefore the main risk factor for the sustainability of the achieved benefits. To ensure the sustainability of the awareness raising initiatives, the means used for their dissemination will have a key role. Overall, IPA II assistance has provided undoubted added value and significantly contributed to the reduction of Lumpy Skin Disease outbreaks and rabies cases.

To resolve the sustainability issues and avoid difficulties in the future IPA administration there are a few measures recommended:

- to ensure and improve the sustainability of the awareness raising activities, and continue dissemination of the information contained in the awareness raising materials,
- to secure financial sources to support future vaccinations of Lumpy Skin Disease and rabies without any interruption,
- to train all relevant staff within the agriculture sector dealing with the IPA programming, implementation, monitoring, and evaluation in the Project Cycle Management (including intervention logic, indicators, etc.),
- to revise the template of the monitoring report and prepare clear guidelines clearly assigning the roles and responsibilities of relevant monitoring bodies and ensure monitoring covers all relevant actions/contracts, and
- to ensure access to the project data and documents for the relevant stakeholders.

1 INTRODUCTION


1.1 Objectives and scope of the evaluation

This Final Report covering Theme 1 Agriculture provides evaluation of Instrument for Pre-Accession Assistance (IPA) II actions for Disease Prevention in Farm Animals in Turkey. It is submitted in accordance with the Terms of Reference (ToR) as one of the main outputs of the Technical Assistance for the Evaluation of 2014, 2015 and 2016 Turkey Annual Programmes.

The evaluation is designed to “improve the strategic link between the planning, programming, monitoring, and evaluation activities of National IPA Coordinator (NIPAC) office”. This purpose is approached as a key contribution to the overall objective “improved overall management of IPA assistance in Turkey.”

The evaluation of Theme 1 Agriculture consists of the 2 activities and 4 projects/interventions (one of them with 2 lots, i.e., 5 contracts) as follows:

Table 1 Basic data on the evaluated interventions (30/04/2022)¹

Code	Sector/Theme/Intervention	Start date	End date	Allocated (EUR)	Contracted (EUR)	Disbursed (EUR)
Sector	AGRICULTURE					
	Theme 1 - EX-POST EVALUATION OF IPA II ACTIONS FOR DISEASE PREVENTION IN FARM ANIMALS IN TURKEY			28,597,500	14,351,730.79	13,953,630.79
A1.1	2015 Activity 1. Control and prevention of Lumpy Skin Disease (LSD)			14,806,323.5	14,351,730.79	13,953,630.79
Contract A1.1.1	Supply of Laboratory Equipment and Light Traps for Control and Prevention of Lumpy Skin Disease (LSD)	17/03/2019	17/03/2022	1,000.00	629,410.79	629,410.79
Contract A1.1.2	Technical Assistance for Control and Prevention of Lumpy Skin Disease (LSD)	11/03/2019	02/07/2022	747,500.00	663,500.00	265,400.00
Contract A1.1.3	Supply of Vaccines for Control and Prevention of Lumpy Skin Disease (LSD) (2 lots)	17/03/2019 17/03/2019	17/03/2022 17/03/2022	13,058,823.5	13,058,820.00	13,058,820.00
A1.2	2015 Activity 2. Oral vaccination against Rabies in Turkey			14,850,000	14,849,999.87	12,666,572.80
Contract A1.2.1	Supply of Oral Vaccination against Rabies in Turkey	19/11/2018	17/03/2023	14,850,000	14,849,999.87	12,666,572.80

¹ The cut-off date of the data used in this evaluation report as agreed in the inception phase is 31/12/2022. When more up-to-date information was collected to indicate recent progress, the corresponding date is mentioned.

The projects under evaluation within Theme 1 were planned with the overall objective to contribute to the alignment with the EU legislation, i.e., negotiation of Chapter 12. The provided support should thus contribute to its ultimate aim of assisting the EU accession process of Turkey. This should be achieved through the Ministry of Agriculture and Forestry's (MoAF) enhanced institutional capacity for control and prevention of animal diseases such as Lumpy Skin Disease (LSD) and rabies in line with the EU legislation. The eventual expected short/medium-term outcomes should be thus visible in the decrease of LSD and rabies outbreaks in the regions covered by the vaccination.

The interventions have: Direct beneficiaries - institutions and professionals dealing with the animal health system and policy and final beneficiaries - the farmers (mainly in the treated areas) benefiting of reduced outbreak of LSD and rabies cases.

The first action consists of three contracts focused on LSD (one Technical Assistance and two supplies: one laboratory equipment and two lots of LSD vaccines). The Technical Assistance for Control and Prevention of Lumpy Skin Disease contract includes four types of tasks;

- epidemiological evaluations and mapping of LSD, improved diagnostic methods and vector analysis, vaccination planning, vaccination, and its subsequent analysis,
- training of the Veterinary Control Institutes staff on several specified topics,
- increased awareness on LSD among farmers, and
- update of Animal Health Strategy on LSD, risk assessment after the disease eradication and preparation of a contingency plan.

This support was complemented by the purchase of equipment for laboratories, supply of light traps and supply of two lots of LSD vaccines (heterologous and homologous).

The second action is represented by a supply contract dealing with the delivery of vaccine baits for rabies and their distribution. Both actions are focused on animal health problems and primarily secure vaccination to decrease outbreaks and/or cases and control both LSD and rabies in Turkey.

The key stakeholder and direct beneficiary of the intervention is the MoAF in the role of Lead Institution (LI), specifically the General Directorate of Food and Control, Animal Health and Quarantine Department the authority responsible for planning and monitoring of animal health. Further, the provided support concerned laboratories at eight Veterinary Control Institutes (VCI) of MoAF, veterinarians and veterinary health technicians of the Provincial and District Directorates of the Ministry (81 provinces, 970 districts) all over the country. The ultimate beneficiaries were livestock farmers although their role in the implementation was not so significant, they should eventually feel the most significant benefit from the assistance. Other stakeholders comprised operating structures, contractors, and coordination bodies of IPA assistance in Turkey – IPA unit at the MoAF, NIPAC - Directorate for EU Affairs at the Ministry of Foreign Affairs, Central Finance and Contracting Unit (CFCU) at the Ministry of Treasury and Finance and EU Delegation (EUD).

The cut-off date of the report is 31 March 2022, and the evaluation report does not reflect any activities after the cut-off date. The financial data are mostly reported as of 31 December 2021. All interventions in theme 1 – Agriculture, which were selected for the evaluation, were funded from IPA II 2015 financial envelope. The individual projects started at the beginning of 2019, resp. end of 2018 in case of the supply of baits for the oral vaccination of rabies. At the time of the evaluation (from November 2021 to March 2022) all projects were still running but were close to the end or had just

been completed. In terms of geographical coverage, the project activities (in particular LSD vaccination) have been taking place all over the country.

1.2 Structure of the report

Besides the introductory description of the objectives and scope of interventions under the evaluation in Chapter 2, a short summary of methodology and description of tool and instruments applied during the evaluation is given in Chapter 3. Chapter 4 includes the main findings structured along the originally proposed evaluation questions. The final Chapter 5 summarises conclusions and respective recommendations resulting from overall findings. All details concerning intervention logic, methodology, implementation of individual interventions – activities and outputs, data collected from surveys and other sources are presented in the Annexes to the report.

1.3 Evaluation questions approaches and methods

The list of evaluation questions was originally determined in the Terms of Reference (ToR) and specific judgment criteria for each question were adopted according to the needs and type of the interventions. Therefore, the initial evaluability assessment took place during the inception phase of the assignment. Its purpose was to ensure that the methodology is suitable for the listed interventions. The suggested methods and tools were based on the reconstructed intervention logic. The purpose of this exercise was to reduce the original scope of the IPA II support and its intervention logic to the activities selected for the evaluation.

The intervention logic at the level of theme, comprising all the interventions included in the evaluation, was primarily analysed based on the information from the programming documents. Provision of additional information and data enabled the preparation of the reconstructed intervention logic, and this was subsequently discussed with the members of the Evaluation Reference Group (ERG) for further adjustment. The model includes inputs, activities, outputs, outcomes, and impacts, together with the contextual factors, and assumptions (see Annex 1).

The evaluability assessment followed the originally determined evaluation questions (all descriptive) and was complemented by the more specific judgement criteria (JC) to reflect the theme specific issues. The appropriate indicators, tools and/or methods were selected depending on their feasibility, available resources and data and assumptions concerning the accessibility of relevant stakeholders. Triangulation of sources or methods was considered to ensure data validity. The proposed evaluation approach in the matrix considered the risks and limitations identified from the documents, which were provided at the inception stage. The evaluation matrix provides summary of proposed tools based on the available data, information, and details, and identifies relevant stakeholders for the application of selected tools (see Annex 2). Within the main findings of this report (chapter 5), references to the relevant JCs are made throughout the analysis. This allows the reader to see how the matrix has been used to construct the evaluation and ensures that no evidence gaps emerge.

1.4 Description of the evaluation activities

As for the methodology, the initial desk review of available documentation gathered secondary data from the provided documents and other available sources. Further data collection methods dealt mainly with the primary data, which were gathered through semi-structured interviews. The

interviews were conducted with all relevant stakeholders starting with the Lead Institution MoAF, contractors, NIPAC staff responsible for the theme, CFCU, and EUD. Some of the end beneficiaries were interviewed during the field visits and focus groups were conducted.

The surveys were utilised to collect the necessary data about the gained benefits and effects of the interventions. The main intention of surveys was to keep it short and simple and use preferably a few closed questions to ensure reasonable response rate. At the same time, the collected information was rather general and did not concentrate on details, as the aim was to assess the broader benefits of IPA assistance. As the full lists of participants (their telephone numbers) of both, the trainings as well as awareness raising seminars, were available, the short questionnaires were prepared in Monkey survey and send to all participants. The responses were received within one week. The data collected through surveys were analysed and incorporated into the report.

The analytical methods were based on the theory of change and included analyses of stakeholders as well as inputs, outputs, identified indicators, internal/external factors, and compared planned vs achieved milestones, targets, and deadlines. The original theory of change was adapted, and its revised version was agreed with the Evaluation Reference Group (ERG) to better correspond with the interventions selected for the evaluation. The availability of the data at the national level enabled to identify some trends for outcome indicators. Both, qualitative and quantitative data were thus utilised.

2 PROBLEMS ENCOUNTERED, SOLUTIONS AND LIMITATIONS

The main limitations for the use of methods concerned availability and accuracy of all data, relevance, and accessibility to sources of data. The initial provision of the data during the inception phase was very limited and took much longer than expected. The basic financial information (allocation, commitment, and disbursement data) at the level of individual contracts were missing as well as substantial proportion of any relevant reports regularly provided by the contractors. The interviews with the contractors were helpful as they were able to share all produced reports, training reports, materials and links to relevant web pages containing further project details, for most of the contracts. The supply contracts concerning the laboratory equipment and supply of LSD vaccines did not have any reports; besides the tender documents published at the web page of the CFCU, other details were not available. These contractors were more difficult to reach but eventually the interviews were arranged and conducted. The beneficiaries at the MoAF were very committed and willing to provide additional requested data from the ministerial statistics database.

The financial data (e.g., contracted, disbursed) provided from different sources differed and had to be double checked. The contacts details provided during the Inception phase were not always valid due to the personnel changes. Provision of the trainees' contact data required some clarification in relation to the General Data Protection Regulation (GDPR). To make sure that our request regarding the survey is recognised, it was introduced during the field trip – visit of one of the training sessions at the VCI Pendik. The survey for the farmers was conducted with kind assistance of the Turkish Cattle Breeders' Association to ensure that the survey link for the farmers is not coming from an unknown telephone number.

3 PRESENTATION OF THE THEMATIC EVALUATION CONTEXT

Turkey is a large, upper-middle-income country with a strong record of inclusive growth. During the last two decades, Turkey has urbanized dramatically, opened to foreign trade and finance, maintained strong macroeconomic and fiscal policy frameworks, and harmonized many laws and regulations with European Union (EU) standards. The decrease in poverty has been remarkable, and other indicators of wellbeing (life expectancy, adult literacy, school enrolment, and access to public services such as water and sanitation) have also improved.

The development plan of Turkey states the main objective of Agriculture and livestock farming system as to create an efficient agricultural sector that is environmentally, socially, and economically sustainable, which has increased its international competitiveness with its production structure that considers supply and demand balances as well as adequate and balanced nutrition of the people of the country. Although the size of agricultural sector in Turkish economy is steadily declining, it remains the world's seventh-largest agricultural economy and farming is crucial to rural development, employment, exports and much of manufacturing. The agriculture sector still plays an important role in the Turkish economy. Primary agriculture employs 18% of the workforce and accounts for 6% of GDP (2019). Turkey is a regional hub for the production, processing, and export of food to large European and Middle Eastern markets. This gives the sector excellent potential, but appropriate investments are needed to help farmers update production techniques, boost productivity and cope with climate change. To increase the competitiveness of the sector, there is an urgent need to align its legal framework and operation with EU standards and regulations. Access to the EU and world markets is a key issue as more than 10% of total exports of Turkey are agricultural products. The level of support in Turkey fell in 2018 and 2019, driven mainly by reductions in market price support resulting from a depreciation in the value of the Turkish lira. The reduction in market price support has been partially compensated by increased premium payments, which cover the difference between target and market prices. Livestock farming is a leading activity for Turkish agriculture and all Governments have been paid attention to this matter. Livestock products represent 56% in total agricultural production. To reduce reproductive losses in cattle and increase the rates of flesh, combined breeds and their hybrids arising from artificial insemination, criteria for support of calf, vaccine and disease-free holdings need to be re-determined and their subsidies increased. Despite continuing challenges facing the Turkish livestock industry, the number of cattle in Turkey grew in 2020 to 18.1 million animals due to the implementation of favourable new government subsidies and the continuation of an import policy bringing large numbers of live animals into the country. The cattle number forecast for 2022 is expected to be 18.8 million head. This three percent increase in the cattle estimate is a result of the MoAF subsidies for calf production and projected feeder cattle imports for 2022. Nevertheless, the presence of many animal diseases in Turkey has had a negative impact on production and productivity and highlights the need for improvements in disease surveillance and control to minimize losses.

The assistance provided within IPA II in the agricultural and rural development sector has covered *acquis* chapters 11 (Agriculture), 12 (Food Safety, Veterinary and Phytosanitary Policy) and 13 (Fisheries). The Agriculture and Rural Development Sector comprises two sub-sectors: (i) institutional and capacity building, and (ii) rural development mostly known as Instrument for Pre-Accession Assistance for Rural Development (IPARD). The institutional and capacity building activities promote increasing the alignment level with the EU standards mostly in legal terms along with introducing new systems. IPARD deals with implementation capacity of the introduced legal framework and other EU requirements to be met in rural areas.

4 FINDINGS OF THE EVALUATION BY THE EVALUATION QUESTION

4.1 Relevance

Q1. To what extent are the components/activities implemented relevant for achieving the specific objectives of the Activity/Theme?

The implemented activities were relevant and corresponding to the needs identified at the planning stage and they are still valid. The planning exercise of IPA II Agriculture interventions started in 2014. The initial projects were proposed by the Lead Institution (LI) – the Ministry of Agriculture and Forestry (MoAF) in cooperation with the programming department of NIPAC and were based on the Indicative Strategy Paper 2014 - 2020 for Turkey. Following the approval of Action Document (AD), the Financial Agreement was signed in 2016 and preparatory work on Technical Specifications and Terms of Reference (ToR) started. Once completed, tenders were launched. The first contract for supply of rabies baits was signed at the end of 2018, and the remaining contracts were signed in the first half of 2019.

The Indicative Strategy Paper for Turkey for the period 2014 - 2020 targeted within the agricultural and rural development sector identified acquis chapters 11 (Agriculture), 12 (Food Safety, Veterinary and Phytosanitary Policy) and 13 (Fisheries) as key for IPA II support. This *inter alia* focused on capacity building for animal health, animal welfare, animal registration, animal by-products and on the improvement of diagnostic and surveillance capacity for animal diseases. This was in line with the needs, as the animal health situation in Turkey at the time was very critical, and adequate administrative capacities to handle control measures for animal diseases were limited. Turkey's large borders represent a major risk in the animal health. These issues were to be tackled in close cooperation with neighbouring countries. The capacity building and support was assumed to ensure Turkey's gradual alignment with the acquis on food safety, veterinary and phytosanitary standards. The 2015 planned activities in these areas aimed at improving of infrastructure (including laboratories), supporting institutional capacity building on animal health, and improving the diagnostic and surveillance capacity with regards to animal diseases. The interventions in this evaluation all cover these needs.

Due to the spread of the new disease - Lumpy Skin Disease (LSD) that emerged in 2013, IPA support was programmed to assist authorities in addressing this risk. A 2015 Action Document (AD) outlines the measures against LSD and in relation to that it referred to high price of the vaccine and unwillingness of some livestock farmers to vaccinate their animals. IPA assistance focused on the strengthening of the laboratory facilities, training of the staff in relation to the LSD diagnostic and identification of vectors, installation of the required equipment to the Veterinary Control Institutes (VCIs), and vaccination to improve the situation. The LSD assistance funded from IPA II sources thus consisted of *Supply of Laboratory Equipment and Light Traps for Control and Prevention of LSD* (further referred as "Supply of laboratory equipment"), and another *Supply of Vaccines for Control and Prevention of LSD* (further referred as "Supply of LSD vaccines") in two lots, both heterologous and homologous LSD vaccines.

The technical assistance (TA) intervention entitled *Technical Assistance for Control and Prevention of Lumpy Skin Disease* (further referred as "TA for LSD") aimed to strengthen the institutional knowledge on animal health and raise public awareness in animal health in compliance with the EU requirements. As the tendering process and selection of the contractor took some time, the LSD activities started in 2019. In the meantime, the LSD vaccination programme could not wait for four years and was started immediately from the national budget. By the time the IPA funded projects started, the LSD outbreaks had significantly decreased but as

the vaccinations are long-term interventions, the IPA support has remained relevant. Compared to the original ToR a few changes of activities were necessary. Preparation of the Animal Health Strategy on LSD was replaced with an update due to duplication of the activity with the previous IPA project. Ten planned training activities were reduced by one, which was replaced with a simulation exercise and preparation of the Contingency Plan for LSD. The vaccination support plan and analysis have lost the urgency as the vaccination was already running and the LSD outbreaks were reduced by the time the TA for LSD started. Nevertheless, it proved to be useful for the future use. The awareness raising seminars for farmers were planned with an aim to assist the vaccination process and deliver basic information on the disease and explain how to proceed in case of outbreak. However, the design of this one-off activity did not correspond with its purpose and addressed insignificant proportion of Turkish farmers. Despite that, the tools to manage possible future outbreaks, epidemiology, diagnosis, and treatment in line with the EU required standards, preserved the relevance of the planned interventions.

Rabies is endemic in Turkey. Recent outbreaks dating from 1999 onwards have underlined the need for intensified efforts at its eradication. The IPA support of oral rabies vaccination from 2005 and 2010 allocations assisted the first oral vaccination campaigns carried out in Turkey. The 2010 IPA intervention finished in 2016 but due to the delays in administrative procedures the next project started only after a three-year hiatus, thus the rabies vaccination programme was interrupted from 2016 to 2019. This again resulted in increased number of wildlife rabies cases. To get rabies back under the control, there was a need to eliminate the virus circulation between wildlife and domestic animals. The allocation of fund for *Supply of Oral Vaccination against Rabies in Turkey* (further referred as supply of rabies baits) provided baits for the distribution of oral vaccination against rabies. Design of interventions thus reflected the situation concerning the animal health diseases at the time of planning and from the needs' perspective was relevant. Currently rabies remains a threat, albeit much reduced. The supply of vaccine baits and their distribution remain important tools to address any future cases (JC 1.1).

All interventions are in line with EU sector priorities. The IPA support included in this evaluation concern animal health issues and are subject of Acquis chapter 12, comprising the legislation in Food Safety, Veterinary and Phytosanitary areas. The veterinary legislation, which is an important part of the Acquis in the agricultural field, covers mainly the part concerning livestock and eradication and control of animal diseases including the comprehensive legislation on notification of animal diseases, necessary administrative capacity, and mechanisms for the identification of diseases, etc. (JC 1.1).

The MoAF staff dealing directly with the IPA interventions were professional and capable, and the IPA assistance was well adapted to their capacities. Besides their common daily duties at the MoAF, the staff dedicated for the project implementation were deeply involved in the project activities and provided full support for the project implementation. Their involvement helped to keep the direction and follow the progress in detail.

The final beneficiaries at the VCIs all over the country had the capacity to contribute to the implementation and benefit mainly from the training activities and equipment supply. The vaccination activities were arranged through numerous Provincial and District Directorates of the MoAF. Besides the supply of LSD vaccines, they have not benefited from capacity development delivered by the intervention. Rather, their staff have been dealing with the administering of purchased LSD vaccines in the field. It was noted that these Directorates struggled to ensure timely roll-out of LSD vaccination due to their multiple other responsibilities and lack of human (veterinary doctors) and technical capacities (JC 1.2).

The design of the interventions (in terms of their intervention logics and indicators) contains some shortcomings but the underlying logic of the IPA support is sound. The overall objective stated in the AD refers to the *contribution to Turkey's gradual alignment with EU legislation in the areas of food safety, veterinary and phytosanitary and agricultural and fisheries policies*. This is not very relevant in relation to the projects within this evaluation. Despite the poorly formulated overall objective, the outcomes of the planned assistance should contribute indirectly to Turkey being more in line with EU practice in this area. This IPA assistance however can only have an indirect contribution to the overall objective. Therefore, the theory of change underpinning the interventions is sound. The achievement of the overall objective should basically mean that the future impact corresponds or is comparable with the situation in other EU countries i.e., in the longer-term perspective there should be no outbreaks of LSD and rabies cases. **The overall objective in this scope can be achieved with the contribution of the specific objective.** Two indicators at the impact level mentioned progress made towards meeting accession criteria and total investment generated via IPA II in agri-food sector and rural development (which were the interventions outside the scope of this evaluation). None of these indicators mentioned in the Action Document AD is relevant for the evaluated measures although they might be linked to other IPA II measures. Also, they lack baseline and target values (see also Q3). Part of the indicators (performance – outcome level) is being monitored in the Annual IPA report covering individual sectors, that is prepared by the NIPAC.

The specific objective was set out in the AD as *to enhance institutional capacity of the MoAF regarding implementation of relevant requirements of the EU legislation in Turkey within the scope of Chapter 11, 12 and 13*. The interventions enhanced institutional capacities of the MoAF, Veterinary Control Institutes (VCIs) and other relevant stakeholders and followed the compliance with the relevant EU requirements and their proper implementation in practise. For this evaluation exercise, and considering the interventions on the evaluation list, we can be more specific and narrow the specific objective in a similar way as it is specified in the ToR of TA for LSD. It would be stated as *the enhancement of institutional capacity of MoAF for control and prevention of LSD and rabies in line with the EU legislation* (see Annex 1). A substantial part of the LSD and rabies assistance has been used for the supply of vaccines. 95% of the amount contracted for the evaluated interventions served for the supply of vaccines. More than half of it was used for the rabies, the other part for LSD vaccination. Therefore, is appropriate to qualify this support as the institutional capacity building to prevent and control the spread of LSD and rabies (JC 1.3).

4.2 Coherence

Q2. To what extent is the EU assistance coherent with interventions by other international actors and with other EU interventions in related fields?

The EU assistance is aligned with the national policies but there are few other international or EU interventions in the area covered by this evaluation. The national strategic documents were fully considered in the preparatory stage of the support. The 10th Development Plan (2014 - 2018) was the most relevant in this regard. This was the highest level nation-wide strategic document to lead the Agriculture and Rural Development Sector along with the other key strategic documents covering the entire sector. The objectives drawn up in the strategic documents were **compliant with the EU accession priorities of the sector** and were reflected in the Indicative Strategy Paper and the Action Document. The Strategic Plan of MoAF for the period of 2013 - 2017 embracing the EU priority areas and pursuing accession process was also directing the planning process and there were also other supportive supplementary documents elaborated. The Plan stated an objective to control transmissible diseases and protect animal health, notably to ensure the livestock production is sustainable. The implementation of the IPA II projects eventually also

considered the Veterinary Strategy Paper prepared under the previous EU project *Technical Assistance for Preparation of Veterinary Services Strategy Paper* (JC 2.1).

Although Turkey participates in many international initiatives and is the member of international agricultural bodies (such as Food and Agriculture Organisation/FAO, World Organisation of Animal Health/OIE, International Fund for Agriculture Development/IFAD, etc.) there have been no other projects running to support the same topic nor other initiatives closely related to health animal issues. MoAF is preparing a World Bank funded project (Climate Smart and Competitive Agricultural Growth in Turkey) and one of the components is to improve of infrastructure of the VCIs in Turkey. The proposed World Bank project will support the establishment of a centralized Veterinary Medicine Control Institute to improve the capacity of Turkey to control and regulate veterinary medicines and vaccines to ensure that effective and high-quality products reach the market. It therefore complements and builds on the IPA support covered in this evaluation. The International Atomic Energy Agency is currently working on the increase of the laboratory capacities of VCIs and concentrates mainly on experts' trainings contributing to molecular research. VCI Pendik is involved in the Horizon project dealing with the swine flu (JC 2.2).

4.3 Effectiveness

Q3 To what extent are the specific objectives and expected results of the Activity/Theme achieved?

The expected results of the theme have been achieved as both, LSD outbreaks and rabies cases were decreased to a minimum. The interventions have delivered most of their planned outputs, which represents good efficiency and has proven to be a sound basis for the achievement of the expected outcomes.

The LSD interventions, focus on the improvement of the control and prevention of LSD. As regards their outputs, epidemiological data and procedures were developed; plans for harmonisation and improvements of the VCIs were proposed based on the assessment of the LSD diagnostic methods, procedures, equipment, laboratory facilities and staff capabilities. A plan of entomological surveillance and the map with traps placement was prepared. The vaccination plan including vaccines to be used, vaccination schemes, duration and time of implementation was prepared. All of these in combination formed the basis for conducting the vaccination campaigns, which were carried out from January to April 2020 and January to May 2021 and covered all bovines in the country.

The **capacity** of the target institutions has not yet been fully developed as planned. The training courses for this purpose had to be postponed due to the COVID pandemic. By the cut-off date of the evaluation, seven training sessions had been organised and 203 participants from the VCIs and MoAF had been trained. Feedback from beneficiaries indicates that the quality of the training was high, implying that the institutional capacity developed by the IPA support should be good. For example, the training on vector transmission was well received and it was agreed to organise it internally on the annual basis. Furthermore, a survey conducted by the evaluation team (see Annex 5) established that all the respondents from direct beneficiaries confirmed they were now using the knowledge gained during the training and 67% of respondents considered the information provided on LSD sufficient. Feedback also indicated likely future needs and underlined the importance attached to training and professional development by these staff.

As regards **awareness raising**, the "LSD Theatre Sketch" was designed and the awareness materials such as posters, leaflets, brochures were prepared for the seminars with the public. Five seminars were conducted and over 200 farmers, veterinarians and MoAF staff took part (originally planned seven seminars for 300 farmers). Another two planned seminars could not take place due to the COVID pandemic and were replaced

by the awareness movie and short animation video. These seminars could address only negligible proportion of farmers in Turkey, therefore the scope of delivered outputs cannot be considered a fully-fledged awareness raising of Turkish farmers. Although the outputs have been delivered as required, the original design of this activity reduced the effectiveness of the awareness raising seminars.

As regards **strategies and methodologies**, the Animal Health Strategy for LSD and Risk Assessment of LSD after Disease Eradication were prepared. A contingency plan for the implementation of the strategy is being completed. TA for LSD is still ongoing, and a few remaining trainings are to be delivered. A simulation exercise on LSD has to be performed to test the LSD Contingency Plan once it is prepared. The experts at the contractor’s side and the MoAF staff elaborated a model that can predict LSD outbreaks. This is not only the practical tool to be used for the future management of LSD in Turkey, but this research is to be published in the scientific journal, which helps to develop research activities and enlarge the scientific cooperation network. This is considered unplanned positive effect of the project. The TA is expected to be finalised soon and all the outputs are contributing to the achievement of the specific objective (JC 3.1).

The intervention on oral vaccination for rabies supplied the baits and in cooperation with the MoAF, has assured their aerial distribution twice a year. At the delivery, the quality of batches was confirmed by the independent titration at the special laboratory in Germany and, upon arrival at VCI Etlik. Before each distribution, training sessions were organized for responsible veterinarians from provincial directorates and practical training was organised for pilots. Post campaign monitoring was taking place at VCI Etlik where collected foxes were examined for presence of bait marker proving bait uptake, and antibodies against rabies to confirm immune response. Distribution of the supplied rabies baits is ongoing. The vaccinations of both LSD and rabies are directly contributing to the outcome in terms of reduced outbreaks/cases of these diseases (see Fig. 1a, 1b) (JC 3.2).

Figure 1 Rabies cases

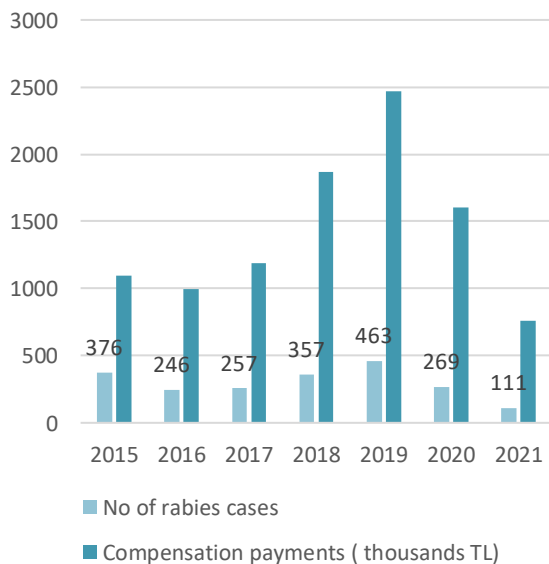
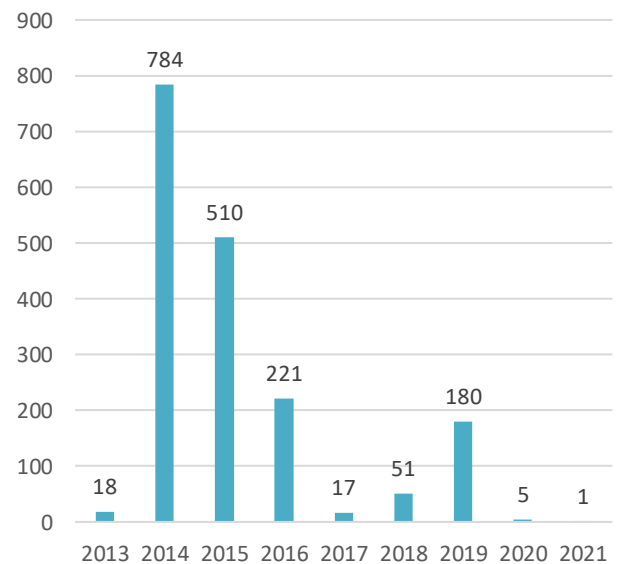


Figure 2 Number of LSD outbreaks



Source: MoAF

Outcomes have emerged in terms of reduced outbreaks of LSD and rabies cases, which tends to confirm that the institutional capacities for the control and prevention of LSD and rabies of the MoAF were enhanced.

The outcome indicators set out in the AD as number of LSD outbreaks, and number of rabies cases in farm animals resulting from the transmission of the disease from wild animals are stated below. These indicators prove the enhanced institutional capacity of the MoAF to implement relevant requirements of the EU legislation. However, the indicators are confusing, and the same indicators are set out as the activity and output level indicators and/or activity and outcome level indicator. In addition, the activity level indicators are determined as the only ones, with the baseline and target values (see Table 2). None of the indicators is monitored in the Physical Progress Monitoring reports, which is presented as the monitoring report/tool (JC 3.3).

Despite these inconsistencies, in the most part these indicators show the direction of change that the planners expected from the interventions and thus serve as a useful guide for assessing effectiveness. Most of the LSD indicators are valid to assess IPA performance. The first of these (*Number of samples received and processed by the 8 equipped laboratories*) tries to indicate decrease of the outbreaks through the reduced number of samples, which is not the best example having the outcome indicator referring directly to the number of outbreaks. The indicator *Number of vaccinated animals (in percentage of population)* is appropriate as an activity/process indicator to understand how well the vaccination programme has been delivered, with the assumption that meeting the target (100%) would ensure full protection against LSD in future although it is scientifically proved that 80% rate is sufficient. The final indicator (*Number of LSD Outbreaks*) is mentioned at both output and outcome level while it is a good outcome indicator to show whether the change expected has actually occurred and has a valid target value.

Looking at the effectiveness of LSD interventions using these indicators, it can be said that the output indicator linked to the samples of laboratories has been met but does not provide the best indication of effectiveness in delivery of outputs. The indicator on the delivery of the vaccination has been met implying good efficiency and a sound basis for effectiveness and the outcomes have been met due to the drastic reduction in LSD outbreaks (see Figure 2).

Alike the rabies indicators are mostly valid though not for the assigned level. The indicator *Number of vaccine baits distributed* is valid outcome indicator demonstrating how well the vaccine baits have been placed. The indicators *Number of rabies outbreaks in the regions covered by the vaccination campaigns* should be an outcome indicator. Together with the next output indicator, which is identical with the outcome indicator (*Number of rabies cases in farm animals resulting from the transmission of the disease from wild animals*), could be good outcome indicators with the valid targets justifying the expected change.

Assessing the effectiveness of rabies activity based on the indicators, it can be concluded that the key output indicators referring to the distributed rabies baits has been already fully met. The two outcome indicators have achieved values close to the planned target, which is a good base for effectiveness, despite the fact, that number of cases provided by the MoAF and reported in the Annual Implementation report differ (see Fig. 1, Table 2). Nevertheless, the reduced number of both, cases, and outbreaks, confirms the trend.

Table 2 Indicators Agriculture and rural development (veterinary policy)

Activity			Output	Outcome
Indicator	Baseline	Target	Indicator	Indicator
LSD				
Number of samples received and processed by the 8 equipped laboratories	1500	250 37*	Number of samples received and processed by the 8 laboratories equipped	
Number of vaccinated animals (in percentage of population)	TBD	100% 86%*	Number of animals vaccinated	
Number of LSD outbreaks	221 (2016)	0 1*		Number of LSD outbreaks
Rabies				
Number of vaccine baits distributed	0 (2017)	24.300.000 24.500.000*		
Number of rabies outbreaks in the regions covered by the vaccination campaigns	402 (2017)	0 47*		Number of rabies cases in farm animals resulting from the transmission of the disease from wild animals
Number of rabies cases in farm animals resulting from the transmission of the disease from wild animals	54 (2017)	0 9*		

*Source: AD 2015, target value is set for 2022, * achieved value by the end of 2021*

4.4 Effectiveness - factors

Q4. To what extent did different factors influence the achievement of the Activity/Theme specific objectives and results?

The most notable supportive factor influencing the effectiveness of the IPA assistance has been the good cooperation between stakeholders and beneficiaries' ownership of the interventions. As regards ownership, the beneficiaries clearly assigned the roles and deadlines and hold regular meetings to discuss and solve problems. The beneficiary institutions were accountable for the results of their projects and did their best to ensure their highest quality and timely delivery. Moreover, there are highly professional and experienced staff at the MoAF, and the same qualities were valid for the team of TA for LSD and the vaccines supply companies (both LSD and rabies), where the contractors did more than was mandatory. For example, LSD vaccines were locally produced, and the contractor distributed the vaccines directly to Thrace, Konya, Erzurum regions, and other places without any additional cost. This well-functioning cooperation enabled generally smooth delivery of outputs (JC 4.1).

The negative factors are related to the proper selection of the target group and the capacities for the administration of LSD vaccines. There were two factors identified that could have a potential negative influence on the efficiency of the projects. The internal factor is the selection of the target group for the LSD awareness raising seminars. These seminars for farmers were able to cover very small proportion of the overall farmers population. In total 212 out about 1 mil. farmers – livestock owners (which is some 0,002%)

took part at the seminars, which could not bring the desired benefit of the LSD activity and/or the scope of contribution of this activity could have been more substantial.

An internal factor related to the effectiveness concerns the capacities of the Provincial and Districts Directorates responsible for the administration of the LSD vaccines. During the campaign periods in which the vaccinations are carried out intensively, the human and technical sources to ensure proper operation of these Directorates were limited. Although this limitation was not directly manifested and has not affected the LSD vaccination, it represents additional expenses for the MoAF and may cause difficulties when any animal disease requiring urgent massive vaccinations occurs in future (JC 4.2).

4.5 Efficiency

Q5. To what extent are the costs of the Activity/Theme proportionate to the benefits achieved/estimated?

Despite some efficiency problems, planned activities and outputs were delivered within planned budgets and followed IPA procurement standards. The IPA-funded actions were procured using a competitive process supervised by the CFCU. No budget increases were noted so there haven't been any cost deviations from those planned. The original allocation for the LSD activity was not fully contracted as there was a significant saving (35%) from the contract concerning the supply of laboratory equipment. The TA contract was the global price contract but due to COVID measures, a part of the planned activities was cancelled and replaced by different types of activities, and/or part of the training activities was delivered online. Although this hampered efficient delivery of implementation, the changes were made considering the budgetary constraints of the contract. In combination, this represents good cost-effectiveness.

The most substantial proportion of sources allocated for LSD (some 90%) was used to supply the LSD vaccines and continue the vaccination programme. Although the heterologous LSD vaccines produced in Turkey were cheaper, the EU countries had a good experience with the homologous vaccine, therefore both types of vaccines were purchased. The homologous vaccines were used for the application in the EU neighbouring Thrace region. The other Turkish regions applied locally produced vaccine, which was more efficient and eventually proved to be equally effective. The procedure for the tender dealing with the supply of LSD vaccines was changed to negotiated procedure as no bid was submitted for the first tender.

In relation to the supply of LSD vaccines, the price comparison of LSD vaccines was mentioned. There were two types of the LSD vaccines supplied and used: homologous vaccine applied in a single dose in Thrace region and heterologous vaccine. The heterologous vaccine was applied in 5 doses in the rest of Turkey but is still cheaper than the homologous one and according to expert opinions, with less side effects. Undoubtedly, the provision of locally produced vaccines has been more effective (JC 5.2).

The conditions of the supply contract for rabies baits enabled to increase the number of vaccines. Therefore, the overall allocation was exceeded to cover additional 5 mil. baits and ensure vaccination till the end of 2022. An extension to the contract is currently under consideration, with funding coming from the savings of IPA II. As regards the costs of individual activities, the available data and information are not sufficient for the provision of any benchmarking or other type of financial analysis.

Except for a long administrative approval, the quality of day-to-day management worked well. Some issues concerning delays in the approval processes concerning administrative approvals in TA for LSD have not affected originally planned the contract duration. Due to the COVID-19 measures, which did not enable to carry out some of the planned activities, the contract was extended by 14 months. Despite the agreement

of all main stakeholders on the proposed activity changes, the administrative process took longer because of the high turnover of the CFCU staff. A similar situation as regards the change of contract managers was reported for a number of the evaluated contracts. The CFCU contract managers have the sole responsibility for individual projects and details/information are not reportedly shared with their colleagues. It is also understood that all documentation regarding the contract is stored but is available only for the authorised CFCU staff (JC 5.1).

The IPA unit at the MoAF provided basic information (Progress and Monitoring reports, minutes from the meetings, ToR). Most of the documents/reports concerning individual produced outputs were eventually provided by the contractors. The most complete documentation, i.e., all the reports and information on individual contracts are stored/archived mostly in paper form at one place (CFCU), the access to these data is very limited as the data provision for many different stakeholders is time and resources consuming. The access cannot be electronically shared with any other relevant stakeholders (NIPAC, IPA unit) and none of this information is publicly available. The accessible documents at the web page of CFCU concern only public tenders (JC 5.3). Overall, this limited access to information on the IPA interventions hampers an objective assessment of its performance by other stakeholders and external parties such as monitors and evaluators.

Q6. Are there different modalities of using resources that have produced more results or have decreased the resources needed for the same level of achievements?

Two alternatives could have been considered to produce better results. The supply contract for the laboratory equipment was launched in parallel with the TA for LSD contract. The TA for LSD carried out assessment of diagnostic methods and laboratories to optimise diagnostic capacities. Current procedures are quite rigid and time consuming, however, provided that the procedures are changed and would allow faster procurement processes, the TA could easily complete the assessment and prepare technical specification for the purchase of the missing laboratory equipment. It is quite likely that the preparation of the technical specifications would not take too long and would be of good quality. This approach, suggesting preparation of the technical specification by the TA team, could be more appropriate to save time and resources and still provide sufficient space to manage the supply on time.

For the awareness raising activities the approach could include more diverse methods tailored to the new and varied information preferences and habits of the target group. The effectiveness of the printed awareness materials significantly decreased in the recent years. Reaching the original target population, the farmers, could have considered the veterinary doctors as a key transfer modality of the information, raising not only the awareness but also increasing the level of understanding. The awareness raising seminars for farmers were carried out for the very small proportion of the relevant target group. Overall, only some 200 farmers participated in the seminars, which is not sufficient to achieve awareness raising on a national scale. Replacing farmers with the veterinarians would have been a potentially better option. There are some 6 000 veterinarians from the 81 Provincial and 970 District Directorates of the MoAF, which are easy to reach. These veterinary doctors have been responsible for the administration of LSD vaccines, i.e., they had to visit all farmers. Together with the application of LSD vaccine they could have provided some basic information including leaflet and if necessary, refer farmers to other relevant social media networks or web pages etc. If needed, the capacities of the private sector could have been utilised as well. There are some 40 000 private veterinarians at 8 000 clinics all over Turkey with obligatory membership in the Veterinary Medical Association (JC 6.1).

Q7. How timely and efficient is the Activity/Theme's process of programming, contracting, implementation reporting and monitoring?

Even though some of the project management processes have not been very efficient, it did not have any significant negative effect on the delivery of the IPA-funded activities and outputs. The supported interventions were programmed in 2015, some three years before they actually entered implementation. As noted under EQ1, despite this gap, the original design remained largely relevant to actual needs at the time of its implementation. The task of designing the interventions fell to the MoAF, while the main coordination role in the programming phase was assumed by the NIPAC with active cooperation of the EUD and Commission Services. Drafting of ToRs and technical specifications started when the Financial Agreement was signed (in 2016) and took a year or more to prepare. The tendering process of some of the contracts comprising the IPA support covered by this evaluation had to sort out several difficulties, but it did not have any significant impact on the duration of the tendering phase. However, the late start-up of the assistance targeting rabies did influence the spread of rabies whilst the IPA assistance was being procured.

Table 3 Contractual Details of Interventions under theme 1

Contract	Launch of Tender	Contract award*	Comments
<i>Supply of Laboratory Equipment and Light Traps for Control and Prevention of Lumpy Skin Disease (LSD)</i>	12/12/2018	27/02/2019	Four items cancelled, final cost 65% of allocated budget
<i>Technical Assistance for Control and Prevention of Lumpy Skin Disease (LSD)</i>	19/06/2018	24/01/2019	No-cost extension of 12+2 months granted
<i>Supply of Vaccines for Control and Prevention of Lumpy Skin Disease (LSD) (2 lots)</i>	28/08/2018	28/02/2019 11/03/2019	Initial tender cancelled, negotiated procedure
<i>Supply of Oral Vaccination against Rabies in Turkey</i>	08/08/2017 08/05/2018	17/08/2018	Initial tender cancelled and re-launched

*contract award is not the same date as contract signature

- The technical specification for the supply of the laboratory equipment was prepared by Pendik VCI with an aim to improve diagnostic methods in the VCI's laboratories. It took approximately 2 years from the start of the drafting process to actually launch the tender. Problems concerning the origin of the products were communicated by the CFCU to the VCI and four items were excluded from the list. The contract was signed with the local company, which provided a very competitive price (65% of the original allocation) and supplied locally produced items. The supplier is obviously experienced and provides supplies for several IPA interventions, but not sufficiently specialised for such specific supplies, which was reflected in the insufficient quality standards of the laboratory equipment.
- The TA for LSD was contracted in six months since the contract notice publication and did not experience any difficulties, although the start of implementation was 1 year after the tender launch.
- The initial tenders for the supply of LSD vaccines and for the supply of rabies baits were cancelled (October 2018 resp. December 2017) as no relevant bids were submitted. The procedure for the tender dealing with the supply of LSD vaccines was changed to negotiated procedure with the contract signed in February 2019.
- The tender for the supply of rabies baits was repeated and successfully contracted in three months from the contract notice in August 2018. However, at the beginning of the project, the problems occurred with the procurement of the aviation company, which was contracted separately by the MoAF. Due to the objections during the tendering procedure at the MoAF, this tender could not be

completed on time and the distribution of the first campaign was occurred later than planned (JC 7.1).

All the projects encountered some implementation difficulties, but ultimately these have not negatively influenced the delivery of the planned activities and outputs. Although some of the outputs were delivered later than expected it did not have any significant effect on the effectiveness, either. Contract extensions were granted to two of the contracts to ensure their full implementation. The main issues are given below:

- The supplied laboratory equipment was installed but did not fully satisfy the expectations of the beneficiaries as part of delivered components did not comply with the original specification and had to be replaced. The supplied microscope malfunctioned shortly after installation and had to be repaired. Final acceptance is not completed yet after provisional acceptance, due to problems with the supplied microscope.
- The supplies of LSD vaccines were implemented as planned.
- The supply of rabies baits was delivered on time, but their distribution was carried out with a one season delay because of the problems encountered with the MoAF's procurement of the aviation company. The first vaccination planned in spring 2019 was postponed to autumn. The initial supply of the baits at VCI Etlik thus had the storage period extended to 9-10 months. Consequently, 83,200 baits expired and could not be used anymore. These baits were compensated and delivered free-of-charge by the contractor to be used during the second campaign in spring 2020. The vaccination thus started in autumn 2019. Due to the delay, the originally planned area did not match the latest epidemiological situation, but the MoAF updated epidemiological data and made small adaptations to the target areas. Since 2020, vaccination programme has been ongoing during spring and autumn periods. More than one-year extension was granted for the supply of rabies baits.

Table 4 Distribution of baits for oral vaccination of rabies

Date	Covered area (km ²)	Number of distributed baits (mil.)
19.09. - 03.10.2019	225,000	4.5
23.02. - 26.04.2020	225,000	5.5
06.10. - 21.11.2020	225,000	5.5
20.02. - 29.04.2021	236,697	5.5
autumn 2021	236,697	5.5
16.02.2022 – ongoing	N/A	3.5
autumn 2022	N/A	2.0
spring 2023	N/A	2.5
23.02. - 26.04.2020	225,000	5.5

Source: CEVA reports, MoAF

The vaccination programme of rabies was initially delayed due to the lacking aviation service for the first campaign although it was tendered separately by the MoAF for each campaign. This would imply that the contract duration would expire after three years before all the purchased baits could be distributed. Thanks to the COVID-19, the non-cost extension was granted, and the vaccination can continue with the distribution of all contracted and supplied baits. An additional supply from savings is considered for the bridging period in 2023 (see Table 3).

- Finally, the TA for LSD started the implementation period with the need to revise one of the activities (preparation of the Health Animal Strategy for LSD), which duplicated some previous assistance. Besides that, the security measures introduced due to the COVID-19 pandemic have also affected the project implementation, mainly in relation to the training activities of the TA for LSD project. As the beneficiary's preference was to have face-to-face trainings, the activities have been postponed until the situation improves. Some of the activities have had to be organised online or in hybrid form (e.g., the laboratory exercises could not take place online). Although the personal contact was missing it was compensated by higher number of participants. The provision of awareness raising campaigns/seminars for the farmers was also influenced by COVID and their number had to be reduced. As a compensation, the awareness package for farmers was prepared. The approval process of these administrative changes at the CFCU was affected by the turnover of the CFCU staff and caused a few months delay.

In general, the official reason for the extension of contracts was COVID-19. The extensions due to small time shifts, which have been caused by the administrative procedures and/or approval process of the reports thus were not visible. At the time of the evaluation the last few activities of the TA for LSD were still running but is unlikely to weaken effectiveness (JC 7.2).

The monitoring of the IPA support shows some room for improvement. The IPA unit at the Department of European Union Harmonisation under General Directorate for European Union and Foreign Relations of the MoAF was established in 2015. This unit is responsible for the monitoring of projects and at the time of evaluation it was also involved in the planning of the future IPA III assistance. As a relatively new unit within the MoAF, it initially lacked experience in these areas under its competence, and this has been reflected in the quality of monitoring and reporting, which strictly followed required obligatory tasks.

The main monitoring tool used to track IPA interventions is the "*Progress and Monitoring Report*", which covers all contracts within the activity. These monitoring reports contain very brief information including the date of the contracts' signature, an estimate of the rate of the projects' physical progress in percentage, and space for the reporting of irregularities and changes in the technical specifications – all in a simple template/form. They do not contain any indicators (neither financial nor output), which could provide any objective measure or indication of intervention progress. These take the form of quarterly reports provided by the direct beneficiary - Animal Health Department to the IPA unit, that was submitting the reports to the Ministry of Treasury and Finance. Aside from filling some formal reporting requirement, it is not clear how useful this report is for the Treasury. Nevertheless, it has not been used for any other monitoring purpose and its utility for other monitoring activities, due to its content, is limited.

The documents were collected from different stakeholders. The monitoring system at the MoAF provided access to the minutes from Steering Committee meetings, monthly monitoring reports, ToR, and link to LSD web page. Relevant contract documents including all technical reports, interim reports, training reports, promotion material were provided by the contractors and financial information were discussed with the individual CFCU contract managers. In general, all the necessary information is stored at the CFCU but not in the electronic form, therefore the library is not easily accessible to any other stakeholders, as this would require a lot of CFCU capacities to seek for documents (some of them already archived) and respond to numerous requests of various stakeholders. Nevertheless, the information is necessary to carry out the proper monitoring and obligatory reporting of the stakeholders.

The IPA unit provides to NIPAC information on all IPA projects at the Ministry at the annual basis. This report, including data on monitoring indicators is used for the preparation of the IPA Annual report for the Commission Services. Management reports are prepared for National Authorising Office. Results Oriented

Monitoring (ROM) is assisting the monitoring role of NIPAC, which deals with the monitoring at the level of sector.

Steering Committee Meetings are considered the official monitoring platform for discussing progress, problems, and planned activities at the project level for the TA projects only. The Steering Committee meetings have been organised quarterly by the TA team in the presence of the Lead Institution/beneficiaries - General Directorate of Food and Control/Animal Health Department, contractor, IPA unit, NIPAC, CFCU and EUD. The TA contract team has been voluntarily preparing a 'Physical Progress Report' providing basic information for their discussion. Progress of activities, problems, proposed solutions, and planned activities have been discussed. On some occasions, informal meetings of relevant stakeholders were organised and/or in case of need other relevant stakeholders were invited to participate at the project meetings.

The supply contracts do not have any Steering Committee meetings and in most cases do not have any reporting obligations. The technical specification for the supply of rabies baits exceptionally required some reporting. It has provided information on the preparation, implementation, and evaluation of the aerial bait distribution campaign. These reports have been provided by the contractor after the completion of each vaccination campaign. The information on the implementation of other supply contracts was missing. The supply contracts are usually easier to implement but many times with quite substantial budget therefore they need to be monitored as part of the activity (LSD and/or rabies).

The Implementation Review Meetings organised by the NIPAC discussed technical implementation of the actions/projects and discuss the problems-bottlenecks in the action or even contract level. Technical meetings for monitoring the implementation of EU funds were conducted and co-chaired by NIPAC and EUD for all projects under sector, two or three times a year. The purpose of the meetings was to identify necessary measures for overcoming the problems, speeding up the procedures and improving the overall implementation performance. Representatives from CFCU, LI and project beneficiaries were participating at the meeting.

Sectoral Monitoring Committee Meetings represent a high-level formal platform at the sector level. It has been taking place twice a year to discuss the progress of all IPA II interventions within the MoAF and propose corrective actions. The participants of the SMC are more diverse, the agenda is agreed with the EUD beforehand. These meetings discuss the implementation problems and propose measures to improve the IPA interventions and the quality of monitoring. For example, the latest meeting, besides other issues, highlighted the need to provide information on the progress towards the achievements of the programme objectives and outcomes (indicators) as well as impact of the actions. This suggests that the reasonable form of the Progress and Monitoring Report could assist with the reporting on the achievement of objectives. If such information is missing, reporting at sector level on achievement of objectives is difficult.

There is evidence that all entities with responsibilities for the management of the evaluated interventions undertake monitoring activities and use their own range of monitoring tools tailored to their own needs. The interviews revealed opinions that more cooperation, joint analysis, and solutions would make monitoring more effective. Examples include qualitative contributions of all stakeholders to critical analysis in the project monitoring meetings, joint on-site-visits, share of conclusions or monitoring reports. Although the monitoring tools and methods at different project and programme levels are in line with the DG NEAR guidelines², apparently in absence of similar guidelines adapted to the IPA interventions in Turkey, there is no sufficient mutual understanding on sharing responsibilities and monitoring results, e.g., between EUD,

² DG NEAR Guidelines on linking planning/programming, monitoring and evaluation

NIPAC and LI. The monitoring data transfer is based on reports shared by emails, missing automation of data transfer, storage, and manipulation. The evaluation finds the project progress reports without important data to inform on real progress.

Q8. How efficient and effective are the institutional arrangements/mechanisms, which ensure coordination among the various components and stakeholders of the Activity/Theme?

In general, the coordination mechanism within the IPA management structure has worked well. NIPAC has had the overall coordination role of the programming process and has been responsible for the overall monitoring, evaluation, and reporting on the implementation of all IPA financial assistance. In cooperation with the LI and direct beneficiaries NIPAC assisted determination of the IPA strategic priorities in the Action Documents for all assisted sectors including those for Agriculture and Rural Development and ensured coherence and complementarity of the financial assistance. In relation to its monitoring function, it ensured the operation of the monitoring forums at the level of the overall IPA assistance as well as at the level of individual sectors. The Annual Report on the implementation of IPA II assistance in Turkey has been regularly submitted by the National IPA Coordinator to provide the overview of the progress at the sector level. The report was prepared in cooperation with the IPA units and included monitoring of the indicators for all interventions within the sector.

As regards the institutional beneficiaries of this assistance, these programmes were the first occasion when the MoAF, General Directorate of Food and Control, had the role of the Lead Institution in IPA II. Within the Directorate, the Animal Health and Quarantine Department (AHQD) was the nominated beneficiary entity. The AHQD had been involved in the programming phase and at that stage there were some efforts to discuss priorities and/or possible future involvement of the partners outside the MoAF. Some initial discussions about the possible focus of the IPA assistance and the cooperation included Turkish Cattle Breeders' Association and other bodies but there were no other meetings organised. They also assisted CFCU with the ToR and technical specifications for the supply contracts with the contribution of the VCIs. The AHD's staff has been managing all the contracts concerning LSD and rabies.

As noted elsewhere, the IPA unit i.e., Department of European Union Harmonisation under the General Directorate for European Union and Foreign Relations of the MoAF was established in 2015 and has been only gradually involved in the monitoring and implementation of IPA interventions in the area of agriculture. Now it has some 10 staff members in two Divisions (programming; monitoring and evaluation). The IPA unit is responsible for IPA II interventions monitoring as well as IPA III interventions planning. The interviews confirmed IPA unit is carrying out on the spot controls together with EUD and NIPAC.

The staff of the unit has dealt with the monitoring of IPA II activities, including on the spot control together with the NIPAC and EUD, reporting, participation in project steering committees' meetings, sector and IPA monitoring committees. However, the minutes of the meetings reveal a low level of involvement and contributions in the discussions and there has been limited availability of the on-site-visits reports and follow-up actions.

The IPA unit prepared presentations for formal monitoring committees and other meetings to provide monitoring information. The information has been gathered from the direct beneficiaries for the reporting purposes. Besides the IPA required reporting obligation, there were no other internal reporting tasks reported within the MoAF structures.

The CFCU is responsible for all budgeting, tendering, contracting, payments, accounting, and financial reporting aspects of the EU funded interventions. CFCU staff have closely followed all the contractual

obligations and paid specific attention to the delivery of all planned outputs. They have been attending all monitoring meetings and carefully followed the progress. CFCU performed all the functions well, however, the evaluated interventions experienced frequent changes of the CFCU contract managers. This was caused by the high turn-over of the staff managing the individual contracts. As the contract managers work individually, there are no other staff members familiar with the contract, who can deputise if needed any substantial difficulties. The EU Delegation contributed to smooth implementation of the projects, having a supervisory role, and assisting if any major issues occurred (JC 8.1).

4.6 Impact

Q9. Which long-term changes have the Activity/Theme contributed to regarding the sector in question?

The change expected from the activities is the control of animal diseases (in this case LSD and rabies) in line with the EU rules and requirements to avoid economic loss. The expected change following the overall objective should ultimately be visible in Turkey's gradual alignment with EU legislation in veterinary area. Some of the benefits are already visible but need to be sustained to achieve the disease-free status.

According to the intervention logic stated in the AD, the IPA II 2015 interventions covered by this evaluation should contribute to the achievement of the overall objective of the alignment with the EU legislation, i.e., negotiation of Chapter 12. According to the AD, the main indicator to measure this is based on progress made towards meeting accession criteria. The interventions within this evaluation have introduced measures that are directly compliant with regulations concerning animal health - vaccination of both LSD and rabies and thus bring national practices in line with EU standards (JC 9.1).

As regards the supply of LSD vaccines, once the vaccines were approved for use, vaccination campaigns were carried out by official veterinarians and their effects and benefits became gradually visible (see Table 4). The long-term benefits will be assured once the tools developed by the TA for LSD are fully applied and necessary funding to proceed with the vaccination is secured.

The supply of laboratory equipment for eight VCIs and installed light traps strengthened the diagnostic capabilities, enabled the application of uniformed methods and vector identification. The supplied equipment and the tools developed by the TA for LSD undoubtedly strengthened the Turkish capacities to manage LSD now and in the future. The prepared material on risk assessment will serve for indication of affected areas with the need for vaccination, which will decrease the number of doses and thus the cost. The proper application of tools should significantly reduce the number of doses and funds for the future LSD vaccination while securing sufficient protection. A less visible future benefit is expected from awareness raising activities in particular because of the small proportion of the target group (farmers) involved. The long-term change should be visible in a few years' time in Turkey as the LSD-free country.

The supply of rabies baits was planned at the time when the incidence of dog rabies was decreasing, whilst wildlife rabies was increasing. The former vaccination area was small, and in the meantime the disease spread to other areas. To ensure the rabies control, there was a need for protection measures in wildlife and oral vaccination was found to be highly successful in controlling fox rabies. The effects of rabies vaccination were visible shortly after the distribution campaign. However, the long-term effects will need continued future vaccination efforts.

From the perspective of the impact, both diseases are on the list of notifiable diseases³. All the details from a large number of EU legal acts were recently streamlined into a single Animal Health Law (Regulation (EU) 2016/429), which was adopted in 2016 and is valid from June 2021. It supports the EU livestock sector in its quest towards a competitiveness and safe and smooth EU market of animals and of their products. Both, LSD and rabies vaccinations are thus performed in accordance with the EU legal requirements and contribute to the eradication of these diseases. At the same time, it prevents the possible economic loss of livestock production and other farm animals due to the health issues. The vaccination as a preventive measure is economically more advantageous than any disease.

The annual Country Progress Report 2021 of the Commission Services mentions that Turkey is yet to fully align its veterinary policy with the EU acquis but also confirms that some progress is reported in fight against animal diseases. This progress is justified by the results - decreasing numbers of the outbreaks, achieved in supported IPA II interventions, which enabled to continue with the vaccination against LSD and oral vaccination against rabies (see Fig. 1, Table 4).

Table 5 Details on LSD outbreaks in years

Year	LSD outbreaks	LSD infected cattle	Provinces	Number of cattle	Vaccinated cattle number	Year
2013	18	438	7	14.415.257	-	2013
2014	784	3.109	43	14.223.109	4.148.303	2014
2015	510	1.126	47	13.994.071	8.350.054	2015
2016	221	3.258	26	14.080.155	10.214.719	2016
2017	17	130	9	15.943.586	13.864.387	2017
2018	51	729	10	15.456.438	15.048.367	2018
2019	180	1.291	29	16.721.436	16.106.894	2019
2020	5	24	5	16.266.352	15.581.636	2020
2021	1	4	1	15.970.624	15.577.088	98

Source: MoAF

4.7 Sustainability

Q10. How likely the effects are to last after the intervention ends?

The capacities built within the projects at the central level are very likely to be sustained. The assistance provided for the capacity building purposes was well received and beneficiaries were keen to learn from experience. The best incentive in capacity building activities was rather unique - mutual understanding between experts and the beneficiaries. It was the result of good coordination and hard work of both partners. The beneficiaries proved very high professional level and the ownership, and the TA team was keen to provide the trainings reflecting the trainees' actual needs and requirements. The knowledge delivered is thus very likely to be sustained. To ensure sustainability, the online courses were recorded and will be used to train other staff. The simulation exercise can also be used for further training. The knowledge

³ When an outbreak occurs, it is mandatory to send the affected animals and animals in contact to slaughter as well as to establish a protection zone and surveillance zone, as determined in the legislation.

gained during the training is likely to be utilised for further education activities. The laboratory staff of the VCI have not experienced high turnover, which should have a positive influence on sustainability.

Nevertheless, sufficient financial support by the MoAF for the VCI is needed to guarantee that the purchased equipment is properly maintained and can be used to full capacity. As regards the institutional capacities, the facility of Pendik VCI, which is also vaccine production facility, is exceptionally well located but historical buildings within the facility create the burden when there is a need to transform them into the modern laboratories. The potential to develop their own business activities is limited by the current legal status, management, and budget restrictions. Therefore, the future potential of the facility is high, but it will require quite substantial investments to achieve such a transformation.

Less positively, the awareness raising activities for the farmers have lower sustainability prospects. The planned broadcasting of the material is only one of numerous possible ways how to disseminate and deliver the message to the large community of farmers. The selection of very small proportion of this target group has limited potential to deliver the desired effects and inform the whole community of farmers. For this awareness to be broadened and sustained, further efforts to reach out to farmers will be needed.

The supplied LSD vaccines have been administered once a year, but their application and distribution costs represent additional expenses. The vaccination was ensured by the veterinarians of the Provincial and District Directorates. The LSD vaccine for the cattle was free of charge for the farmers during the project implementation. The expenditure related to the administration of the vaccines was covered from the national/MoAF budget. The responsibilities of the Provincial and District Directorates include LSD vaccination and many other administrative duties on birth, registration etc. The province visited by the evaluation team has 25 districts and one district comprises some 40 villages. Staff of the District Directorate (15 people) have to visit every farm, all together they would deal with some 33 000 cattle and 100 000 sheep and goats. The expenditures of the Directorate are mainly connected with the transport (cars, fuel, maintenance) and material. These offices are during the vaccination programmes obviously busy and not sufficiently equipped in terms of human and technical resources (JC 10.1).

To sustain the current benefits, the vaccination campaigns with effective vaccines and adequate vaccine coverage (above 80%) have proven to be the best tool for successful control of LSD (FAO Animal Production and Health Manual⁴). As LSD is spread by flies in the heat on a seasonal basis from distant places, the risk is still high. Turkey has the border with seven other countries (two EU countries) but not all the neighbouring countries pay attention to this risk and vaccinate. Cattle is also imported from the countries all over the world. The risk of spread of LSD from other countries persists. The tools and instruments prepared by the TA for LSD will assist to keep the LSD under control e.g., the risk base vaccination approach will be applied, but the allocation of additional financial sources to cover the necessary vaccination needs will be essential to prevent the outbreaks. Based on the experience of the veterinarians, the farmers are more aware than they used to be and more willing to report the LSD disease. The vaccination needs to continue to some extent, but very likely the scope of vaccination will be smaller comparing to last three years. However, it is still rather costly and so far, there is a declared commitment of the MoAF to allocate resources, but the preparatory work of the budget is only about to start (JC 10.3).

In case of emergency The MoAF can also seek for other financial sources. As already experienced, in case of emergency the OIE regional antigen/vaccine banks may deliver vaccines. The established mechanism enables the rapid supply of emergency stocks of vaccines to affected countries, in order to vaccinate

⁴ <https://www.fao.org/documents/card/en/c/1fc63b0-80e9-4f8e-825f-10ea6e998479>

targeted animal populations at risk and to eventually target eradication wherever possible.

The same applies for the rabies vaccination, which is distributed twice a year. The IPA-funded supply and distribution of baits for rabies vaccination proved to be effective. However, when no IPA support was provided, the number of cases increased rapidly. The administration of baits has taken place twice a year and need to continue after 2023 when IPA support is over. The MoAF has expressed interest in continuing the programme and has announced the preparation of the plan for this purpose. The additional increase of the budget to cover the bridging period for the rabies baits supply is currently being considered. Two million doses should be purchased from savings to cover 2023 campaign until the national budget line is in place (JC 10.2).

Q11. What are the main risks to sustainability, identified at the Activity/Theme implementation stage/materialised beyond Activity/Theme implementation?

The missing budget allocation of the MoAF to fund the continued vaccination is the main risk factor for the sustainability of the achieved benefits. As regards the continued vaccination efforts for both LSD and rabies, it will depend on the internal policy priorities of MoAF, which will be the most likely determining factor for future sustainability. Climate change increases livestock susceptibility to diseases and influences the emergence and proliferation of disease hosts and vectors. The risk of the spread from neighbouring countries and imported animals persists. Therefore, the allocation of financial sources for future vaccinations should confirm the commitment of the MoAF to continue with the eradication. The price and quality of the vaccines as well as distribution and vaccination expenses will be a key consideration in this respect. The homologous LSD vaccines are more expensive than locally (in Turkey) produced heterologous vaccine, even though they must be administered in 5 doses. The absence of LSD outbreaks for three consecutive years is required for a country to regain an official disease-free status. This implies that the vaccination should not be interrupted, and it was confirmed by the European Food and Safety Authority studies. No LSD outbreaks were reported in South-Eastern Europe, following the mass vaccination regional campaign with homologous LSD vaccine, which continued for four years (2016 – 2019).

The TA for LSD delivered the surveillance system - tools and instruments, which are already in place and should ensure effective protection of animal health. These tools can indicate the locations and number of doses needed for the eradication of diseases and will reduce the expenses comparing to the current LSD vaccination. These tools and gained knowledge together with the supplied laboratory equipment should not be substantially affected although, the possible changes in the management of the VCI could influence the built capacities. The most uncertain component in terms of sustainability is the awareness raising part. Continued awareness activities among NGOs, farmers associations, cooperatives, unions, and veterinarians could sustain the effects of the interventions. These bodies could help the MoAF with the dissemination activities and to compensate the shortage of veterinarians' capacities at the provincial and district levels (JC 11.1).

The same factors influence the sustainability of the rabies vaccination. The experience proved, that 2 – 3 years of the interrupted rabies vaccination (which was originally also funded from EU sources) led to substantial increase of rabies cases. Therefore, sustainable benefits can be ensured only by continued vaccination based on the epidemiological situation in the country.

Q12. What is the added value of the Activity/Theme, compared to what could be achieved without the EU support?

The initial LSD vaccination effort (before the IPA II assistance start) demonstrates that Turkey would be able to manage it without the IPA support. However, it can be expected that the achievement of the current results would take longer. This is supported by the experience from the rabies vaccination, which needed repeated assistance to reduce the outbreaks.

The support of the EU is highly appreciated. Firstly, the experience, knowledge and know-how provided through TA for LSD in the form of numerous instruments (diagnostic methods, vaccination plan, risk assessment, strategy update) and trainings to the final beneficiaries is considered very valuable. As emphasised, the beneficiary staff is highly educated and very professional therefore the assistance was a very good platform for the exchange of experience and mutual learning. It helped to create a professional network opened to future cooperation. In the absence of EU sources this process would be most likely missing the EU expertise, which is highly appreciated. Provision of IPA II financial support for LSD measures eased the state budget and improved the system's operation. It may be expected that without this assistance it would take longer to reduce the number of outbreaks to the same level.

The TA for LSD and LSD vaccination could work in parallel and bring some synergy effects. TA was able to analyse the vaccination data and use them for the preparation of new tools for the future LSD management. Such a synergy effect is also expected from the supply of the laboratory equipment but due to some problems with the delivered equipment, it could not be fully manifested, yet.

As regards rabies vaccination it would have been less likely to take place in such a scope and to achieve currently reported results. If necessary, it would be probably taking place in the reduced scope either in the number of doses or in terms of the area covered and it would not be able to reach a desirable progress. Besides the rabies and LSD there are several other diseases, which require vaccination. Considering the number of farm animals in Turkey it does require substantial financial sources for preventive measures. These measures are crucial because the economic loss could be much bigger, and it would have additional negative social impacts on farmers and the society (JC 12.1).

The EU is a visible and trusted supporter for the agriculture sector, which underlines that fact that there is no other assistance in this area provided by the international or bilateral aid organisations. In general, the IPA assistance complements the enlargement policy of the Union. It is focused on the support of political and economic reforms in Turkey. This assistance contributes to aligning national policies with EU priorities and to the achievement of the broader European objectives. The supported IPA measures help to ensure stability, security, and prosperity in the immediate neighbourhood of the Union (JC 12.2).

5 OVERALL ASSESSMENT CONCLUSIONS, LESSONS LEARNED AND RECOMMENDATIONS

5.1 Conclusions

1. The IPA assistance covered by this evaluation reflected the initial needs and was in line with EU and national strategies at the time of programming. The relevance of the IPA funded LSD and rabies assistance remains valid despite the significant time lag between initial design and its implementation. Nevertheless, in general, such a three to four years gap is too long to keep the planned interventions fully relevant. With the dynamic changes in the society and country's economy influenced by various external factors (such as COVID) the originally identified problems and needs may change quickly and considerably and the support's relevance can be eroded. Therefore, the intention of IPA management structures to shorten the new programming period for IPA III and prepare the ToRs and technical specifications, before the financial agreements are signed, is appreciated and should help. Fortunately, this was not the case for the assistance under evaluation here, although shortening this preparatory and contracting period should be a priority for the institutions concerned (EQ1, EQ7).

2. Despite following all the procedures correctly, there were some delays that could be addressed by the relevant authorities to ensure and maintain the efficient functioning of the tendering/contracting process. For example, the preparation of the technical specification for the supply of special laboratory equipment is much easier for someone who has not only the technical knowledge but also some previous experience with IPA public procurement processes and knows the rules. Moreover, one of the tasks of the ongoing TA project was to assess the laboratory equipment. This assessment thus could combine the local needs of VCIs with the technical skills and IPA procurement experience of experts (EQ6).

3. While both LSD and rabies activities have been in principle well designed the intervention logic shows space for improvements. Regardless of the tool used for the programming (logical framework, logic chain, theory of change etc.) the main attention should concentrate on the intervention logic i.e., the correct and coherent definition of the expected results, especially outputs, outcomes (specific objective) and impact (overall objective). These should be supported by relevant indicators that meet DG NEAR's own quality standards and include valid, realistic baseline and target values. Although the evaluators are aware of some ongoing technical assistance support projects that provide support in these areas, it is evident that the need for these fundamental programming skills remains acute in this sector (EQ1, EQ3).

4. The planned outputs of the LSD and rabies activities have been delivered and were translated in the successful results. The control and eradication measures including the massive vaccination of both LSD and rabies resulted in very significant decrease of outbreaks. The institutional capacities were strengthened and the MoAF together with the VCIs and other relevant institutions are well equipped to address LSD and rabies more effectively. The tools to control and manage the LSD should not only secure the disease-free status of the country in a short time but also to reduce the cost of vaccination and enable precisely targeted interventions. These achievements could be reached due to commitment of all the main stakeholders at both, the beneficiaries', and contractors' side (in most cases). In combination, these positive effects bring Turkey closer in line with EU veterinary standards, as implied by the action's overall objective (EQ3).

5. The successful continuation of the animal disease eradication is also the subject of external factors. One of those, which was identified within the scope of the evaluation and needs the attention of the MoAF, is

related to the insufficient capacities of the Provincial and District Directorates during the vaccination periods. These are in need of strengthening to ensure any future outbreaks are successfully dealt with (EQ4).

6. The competitive tendering managed by the CFCU in compliance with the IPA rules ensured the costs proportionate to the achieved benefits. Savings were accumulated from tendering but also due to the COVID-19 restrictions, which changed many face-to-face to online events or led to cancellation/replacement of some activities. Local production of LSD vaccines has been more efficient and seems to work well. The increased budget for rabies baits was proportional to the increased number of doses and secured the continued vaccination, which helps to reach the objective (EQ5).

7. The available resources, with one minor exception, were well utilised to produce the planned results. The awareness raising seminars in the TA for LSD could have achieved much better coverage by better defining its target group (farmers) which in turn would have delivered a much wider effect than was actually achieved. As it was this, the one-off provision of information that was done had a very limited possibility of further dissemination and low sustainability (EQ4, EQ7).

8. Whilst the monitoring arrangements for the assistance covered by this evaluation probably meet formal requirements, in practice they do not facilitate a proper assessment of IPA performance. The involvement of the IPA Unit at the MoAF has been limited by the existing monitoring and reporting setup, which requires improvement. The Progress and Monitoring Report, presented as the main monitoring tool, lacks the basic monitoring information. It lacks performance data linked to financial, process and output indicators that would provide an objective overview of progress towards the objectives during the implementation as well as information about their quality and timely delivery. There is also no adequate assessment of progress towards planned outcomes. More positively, the monitoring forums deployed for this assistance have proved to be useful in as much as they allow contract level discussions on contracting and implementation. Eventually, the monitoring system at the sector level has showed the ability of stakeholders to oversee performance and achievement of outputs and outcomes (EQ7, EQ8).

9. The provision of information and project documents for the evaluations has been cumbersome. Access to it is limited to CFCU staff in most cases, which complicates monitoring and evaluation functions at both project and sector level. Making access to this information less restrictive would facilitate better implementation and supervision of IPA performance and ultimately improve EU visibility among wider stakeholders (EQ5, EQ7, EQ8).

10. To ensure the sustainability of the awareness raising initiatives, the means used for their dissemination will have a key role. So far, over 200 Turkish farmers have been accessed by these efforts, which is clearly insufficient given the size of the country and number of active farmers. Although the MoAF has already announced the effort to provide this information via TV channel for farmers, there are more diverse opportunities, which need to be taken forward e.g. the dissemination of information can be assured via the staff of the Provincial and District Offices of Agriculture, using social media networks used by farmers (such as Facebook, Twitter), also by cooperating with the Turkish Cattle Breeders' Association and/or Veterinary Medical Association (EQ9, EQ10).

11. The sustainability of the achieved benefits in both LSD and rabies vaccination depends on the vaccination programmes continuing after IPA support is over. It can be expected that based on the epidemiological situation and success of the IPA interventions the scope of future vaccination programmes will not be so extensive. Nevertheless, they will still require fairly significant funds to deliver (EQ9, EQ10).

12. IPA II assistance has provided undoubted added value and significantly contributed to the reduction of LSD outbreaks and rabies cases. The first incidence of LSD in Turkey proved that thanks to the locally produced vaccines the country managed to fight the disease, but EU contribution introduced tools enabling more efficient way to reduce the outbreaks. The rabies cases confirmed that on many occasions the absence of EU assistance slows down the progress of interventions (EQ12).

5.2 Lessons learned

One challenge of the interventions evaluated was to ensure high quality specifications for the laboratories supply. The optimal approach would recommend preparing the technical specifications within the TA contract, ensuring the good understanding of the needs, the IPA specific knowledge are reflected in the equipment specifications. However, the length of the procedures due to PRAG rules, did not allow incorporation of the technical specification to the TA deliverables. The experience revealed the imperative need for simplification of the PRAG rules to allow shorter procurement processes and improved coordination between contracts to gain efficiency.

The current procedures would not allow more flexible approach, but supply of laboratory equipment could work better if the technical specification is prepared by someone with the IPA experience as the specification could be more detailed and the drafting process quicker and avoiding subsequent changes. If the TA contract is complemented with the equipment supply for the laboratories, as one of the planned activities deals with the assessment of the laboratory equipment, then it offers good opportunity to combine these efforts. The preparation of technical specification by the TA staff could save resources and maybe secure better results. This will require the change of currently applied procedures.

The experience provides numerous examples that coordination of activities, when split into different tenders for contracting and implemented separately by different partners, under different rules is very risky, in particular when it concerns tendering. Therefore, if this cannot be avoided it needs to be arranged well in advance and with sufficiently long duration to avoid the need to launch new tenders each time when the service is needed.

Another issue that can serve as lesson learned is the correct identification of the target group for the awareness raising activities. As the awareness raising was targeted to farmers, these were naturally selected as participants. However, the scope of activity was disproportionate to the size of the target group. The veterinarians from the Provincial and District Directorates administering the LSD vaccination could be much more appropriate target group for several reasons. Firstly, they are much less numerous therefore with the same number of seminars' participants, bigger proportion of the group would be involved. Secondly, the topic is very familiar and much easier for them to understand. Thirdly, these were the veterinarians had to visit all the livestock farmers, which eventually covers the overall population. Together with the LSD vaccination they could provide some basic information including leaflet and/or link to web page etc.

5.3 Recommendations

Based on the above conclusions suggest following recommendations are suggested:

The dissemination of the information on the LSD disease for the farmers should be more tailor-made, better targeted and focused on the sustainability of the main message. As this part of the project activities is completed, to ensure and improve the sustainability of the awareness raising activities, the MoAF should continue dissemination of information contained in the awareness raising materials. The group, which can

effectively help with the dissemination are the veterinary doctors. Those from the Provincial and District Directorates are directly accessible and can easily convey the information to the farmers. They can provide the information and distribute the available materials in the way, which is the best corresponding with the particular farmers' needs and (media) sources they use for the information. This should ensure maximal coverage of the huge community of farmers. For this purpose, it is recommended to consider the use of several communication channels: social media networks, which are related to farmers (Twitter, Facebook, YouTube), TV channels/programmes for farmers, phone applications (WhatsApp), professional associations, or other non-governmental organisation such as Turkish Cattle Breeders' Association with 120,000 members, which could also assist. The private veterinarians can be provided the information through their Veterinary Medical Association.

The MoAF should secure financial sources to support vaccinations of LSD and rabies without any interruption. As these diseases can easily spread from other countries across borders and not all the neighbouring countries are regularly vaccinating, the risk of outbreaks remains high. Development of an early notification system for these diseases should be therefore considered.

Although the intervention logic, as regards the logic chain (objectives) of the projects under this evaluation, was well developed, the determined indicators lacked the basic features of "smart" indicators. The ongoing training provided from the TA should be addressing these topics, but there is still obvious need to gain deeper knowledge and develop the programme management skills further. Therefore, all staff members from the agriculture sector involved in the implementation of IPA funded activities should undergo project cycle management training. The training should pay special attention to the intervention logic/theory of change and proper definition of coherent objectives with the correctly determined outputs, outcomes and impacts and reasonable corresponding indicators. Due to the natural staff turnover, such a training could be planned regularly therefore the NIPAC office can consider building internal capacities for this purpose.

It is also recommended to clarify the roles and responsibilities of main stakeholders involved in the process of monitoring and to prepare a simple Monitoring guideline/procedure for all key stakeholders explaining their monitoring responsibilities, used tools, data sources for data collection, all the tasks, reporting obligations and communication flows. DG NEAR Guidelines on linking planning, programming, monitoring and evaluation can serve as the reference material. This is also a good opportunity to revise the content of progress and monitoring reports. The revised reports should include all the necessary information concerning date of the contract signature, allocation, commitment, disbursement, information on the progress in activities, delivered outputs, indicators including baseline and target values and any other relevant information, which can be subject of discussion at the Steering Committee meeting. The monitoring system should be applied to all contracts (including supplies) so that the Steering Committee meetings are taking place at the level of activities and cover all relevant contracts.

The quality of monitoring system depends a lot on the quality of the data and information. Therefore, it is crucial for all relevant stakeholders, namely IPA unit performing the monitoring function at the project level, to have full access to the relevant documents, which are currently all in electronic form. As this is already existing with the CFCU, there is no need to store this information separately in two places. It is recommended to enable access to all data and information relevant for monitoring and evaluation for the staff assigned with these tasks and responsibilities. These data are necessary for the obligatory reporting to various bodies as well as evaluation function, which might be internal or external. This means to have full access to all monitoring information as well as every output produced by the contractor such as individual

reports, promotion material, training material, lists of trainees with the contact details (email, phone number) and any other relevant information.

Table 6 Recommendations

Recommendation	Addressee	Timeline for implementation	Relevant	
			EQ	conclusion
1. Ensure the dissemination of the material prepared for the LSD awareness raising activities through several channels including social media networks, farmers' associations, and other relevant bodies	MoAF	asap and ongoing	8, 10	10
2. Ensure financial sources for the continued LSD and rabies vaccination within the next national budget (2023)	MoAF	asap	9, 10	11
3. Train all relevant staff within the agriculture sector dealing with the IPA programming, implementation, monitoring and evaluation in the Project Management Cycle (including intervention logic, indicators). These should build on any ongoing TA support currently being delivered	NIPAC	asap and ongoing	1, 3	3
4. Fully review and update the monitoring and reporting arrangements for the sector i.e., prepare the monitoring guidelines clearly assigning the roles, tasks and responsibilities of relevant stakeholders and explaining information flows and procedures	NIPAC, in liaison with the MoAF, NAO, EUD	asap	7, 8	8
5. Ensure the access (e-library) to the project data and documents for the relevant stakeholders	CFCU, NIPAC	asap and ongoing	5, 7, 8	9