

## **Republic of Turkey**

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### **Ardahan-Kars-Artvin Development Project (AKADP)**

#### **Supervision report**

Main report and appendices

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## Abbreviations and acronyms

ALM	Ardahan Livestock Market
DBSDP	Diyarbakir, Batman & Siirt Project
GDAR	General Directorate of Agricultural Reform
LWFs	Livestock Water Facilities
MFAL	Ministry of Food, Agriculture and Livestock
P/DDFAL	Provincial and District Directorates of MFAL
SEDP	Sivas-Erzincan Development project
SPAs	Special Provincial Administration

## Supervision Mission Report

### A. Introduction<sup>1</sup>

1. An IFAD mission conducted a supervision in Turkey from 17 to 29 May, 2015 to assess the project implementation progress over the past year, provide guidance to keep up the pace of project implementation and disbursements and assist the project in the preparation for project completion stages. The mission visited Kars, Ardahan and Artvin and was accompanied by the Project

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<sup>1</sup> The mission consisted of Dr. Mona Bishay, Team Leader and Agricultural Economist; Mr Michele Pirazzoli, Rural Infrastructure Specialist; Dr. Amar Kaanane, Marketing and Value Chain Specialist, Ms. Stefania Gnoato, Gender and Targeting Specialist; Mr. Samir Bejaoui IFAD's Programme Officer, M&E and Procurement Specialist, and Mr. Moez Makhoul, Finance Specialist. During its fieldwork the Mission was accompanied by a MFAL team composed of Mr. Iker Manyaz Coordinator, Ms. Saliha Akbas, Agricultural Engineer, Mr. Ekrem Savas, Agricultural Engineer, General Directorate of Agrarian Reform, Department of Rural Development, MFAL. The UNDP team comprised Ms. Pelin Rodoplu, Regional Competitiveness Specialist, Mr. Arif Öztürk, UNDP Project Administrator; and Mr Guray Balaban, Infrastructure Specialist.

counterparts from the Ministry of Food, Agriculture and Livestock (MFAL), the Project Management Unit (PMU), the Provincial and District Directorates of MFAL (P/DDFAL) and UNDP. The stakeholders met included farmers, livestock producers, rural inhabitants including women farmers and rural youth, heads of various farmer organizations and cooperatives, local administrations, and civil work contractors and supervisors. The mission met with His Excellency the Governor of Ardahan and the Directors of DDFAL in Ardahan and Artvin and benefited from their insights and directions.

2. The mission met also with the technical staff of the SPAs responsible for the development of village infrastructure facilities financed by the Project and discussed the issues requiring specific follow up during the implementation of the works as well as the potential for replication. The mission would like to express its special thanks and appreciation to the Regional Project Administrator, and all PMU project staff for their excellent efforts in organizing the mission and providing timely and efficiently all required information and data. The mission would also like to thank the representatives of MFAL at the central and provincial levels for hosting the Mission and providing it with comprehensive assistance and for the usual hospitality extended.

3. The AKADP became effective 2 July 2010. It represents an investment of USD 26.6 million, of which the IFAD loan amounts to USD 19.2 million. The Project provides support to the livestock and horticultural sectors in Kars, Ardahan and Artvin provinces in the form of co-financing investments in the livestock and horticultural sector, demonstrations and training and village infrastructure investments. The original closing date for the IFAD Loan was 31 March 2016. Following a GoT request, the project has been extended by one year and the new loan closing date is 31 March 2017, and the Project Completion Date is 30 September 2016. As the GoT had requested a 2-year extension, IFAD agreed that the 2nd year will be subject to satisfactory project performance during the year 2014/2015. One of the objectives of this Supervision Mission is to assess such performance and make recommendations to IFAD in this regard.

4. The overall goal of AKADP is to reduce rural poverty in the Project area. The objectives of the Project are to: (i) increase assets and incomes of poor women and men smallholders and of small rural entrepreneurs, who have the potential and personal willingness to move towards commercial agriculture and income generating activities; (ii) improve poor rural people's access to infrastructure to provide benefits to primary producers and small enterprises; and (iii) strengthen institutional advisory services and project management capacity.

5. The findings and recommendations of the Supervision Mission's Draft Aide Memoire were reviewed and endorsed at a wrap up meeting in Ankara on 27 May 2015, at MFAL which was chaired by Mr. Ümit Bingöl, Deputy Director General of GDAR.

## **B. Overall assessment of project implementation**

6. As of the last Supervision Mission of June 2014 AKADP implementation was lagging behind, disbursement was much below expectations, and project performance was assessed as moderately unsatisfactory. Hence the project has been classified as a "Problem Project" within IFAD's Portfolio Review System. The picture that has emerged during the May 2015 Supervision Mission field work is of a much improved implementation and significant progress towards achieving project objectives

7. It is the Supervision Mission's assessment that Project performance as of May 2015 is overall **moderately satisfactory**, with some activities clearly leaning towards the satisfactory category, and that **the project should be removed from the problem project list in IFAD's internal Portfolio Review. The mission also recommends that IFAD approves the extension of project completion date (and loan closing date) for another full year.**

8. Mission field visits and analysis demonstrate that project implementation has undergone a great leap forward since June 2014. The execution of the 2014 AWPB is satisfactory with a financial execution rate of 96%. The 2015 AWPB is clearly written and provides a detailed overview of activities to be undertaken. Its execution is progressing well. Most recommendations of the 2014 supervision and implementation support missions have been implemented. The PMU has expanded through

recruited and/or seconded staff, the working environment has become more stable, higher staff morale and effective team work are evident in PMU and clearly reflected in field achievements. Vehicles and agricultural machinery and equipment have been procured and are operational, and support to smallholders households in increasing their assets has expanded through a well-defined co-financing programme for improvement of livestock husbandry and horticulture practices. The associated training is being implemented. Civil work agreed upon in the AWPBs relating to village infrastructure is meeting its schedule and the quality assurance tests. Beneficiaries interviewed expressed satisfaction with results obtained and the project is working at expanding coverage through strengthening dissemination and replication. The mission observed a number of emerging contextual innovations that lend themselves to replication and scaling up in the project area, and elsewhere, with good prospects for positive impact on rural population.

9. As a result of such progress the disbursement rate from IFAD loan reached 42.79% by mid May 2015 as compared to 23.5% a year earlier and the outreach of the project is on a fast track towards expansion. The training and institutional strengthening programs provided for farmers' organisations, farmers, project and P/DDFAL staff have resulted in a better understanding by all stakeholders of project objectives and means to achieve them, which heightened their morale and enthusiasm and resulted in more commitment and ownership of the Project. The following sections of this Aide Memoire describe these achievements in more details and highlight areas that still require strengthening.

10. Notwithstanding the above, the mission urges project staff and all partners to avoid complacency. For the continuation of satisfactory achievement in the coming year, project staff and implementation partners must continue their hard work and vigilance to speed up implementation further with a view towards achieving project objectives and maximizing impact on smallholders. Appropriate field monitoring and follow up are essential to ensure wide spread dissemination of tested technologies and approaches for livestock and horticulture development, and that the ongoing construction of village infrastructure is completed on time and started servicing the communities as soon as possible.

11. Furthermore, the positive achievements of the past year could well be threatened by the potential vacuum that could be created as a result of the recent resignation of the Project's Regional Administrator and his eminent departure. His dynamism, commitment to the project and managerial skills were crucial factors in project's turn around. **Given the relatively short time left for project implementation, the mission urges the MFAL to speed up the process of recruiting another high calibre manager with experience in agricultural and rural development projects to ensure non-interruption of project progress.**

## **C. Outputs and outcomes**

### **Component 1. Smallholder and Non-farm Enterprise Investments**

12. The component seeks to increase poor smallholders' assets and incomes within the participating provinces and villages, through the delivery of comprehensive and complementary 'hardware' and 'software' packages targeted at improving livestock and horticultural production and at supporting non-farm employment. Its three sub-components are: (i) Improvement of Livestock Husbandry Practices; (ii) Improvement of Horticultural Production and (iii) Support of Non-farm Employment.

13. Overall, the Project has made good progress particularly since the last mission in October 2014, and has implemented several activities under this component. Due to the earlier delays in project implementation and the low disbursement, the Project followed a more "hardware-oriented approach", which was not initially complemented by the related "software" in terms of timely training, extension services and needed dissemination and communications to farmers. In the period under review good efforts was made by the Project to address this imbalance. The component recorded overall good financial achievements in implementing the AWPB for 2014 compared to targets. Project

achievements in this regard ranged between 27% and 115%. As of May 2015 the project has absorbed 21% of the budget allocated to the first component under the 2015 AWPB. The mission believes that the component is on the right path with a clearer and better understanding of actions needed; but establishing wider outreach and relevant synergies and complementarities will require a longer implementation time horizon. The overall performance of component 1 is rated **moderately satisfactory**.

14. **Sub-component 1.1. Improvement of Livestock Husbandry Practices** recognizes the dependence of rural people in the project provinces on livestock production. The 'hardware' aspects of this sub-component include provision for capital assets (modern barns, drinking troughs, manure pits, hay storage premises, etc.) and equipment and materials (milking machines, portable generators etc.). In addition, with respect to improving the feed base for livestock, provision is made for small agricultural equipment (seed drills, hay and corn silage machines, baling machines, grass mowers, etc.) and inputs (seed and seedlings). The 'software' aspects of the sub-component include provision for a programme of on-farm demonstrations (e.g. best practices for cereal and forage production and silage making); farmers training courses (e.g. animal husbandry and management, farm business development, barn/livestock hygiene, animal nutrition); and farmers exchange visits for animal husbandry.

15. A specific focus in implementation has been given to the construction of modern barns. The so-called "closed" barn types were initially promoted and two barn constructions started in 2013 were completed in 2014 (one in Selim district and one in Ardanuç district). Target farmers were unwilling to meet the beneficiary contributions, due to high construction costs in the region. Also, the feasibility analysis conducted by PMU showed that the investment is unattractive under current conditions. The supervision mission of June 2014 recommended to PMU to refrain from further promotion of modern barn investment until viable solutions will be identified.

16. In order to find a solution for investment in barns construction, the PMU worked out new alternative for modern barns by switching from dairy barn model to fattening barn model, which would take down the requirement of area per cattle from 13 m<sup>2</sup> to 9 m<sup>2</sup>. This will have a significant impact on cost reduction. According to the feasibility study done by PMU, the findings show that the construction of semi-open barns for smallholders is viable if farmers satisfy certain conditions (no forage feed problem or importing feed from outside, i.e. farmers cultivating maize are suitable for this and the solutions are feasible). The design of the new semi-open barns was completed in the first semester of 2015 and three pilot constructions will be executed in 2015 (IFAD: \$192,000).

17. Initially, three male farmers will benefit of the new barns. This is a step in the right direction. The mission urges the project to arrange farmers' visits to the sites of these new barns once in utilization and undertake a good familiarization and dissemination campaign using various means to ensure replication. Project M&E should follow up this activity closely and record and propagate positive impact of these barns on livestock productivity and household income.

18. The forage crop demonstrations have been implemented for 70 male farmers on 411 da in 39 villages which represent respectively 56% and 73% compared to the planned. The silage maize farmer producer visited in Arpacay district of Kars is very satisfied. He reported that there are many farmers in his district who are willing to adopt this technology. The only problem that he encounters is the lack of the packing equipment. However, the results of the follow up by the PMU/TA showed that the demonstrations on maize did not succeed in Ardahan and in Artvin provinces because of weather conditions in Ardahan and for small plot in Artvin. It is therefore recommended to promote this activity only in Kars province.

19. In 2014, the project financed 3,707 kg of seeds and 7,275 kg of fertilizer, 2 hay silage machines, 2 maize silage machines, 2 hoeing machines and 2 seed drilling machines. This corresponds to 100% of the planned. The PMU planned the distribution of seeds to 55 male farmers and 2 female farmers to expand the forage crop products demonstrated successfully in 2014. The achievement to the amount of seed distribution in the first semester of 2015 is around 32% of the planned target.

20. Seventeen Farmers in Kars province attended the livestock management courses at SÜTAŞ and received a credential certificate. Farmers were selected from beneficiaries who recently invested in barns construction either from their own budget or received subsidies from government and development agencies. The objective of the training program was to teach farmers the fundamentals of livestock management, thus enhancing success potential of the investment made on their new businesses, and helping replicating it.

21. Twenty three people have received trainings from PDFAL technicians on the milk hygiene and the proper milk collection practices. Eight people (including PDFAL directors and Union Presidents) were sent to Trakya region to see live demonstration of raw milk collection activities at selected villages as well as conduct meetings with the exemplified dairy unions and cooperatives. Fifteen male mid-size milk processors, have received training at SÜTAŞ training facility on dairy and livestock management practices followed by a visit to TIRE Cooperative in İzmir. Concerning the training of farmers on milk hygiene and milk quality by special experts, the activity is contracted and it will be realized in May 2015. The expected participants are to be of 400 females and 200 males coming from 12 villages.

22. The recommendation of the supervision mission of June 2014 concerning the preparation of detailed long-term training program with focus on farming as a business alongside technical trainings, had to be postponed due to work load according to the project Director. It is thus recommended by this mission to implement this activity as soon as possible.

23. Investments in milk collection centres are highly demanded by a wide range of stakeholders in the Project. The previous mission recommended carrying out a thorough assessment of the proposed milk collection centres for management, access to capital and organization of producers. The PMU contracted an experienced dairy consultant in January 2014 to support the technical design and control of the piloted "milk collection centre" investment. The expert will continue to provide support in 2015 in similar capacity.

24. The activities planned in the AWPB of 2014 and in the first semester of the AWPB of 2015 are: i) in 2014, co-financing the implementation of 4 milk collecting centers at 2 villages in Kars through Dairy Producers Union, and at 2 villages in Ardahan through Cattle Breeders Association; ii) in 2015, co-financing three more collection centers in Kars; and iii) procurement of two trucks to be used to transport raw milk from households to the collecting centers. Moreover, for future co-financing the PMU has developed designs to pilot smallholder investments in: hay storage (8), silage halls (10), silage packing (3).

25. Two cold milk collection centers were established by the Kars Dairy Association and two cold milk collection centres were established by the Ardahan Breeders Association in 2014 through project grants. The value and profitability of these activities were confirmed by previous IFAD missions and it was agreed to further expand these centers to other villages. The new activities are co-financed (80% by project and 20% by farmers' union).

26. The current mission visited two cold milk collection centers, the center established by the Kars Dairy Association at Selim District (Benliahmet village) and the center established by the Ardahan Breeders Association at Sulakyurt village of Ardahan center district. The mission noted the progress made in construction and equipment's arrival, and the strong evidence regarding higher farm gate prices of milk for participating dairy farmers. However neither of these two centers are fully functioning for various technical and organizational issues. In addition, procurement of two trucks to be used to transport raw milk from households to the central tanks has been canceled because of VAT and higher cost according to the PMU of the project

27. The mission is concerned about the sustainability and survival potential of these two centers, especially for the milk collection center at Ardahan center district. During the meeting with the Ardahan Breeders Association, the mission noticed disagreement between the Association members. Some of the members are not willing to deliver their milk production to the collection center despite the higher farm gate price. They prefer to deliver to the dairy processing plants directly, at the lower price,



because of the financial advancements on milk production provided by processors which many farmers find useful in meeting various obligations. It is therefore highly recommended to the PMU to: i) organize meetings with these two associations in order to set up a plan to speed up the operational process and the functionality of these centers; ii) with the help of a Milk Processing Value Chain Expert, analyse the situation carefully and deliver concrete implementation plan to successfully establish a working model for the supply and value chain of raw milk for these centers which is attractive to farmers; iii) with the help of the specialist, establish linkages of these centers to the private sector.

28. Concerning the establishment of three more milk collection centers in Kars, the design is completed but the beneficiaries are not yet identified. Given the problems faced by the already existing centres, the mission expresses scepticism about going ahead with these centres before the exact modality of implementation and results obtained from those already established are understood and analysed.

29. The overall rating of the sub-component performance is **moderately satisfactory**.

30. **Sub-component 1.2. Improvement of Horticultural Practices.** Similar to Sub-component 1.1, the initial menu's 'hardware' aspects include provision for equipment and materials (e.g. tunnel/glass greenhouses, drip irrigation equipment, knapsack sprayers, etc.) and inputs (seed/seedlings). The 'software' aspects include provision for on-farm demonstrations (e.g. drip irrigation, best practices greenhouses, open field vegetable production and orchard establishment and maintenance); farmers training courses (e.g. production of marketable fruits and vegetables, efficient irrigation, agro-processing, storage/post-harvest technologies and horticultural production for women); and farmers exchange visits for horticulture production.

31. **Vegetable** and ornamental crop production: the activities planned in the AWPB of 2014 and in the first semester of the AWPB of 2015 concerning capital investments in greenhouses and orchards are: i) establishment of 45 orchards in 2014 (including drip irrigation system, fences, and certified seedlings); ii) complete the establishment of 3 modern greenhouses in 2014 (200 square meter on average).

32. Nineteen farmers received co-financing support for orchard establishments including drip irrigation systems, encirclement walls, certified seedlings, and water pumps during 2014. In Kars Kağızman district 5 walnut, 6 apricot, and 2 apple orchards and in Artvin Yusufeli district 4 walnut orchards and 2 mulberries were fully completed and the payments were processed in 2014 (\$187,120 from project and \$80,194 from beneficiary contributions). In addition, the physical establishment of 18 orchards (were completed in Artvin (9 vineyards, 7 walnuts, 2 cherries with \$113,212 from project and \$48,520 from beneficiary contributions). 38 male farmers (17 villages) have benefited from the project in orchards activities on the total of 302da. For demonstration, the project co-financed 3 modern greenhouses in 2014 (200 square meter on the average). 2 female and 2 male farmers have benefited with a total of 0.8da.

33. Training and extension activities planned in the AWPB of 2014 and in the first semester of the AWPB of 2015 are: i) organize visit the Isparta Eğirdir Research Institute to forty farmers beneficiaries of the orchard and greenhouse co-financing program; ii) organize a workshop for the seedling selection and orchard management techniques by a horticulture specialist for 10 project staff and 15 farmers, iii) organize extension services at villages to cover key subjects such as drip irrigation systems, fertilizers, and pruning for 120 farmers in Kars and Artvin; and iv) organize visit to 20 women farmers to Yalova Orchard Research Institute for an on-site training program on the foliage plant production. Overall delivery in this regard is moderately satisfactory.

34. Sixty people from Kağızman and Yusufeli districts (21 villages) received training at Eğirdir Orchard Research Institute. Farmers received 4 day full theory and practical trainings on the subjects of fertilizers, irrigation, pruning, and disease management from the experts. DDFALs organized extension services at villages to cover key subjects such as drip irrigation systems, fertilizers, and pruning. The participants are 22 female farmers and 82 male farmers coming from 14 villages. The

organization a workshop for seedling selection and orchard management techniques was not conducted and it is recommended to organize it as soon as possible.

35. As part of AKADP horticulture extension program, 38 technical staff and 52 farmers benefit from the conference organized at Kağızman district on walnut production and orchard management. In addition, 14 farmers from 4 villages received comprehensive trainings (periodic courses) about the greenhouse cultivation techniques. The trainings are performed by volunteer staff and University instructors at no charge. Seven women farmers visited Uzundere district of Erzurum to see landscape plant production greenhouses organized by women entrepreneurs. In addition, 14 women farmers supported by the project received greenhouse and vegetable production training at BATEM facilities in Antalya. The training focused on the fundamentals of greenhouse management, landscape plant production, plant care, disease management and vegetable production techniques in the greenhouse. The percentage of achievement is 70%.

36. The mission had the opportunity to visit two demonstration greenhouses (vegetables and ornamentals production) and one orchard (apricot) in Kağızman district of Kars. The mission also visited one orchard (mulberries) and one polycarbon greenhouse (PDFAL olive seedling production) in Yusufeli district, and a walnut orchards in Artvin province. All of them were technically sound. From the point of view of the farmers encountered by the mission, the investment in orchards and in greenhouses is financially viable; the fruits and vegetables are sold at farm gate or to markets and can eventually be sold to traders exporting to Russia and Azerbaijan and for ornamental to municipalities.

37. Artvin province, particularly Yusufeli district, is famous with its traditional grape orchards. However, the small scale lands due to the topographical conditions push farmers to seek new alternatives to increase the value of their products. The PMU in the 2015 AWPB planned to provide the grape pressing and processing (şıra) machineries by the project under a pilot activity so that farmers would be able to convert their grapes into more valuable end product as grape juice. The project will pilot the establishment of two grape juice production units in 2015 (IFAD: \$23,000). Before implementing this activity, the mission recommend to the PMU to establish a business plan study to show the feasibility of these processing facilities.

38. Overall, while the Project established a number of greenhouses and orchards that are reportedly profitable to farmers, and organized relevant training courses in this regard, project efforts in dissemination and encouraging replication need significant strengthening. The mission urges the project to develop a clear dissemination strategy using various communications means to ensure better project outreach and impact, with special attention to the needs of women farmers.

39. The overall rating of the sub-component performance is **moderately satisfactory**

40. **Sub-component 1.3. Supporting Non-Farm Employment:** During the last supervision mission it was agreed that project staff and the PMU will examine opportunities for micro and small enterprise development through a series on topical studies to identify opportunities with potential for further support. As of mission visit (May 2015) no progress has been made in this sub-component except for the organization of a Workshop and a study visit on rural tourism, with a total participation of 77 farmers. The agreed studies mentioned above are still pending.

41. So far the Project classifies its activities in support of greenhouses at farm level as non-farm employment. In 2014, AKADP successfully set up two pilot greenhouses for women in Kağızman villages (Kötek and Aydınkavak). However, the foliage seeds were not cultivated; the season was missed due to the delays during the tendering process. Instead, the beneficiaries cultivated vegetables this year (i.e. tomatoes, cucumbers and green pepper) and the foliage production was postponed to mid-2015. Depending on the success of the foliage business, AKADP plans to provide co-financing support for similar greenhouses in 2016 (\$17,028).

42. In 2014, AKADP established 17 family style greenhouses for women farmers. The greenhouses were intended to provide enough vegetable products for local consumption but not necessarily as a commercial practice. Nine small scale greenhouses (24 square meter) were set in Selim district and

eight greenhouses were set in Sarıkamış district of Kars. 15 out of 17 greenhouses were successfully cultivated tomatoes, peppers and cucumbers in 2014.

43. The mission believes that the activities on family style on-farm greenhouses, classified in the AWPB as non-farming enterprises cannot be considered as such. In order to generate non-farming employment in the project area, the mission, based on its field observations, recommends the PMU (through TA) to investigate the possibility of supporting young farmers service providers in the area of post-harvest of fruits and vegetables (that will serve the orchards and greenhouses) and in the area of agro processing and good hygiene practices (that will serve the cold milk collection centers and processing plants).

44. The overall rating of the sub-component performance remains **moderately unsatisfactory**.

Agreed action	Responsibility	Agreed date
Promote silage maize activity only in Kars province.	PMU, PDFAL, DDFAL	Sept 2015/16
Implementation of value chain analysis (through TA) in livestock, dairy and horticultural sector.	PMU	As soon as possible
Organize a meeting with the associations benefiting from the milk collecting centres in order to set up a plan to speed up the operations and functionality of these centres.	PMU, MFAL	July 2015
Preparation of detailed long-term training program with focus on farming as a business alongside technical trainings (through TA)	PMU/MFAL	Oct 2015
Analyse and deliver concrete implementation plan to successfully establish a working model for the supply and value chain of raw milk for the milk centers with emphasis on linkages with processors.	PMU/Contracted Value Chain Consultant	Oct 2015
Develop a clear dissemination strategy for the orchards and greenhouse pilots using various communications means to ensure better project outreach and impact with special attention to the needs of rural women	PMU	July 2015
Organize a workshop for the seedling selection and orchard management techniques through TA.	PMU/MFAL	December 2015
Establish a business plan study for the grape pilot processing units to show the feasibility.	PMU	July 2015
Investigate the possibility of supporting service providers in the areas of post-harvest, food processing, and hygiene practices.	PMU/TA	Oct 2015

## Component 2 – Village Infrastructure

45. **Overview.** Under the **Village Infrastructure** Component, the mission records good progress during the period under review, with investments in small scale village public infrastructure under implementation on a full-fledged scale in Kars and Ardahan. The implementation arrangements made with the SPAs in these two Provinces have proven highly effective for designing and contracting construction works both for pasture roads and for Livestock Water Facilities. The high competition among local contractors resulted in cost savings that will ultimately allow for a higher than anticipated outreach. The field visits undertaken at construction sites confirmed that the target of completing the works within the 2015 construction season is feasible and that appropriate quality standards are applied.

46. Expenditures for civil works financed by the IFAD loan are estimated to absorb 63% of the budget by end 2015, leaving a balance of about USD 2.8 million. Overall, it is the mission assessment that the Component has now embarked on a sound path for the development of rural infrastructure in the project area. If sustained by careful planning of future investments and an extended implementation period the Component is likely to reach full disbursement and satisfactory rating at completion. A longer implementation period would allow the incorporation of lessons learned in the identification of the type of infrastructure projects to be replicated on a wider scale as well as the development of synergies between the project's Components.

47. Expenditures from the IFAD Loan foreseen under Component 2 for 2015 are USD 3.0 million, intended for: i) the finalization of the Ardahan Livestock Market (USD 866,000); ii) the construction of Livestock Water Facilities (LWFs) serving 36 villages (USD 1,242,000); and iii) the rehabilitation of roads to pastures serving 5 villages (USD 900,000). Other activities financed by the GoT under the

Component are valued at USD 0.5 million for; i) the finalization of 2 Livestock Handling Facilities (USD 73,000); iii) the implementation of 3 protective fenceings for livestock in the pasturelands (USD 41,000); iv) the upgrading of an existing livestock market in the Selim district of Kars (USD 195,000); v) fencing of 4 milk collection centres (USD 30,000); and vi) the procurement of design and technical consultancy services (USD 175,000).

48. The mission is confident that the main conditions for the Component to meet its annual physical and financial targets are in place. The works at the Ardahan Livestock Market (ALM) will be completed latest by the first week of June. The contracts for the construction of Livestock Water Facilities (LWFs) and pasture roads serving 45 villages have been signed and works are underway; additional investments in roads and LWFs are at an advanced stage of implementation, scheduled for completion by year end and will serve 17 more villages. As such, both the Component physical targets set in the AWPB as well as the PDR target of serving 60 villages with improved infrastructure by project end are highly likely to be exceeded.

49. Overall, the mission notes a considerable improvement in the implementation of the Component which is a sound basis for an improved rating as compared to the previous IFAD supervisions. To this effect, the Component is rated **“moderately satisfactory”**. Further improvements in the rating would depend on: i) finalization of ongoing works with adequate quality; and ii) selection of new investments geared not only to maximize outreach but also to develop synergies between project components and support the dissemination of good practices in rural infrastructure development.

50. **Livestock Markets.** In line with project design, IFAD supports the improvement of marketing infrastructure in the project area through selected investments in the construction of two Livestock Markets (in Ardahan and Artvin-Ardanuc). During implementation the PMU has received additional applications for the development of district level livestock markets and has identified an additional investment to be implemented with GoT financing in 2015.

51. **Ardahan Livestock Market (ALM).** The ALM constitutes the single largest investment carried out by the AKADP, valued at USD 3.1 million entirely financed with IFAD Loan funds. It has a capacity of 1 080 sheep and 2 060 cattle and would serve about 10,000 farming households in the project area. The mission visited the site and noted that concrete, steel and electromechanical works have been finalized. Works still to be carried out require about 10 days. The construction of an additional building to serve as meeting place between sellers and buyers within the ALM perimeter may be started soon as the Ardahan Municipality has successfully mobilized the required financing. The mission was informed that an inauguration ceremony with national and local authorities has taken place already on 24 May 2015.

52. In line with previous supervision mission recommendations, MFAL and the PMU have taken action to address the challenges relating to the operational sustainability of the ALM. A team of consultants have been recruited to develop the detailed operational plan and to provide trainings to the Ardahan Municipality staff that will be in charge of the ALM operation. The first training session is scheduled in mid-June financed with AKADP funds. The 9% cost increase resulting from the latest design review carried out in early 2014 has been covered with IFAD Loan funds following a request from MFAL to the MoD; this has increased the disbursement from the IFAD Loan under the Component compared to the 2014 AWPB target.

53. **Other Livestock Markets.** In line with previous supervision mission recommendations, the project has supported the Ardanuc DDFAL staff in completing the required feasibility study for the construction of a livestock market in Ardanuc with a capacity of 300 sheep and 350 cattle and with about 1,500 HH users across the district. The 2015 AWPB includes the procurement of the detailed designs for the Ardanuc market in a single bid package with the design of another 3 markets in Kars and Ardahan<sup>2</sup>. As per project design, IFAD financing of the Ardanuc livestock market may be considered for implementation in 2016, subject to the timely finalization of the designs and

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<sup>2</sup> The Municipalities would seek alternative financing sources for the works e.g. the Northern Anatolia Project (DAP)

procurement of civil works and related supervision services. The mission stresses that further investments in Livestock Markets imply lost opportunities for financing other village infrastructure e.g. LFWs, roads to pastures or sewers, thus affecting the Component original focus on improving village-based infrastructure. For consistency with the project original goal and objectives and due to the lack of a comprehensive master plan for the development of livestock markets in the region (see para below), the mission recommends further investments in Livestock Markets to be carefully considered.

54. The mission notes that the 2015 AWPB includes the GoT financed upgrading of the livestock market in Selim District of Kars. The PMU supported the Municipality to carry out the feasibility assessment and preliminary design, which was reviewed on site by the mission. The facility will cater for 800 cattle and 200 sheep and would serve about 2,000 households across the District. The mission and MFAL concurred on the need to carry out a thorough design review to identify cost reducing options and provide third party quality assurance. The mission reiterates its concern for the lack of a well-defined long term strategy (at least at the Provincial level) for the establishment of district level livestock markets to support investment decisions in this sector. MFAL may consider supporting the development of such a Master Plan with AKADP financing.

Agreed action	Responsibility	Agreed date
Temporary acceptance of construction at the ALM	MFAL, UNDP	15 June 2015
Finalization of ALM O&M plan and training of staff	TA consultants	15 July 2015
Design review and implementation arrangements for the Selim Livestock Market	MFAL	15 June 2015
Tender for designs for the Ardanuc Livestock Market	MFAL, UNDP	30 June 2015

55. **Village infrastructure.** The establishment of a framework agreement and administrative arrangements with the Special Provincial Administration (SPAs) in Kars and Ardahan, in line with the recommendations of the October 2014 IFAD follow up mission, resulted in a significant acceleration of village infrastructure activities under the Component. Within the framework of partnership with the SPAs the project is implementing Livestock Water Facilities and roads to pastures, which are typically "low complexity-low-cost" infrastructure at scattered locations. The SPAs carry out the design, tendering and daily supervision of the works and pay for VAT on civil works contracts. The PMU retains its key role in the evaluation of the investment proposals and in Quality Assurance of both the designs and the works. With this arrangement, the Project is effectively mobilizing additional resources (both in kind and in cash) that were not envisaged in the original project design. Tendering in line with national bids has proven successful in cost savings with a discount of 15-50% over earlier cost estimates.. The savings have been promptly reinvested to increase the scope of works to cover additional 17 villages. Given the vast scope and the scattered location of ongoing works, the mission and MFAL agreed to recruit an additional Field Engineer to be based in Ardahan.

56. **Livestock Water Supply.** Following demand assessment carried out by PMU Field Engineer in Kars and Ardahan<sup>3</sup>, the PMU and the SPAs identified a first lot of villages requiring gravity fed livestock water supply systems in the pastures. The table below summarizes the status of implementation of these projects, valued at USD 850,000 in aggregate (excluding VAT).

**Table 1 - Status of Implementation of LWF projects (as of 25 May 2015)**

Livestock Water Facilities (AKADP-SPA)	Implementation status			TOTAL
	CW Contract	Tendering	Design	
Number of Villages	37	0	15	52
Number of Lots	5	0	1	6
Beneficiary HH	3.759	0	1.440	5.199
Cattle Population	65.465	0	13.717	79.182
Value TL	1.825.300	0	325.449	2.150.749

<sup>3</sup> The identification of a core of 176 villages to be targeted by project activities has been completed in early 2014.

Sources: PMU, SPA

57. A desk review of a sample of designs reveals that the survey information used in the hydraulic designs have sufficient detail and that materials selected are in line with agreements with IFAD. Other technical parameters have been developed with state-of-the-art software packages. Mission field visits of LWFs revealed that the contractors have mobilized adequate workmanship and equipment and that the works proceed according to schedule. The key operations are being carried out in line with good engineering practice. Agreements with the site supervisors were reached about additional good practices to ensure durability (see WP 2)..

58. Moreover, further discussions revealed that LWFs would effectively address both the livestock need and the demand of domestic water. This is achieved by either increasing the storage capacity of the existing village water supply system or by tapping an alternative cheaper source operating on gravity only. This adds a relevant social dimension to the investments as the benefits would clearly include improved health and hygiene at the household level.

59. The option of piloting solar powered LWFs supported by the GDAR at the time of the 2014 supervision<sup>4</sup> has been followed up by the PMU which has identified a potential site in Kars (Sarikamis District) in which the necessary geophysical investigations are ongoing. This is seen as positive development as the photovoltaic technology is well known in Turkey, but with limited applications in the region. As such, this investment is considered a contextual innovation in villages lacking reliable sources of surface water in the pastures, as solar power is particularly attractive for ease of operation and minimum operating cost. The mission notes that finalization of designs and contracting of installation works in 2015 is still feasible. The facility would serve some 200 HH engaged in livestock production in the village. Such pilot activity would need careful monitoring and follow up by PMU to ascertain right replication through lessons learnt.

60. **Pasture roads.** Investments in pasture roads rehabilitation have been initiated during the review period in the context of the framework agreement with the SPA. The investments selected for implementation have been identified from a long list of proposals covering 36 villages in Kars and Ardahan. A sound prioritization mechanism has been developed by the PMU geared to maximize efficiency and effectiveness by considering among the key factors both cost/km and cost/head of cattle. The table below summarizes the status of implementation of these projects, valued at about USD 630,000 in aggregate (excluding VAT).

**Table 2 - Status of Implementation of Pasture Roads projects (as of 25 May 2015)**

Pasture Roads (AKADP-SPA)	Implementation status			TOTAL
	CW Contract	Tendering	Design	
Number of Villages	8	2	0	10
Number of Lots	3	2	0	5
Beneficiary HH	1.070	191	0	1.261
Cattle Population	21.834	3.485	0	25.319
Value TL	1.086.000	549.139	0	1.635.139
Length (km)	27	13	0	40

Sources: PMU, SPA

61. The desk review of a sample of designs reveals that the elaborations requested by the 2014 IFAD implementation support mission have been carried out by the SPA designers. This and other technical parameters are deemed in line with good engineering practice. Overall, the design standards applied are geared to extend the investment lifespan and to mitigate the risk of major damages during the winter months.

<sup>4</sup> The key technical aspects to guide the identification of solar powered LWFs were described in Working Paper 2 of the IFAD 2014 Supervision mission report

62. The field visits carried out at a village in Ardahan where pasture road construction is ongoing revealed that the contractors have mobilized adequate workmanship, equipment and construction material and that the works proceed as scheduled. There are clear technical improvements as compared to the of road grading works financed by the project during the first years of implementation.

63. Discussions undertaken on site with project beneficiaries revealed that the road connecting the village centre to two highland pastures was a long-awaited investment in the village, that would effectively contribute to improving livelihoods for the 4-5 months in which most of the village livestock keepers and their families move to the highlands. In particular it was reported that as a consequence of difficult access farmers had to carry their daily milk production in cans on foot (twice a day, most often by women) and that this practice will be discontinued when the dairy tank truck will have direct access to the pastures.

64. The demand for pasture roads rehabilitation remains very widespread as confirmed by the mission field visits and by meetings with government officials at the provincial level. Subject to satisfactory completion with adequate quality standards of the 2015 pasture road construction programme, additional investments in roads to pastures are an obvious option for investments under the AKADP Village Infrastructure Component for the remaining project implementation period. With the consolidation and the replication of project activities under the first Component, a ranking mechanism geared to prioritize the upgrading of road sections that would develop synergies with other investments (e.g. the milk collection centres) shall be considered.

65. Protective fencings In the second half of 2014 the project has completed the construction of protective fencing in the pasturelands of 7 villages (3 in Kars, 1 in Ardahan and 3 in Artvin) serving an aggregate of 754 HH; replication in 3 more villages to serve an additional 250 HH is planned for 2015. The designs developed by the PMU consist of simple wire mesh enclosures with a single paddock to facilitate carrying out basic animal caring works. These investments have been highly appreciated by the beneficiaries, mainly in connection with their function as protection from wild animals and theft. Three additional fencings are scheduled for implementation before year end. The PMU has ranked the proposals collected by the PDFALs and will shortly carry out a field verification prior to starting the procurement process.

66. Livestock Handling Facilities. The installation of pilot Livestock Handling Facilities (LHFs) in 2 villages serving approximately 200 HH in aggregate, was started in late 2014 and is about to be completed. Site visits carried out at one LHF being constructed in Ardahan confirmed the status and the compliance of the works with the specifications. The facilities constitute a relevant innovation in the context of rural Turkey, identified through the close collaboration of the PMU with the PDFAL to support a more efficient the delivery of veterinary services to the livestock keepers (for artificial insemination, vaccinations, etc. ). The mission was informed that upon completion of the works, training activities on the use of the LHFs will involve both the PDFAL staff and the villagers that may use the facilities to conduct basic animal caring works and animal loading during sales transactions in a more controlled manner. Replication on a wider scale with IFAD loan proceeds would be subject to assessment of results during 2015.

67. Other infrastructure. The demand for the construction of sanitary sewers in project villages remains widespread as virtually none of the villages in the project area has a sewer with a treatment facility. IFAD and MFAL have gained a considerable experience with the implementation of village sanitation facilities with natural treatment plants under the Sivas-Erzincan Development project (SEDP) and the Diyarbakir, Batman & Siirt Project (DBSDP). In light of the relatively high investment cost required, the PMU is considering developing at most 2 projects focusing on the villages where the Project has supported the establishment of milk collection centres. The mission agrees with the approach of clustering investments in light of potential synergies. The guiding factors in the identification of the rural sanitation project(s) to be selected for implementation would be: i) topographic conditions; ii) cost/beneficiary; iii) commitment to carry out household connections and to provide the land for the natural treatment plant; and iv) commitment to operate the milk collection

centre. The site identification process and the detailed designs are scheduled for completion by end 2015 to allow starting the construction works in 2016.

Agreed action	Responsibility	Agreed date
Completion of Livestock Handling Facilities	PMU, Contractors	15 June 2015
Training of PDFAL staff and beneficiaries on LHF operations	TA consultants	30 June 2015
Recruitment of Field Engineer to be based in Ardahan	MFAL, UNDP	30 July 2015
Tender for supply and installation of n.1 solar pumping unit	PMU, UNDP	30 June 2015
Tender for supply and installation of n.3 pasture fences	PMU, UNDP	15 July 2015
Tender for the design of sanitary sewer(s)	PMU, UNDP	30 July 2015
Enhanced ranking for the prioritization of investments in village infrastructure for 2016	PMU	30 August 2015
Design of investments in village infrastructure for 2016	PMU, PDFAL, SPAs	30 October 2015
Temporary acceptance of all works undertaken with the SPA	MFAL, UNDP	30 September 2015

## D. Implementation Progress

68. **Project Management.** During the period under review **project management has been assessed by the mission as satisfactory.** Since the 2014 supervision mission the PMU expanded through recruited and/or seconded staff, the working environment has become more stable, higher staff morale and effective team work were very evident for the May 2015 Supervision Mission. This was clearly reflected in higher achievements at field level in all components. The Regional Administrator (RA) has recently resigned and the mission recommends that MFAL starts immediately the process of his replacement (see para 12 above)

69. In addition to the staff assigned to the project (full or part time) from of the three PDFAL of Kars, Artvin and Ardahan, the PMU currently includes 6 full time staff, paid on the loan and contracted by UNDP. This comprises the Regional Administrator (RA) with overall responsibility for coordination, a Field Civil Engineer (a second one is to be hired shortly) , two Agricultural Economists and two Procurement Officers. One of the Procurement Officers, recently transferred from previous posting at Artvin is also supporting the RA in M&E. So far no full time M&E Specialist has been hired, but during the wrap-up meeting in May 2015 MFAL agreed to hire an M&E officer at project level (in Kars) asap in 2015.

70. Under the Service Agreement, UNDP functions as an implementation partner *inter alia* in the domain of financial management and procurement, with a UNDP Project Administrator based in Ankara as focal point. With support from the PMU, the PDFALs/DDFLAs are responsible for the management of smallholder investments under Component 1. PDFALs and DDFALs have staff involved in project implementation at the field level, but not systematically two full time staff as stipulated at design. Understaffing and staff turnover at PDFALs and DDFALs, though improved somewhat during the year, are still constraints to speedy implementation. Staff shortages especially at DDFAL remain an important issue at regional level.

71. Cooperation and coordination with various implementation partners improved during the reviewed period, including partnering with new implementing institutions (SPA) which speeded up significantly the implementation of the civil work under the second component. Project Training for PMU staff (including PDA and DDAs staff) continued as planned and cooperation was enhanced at several levels including the distribution of reference manuals/checklists about project activities for PDFLA/DDFLA staff involved with project. The energy and commitment of the Project's Regional Administrator were crucial in the progress achieved. His recent resignation is a serious risk to project implementation.

72. **AWPB, Progress Report and Coherence between AWPB and implementation.** The 2015 AWPB is satisfactory and provides a comprehensive, detailed and succinct overview of activities. The



AWPB was received timely by IFAD and no objection was provided. The PMU provided an implementation Progress Report and a Supervision Mission Briefing which proved useful for the Supervision Mission. Most of the recommendations of the June 2014 Supervision Mission and those of the October 2014 Implementation Support Mission were implemented. Considering the regulated allocation mechanism of the annual budget by the Ministry of Development to the PMU, the financial execution of the AWPB 2014 is considered satisfactory. According to the 2014 AWPB, USD 3,913,824 was planned against USD 3,200,000 actually allocated for a respective financial execution rate of 78% and 96% (117% if we consider the commitments with payments pending for 2015).

73. **Monitoring and Evaluation.** The mission recognized the important efforts deployed by the PMU to create a database with consolidated data on (i) co-financed projects, (ii) infrastructure, (iii) horticulture, (iv) training, and (v) satisfaction surveys. The migration from Excel to Access (on Zoho platform) is a major step forward in data management and constitutes the backbone for the evaluation of project's outputs, results and eventually impacts. With enhanced project implementation, there is a need to closely monitor results in close collaboration between the PMU and the PDAs/DDAs. Monitoring tools have been developed and gradually distributed to the decentralized entities of MFAL to feed the database at PMU level. This will be critical to determine whether activities are yielding expected results and the need to adjust.

74. With the availability of data gathered through different field surveys, the PMU set-up an M&E website (<http://akakprojesi.wix.com/akakp2015#!home/mainPage>) where key activities description with their level of satisfaction is publically shared through users friendly tools. The PMU RA regularly interprets the results to successively adjust the planned activities according to their specificities. While additional attention should be given to results monitoring, the mission praised the team for the use of the M&E system for decision-making.

75. **Recruitment of M&E Officer.** Due to the low volume of qualified applications for the M&E Officer position to be based in MFAL (Ankara) - as agreed previously with IFAD- the process has been put on hold until next month. The M&E Officer position in Ankara will be instrumental to align the project's M&E system to the national framework. But the mission stresses that provisions need to be made to ensure that the project M&E function is strengthened. This is particularly critical as the project will go into a transitional phase due to the departure of the RA who took a keen interest in M&E. Discussions with MFAL led to the recognition of the critical need to support M&E capacity at PMU level without jeopardizing the central function.

76. While fully recognizing the strength of the PMU database, the mission could not assess the project's physical progress towards the realization of the objectives-related indicators in the log-frame. A gap has been identified between IFAD's reporting requirements and the monitoring tools as used by the PMU (exclusively in Turkish). The mission worked with the RA and the M&E Officer (appointed as procurement officer but devotes part of her time for project M&E) to clarify the adequate reporting needs to IFAD. It concluded that stronger efforts should be deployed to redefine the M&E framework and reconcile it with the logical framework and project goals and objectives. Hence, the mission recommends that, as soon as the M&E Officers at Ministry and PMU levels are recruited, the PMU organizes (with IFAD as facilitator) a workshop with PMU staff members, and other stakeholders to (i) revise the project's logical framework, (ii) define the list of indicators with realistic targets, (iii) consolidate the list of physical targets for each activity with clear objectives based on actual costs and beneficiaries' needs, (iv) share the M&E tools with relevant stakeholders and ensure ownerships, and (v) collate the above in a concise operational guideline to ensure a sound and reliable M&E system.

77. While the appropriateness of the greenhouses and orchard demonstration plots visited by the mission are not questioned, the mission noticed that these initiatives, if properly monitored, could bring further insights on the relevance and level of buy-in from visiting farmers. This should include measuring the effectiveness of best-practices dissemination and its prospective replication. Tracing the causality between the success of these plots and the increase in requests for matching-grants to replicate these practices has not been so far undertaken by the M&E system. This should be possible through increasing awareness of these activities in the farming communities, and monitoring of

visitors and successive co-financing requests. The mission encourages the DDA/PMU to organize awareness campaigns on these cropping practices, and monitor farmers visits to the demonstration plots along with the degree of interest in replication and under which conditions, and adjust as needed.

78. **Impact assessments.** With the approaching project completion date, the PMU will be looking at drafting TORs for impact surveys based on the implemented activities. The aim is to conduct impact assessment surveys in mid-2016 to feed the completion report due at the end of the project. In the perspective of an additional year granted to the Project, the initiative will be postponed by one year accordingly. Project should therefore schedule the impact assessment surveys by mid-2016, draft TORs and start recruiting by end 2015 (or a year later in case of extension). The mission will share with the project the TORs used by the Sivas Project in conducting its own impact surveys which greatly facilitated Project Completion reporting.

79. **Innovation and Knowledge Management.** The May 2015 Supervision Mission observed a number of emerging contextual innovations that lend themselves to replication and scaling up in the project area with good prospects for positive impact on rural population: these include (a) modern livestock handling facilities, (b) upgraded and regulated Livestock Markets, (c) polycarbonate greenhouse that will be used for the production of local variety seedlings for , inter-alia, the conservation of the species- managed by Artvin PDFAL-, and (d) new alternative design for modern barns by switching from dairy to fattening barn model, which would reduce significantly the requirement of area per cattle and barns investment cost. Close monitoring and data collection in 2015 and 2016 is strongly recommended by the mission to enable the Project to document the outcomes of these contextual innovations and their impact on smallholders and introduce appropriate knowledge management products (e.g. a small monograph with specifications or film material on their operation) to share results widely and enhance their replication and scaling up. The target of the polycarbonate greenhouse is to cultivate 20,000 local olive saplings, 5,000 tomatoes seedlings and 1,000 mulberry saplings in the first year and reach to 100,000 saplings by the end of the 5th year of the investment cultivating 500 hectare area. Saplings and seedlings will be distributed to the farmers across the villages.

80. Overall, the PMU is producing material and increasingly using social media to disseminate good practices and testimonials. The mission acknowledges the gradual use of these channels of communication and advises the PMU to develop of strategic communication/knowledge management strategy to guide the identification of appropriate learning materials to be disseminated according to the target audiences.

81. The "Performance of M&E" is rated as **moderately satisfactory**. The mission particularly appreciated the time and energy dedicated to constitute a solid platform for data insertion as well as the methodologies and tools for data collection and verification. But there is a need to reconcile this with IFAD's requirements particularly is establishing linkages with outcome and impact. The mission is optimistic on the potential success of this process.

Agreed Action	Responsibility	Agreed Date
Start Immediately the process of recruiting a new Regional Administrator for the PMU	MFAL	Immediately
Advertise 2 M&E officer positions (one based in Ankara and the other in Kars in the PMU)	MFAL	30 June 2015
Organize (with IFAD as facilitator) a workshop with PMU, MFAL's Working Group on Externally financed projects, PDAs and DDAs on the overall M&E system	PMU/MFAL/IFAD	15 September 2015
Draft TOR for project's impact assessment	PMU/MFAL	15 December 2015 or a year later

## Training and Institutional Strengthening

82. **Smallholder training.** In line with design, the project has a significant focus on male and female smallholder training which is being conducted in complementarities with other project activities.

The mission noted good efforts made by the project since the last supervision mission in addressing the initial imbalance between the “hardware-oriented approach”, and the related “software”. In terms of training outreach, the mission noted that project gender focus on smallholders training is par with, and at times exceeding, male training. As per 2014 AWPB, to date 357 women farmers have been trained on livestock and horticulture management. The objective of training women farmers will be further pursued in 2015 with the training of 470 women on cooperative management, local food processing and business management, raw milk hygiene and quality and horticulture management. Around 350 male farmers have received training in the same domains as women farmers with additional modules on fodder crop production. In 2015, the project will conduct further incremental training to 370 male farmers in livestock and agriculture modern technologies and milk hygiene.

83. The 2014 supervision mission recommended the PMU to document results of farmer training and farmer demonstrations. In response to this, the PMU developed a report format for each training and demonstration activity. To date the project has completed reports for trainings conducted in 2015 so far, and those for demonstrations will be completed after the harvesting season. A second recommendation sought the preparation of a long-term training program on farm as a business alongside technical training. Unfortunately, this remains pending since it requires external technical assistance for which MFAL approval has proven hard to obtain.

84. **PDA and DDAs staff training.** Starting in 2013 the project has been conducting training of PDA and DDA staff in ‘awareness about new technologies’ through several study visits to learn about: new technologies, milk supply chains, dairy associations, cooperative models, milk collection centres, rural tourism, livestock markets, modern dairy processing and new dairy technologies. In 2015, 15 staff will take part in an international study tour to observe the farm cheese production and marketing models in Europe. No staff training has been conducted in the areas of ‘improvement of service delivery capacity’ (communication skills, principles of adult training, planning and design of training programmes for farmers, effective training delivery, monitoring and evaluation, team building and ‘development of farming business skills’). The mission recommends the PMU to follow up on and address this training gap.

### **Targeting Approach and Poverty Focus**

85. As per the PDD and PIM, the AKADP’s targeting strategy combines a demand-driven modality with geographic targeting, self-targeting in terms of the types of Project benefits available and direct targeting, i.e. application of eligibility criteria. This is based on national level indicators on socioeconomic development index for the provinces, secondary criteria used to identify districts and villages, and demand driven and self-targeting process by smallholders.

86. The mission verified the extent to which the above mentioned targeting criteria, are being applied in project implementation and concluded that it is being largely observed. Criteria are project-specific and are revised and adjusted jointly by the PMU, DDFALs and PDFALs on a continuous basis to include lesson learnt from implementation. Changes are ultimately approved by the MFAL. Once the DDFAL receives the applications, the screening and selection is carried out sequentially first by the DDFAL, secondly by the PDFALs, thirdly by the PMU and lastly by MFAL. Reject applications and not shared by the four entities at any level of the screening process, meaning that no internal oversight is exercised.

87. In 2012 the project selected initially 40 villages and increased them up to 88 and 176 respectively in 2013 and 2014. By December 2014 the project had extended its activities to a total of 61 villages (or 35% of all selected villages). As of 15 May 2015, 61 villages had participated in project activities reaching out to 1,375 farmers and 2,338 households. With the activities planned in the 2015 AWPB, it is expected that an additional 1,105 farmers and 7,520 households will benefit from the project by the end of this year.

88. Given the increasing demand for project services emanating from non- project villages and the low disbursement rate registered by mid-2014, a decision was taken by GoT and IFAD to expand outreach and accelerate implementation by including all villages from the 10 initially selected districts,

bringing the number of villages up to 597. With this increase in the project geographical area and the potential growth of implementation workload, the mission highlights the need to ensure quality and oversight in the beneficiary selection and implementation process through a more rigorous monitoring and reporting by the PMU.

89. **Gender targeting** is factored into all criteria applied across the different projects. Specifically, women applicants are given extra scores as compared to men. To date the project has extended its support to 378 women through livestock training and horticulture management, training and establishment of 17 vegetable and landscape plant production greenhouses, and maize silage demonstrations. Field visits confirmed women's high interest and enthusiasm for activities such as greenhouses. In the remaining 2015 implementation, the project is expected to benefit 502 additional women through: expansion of small scale greenhouse vegetable production; study exchange visits; training in local food processing; business management; raw milk hygiene and quality; horticulture management; modern orchards and grape juice processing units; and rural tourism.

90. The mission stresses that women's participation in the project could increase if project activities were better disseminated taking into account the cultural specificities. More specifically, women in the project areas are not always present in public places where the MFAL regularly displays announcements of upcoming project activities. The mission recommends MFAL to take this cultural dimension into consideration, for example by using local or national TV/Radio channels to make the announcements. This would increase the probability of women being informed on opportunities offered by the project and the application process involved.

## **E. Fiduciary Aspects**

91. **Financial management.** A Financial Management (FM) assessment was conducted to review the adequacy of the arrangements in place for the Project. The assessment also included an SOE review. The project is implemented by the General Directorate of Agricultural Reform (GDAR), under the Ministry of Food, Agriculture and Livestock (MFAL), through a Project Management Unit (PMU) located in the Kars Province Directorate of Food, Agriculture and Livestock (PDFAL). A service agreement signed between MFAL and UNDP specifies that UNDP shall administrate funds (IFAD loan, Government contributions and UNDP grant) and support the project in dealing with flow of funds arrangements, assistance in the procurement process and recruitment of PMU staff. Based on the FM supervision, the FM rating of this Project is **Satisfactory**.

92. **Financial and accounting staffing.** In addition to the staff of the three PDFAL of Kars, Artvin and Ardahan, the PMU includes 6 full time staff, paid on the loan and contracted by UNDP. The fiduciary team includes two procurement and one finance assistant, a project administrator fully dedicated to the project and three part time staff (a resource management associate, a procurement associate, and a program manager) assisting the project at UNDP level, and a finance staff partially in charge of project at MFAL level. The level of staffing is adequate for Finance and Accounting.

93. **Budgeting.** Before the end of every fiscal year, The MFAL prepares its annual budget including all its activities and submit it to the Ministry of Development for approval before its final approval by the Parliament before December 31 of each year. IFAD loan budget is viewed by the Government as part of the national budget. The PMU/GDAR (MFAL) prepares an AWPB for the activities of the next year, under the loan, which is included in the MFAL budget. This AWPB is submitted to IFAD approval. Once the budget is approved, the Ministry of Finance transfers the funds on a quarterly basis to the project bank account in Turkish Lira, opened at Garanti Bank and administrated by UNDP.

94. **Flow of Funds and disbursement arrangements.** Disbursements from the project bank accounts are subject to a sufficient level of review and processing to ensure an acceptable level of control. The Project has one designated account (DA) in USD opened at the Central Bank of Turkey, one project account (PA \$) in USD, opened at Bank of America, and one project bank account (PA TL) in TL, opened at Garanti bank. The flow of funds are detailed as follows: (a) one designated bank account (DA) in USD, administrated by GDAR/MFAL, it receives funds from IFAD loan and transfers

them to the project account in USD, (b) one project account in USD, administrated by UNDP, it receives funds from DA and transfers them to the project account in TL, and serves to pay suppliers when the contracts are in USD, and (c) one project account in TL, administrated by UNDP, it receives funds from project account in USD and the Government contribution, and is used to pay project expenditures.

95. The payment process in MFAL starts with technical approval at PMU level, after which documents have to be reviewed and approved by the procurement and finance assistant and the PMU regional administrator. All transactions are further subject to the approval of the Externally Funded Projects Working Group under GDAR and UNDP. Upon approval, a bank transfer shall be issued. The UNDP maintains the two project bank accounts reconciliation updated and GDAR maintains designated account reconciliation on a monthly basis.

96. **Commitments and payments to suppliers.** The total amount of commitments (signed contracts) as of April 30, 2015 is USD10.6 million, financed by IFAD loan (USD8.0 million), MFAL (USD1.8 million) and the beneficiaries (USD0.8 million) and represents 40% of the total project cost (FM Appendix. Table 1). The total amount of actual expenditures as of April 30, 2015 is USD7.7 million, financed by IFAD loan (USD5.5 million), MFAL (USD1.6 million) and the beneficiaries (USD0.6 million). It represents 29% of the total funds allocated for the project and 72% of the total commitments (Appendix 5). According to the PDR, the payments would be USD23.7 million after four years of the project implementing. So, the actual expenditures represent only 32% of the forecasts. The table showing payments by financier is available in **Appendix 5**. The payments on IFAD loan are still low. From IFAD loan which totals about USD19.2 million, the actual expenditures are USD5.5 million (29%) excluding the designated account (see para 107). The payments by category of expenditures on the loan are presented in the table in **Appendix 5**.

97. **Payments on AWPB 2014 and 2015.** The total amount of payments, including the contributions of the Government and the beneficiaries, for the AWPB 2014 as of December 31, 2014 is USD3.4 million and represents 72% of the total planned amount. If we add the payments, related to the AWPB, affected in 2015 (USD0.8 million), the total payments on AWPB are USD4.2 million and represents 89% of the planned amount. Payments on loan related to the AWPB 2015 as at April 30, 2015 are relatively low (USD0.2 million). This is due to the fact that during the four first months of 2015, the project paid expenditures related to the AWPB 2014 for an amount of USD0.6 million.

98. **Internal Control.** The internal control system in place within the MFAL conforms to the Government system and has been deemed satisfactory by IFAD. Indeed, the MFAL guarantees the separation of the functions through several controls mechanisms. The payments from project bank accounts are also subject to UNDP internal control procedures.

99. **Internal Audit.** At the PMU level, there is no an internal auditor. However at UNDP level, there is an internal auditor department, and the financed project-related transactions will be subjected to its regular review. Indeed, every four or five years, UNDP internal auditor from Headquarter in New York proceeds to the audit of UNDP office in Ankara. However, the project is audited yearly by the external auditor of UNDP.

100. **Project Implementation Manual (PIM).** The MFAL prepared in 2010 a PIM and submitted it to IFAD for approval. This PIM was updated by the MFAL and PMU on February 2015 and submitted again for IFAD approval.

101. **Accounting.** The project accounting is held on the Atlas accounting software, used by UNDP. In addition, the PMU recorded the financial information in the planer recording system, developed by IFAD. UNDP does not record any information in this system, but it used it as monitoring system of the AWPB and the procurement plan. The data is systematically crossed referenced between the two systems.

102. **Financial Reporting and Monitoring.** The Atlas software cannot produce automatically the financial statements. The AKADP financial reports are produced on Excel sheet by UNDP and GDAR. UNDP extracts the information from Atlas software and prepare payments statements by category, by

component and by funding sources. GDAR prepares a statement of sources and uses of funds, a statement of cumulative investments, a statement of the designated account reconciliation. The mission recommends to prepare every six month, in addition to the other financial tables, a statement of commitments (signed contract) by component, category and by financier for the semester, the year and cumulative since the beginning.

103. **Fixed assets register.** The PDFAL is following all the assets of the Province, including those of the project, on a fixed assets register.

104. **Disbursements on loan to designated accounts (moderately satisfactory).** As of April 30, 2015, three WAs had been processed in 2014 and 2015 (WA 7 to WA 9) from the IFAD loan for a total of USD3.3 million, for the replenishment of the designated account. By the same date 43% (SDR5.2 million), equivalent to USD7.7 million of the total funds allocated for the project have been disbursed (See Appendix 5). This still indicates underachievement in comparison to design expectations. The difference between the disbursements and the actual expenditures (USD5.5 million) represents the balance of the designated and the two project accounts.

105. **Counterpart Funds (satisfactory).** The Government of Turkey contributes financing in cash and kind to cover the tax exemption and MFAL and PDFAL staff cost. The GoT is also financing some projects activities (component 1), which was initially budgeted to be financed by the loan. But, as the Ministry of Development did not allocate enough funds on the loan, the MFAL decided to finance these activities on its budget. The financial statements includes the payments done by the MFAL and the tax exemption, but it doesn't include the MFAL and PDFAL staff cost. As of April 30, 2015, USD1.6 million representing 48% of the total allocated amount has disbursed on the MFAL budget to pay its contribution. However, the payments on the loan and by the beneficiaries represent respectively 29% and 16% of the total (Appendix 5).

106. **Compliance with loan covenants.** The Project's compliance with loan Covenants is satisfactory (Appendix 6).

107. **Audit. (Satisfactory).** The project is audited by the Treasury Controller under the Prime Ministry. The auditors finished their audit mission for the fiscal year 2014, but they did not yet submit the report to IFAD. The mission reminds that according to the Financing Agreement, the MFAL must submit the audit report for the FY 2014 not later than June 30, 2015. The mission reviewed the audit report for the fiscal year 2013 and notes that the audit resulted with an unqualified opinion and there are no any material internal control weaknesses. Thus, it is not required to issue a separate management letter. The project is also audited by the external auditor of UNDP, a private audit firm, and he also did not submit yet his report to the UNDP.

108. **Reallocation of the IFAD loan by category.** IFAD approved on December 10, 2014 the project request for one year extension and the reallocation of loan proceeds by category. However, the exchange rate USD/SDR used by the PMU for the reallocation request was the appraisal rate (1.60) and not the current exchange rate (1.46). With the increase of the USD against the SDR, the project has less funds allocated in USD. As of May 2015, the project forecasted deficit is USD1.950 million. On the basis of the project reallocation request amounts in USD, and the exchange rate of December 2014, the loan amount will be SDR13.113 million, it means it should increase of 1,033 MSDR. As the loan amount could not increase, the PMU/MFAL has two options: a) the Government to increase its contribution in the project financing if the forecast based on USD 19.2 million will be implemented, and b) the PMU/MFAL to reduce some activities of the project in future planning.

109. **SOE review.** The mission selected and reviewed 18 payments orders, from which 15 on loan from WA 7; 8; and 9, for a total amount of USD1.237 million (37% of the total amount of WA 7; 8; and 9). This sample represents 58% of the total transactions (26 transactions), excluding the monthly salaries of PMU staff. The mission reviewed the salaries of two months March 2014 and February 2015 and found the amounts have been submitted to IFAD No Objection. The mission found these satisfactory and that the supporting documents of the procurements are in place and in a good order.

110. The mission noted that PMU did not ask the contractor Sanli Insaat for the construction of livestock market to provide a complementary performance security valid until 13/06/2106 for an amount of \$26,500 corresponding to the amendment of the contract. The mission also noted that regarding Pick-up vehicles, Minibus and Truck there is only IFAD NO to proceed from the procurement through SSO, but there is no IFAD NO for the bid evaluation report, the selection of the suppliers and the contract amount. The mission recommends the project to ask for IFAD no objection on evaluation report, selection and awarding retroactively.

Agreed action	Responsibility	Agreed date
Prepare every six month, in addition to the other financial tables, a statement of commitments (signed contract) by component, category and by financier for the semester, the year and cumulative since the beginning.	PMU/UNDP	Immediate
Review the reallocation of loan by category given the deviation between the appraisal and current exchange rate USD/SDR.	IFAD/MFAL/PMU	June 30, 2015
Ask the contractor Sanli insaat to provide a complementary performance security.	PMU	Immediate
Obtain IFAD NO for the procurement processes for Pick-up vehicles, Minibus and Truck.	PMU	Immediate

111. **Procurement.** The procurement procedures are subject to three control levels done by the PMU, the GDAR and the UNDP. It is the mission's assessment that in general, goods, works and services financed by IFAD have been procured in accordance with the financing agreement and IFAD rules and procedures. The arrangement with UNDP appeared to work efficiently and the collaboration with PMU is an enabling environment for high quality procurement. In particular, the mission appreciates the functioning and proficient results from outsourcing of tendering and site supervision for low risk/low complexity procurement of works (mainly for LWFs and pasture roads) to SPAs while using national procurement procedures. With this arrangement, the time required for the overall bidding process is reduced threefold compared to the UNDP-led tender and involves a competitiveness process among local contractors.

112. However, the mission observed some discrepancies pertaining to the thresholds for prior-review as well as for the application of International Competitive Bidding for which the same thresholds apply to goods, services and civil works for specific advertisements. Therefore, the mission recommends to (i) update the **IFAD's prior-review thresholds** for goods and civil work respectively to USD 50,000 and **USD 100,000** and (ii) increase the ICB threshold for civil work from USD 100,000 to **USD 500,000**. Accordingly, the NCB for civil works will range between USD 30,000 and USD 500,000.

113. Regarding "Community Participation Procurement", the mission encouraged the project to keep providing procurement support, control and guidance services to the beneficiaries as it has been the case in earlier community-related procurements. The project's co-financing manual is deemed comprehensive. Nonetheless, the mission noticed the absence of indication on the bid opening and evaluation committee's composition in the purchase process led by associations. With a fluctuating number and expertise of committee's members, the mission recommends the constitution to be: 1 PDFAL, 1 DFAL, 1 beneficiary (member of the association), 1 PMU (with procurement expertise) and 1 technical profile relevant to the good or work being acquired. The purchase process for individual farmers should remain the same.

114. On the bidding documents, the mission noted that the technical specifications for goods are set and the tender only requires the supplier to sign the technical description to ensure compliance. This rigid specification may lead, as was the case for the milk collection centres, to delivery of inadequate material. A better practice is to request bidders to submit their technical proposals while allowing them to propose better equipment if judged more suitable. The criteria to consider should be the value-for-money with a tentative budget excess of maximum 15%. The mission recommends that UNDP adapts the bidding documents for goods' specification while allowing the proposal of better performing material and its rationale.

115. **Procurement Plan.** Automatically generated by "Planner" from the AWPB, the procurement plan is very detailed and accurate. For the sake of clarity, the mission recommends to display the association of the related category of expenditure to each activity to be procured.

116. **Contract Register.** Since April 2014, 20 contracts (4 on IFAD loan and 16 on counterpart funds) were signed for a total of TRY 932,214.05 (excluding the contracts in the context of matching grants for which 152 equipment, 42 orchards, 4 facility and 3 barn contract grants were signed with farmers or associations). Only National Competitive Bidding (NCB) and Local Shopping (LS) methods have been used in compliance with the IFAD's procurement guidelines. The mission noted the following and discussed it with UNDP:

- a) Some discrepancies were observed between the list of contracts and the related activities into the AWP and the procurement plan. This complicated the coherency check which calls for more regular updates. The mission recommends to ensure timely revisions of the contract registry and proposes that a copy of the register would be attached to the progress reports the PMU is requested to send to IFAD twice a year ;
- b) Following the UNDP procedures, the bid for proposal's advertisements are published in Turkish and English, but in case of good purchases, the specifications are only available in Turkish. While it would not be cost-effective to systematically translate these technical documents in English, the mission recommends that UNDP adds the following sentence in the bidding document "Specifications can be provided in English upon request from interested bidders". Translation will be undertaken by UNDP if bidders request it.

117. As a complement to the Contract registry held in UNDP, the mission recommends the PMU to consolidate the information already at their disposal and structure it in a similar way for matching grant contracts with the following consolidated information: (a) Date of application by the farmer/association; (b) Estimated time for delivery; (c) First approval date by MFAL; (d) Grant contract signed between PDA and farmer/association ; (e) Second approval date from MFAL after control undertaken by PMU and PDA ; (f) Date when the contract is signed between farmer/association and supplier; and (e) Date of payment by UNDP to the farmer/association.

Agreed action	Responsibility	Agreed date
Update the IFAD's prior-review thresholds for goods and civil work, increase the ICB threshold for civil work and adjust the NCB thresholds range	UNDP/PMU/MFAL	Immediate
Update the co-financing manual on the bid opening and evaluation committee for associations	UNDP/PMU/MFAL	Immediate
Modify the bidding documents for goods' specification to allow the proposal of better performing material by bidders along with explanation on the upgrade rationale	UNDP/PMU/MFAL	Immediate
Include the updated registry of contracts into the Progress Report that has to be sent twice a year to the CPM for Turkey	UNDP/PMU/MFAL	Immediate
Associate the related category of expenditure to each activity to be procured and provide the Status of Funds for each sources of financing by category of expenditure with a snapshot at the beginning and the end of the year	UNDP/PMU/MFAL	Immediate
<b>Contracts register</b>		
Keep an updated registry of contract to be submitted to IFAD along the project's progress report twice a year.	UNDP	Immediate
Update the bidding document for NCB on goods by adding a reference on the availability of translated specifications in English.	UNDP	Immediate
The PMU to consolidate its contract registry related to matching grants with the above-listed information and translate it into English.	PMU	30 September 2015

## F. Sustainability

118. While the AKADP operates in a socio-economic as well as in an environmental setting that poses specific challenges and risks towards achieving sustainability of project interventions, a number of safeguards introduced by PMU and the implementing agencies over the review period are meant to



minimize such risks. The mission urges PMU to continue implementing these measures and monitoring their effectiveness. Sustainability is rated as **moderately satisfactory**

119. **Institutional Sustainability.** Commitment to the project by GDAR/MFAL continues to be a positive element towards ensuring sustainability. Collaboration with other institutions such as the SPAs is noted as a positive development during the review period towards sustainability of project activities. Partnership with SPA is likely to ensure proper maintenance of the small scale infrastructure facilities constructed by the project as the SPA has the institutional responsibility to keep in good working conditions the village based infrastructure facilities in their respective Provinces, in collaboration with village Muhtars and inhabitants.

120. During the year, PMU has secured TA support to the Ardahan Municipality to identify an optimal institutional setup and management arrangement to increase the likelihood of institutional sustainability of the ALM. The team of contracted consultants will also provide trainings to the Ardahan Municipality staff that will be in charge of the operation of the ALM (scheduled to start in mid-June). The likelihood of sustainability of the ALM will increase if local authorities enforce necessary regulations conducive to a well-functioning market (such as the mandatory sales and purchase of livestock through ALM as a pre-requisite to obtain livestock licenses in the region).

121. The project initiated collaboration in milk collection with three farmers associations (Kars Dairy Association, Ardahan Breeders Association and Doğruyol village development cooperative). These institutional partnerships are considered a positive development as they should enhance, in principle, the chances for sustainability of the cold milk collecting centres'. However, the mission remains concerned about the sustainability of some of these centers, especially for the milk collection center at Ardahan center district. During the meeting with the Ardahan Breeders Association, the mission noticed disagreement between the Association members. Some members are not willing to deliver their milk production to the collection center, and prefer to deliver to the dairy processing plants because they offer yearly advance payment on milk delivery which many farmers find useful in meeting various obligations. Also two of these centers are still lacking trucks necessarily for milk collection. The mission has made a number of recommendations in this regard (see above). Institutional sustainability is rated **moderately satisfactory**

122. **Social Sustainability (empowerment):** Investments in village infrastructure- for which construction is currently ongoing- are selected based on applications from village *muhtars* as elected representatives. The wider village population is involved in the implementation process. It is required to collectively acquire the land where small hydraulic structures are to be constructed and/or to carry out simple complementary works such as grassing of slopes and landscaping around the trough locations.. For the planned investments in sanitary sewers, the same cost sharing principle applied under SEDP and DBSDP would apply in AKADP, whereby the beneficiaries carry out the household connections at their own expenses. These measures are geared to increase the sense of ownership and the likelihood of social sustainability. The mission noted the strong commitments of villagers to such contributions. The planned trainings on the use of the LHF's will involve the PDFAL staff, as well as the villagers that may use the facilities to conduct animal caring works and animal loading during sales transactions in a more controlled manner. Similarly, as mentioned above, the co-financing programs in orchards, greenhouses, barns and cold milk collection centres are associated with project supported extension and training services at village level aiming at increasing the chances of sustainability and rural household's empowerment. (**moderately satisfactory**).

123. **Economic and Financial Sustainability.** The co-financed investments projects under components 1 and 2 were subjected to feasibility studies. The generation of positive net monetary benefit streams are, in principle, an indication of likelihood of financial sustainability. Likewise the feasibility studies submitted to the PMU for investments in additional district level livestock markets include a basic estimate of the IRR; and the generation of positive net monetary benefit streams. The new alternative for modern barns ( switching from costly dairy barns to fattening barn), will have a significant impact on decreasing cost per expected benefits. All LWFs selected for implementation are either gravity fed or use solar pumping. Both solutions do not require an external power supply, thus

increasing the likelihood of economic and financial sustainability. The option being considered for the design of pilot sanitation facilities excludes pumping and costly treatment processes to enhance economic and financial sustainability. The operational plan being developed for the ALM includes a break-even analysis for the calculation of the users' fees to be applied<sup>5</sup>. Nevertheless, the Ardahan Municipality is reportedly willing to cover any losses from its general budget for service and utilities. **(moderately satisfactory)**

124. **Technical Sustainability.** The design of the new barns adopted by the project is simple and easy to implement. The supervision arrangement in place for milk collection centres implies that the PMU dairy consultant ensures appropriate technical standards in design and provides quality assurance services during the implementation stage to minimize the risk of technical problems. After sale services, equipment and parts for repairs of all projects co-financed under component 1 are available from the local private sector, SPAs and the Municipalities. The designs quality assurance for LWFs covers all hydraulic structures to ensure smooth operation of the pipelines. Solar pumping, the selected option for the development of shallow wells, is an increasingly widespread technology in Turkey. The use of borrowed material for the road base and the relatively large diameter (D 800) of the corrugated PE pipe culverts used are clear technical improvements as compared to the of road grading works financed by the project in the first years of implementation. Overall, the supervision arrangements in place for village infrastructure- with the PMU Field Engineer retaining a quality assurance role during design, construction and defects liability period- are geared to minimize the risk of technical problems due to the poor quality of works. Skills, equipment and parts for repairs of all project financed infrastructure are available from the private sector, the SPAs and Municipalities.

125. **Environmental Sustainability.** LWFs reduce the risk of water contamination by preventing direct access to the sources by means of piped networks and troughs. Discussions undertaken during the site visits were geared to ensure that the location of the troughs is selected in order to minimize the risks relating to concentration of animals around the troughs. The construction of livestock marketing facilities meeting the hygienic standards for waste disposal will also result in positive environmental impacts. The mission notes that relevant design adjustments in the ALM have been carried out following the recommendation of MFAL's commission for nitrate pollution. The planned pilot investments in sanitary sewers with Natural Treatment Plants would also result in positive environmental impacts.

126. **Adaptation to Climate Change.** All co-financed orchards by AKADP use drip irrigation. In principle, the reduction of water losses through drip irrigation implemented under AKADP is an effective way of addressing the risks of reduced availability of water in the region due to potential climate change. In addition the reduction of water distribution losses through spring development and piped networks implemented under AKADP are effective ways of addressing the risks of reduced availability of water at the source. The provision of adequate drainage in project-supported pasture roads is a key feature to ensure their durability also in the scenarios with increased occurrence of destructive high-density-short duration rainfall events.

127. **Exit Strategy.** The AKADP exit strategy comprises mainstreaming of project approaches into the PDFALs' modalities for supporting agricultural production in the Project area and into various farmers associations. Despite frequent staff turnover, the secondment of PDFAL's staff is proving increasingly successful in AKADP and has proved successful in the other IFAD-financed projects in Turkey (DBSDP and SEDP). It builds capacity and sense of ownership at the Provincial level, paving the way for a satisfactory implementation of the exit strategy. The co-financing strategy adopted by AKADP in financing activities at farm's level embodies, in principle, important dimensions of an exit strategy. The training of the milk production associations' members in the area of post-harvest technologies and good hygiene practices increased awareness that milk productivity and quality in the region needs to be improved. Some Associations have already taken concrete steps to bring complementary investments from their own resources including (i) concentrated efforts to increase

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<sup>5</sup> An affordable entrance fee of 2TL per head of livestock was calculated in the feasibility study carried out prior to the start of the works.

number and success rate of Artificial Insemination, (ii) facilitating provision of affordable credit to smallholders for cattle purchase and feed, and (iii) basic village infrastructure investments (i.e. fences, landscaping).

128. The project has now embedded its village infrastructure development activities in the SPA's program, paving the way for a satisfactory implementation of the exit strategy. Moreover, future activities under the AKADP Component 2 will be geared to disseminate good practices in rural infrastructure development (e.g. solar pumping, natural treatment facilities, PE lining for water storage etc.) to be subsequently replicated by the SPAs after Project completion. Functioning of the ALM beyond Project life-time will not necessarily depend on the Ardahan Municipality, as the Municipality may opt for attracting private operators working under a concession agreement. Notwithstanding the above, the Project should develop a detailed Exit Strategy during 2015.

## **G. Impact**

129. The increased rate of project implementation over the reviewed period (e.g. the completion/nearing completion of a number of village infrastructure, demonstrations and training programme), as well as the progress achieved in project Monitoring and Evaluation have increased the visibility of project impact.

130. **Physical and Financial Assets (moderately satisfactory).** Matching grants provisions have contributed to increasing beneficiaries' farm fixed assets (machinery and equipment). Improved road access and availability of livestock water in the pastures are likely to result in improved animal health and ultimately trigger own investments in additional heads of livestock. To this effect PMU should monitor, the number of animals in a sample of villages benefitting from AKADP village infrastructure investments. Records from villages benefitting from Livestock Handling Facilities and pasture fences are also expected to show shortly a reduction in the livestock mortality rates, thus preventing the loss of key productive assets. There is also a wider scale impact expected from AKADP support for the construction of Livestock Markets meeting the sanitary requirements which prevent the outbreak of diseases and increase livestock value.

131. AKADP organized a large scale demonstration program to promote high yielding forage crops and silage making techniques in the region and farmers met indicate willingness to adopt this technology. It also organized farmers training program in the review period to improve productivity of livestock through better farm management. Adoption will improve the feed deficiency, increase the value of livestock as an asset and decrease farms' cost. The spread of the new barns will reduce animal disease and increase animal value and productivity. The establishment of cold milk collection centers that apply good hygienic practices has started-in some cases- to reduce milk losses and increase milk prices. The very promising expansion in establishing orchards and greenhouses observed by the mission, and training on the good agriculture practices and in post-harvest technologies will boost the value of farm assets.

132. **Food Security (moderately satisfactory)** . The expected reduction of livestock mortality due to AKADP support for the improvement of livestock-related infrastructure for common use (i.e. Livestock and Water Handling Facilities, pasture roads and fences, Livestock Markets (many nearing completion or completed) is expected to positively impact poor smallholders for which the loss of a head of cattle is critical in terms of food security. The increase of horticulture products, livestock production and reduction of post-harvest losses in the coming season and beyond due to AKADP support are expected to have a positive impact on availability of food for poor smallholders (as verified in mission field visits) , therefore positively affecting food security, food quality and safety. The project M&E has to follow up carefully on these emerging impact and use appropriate assessment techniques to measure it. (see above )

133. **Increase in Income.** The PMU has developed spreadsheet based models to compute the projected incremental returns to farmers in connection with investments in LHF's and LWF's, due to reduced milk and meat losses. The models show increased incomes per head of livestock of TL 200

in average, with wide variations depending on the distance between the village centre and the pastures. Similar approaches need to be developed for investments in pasture roads nearing completion. This will ultimately allow extrapolating the positive contribution of investments in LWFs and pasture roads to the incremental monetary benefit stream generated by the Project, hence the overall IRR at Completion. Investments in Livestock Markets (including the completed ALM) are also expected to increase farmers' income due to the expected reduction of transaction costs and improved animal health. The quantitative assessment of such benefits requires monitoring of farm gate prices (see section on M&E).

134. The investment in cold milk collection centres is likely to create significant impact for the target group. In the case of Kars collection centres, the raw milk prices increased substantially (more than 50%) as a result of the marketing activities initiated by the Associations on behalf of the villagers. The Associations negotiated the milk price and was able to sell the collected milk for better prices for the advantage of the smallholder dairy farms. The M&E surveys conducted by PMU show that the AKADP efforts on maize silage are having positive impacts in Arpaçay and Selim districts. The farmers not only stop purchasing cattle feed but were also able to sell their surplus products, which would add extra income to the farm budget. The M&E results reveal that the application of small scale family greenhouses provide added value to the family budget. Efforts for large scale dissemination should be enhanced.

135. **Policy Impact.** The completion of the ALM is laying the ground for implementation of MFAL's policies in respect to livestock registration and trade, possibly also serving as an important tool in the region for the livestock market regulation. However, uncertainties persist regarding the gradual closing or upgrading to higher standards of unlicensed district level markets. To this effect, MFAL may consider supporting the development a well-defined long term strategy (at least at the Provincial level) for the operation of district level livestock markets. The implementation of cold milk collection centres by the AKADP will help the milk producers to meet the hygiene standards required by the government policy.

## H. Conclusion

136. Overall, the Project recorded a significant leap forward in implementation in the period under review. However, the resignation of the Project Regional Administration (by mid-June) can result in a managerial vacuum representing a serious risk to keeping the fast implementation momentum. Under the Smallholder and Non-Farm Enterprise Investments component the project has made good progress since June 2014 except for the sub-component of support of non-farm enterprises which is still much behind appraisal targets. Some activities like family style greenhouses, classified in the AWPB as non-farming enterprises cannot be considered as such. The project dissemination efforts are lagging behind the pilot activities. Under the Village Infrastructure Component, the mission records good progress during the period under review, with investments in small scale village infrastructure under implementation on a full-fledged scale in Kars and Ardahan, in collaboration with the SPAs. If sustained by careful planning of future investments and an extended implementation timeframe (i.e. up to 2017) the Components are likely to reach full disbursement and satisfactory rating at completion. Overall, the synergy between the two components has not been adequately observed and can improve.

137. In order to keep the momentum gained in project implementation, the following tasks should be undertaken on a priority basis (part of mission's overall recommendations)

- MFAL to start immediately the Process of recruiting a capable Regional Administrator (Project Manager) with proven experience in agriculture development projects and to finalize it asap.
- Develop a clear dissemination strategy for pilots undertaken under component 1 to ensure better project outreach and impact with special attention to the needs of rural women

- Investigate various options for promoting off-farm employment including supporting young service providers in the areas of post-harvest, food processing and hygiene practices
- Finalize the works at the Ardahan livestock market ensuring that detailed operational arrangements are in place, and that M&E data are collected and analyzed to allow subsequent assessment of impact and replication potential elsewhere in Turkey.
- Identify the type of infrastructure projects to be carried out with the SPA in the coming year, maximizing synergies between project's Components as stipulated at design (e.g. village infrastructure prioritized where milk collecting centres and other interventions under component 1 are concentrated) and learning from pilot activities already realized.
- Continue the effort to disseminate additional pilots showing good practices in rural infrastructure development (e.g. solar pumping, natural treatment facilities, PE lining for water storage etc.) to be subsequently scaled up by the SPAs after Project completion.
- Carefully consider further investments in Livestock Markets construction as these are relatively costly and imply lost opportunities for financing other critical village infrastructure e.g. Livestock Water Facilities, Roads to Pastures or Sewers which are proven priorities for the Project primary target group.



## Appendix 1: Summary of project status and ratings

### Basic Facts

Country	Turkey	Project ID	1492 [1100001492]	Loan/DSF/Grant/ASAP FI No.	1000003637
Project	Ardahan-Kars-Artvin Development Project			Top-up Loan/DSF/Grant/ASAP FI No.	
Date of Update	01-Jul-2015				
Supervising Inst.	IFAD				
No. of Supervisions	4	No. of Implementation Support/Follow-up missions	3		
Last Supervision	27-May-2015	Last Implementation Support/Follow-up mission	24-Oct-2014		

USD million Disb. rate %						
Approval	17-Dec-2009			Total financing	26.41	
Agreement	12-Apr-2010	Effectiveness lag	6.6	IFAD Total	19.20	
Entry into force	02-Jul-2010	PAR value	-----	IFAD loan	19.20	43
First disbursement	06-Dec-2010			DSF grant		
MTR		Last amendment		IFAD grant		
Original completion	30-Sep-2015	Last audit	01-Jul-2015	ASAP grant	0.00	0
Current completion	30-Sep-2016			Domestic Total	7.21	
Current closing	31-Mar-2017			Beneficiaries	3.99	0
No. of extensions	31-Mar-2017			National Govern	3.22	0
	1			External Cofinancing Total		

### Project Performance Ratings

B.1 Fiduciary Aspects	Last	Current	B.2 Project implementation progress	Last	Current
1. Quality of financial management	5	5	1. Quality of project management	4	5
2. Acceptable disbursement rate	2	2	2. Performance of M&E	3	4
3. Counterpart funds	5	5	3. Coherence between AWPB & implementation	3	4
4. Compliance with financing covenants	5	5	4. Gender focus	3	4
5. Compliance with procurement	4	4	5. Poverty focus	4	4
6. Quality and timeliness of audits	5	5	6. Effectiveness of targeting approach	4	4
			7. Innovation and learning	3	4
			8. Climate and environment focus	4	4
B.3 Outputs and outcomes	Last	Current	B.4 Sustainability	Last	Current
1. Smallholder and Non-farm Enterprise Investments	3	4	1. Institution building (organizations, etc.)	4	4

2. Village Infrastructure Investments	3	4	2. Empowerment	4	4
3. Institutional Strengthening and Project Management	4	4	3. Quality of beneficiary participation	4	4
			4. Responsiveness of service providers	4	4
			5. Exit strategy (readiness and quality)	3	4
			6. Potential for scaling up and replication	4	4

#### B.5 Justification of ratings

Disb. rate: As a result of the greatly improved progress in project implementation since mid-2014 the disbursement rate from IFAD loan reached 42.7% by mid May 2015 compared to 23.5% a year earlier. While this increase in disbursement within the year -reflecting the acceleration of project activities- is commendable, overall disbursement is still below expectations. Quality of Project Management: During the year the PMU expanded through recruited and/or seconded staff, the working environment has become more stable, higher staff morale and effective team work were very evident and this was clearly reflected in higher achievements at field level in all components. Performance of M&E: During the year PMU deployed important efforts with strong support from the project Coordinator and the part time M&E officer to create a project data base on co-financed projects, infrastructure, horticulture, training, and farmers satisfaction surveys. The migration from Excel to Access is a major step forward in data management and constitutes the backbone for future evaluation of project's results and outcome. Gender focus: the project has been devoting increasing attention to the gender dimension. To date the project has extended its support to 378 women (27.5% of total direct beneficiaries). Innovation and learning: a number of emerging contextual innovations that lend themselves to replication and scaling up in the project area with good prospects for positive impact on rural population. Comp. 1 rating increased to 4 as it has made good progress and recorded overall good financial achievements in implementing the AWPB for 2014 compared to targets. Project achievements in this regard ranged between 27% and 115%. Comp. 2 is rated 4 as good progress during the period under review was achieved with investments in small scale village public infrastructure under implementation on a full-fledged scale in Kars and Ardahan.

### Overall Assessment and Risk Profile

	Last	Current
C.1 Physical/financial assets	3	4
C.2 Food security	4	4
C.3 Quality of natural asset improvement and climate resilience	4	4
C.4 Overall <b>implementation progress</b> (Sections B1 and B2)	3	4

#### Rationale for implementation progress rating

The picture that has emerged during the May 2015 Supervision Mission field work is of a much improved implementation and notable progress towards achieving project objectives. Mission field visits and analysis demonstrate that project implementation has undergone a great leap forward since June 2014. The execution of the 2014 AWPB is satisfactory with a financial execution rate of 72%. The 2015 AWPB's execution is progressing well. The smallholder and non-farm enterprises component recorded overall good financial and physical achievements in implementing the AWPB for 2014 compared to targets, reaching 115% and 133% in some activities respectively. Support to smallholder's households in increasing their assets has expanded through a well-defined co-financing programme for improvement of livestock husbandry and horticulture practices. The switch from a modern costly barn to an economical semi-open barn, as per IFAD's follow-up mission recommendation, is promising and farmers interviewed are enthusiastic for adoption. Four cold milk collection centers were implemented at four different villages in 2014 (two in Ardahan and two in Kars). The training and institutional strengthening programs provided for farmers' organisations, farmers and staff have resulted in a better understanding by all stakeholders of project objectives and means to achieve them, which resulted in more commitment and ownership of the Project. Beneficiaries interviewed expressed satisfaction with results obtained and the project is working at expanding coverage through strengthening dissemination and replication. Field activities, under the village infrastructure component gained significant momentum since June 2014. The mission recorded good progress during the period under review. The ALM construction has been finalized and inaugurated and civil works for other small scale village infrastructure are under full fledge implementation in Kars and Ardahan, in collaboration with the SPAs.

C.5 Likelihood of achieving the development objectives (section B3 and B4)	3	4
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#### Rationale for development objectives rating

The increased pace of implementation over the last year and emerging results at farms and village level provide good indications of substantial potential for achieving project objectives. Selected assessment by project's M&E of the outcome of project support to improving livestock husbandry and horticulture practices indicate a significant increase in the assets and incomes of poor women and men smallholders receiving project support; but time is needed to ensure appropriate dissemination and replication at a wider scale. Ample evidence was observed in the field that project's support leading to improvement in village infrastructure will have substantial direct and indirect benefits to primary producers and small enterprises. Investments in Livestock Markets are expected to contribute to increasing farmers' income in connection with the expected reduction of transaction costs and improved animal health; the quantitative assessment of such benefits requires careful monitoring of the effects on farm gate prices. Investments in cold milk collection centers have started to increase farmer's income through increasing farm gate price of milk. The PMU has developed spreadsheet based models to compute the projected incremental returns to farmers in connection with investments in LWFs, due to reduced milk and meat losses. The models show increased incomes per head of livestock of TL 200 in average, with variations depending on the distance between the village centre and the pastures. If sustained by careful planning of future investments and adequate implementation time frame the Components are expected to reach full disbursement and contribute significantly to project objectives. The construction of the ALM and its full functioning would lay the ground for implementation of MFAL's policies in respect to livestock registration and trade, possibly also serving as an important tool in the region for livestock market regulation.

#### C.6 Risks Short description of major risks for each section and their impact on achievement of development objectives and



<i>sustainability</i>	
Fiduciary aspects	Risks emanating from shortfall in budget allocations has been largely abated, with an allocation of US 4 million allocated from loan funding for 2015 and USD 0.5 million from government resources. Given the high momentum achieved in 2014, project may even be able to increase implementation slightly beyond current allocations.
Project implementation progress	Project implementation will continue to face the inherent risk of only limited possible implementation activities during the long winter season due to the harsh weather conditions in the region. Most investment activities cannot commence before April or May, hence solid planning and preparedness measures should be undertaken to mitigate risks of delayed implementation emanating from the short (summer) implementation period. While the high risk of project under achievement has been mitigated by the great leap forward in implementation during 2014 and 2015, there still remains some risk that Project achievements across the board will be lower than anticipated at design, particularly if a suitable project director is not appointed timely with negative effect on the pace of implementation. Overall, the cumulative delays in the first three years of project implementation have no doubt resulted in lower than anticipated benefits accruing to farmers currently. On the other hand, the training and demonstrations undertaken have yielded visible results this past summer and fall, and the PMU is planning extensive dissemination campaigns during 2015. Data on Project spending and outputs is satisfactory.
Outputs and outcomes	Despite substantial implementation progress during the last year some risks in achieving project objectives still remains, particularly for the first component, as dissemination and replication of good practices in livestock husbandry and horticulture need time for planning and execution. Achieving project expected outcome in gender and women's outreach is facing the risk of achievements below expectations if the project does not devise a technology dissemination strategy taking into consideration appropriate cultural factors regarding rural women in the project area. One of the risks envisaged by the 2014 supervision mission of the village infrastructure not meeting the appraisal targets is no longer relevant. Upon completion of the works contracted during the period June 2014-May 2015, the appraisal target of serving 60 villages with improved public infrastructure will be exceeded. The Project's Field Engineer retains a role in acceptance and quality assurance of completed works, thus the risk of low quality and delayed implementation of the works is mitigated. Currently the main risk for Component 2 is that political pressure may interfere with the identification and with the allocation of the balance of funds to infrastructure development, unless mitigation measures are put in place. Operating the ALM at full capacity remains a challenge as it involves a major shift to consolidated sale practices from informal unlicensed markets. While progress remains somewhat slow to measure outcomes, the PMU has repositioned some staff leading to the strengthening of the M&E system and more rigorous outcome and impact measurement will begin using university students as surveyors. Progress on measuring outcomes and results is expected to show by December 2015. If a full time M&E officer is not appointed at PMU level, there will be a risk of deteriorating M&E performance. .
Sustainability	Collaboration with other partner's institutions such as the SPAs has greatly mitigated the risk of poor operations and maintenance of village infrastructure and is noted as a positive development during the review period. Such partnership is likely to ensure proper maintenance of the small scale infrastructure facilities constructed by the project as the SPA has the institutional responsibility to keep in good working conditions the village based infrastructure facilities in their respective Provinces. There is currently a risk of sustainability of the milk collection centers as some farmers still prefer the old practice of being paid a lump sum in advance by private milk processors and project efforts to develop an appropriate value chain for this sub-sector is just starting. Unless more time is made available, some risks remain in reaching the intended objectives. The overall project framework is appropriate for the introduction of sustainable investments for development of the agriculture sector in the region. The approach of assisting smallholders who will be displaced as a result of the inundation along the Chorouki Valley has found ownership at GDAR and generated interest in opportunities to scale up in the future. GDAR is seizing upon the opportunity to improve highland animal husbandry by agreeing to give priority to investments for pasture roads and drinking water for livestock.

## Proposed Follow-up

Issue / Problem	Recommended Action	Timing	Status
Value Chain Dairy	Analyse and deliver concrete implementation plan to successfully establish a working model for the supply and value chain of raw milk for the milk centers with emphasis on linkages with processors. PMU/Contracted Value Chain Consultant	October 2015	
Livestock Markets	Design review and implementation arrangements for the Selim Livestock Market Tender for designs for the Ardanuc Livestock Market MFAL, UNDP Completion of Livestock Handling Facilities.	July 2015	
Grape VC	Establish a business plan study for the grape pilot processing units to show the feasibility.	July 2015	
Horticulture	Implementation of value chain analysis (through TA) in livestock, dairy and horticultural sector. Organize a workshop for the seedling selection and orchard management techniques through TA.	September-Dec. 2015	
Orchards/green houses	Develop a clear dissemination strategy for the orchards and greenhouse pilots using various communications means to ensure better project outreach and impact with special attention to the needs of rural women PMU	July 2015	

M&E	Budget allowing, advertise 2 M&E officer positions (one based in Ankara and the other in Kars in the PMU) Organize (with IFAD as facilitator) a workshop with PMU, MFAL's Working Group on Externally financed projects, PDAs and DDAs on the overall M&E system UNDP/PMU/MFAL/IFAD Draft TOR for project's impact assessment PMU/MFAL	Sept. - Dec. 2015
Fiduciary review	Request IFAD NO for Pick-up vehicles, Minibus and Truck. Update the IFAD's prior-review thresholds for goods and civil work, increase the ICB threshold for civil work and adjust the NCB thresholds range UNDP/PMU/MFAL Update the co-financing manual on the bid opening and evaluation committee for associations UNDP/PMU/MFAL Include the updated registry of contracts into the Progress Report that has to be sent twice a year to the CPM for Turkey UNDP/PMU/MFAL	Immediate

**Additional observations**

The above-recommendations are based on the Aide-memoire of the supervision undertaken in May 2015.

## Appendix 2: Updated logical framework: Progress against objectives, outcomes and outputs

Narrative Summary	Impact and Results Indicators	Means of Verification	Assumptions and Risks
<b>Goal</b>			
Rural poverty in the Provinces of Ardahan, Kars and Artvin reduced	By end of PY5: <ul style="list-style-type: none"> <li>Reduction of at least 20% of rural people living on less than USD 4.30/day in targeted districts.</li> <li>At least 20% of households increase household asset ownership in targeted districts.</li> <li>Measurable decrease in chronic malnutrition among children below 5 years of age.</li> </ul>	National statistics on income by region. Ministry of Health, WHO and UNICEF data. Baseline survey. Impact assessment study. Completion Assessments.	Macro-economic environment and policy remains conducive to investment, private sector development and trade.
<b>Objectives</b>			
The incomes and access to productive rural infrastructure of poor rural smallholders participating in the project improved	By end of PY5 in target districts: <ul style="list-style-type: none"> <li>10% increase in income of targeted smallholder producers.</li> <li>20% increase in volume and value and diversity of agricultural produce sold.</li> <li>At least 50 villages have improved sustainable access to infrastructure (livestock drinking water, access to rangeland and pastures, and sewerage).</li> <li>25% of farmers using investment plans in making decisions.</li> <li>25% of farmers adopting improved production technology.</li> </ul>	Baseline survey. Independent impact assessment study. Household survey. Farmer survey. Mid-term Review and Completion Report. Sector studies.	No deterioration in existing markets for livestock and crops.
<b>Outputs</b>			
<b>Component 1: Smallholder and Non-Farm Enterprise Investments</b> Sub-component 1.1: Animal husbandry and feed base improved	By end PY5 in target districts <ul style="list-style-type: none"> <li>5% increase in average milk yields by end of PY2 and 10% by end of project.</li> <li>5% increase in weight of livestock at the end of winter of PY 2 compared to PY1 in improved barns.</li> <li>25% reduction in incidence of preventable livestock disease.</li> <li>10% increase in calving rate.</li> <li>50% increase in number of households using milking machines in 100 villages by end of project.</li> </ul> Starting in PY2, in each PY: <ul style="list-style-type: none"> <li>10% increase in straw and grain harvested by farmers in 100 villages.</li> <li>100 additional farmers producing silage in each project province.</li> <li>10% increase in number of farmers producing forage crops.</li> <li>2% annual increase in number of farmers producing forage seed for trade.</li> <li>10% increase in number of farmers producing quality hay.</li> </ul> By PY5: <ul style="list-style-type: none"> <li>800 farmers using newly constructed hay shelters.</li> </ul>	PMU reports. Annual Farmer survey. Technical and financial feasibility reports. Participatory Impact Monitoring. PDA and DDA data.	No major changes to agro-climatic conditions.  No untreatable outbreaks of infectious disease in livestock.

[illegible]

### Appendix 3: Summary of key actions to be taken within agreed timeframes

Agreed action	Responsibility	Agreed date
<b>Component 1. Smallholder and Non-farm Enterprise Investments</b>		
Promote silage maize activity only in Kars province.	PMU, PDFAL, DDFAL	Sept 2015/16
Implementation of value chain analysis (through TA) in livestock, dairy and horticultural sector.	PMU	As soon as possible
Organize a meeting with two associations benefiting from the milk collecting centres in order to set up a plan to speed up the operations and functionality of these centres.	PMU, MFAL	July 2015
Preparation of detailed long-term training program with focus on farming as a business alongside technical trainings (through TA)	PMU/MFAL	Oct 2015
Analyse and deliver concrete implementation plan to successfully establish a working model for the supply and value chain of raw milk for the milk centers with emphasis on linkages with processors.	PMU/Contracted Value Chain Consultant	Oct 2015
Develop a clear dissemination strategy for the orchards and greenhouse pilots using various communications means to ensure better project outreach and impact with special attention to the needs of rural women	PMU	July 2015
Organize a workshop for the seedling selection and orchard management techniques through TA.	PMU/MFAL	December 2015
Establish a business plan study for the grape pilot processing units to show the feasibility.	PMU	July 2015
Investigate the possibility of supporting service providers (especially youth) in the areas of post-harvest, food processing and hygiene practices.	PMU/TA	Oct 2015
<b>Component 2 – Village Infrastructure</b>		
Temporary acceptance of construction at the ALM	MFAL, UNDP	15 June 2015
Finalization of ALM O&M plan and training of staff	TA consultants	15 July 2015
Design review and implementation arrangements for the Selim Livestock Market	MFAL	15 June 2015
Tender for designs for the Ardanuc Livestock Market	MFAL, UNDP	30 June 2015
<b>Monitoring &amp; Evaluation</b>		
Start Immediately the process of recruiting a new Regional Administrator for the PMU	MFAL	July 2015
Advertise 2 M&E officer positions (one based in Ankara and the other in Kars in the PMU)	MFAL	July-August 2015
Organize (with IFAD as facilitator) a workshop with PMU, MFAL's Working Group on Externally financed projects, PDAs and DDAs on the overall M&E system	PMU/MFAL/IFAD	September 2015
Draft TOR for project's impact assessment	PMU/MFAL	July 2015

<b>Fiduciary Aspects</b>	<b>Responsibility</b>	<b>Agreed date</b>
Prepare every six month, in addition to the other financial tables, a statement of commitments (signed contract) by component, category and by financier for the semester, the year and cumulative since the beginning.	PMU/UNDP	Immediate
Review the reallocation of loan by category given the deviation between the appraisal and current exchange rate USD/SDR.	IFAD/MFAL/PMU	June 30, 2015
Ask the contractor Sanli insaat to provide a complementary performance security.	PMU	Immediate
Obtain IFAD NO for the procurement processes for Pick-up vehicles, Minibus and Truck.	PMU	Immediate

## Appendix 4: Physical progress measured against AWP&B, including RIMS indicators

Component	Activities	Unit	2013			2014			2015			Cumulative		
			Target	Realization	%	Target	Realization	%	Target	Realization	%	Target	Realization	%
1.1	Barn Design Works	unit	1	1	100%							1	1	100%
Smallholder Livestock Investments	Barn Constructions	unit	10	1	10%	6	2	33%	3	0	0%	19	3	16%
	Village Cooperative Supports	unit				3	1	33%	2	0	0%	5	1	20%
	Village Cooperative Supports (construction)	unit							1	0	0%	1	0	0%
	Transportation and Labor	day				150	115	77%				150	115	77%
	Silage Halls	beneficiary							10	0	0%	10	0	0%
	Milk Center Vehicles	Unit							2	0	0%	2	0	0%
	Milk Center Consultancy Services	project				2	2	100%	1	1	100%	3	3	100%
	Milk Center Constructions	village				4	4	100%	3	0	0%	7	4	57%
	Agro Machinery Purchases	Unit	0	2	0%	8	8	100%				8	10	125%
	Agro Machinery Co-finances	beneficiary	165	152	92%				4	0	0%	169	152	90%
	Forage Crops	da	210	89	42%	560	411	73%	1900	702	37%	2670	1202	45%
	Technical Trainings	staff							4	0	0%	4	0	0%
	Farmers Exchange Visits	beneficiary	27	29	107%	25	35	140%	62	15	24%	114	79	69%
	Village Extension Trainings	beneficiary				900	556	62%	300	0	0%	1200	556	46%
	Hay Storage Units	beneficiary							8	0	0%	8	0	0%
1.2	Orchard Co-finances	beneficiary	7	7	100%	43	32	74%	88	17	19%	138	56	41%
Horticulture Practices	Processing Units	beneficiary							2	0	0%	2	0	0%
	Greenhouse Co-finances	beneficiary	2	1	50%	45	24	53%	26	0	0%	73	25	34%
	Technical Trainings	staff				0	38	100%				0	38	100%
	Farmers Exchange Visits	beneficiary	0	17	100%	60	67	112%				60	84	140%
	Village Extension Trainings	beneficiary				0	66	100%	150	0	0%	150	66	44%
1.3	Workshops on Rural Tourism	beneficiary							60	60	100%	60	60	100%
Non Farm Investments	Technical Trainings	staff							20	17	85%	20	17	85%

2.1	Cattle Handling Facilities (construction)	village				2	0	0%	2	0	0%	4	0	0%
Village Infrastructure	Livestock Water Systems (design)	Unit	1	1	100%							1	1	100%
	Fences for Milk Centers (construction)	Unit							4	0	0%	4	0	0%
	Protection and Clustering Fences (construction)	village				7	7	100%	3	0	0%	10	7	70%
	Drillhole and Borehole Design Works	Unit				0	3	100%				0	3	100%
2.2	Livestock Markets (construction)	Unit	1	0	0%	1	1	100%	2	1	50%	4	2	50%
Livestock Markets	Livestock Markets (design)	month				0	2	100%	1	0	0%	1	2	200%
2.3	Livestock Water Systems (construction)	village							41	0	0%	41	0	0%
Roads and Water Investments	Pasture Road Rehabilitations (construction)	village							5	0	0%	5	0	0%
2.4	Barn Design Works	Unit							1	0	0%	1	0	0%
Design Works	Livestock Water Systems (design)	Unit							1	0	0%	1	0	0%
	Livestock Markets (consultancy)	project				1	0	0%	1	0	0%	2	0	0%
	Livestock Markets (design)	Unit							4	0	0%	4	0	0%
	Sewerage Design Works	Unit							2	0	0%	2	0	0%
3.1	Ardahan Livestock Market Opening Ceremony	Unit												
Improving Institutional Capacity	Vehicle Purchases	Unit	3	3	100%	6	6	100%				9	9	100%
	Tradeshow Visits	beneficiary	0	30	100%							0	30	100%
	Office Supply and IT Equipment Purchases	Unit	53	53	100%				30	0	0%	83	53	64%
	Staff Trainings	staff							15	0	0%	15	0	0%
	Staff MidTerm Meetings	Unit				1	0	0%				1	0	0%
3.2	Vehicle Rentals and Gas Purchases	month				8	8	100%	9	0	0%	17	8	47%
Project Management	Project Advertisement and Awareness Activities	Unit							6	0	0%	6	0	0%



	<b>Grand Total</b>	Beneficiaries	201	<b>236</b>	<b>117%</b>	1073	<b>780</b>	<b>73%</b>	710	<b>92</b>	<b>13%</b>	1984	<b>1108</b>	<b>56%</b>
		Unit	69	<b>61</b>	<b>88%</b>	25	<b>18</b>	<b>72%</b>	58	<b>1</b>	<b>2%</b>	152	<b>80</b>	<b>53%</b>
		Staff	0	<b>0</b>	<b>0%</b>	0	<b>38</b>	<b>0%</b>	39	<b>17</b>	<b>44%</b>	39	<b>55</b>	<b>141%</b>
		Village	0	<b>0</b>	<b>0%</b>	13	<b>11</b>	<b>85%</b>	54	<b>0</b>	<b>0%</b>	67	<b>11</b>	<b>16%</b>
		da	210	<b>89</b>	<b>42%</b>	560	<b>411</b>	<b>73%</b>	1900	<b>702</b>	<b>37%</b>	2670	<b>1202</b>	<b>45%</b>



## Appendix 5: Financial: Actual financial performance by financier; by component and disbursements by category

**Table 5A: Financial performance by financier at 30.04.2015**

Financier	Appraisal (USD '000)	Disbursements (USD '000)	Balance	Per cent disbursed
IFAD loan	19200	5479	13721	29%
Government	3221	1547	1674	48%
Beneficiaries	3994	631	3363	16%
<b>Total</b>	<b>26415</b>	<b>7657</b>	<b>18758</b>	<b>29%</b>

**Table 5B: Financial performance by financier by component (USD '000)**

Components	IFAD Loan			Government			Beneficiaries			Total		
	Appraisal	Actual	%	Appraisal	Actual	%	Appraisal	Actual	%	Appraisal	Actual	%
1. Smallholder and Non-farm Enterprise Investments	7 667	898	12%	0	692		3 569	631	18%	11 236	2 221	20%
2. Village infrastructure investments	8 152	3 103	38%	1 793	546	30%	425	0	0%	10 370	3 649	35%
3. Institutional strengthening and PM	3 381	1 478	44%	1 428	309	22%	0	0		4 809	1 787	37%
<b>Total</b>	<b>19 200</b>	<b>5 479</b>	<b>29%</b>	<b>3 221</b>	<b>1 547</b>	<b>48%</b>	<b>3 994</b>	<b>631</b>	<b>16%</b>	<b>26 415</b>	<b>7 657</b>	<b>29%</b>

**Table 5C: IFAD loan disbursements (SDR, as at 30.04.2015)**

Category	Initial Allocation (1)	Revised Allocation (2)	Disbursement (3)	Balance (2) - (3)	% disbursement (3)/(2)
Authorized Allocation Designated Account	0	0	1 623	-1 623	100%
1. Civil Works	5 130	5 450	2 020	3 430	37%
2. Vehicules, equipment & goods	330	330	242	88	73%
3. TA, training & workshops	1 470	870	87	783	10%
4. Co-financing and investments	3 370	3 500	460	3 040	13%
5. Agricultural inputs	940	630	33	597	5%
6. Recurrent costs	800	1 300	704	596	54%
Unallocated	40	0	0	0	
<b>Total</b>	<b>12 080</b>	<b>12 080</b>	<b>5 169</b>	<b>6 911</b>	<b>43%</b>

Bank balance 2 207

## Appendix 6: Compliance with legal covenants: Status of implementation

Section	Covenant	Target/Action Due Date	Compliance Status/Date	Remarks
<b>Section B 2</b>	The Borrower shall pay to the Fund interest on the principal amount of the Loan outstanding.	Semi-annually, payable on each 1 June and 1 December. To be routinely monitored for compliance.	Complied with.	
<b>Schedule 1 Section 7</b>	The Borrower, through MFAL, shall authorise UNDP to hold and disburse Loan Funds on its behalf as set forth in the Loan agreement and the UNDP Service Agreement. To this end, UNDP shall use its own official corporate account to receive funds from the Special Account.	To be routinely monitored for compliance.	Complied with.	
<b>GC 4.02 (b)</b>	No withdrawal shall be made from the Loan Accounts until the first AWPB has been approved by the Fund and the Fund has determined that all other conditions specified in the Financing Agreement as additional general conditions precedent to withdrawal have been fulfilled.	To be routinely monitored for compliance.	Complied with.	
<b>GC Section 4.04 (d)</b>	If the Borrower requests a withdrawal from the Loan Accounts for amounts to be paid thereafter for Eligible Expenditures, the Fund may, before transferring such amount to the Borrower, require that the Borrower provide evidence satisfactory to the Fund showing that previous withdrawals have been properly spent for Eligible Expenditures. The Fund may place reasonable limits on the amount that the Borrower may withdraw in advance or the overall balance of such advance withdrawals, and may require that such amounts be held in a freely convertible currency and/or be held in an account designated for that purpose in a bank acceptable to the Fund.	N/A		
<b>GC 4.08 (a)</b>	All expenditure under the Financing shall meet the reasonable cost of goods, works and services required for the Project and covered by the relevant AWPB and procured in conformity with the Fund's Procurement Guidelines.	Continuous.	Complied with.	
<b>GC 7.01 (b) (ii)</b>	MFAL shall submit draft AWPBs to the Fund for comments and approval.	No later than 30 days before the beginning of the relevant Project Year. To be routinely monitored for	Partially complied with.	The 2015 AWPB was submitted to IFAD on December.

Section	Covenant	Target/Action Due Date	Compliance Status/Date	Remarks
<b>GC 8.03</b>	MFAL, or other party so designated in the relevant Agreement, shall furnish to the Fund periodic progress reports on the Project, in such form and substance as the Fund shall reasonably request. At a minimum, such reports shall address (i) quantitative and qualitative progress made in implementing the Project and achieving its objectives, (ii) problems encountered during the reporting period, (iii) steps taken or proposed to be taken to remedy these problems, and (iv) the proposed programme of activities and the progress expected during the following reporting period.	To be routinely monitored for compliance.	Complied with.	
<b>GC 9.02</b>	MFAL shall deliver to the Fund detailed financial statements of the operations, resources and expenditures related to the Project for each Fiscal Year prepared in accordance with standards and procedures acceptable to the Fund and deliver such financial statements to the Fund within four (4) months of the end of each Fiscal Year.	To be routinely monitored for compliance.	Partially complied with	MFAL delivers to the FUND some financial statements on disbursement, but not on commitments (signed contracts).

## **Appendix 7: Knowledge management, Learning and Innovation**

### **Knowledge Management**

Following a recommendation from the 2014 supervision mission, the PMU has moved forward in introducing several tools to better manage and disseminate knowledge. The PMU is producing material based on project experience and increasingly using social media to disseminate good practices and testimonials as described below.

With the integrated availability of data gathered through different kind of surveys, the PMU set-up an M&E website (<http://akakprojesi.wix.com/akakp2015#!home/mainPage>). The website is intended to share information with project staff as well as with the general public. Key activities description with their level of satisfaction is disseminated and publically shared through graphs, color-coding symbols, survey results, beneficiaries insights, statistics about procurement, areas of intervention, gender disaggregation, training subjects and materials, etc. This practice is highly relevant to MFAL, project staff and the beneficiaries. In addition, the PCU Regional Coordinator regularly interprets the results to successively adjust the planned activities according to the areas of intervention's specificities to enhance performance. While additional attention should be given to results monitoring, the mission praised the team for the use of the M&E system for decision-making.

A Business Intelligence Platform is included whereby the project generates, stores and reports data through an online platform. This cloud base platform allow users to access data, create query tables, and dynamic reporting. Another feature includes video reporting for which the PMU prepares videos in several categories: i) training, i.e. relevant activities are recorded during the implementation stage and shared with the public through social media (i.e. you tube); ii) success stories, i.e. success stories are recorded in video formatting to better illustrate the successful results of the activities to stakeholders; and iii) activity introduction, i.e. the purpose and the progress of project activities are disseminated to the public in video formatting. Each activity progress is summarized in dashboards so that related key results can be used for decision making.

The mission acknowledges PMU actions in Knowledge Management and the use of various channels of communication to share project experience and learning. It advises PMU to develop a strategic communication/knowledge management strategy to guide further identification of appropriate learning materials to be disseminated according to the target audiences. The mission also urges Project M&E to keep track on the utilization of these materials by the project and by outside entities to get a sense of the extent of real dissemination of learning through project experience.

### **Innovation and Learning**

Following recommendations of the October 2014 follow-up mission, PMU worked out a new alternative for modern barns by switching from the expensive dairy barn model to the less costly and less complex semi-open fattening barn model. This would take down the requirement of area per cattle from 13 m<sup>2</sup> to 9 m<sup>2</sup>. It would have a significant impact on cost reduction and affordability. According to the feasibility study done by PMU, the construction of semi-open barns for smallholders is viable if farmers satisfy certain conditions specifically that no forage feed problem is experienced and that farms do not import feed from outside. This implies that farmers cultivating maize are suitable for this barn model and the solutions are feasible. The design of the new semi-open barns has been completed in the first semester of 2015 and three pilot constructions will be executed in 2015. The Supervision Mission considers this new design a very promising affordable innovation that will lead to increased livestock productivity for small holders. It is recommended that project M&E follow up closely on the dissemination and adoption of this new model and report results obtained at farm level systematically.

The mission concluded that the village based modern livestock handling facilities constitute a relevant innovation in the context of rural Turkey. It aims at improving the efficiency of delivering veterinary services in remote locations and at enabling villagers to conduct basic animal caring works and animal loading during sales transactions in a more controlled manner. In light of the good potential for replication elsewhere in Turkey it is recommended that careful monitoring and data collection in 2015 and 2016 should be undertaken by Project M&E system, to be followed by documenting the outcomes of their establishment with appropriate

knowledge management products (e.g. a small monograph with specifications or film material on their operation) to share the lessons learnt from the experience.

Similarly, with the completion of the ALM (an important innovation in the regional context and in rural Turkey) it will be important to capture relevant learning emerging from trends in sales practices and transactions, with a particular focus on the impact on smallholders in terms of sale prices, reduced transport costs and control of disease outbreaks due to the improved facility. Prior to Project Completion, MFAL may consider outsourcing a study covering such aspects in details. Relevant knowledge products both for MFAL and IFAD may be developed to analyse the effects of the shift towards upgraded and regulated livestock markets on smallholder's livestock keepers. This will be highly relevant for investments both elsewhere in Turkey and for other countries in the region.

The introduction of site specific factors in the design of the protective fencings installed in the pastures is considered a relevant contextual innovation in rural Turkey. The PMU has developed a design consisting of simple enclosures with concrete poles and galvanized wire mesh fences with a single paddock to facilitate carrying out basic animal caring works. While utilized only for a few months in 2014 prior to the winter months, these investments have been highly appreciated by the beneficiaries, mainly in connection with their function as protection from wild animals and theft.

The PMU is considering the implementation of additional investments in village infrastructure which would rate as innovative in the context of the project area. These include solar powered Livestock Water Facilities and sanitary sewers with Natural Treatment Plants. Discussions undertaken with the SPA technical staff in Ardahan envisaged the possibility to pilot the construction of water storage facilities for livestock with PE liners, which provide an attractive and possibly cheaper alternative to the construction of zoned earthfill embankments to collect seasonal runoff where no alternative water sources can be developed. Monitoring and Evaluation are essential to follow up on potential outcome of these innovations.

Artvin project districts are popular with the local fruit and vegetable varieties growing in traditional farms. The varieties are not properly preserved for the future despite the unique characteristics such as flavour, texture and organic make up. An important innovation of the AKADP is the establishment of polycarbonate greenhouse that will be used for the production of local variety seedlings and genetic conservation. The greenhouse will be managed by Artvin PDFAL – Vegetative Production Section Directorate. The target is to cultivate 20,000 local olive saplings, 5,000 tomatoes seedlings and 1,000 mulberry saplings in the first year and reach to 100,000 saplings by the end of the 5<sup>th</sup> year of the investment cultivating 500 hectare area. Saplings and seedlings will be distributed to the farmers across the villages. Here again careful monitoring and evaluation of this innovation by the project is essential.

An important learning resulting from the project experience so far, is the value of partnership with local institutions for effective and efficient implementation of village infrastructure schemes. The implementation arrangements made with the SPAs in Kars and Ardahan, recommended by the October 2014 IFAD follow up mission, have proven highly effective for designing and contracting construction works both for pasture roads and for Livestock Water Facilities. Such partnership resulted in a significant acceleration of the village infrastructure activities under the AKADP. Moreover, the high competition among local contractors resulted in cost savings that will ultimately allow for a higher than anticipated outreach both in respect of the AWPB targets as well as in respect to the overall target of the Component. Pending the finalization of the works with adequate quality standards, the arrangements with the SPAs are deemed the most appropriate for the implementation of "low complexity-low-cost" infrastructure at scattered locations. The SPAs carry out the design, tendering and daily supervision of the works in accordance with National regulations. The PMU retains its key role in the evaluation of the investment proposals and on Quality Assurance of both the designs and the works. With this arrangement, the Project is effectively mobilizing additional resources (both in kind and financially, as the SPAs cover the cost of VAT) that were not envisaged in the original project design.