

## **Republic of Turkey**

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### **Ardahan-Kars-Artvin Development Project Supervision Report June 2014**

#### **Supervision report**

#### **Main report and appendices**

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## **Abbreviations and acronyms**

ALM	Ardahan Livestock Market
AKADP	Ardahan-Kars-Artvin Development Project
GDAR	General Directorate of Agrarian Reform
MFAL	Ministry of Food, Agriculture and Livestock
P/DDFAL	Provincial and District Directorates of MFAL
PMU	Project Management Unit



## **Ardahan-Kars-Artvin Development Project (AKADP)**Supervision mission: June 2-20, 2014

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

1. An IFAD mission conducted a supervision mission in Turkey from June 2 to 20, 2014 to assess the project implementation progress and provide guidance to accelerate implementation and subsequently disbursements. The mission visited Kars, Ardahan and Artvin and was accompanied by the Project 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, heads of various farmer organizations and local administrations and the specialist who is providing technical assistance to the PMU for the establishment of milk supply chain and collection centres in the project area.
2. The AKADP constitutes an investment of USD 26.41 million, of which IFAD loan amounts to approximately USD 19.20 million. The Project that scheduled for completion in 30 September 2015, is about to complete its 4<sup>th</sup> year and approximately USD2.8 million or 23.5% of the IFAD Loan has been spent. Hence, it has been rated “**problem project**” within IFAD portfolio review analysis.
3. The findings and recommendations of this draft Aide Memoire were reviewed and endorsed at a wrap up meeting in Ankara on 10 June 2014, which was chaired by Dr. Gürsel Küsek, General Director of the General Directorate of Agrarian Reform (GDAR).
4. The mission would like to thank to 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.

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

5. It is mission’s assessment that Project performance is **moderately unsatisfactory**.
6. Since effectiveness, the Project implementation has been delayed due to a number of factors including the: i) changing of the PMU Regional Administrator; ii) reorganization and renaming of the Ministry of Agriculture and Rural Affairs as the Ministry of Food Agriculture and Livestock and the responsible general directorate and department; iii) late recruitment of PMU staff; iv) late procurement of Project vehicles and agricultural equipment and machinery for demonstrations; v) director and staff turnover at the provincial and district directorate levels and vi) technical field staff turnover and shortages. The mission learned that finally, the PMU has been expanded through recruited and/or seconded staff, vehicles and agricultural machinery and equipment are procured, the working environment has become more stable, and the first set of training programs provided for farmers’ organisations, farmers and some staff has resulted in helping the stakeholders to use a common language. These developments heightened the morale of all stakeholders and resulted in more commitment and ownership of the Project.

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<sup>1</sup> The mission consisted of Ms Nedret Durutan, Team Leader and Agriculturalist; Mr Michele Pirazzoli, Rural Infrastructure Specialist; Ms Sigrid Giencke Marketing and Value Chain Specialist, Mr Cuneyt Okan, Rural Development Specialist; Ms Denisa Butnaru, Financial Officer. During its fieldwork the Mission was accompanied by a MFAL team led by Mr. Ümit Bingöl Department Head, Mr. İlker Manyaz Coordinator, Ms. Nejla Furtana and Ms. Pınar Avşar, General Directorate of Agrarian Reform, Department of Rural Development, MFAL. The UNDP team comprised Mr. Arif Öztürk, UNDP Project Administrator; and Mr Guray Balaban, Infrastructure Specialist.

Agreed action	Responsibility	Agreed date
Initiate impact surveys in activity areas as input for M&E	PMU	Beginning of July 2014
Finalize Feasibility Study for the Ardahan livestock market	PMU, DDFAL	End July 2014
Apply to IFAD to modify matching grant ratios	PMU/MFAL	July 2014
Complete operations and management study for ALM	PMU, Ardahan PDFAL	30 August 2014
Develop Pipeline of for 2015-2017 including implementation arrangements (readiness for extension, if requested)	PMU, MFAL	15 September 2014
Review of activity menus and provincial strategies for 2015 based on location (province/district)	PMU, P/DDFAL,	Sept 2014
Increase AKADP annual Loan budget allocation from MoD for 2015	MFAL	30 September 2014
Ready ALM for Temporary acceptance of construction	MFAL, UNDP	20 December 2014
Horticulture expert provided by GDAR to support investment decisions	MFAL	

## C. Outputs and outcomes

### 7. Component 1. Smallholder and Supporting Non-farm Employment.

8. 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 to support 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.
9. The Project has made progress in the recent months, particularly since the last mission in 2013, and has implemented a number of activities with differing results. Due to the delays in project implementation that resulted in low disbursement, the Project followed a more "hardware-oriented approach", which was not directly complemented with the related "software" in terms of timely training and extension services. Furthermore, the mission observed that there is a need for a concerted approach that would create synergies, sustained results and allow impact assessment.
10. As outlined in the Design Report, *"the Component 1 offers an initial menu of investments and corresponding beneficiary training ... to poor smallholders, aimed at improving practices in livestock husbandry and crop production including horticultural crops. The initial menu is flexible and should be amended in the light of Project experience."* It is recommended to review the approach of the Project in particular with regard to sustainable impact. A review of the approach should include two main aspects: i) the overall approach in the Project concept and ii) tailoring of provincial strategies that take into consideration the differences between them.
11. The Project should aim at involving private sector players without becoming an active market player/decision maker itself. It should be noted that in the context of value chain development and integration of smallholders, the Project should focus on empowerment and capacity building to achieve the project goal of reducing poverty. Access to markets and creating linkages in line with improved production will only be sustainable if the farmers understand that *farming is a business* and become recognized business partners. The same applies to the PDA and DDA staff: external expertise is required in strengthening their capacities to better understand and implement the commercial aspects of agriculture.
12. The overall rating of the component performance remains **moderately unsatisfactory**.
13. **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.
14. A specific focus in Project implementation has been given to the **construction of modern barns**. So-called "closed" barn types were initially promoted and 3 barns were completed: 2 in Kars and 1 in Artvin. The constraints detailed in the previous supervision report still prevail. Although farmers during design of the Project emphasized the need for modern barns and were enthusiastic about sharing the investment cost with the project, the decline of prices in the livestock sector in recent years has had severe impact on the demand with consequent loss of interest in these new facilities. In addition, the cost of the modern barns of TL 100,000 to 130,000 was seen as too high for small farmers rearing up to 20 cattle. An example was seen in Selim district of Kars where a farmer who had invested in the new barn had to sell most of his cows to finance his contribution of 30% to the investment cost. With the support of Government programs he will purchase 20 new cows plus related milking equipment and cooling facility for TL 130,000 whereof 50% will be grant provision, from a different government support program. However, with the investment in the new barn and new cattle he has become indebted and lost some of his major income for several months.
  15. Based on the negative experiences, the PMU carried out comprehensive cost-benefit analysis of such barns under the prevailing economic conjuncture. The calculations indicate that currently the investment is financially not viable below 50 cattle. Due to the climatic conditions in the region and technical requirements set by the Government for hygiene, animal welfare etc. it is difficult to reduce the costs for such investments.
  16. During the mission, an increase of the grant component up to 90% for investments in new barns was discussed since the design report emphasised on the need to subsequently adjust the ratio set for the co-financing of investments in the light of experience gained in the Project. In general, matching grant schemes are designed to mitigate the risks of investments, not to subsidize unprofitable investments. Furthermore, matching grant schemes are used to stimulate investments and motivate others to follow. If the (full-cost) investment is financially not viable it can't be replicated.
  17. In the frame of EU IPARD program investments, modern barns of less than 50 cattle are supported with 50% subsidies. According to the Project, related investments are mostly done by entrepreneurs interested in entering the growing milk market, but less by larger traditional farmers.
  18. It is recommended not to further promote new barn investments for poor farmers (owning less than 20 registered cattle) until suitable low cost solutions are found. Here, the Project should seek for external expertise since it is not the Project's task to define suitable technologies. Among options that may be considered are simple low cost repairs in the exiting barns by the farmers such as for improved light, ventilation and applying white washing.
  19. Based on the recommendations of the previous mission: i) two teams (one professional + one worker/each) were established; ii) necessary machinery and equipment, and iii) 2 trucks were purchased to establish the demonstrations. These teams need to be backed up technical staff in the districts by the provincial and district directorates of MFAL. However, the staff shortage still prevails in the project area. On the other hand, access to small funds continues to be a bottleneck for smooth implementation of planned demonstrations. The mission observed that although some improvement was observed in the quality of the demonstrations there is still room for further improvement.
  20. To date, 22 forage demonstrations for hay, silage maize etc. have been conducted. Although more discipline was applied in the selection of the demonstration farmers and farms, there is still need for improvement e.g. the silage maize demonstration visited in Ardanuç district of Artvin would hardly fulfil its intended objectives since even the farmer who is hosting the demonstration would not adopt the practice due to lack of resources (lack of rotary hoe, limited

resources for manual weed control by labor etc.). Although he is aware of the advantage of silage maize for livestock feeding, he prefers alfalfa since production cost is less and the stand easier to manage. It should be noted that in conducting demonstrations and developing recommendations, the farmer categories (including scale of production, resources, assets, production purposes, education level) have to be carefully taken into consideration.

21. In 2013, the Project has supported farmer organizations by organizing visits to successful cooperatives such as those in Tire/Izmir, and Aksaray. Twenty five couples had the chance to benefit from **training** at the SÜTAŞ Farmer School in Aksaray.
22. “Nimbus” training courses developed by the PMU included various topics such as new born calf care, calf feeding, milking and barn hygiene, udder diseases and manure use and were delivered in the villages (Table 1).

Training provider	Kars	Ardahan	Artvin
	Rural Development specialist (veterinarian)	PDFAL Focal point (veterinarian)	Veterinarians in Ardanuç DDFAL
Number of Districts and households (hh)	25 hh in 4	25 hh in 4	25 hh in 1

23. The topics selected were those most common problematic areas in livestock production identified by the practicing veterinarians in the region. After the courses, simple tool kits were distributed to the farmers to apply some of the newly learned practices. A total 186 female farmers, as primary and traditional responsible for livestock, benefited from the courses. The mission met some of the participants of such courses in Ardanuç district of Artvin who reported their satisfaction. Before and after the courses, simple surveys were conducted by the PMU to collect baseline information and the change. The post-training survey was conducted shortly after the courses. The results presented by PMU indicated significant improvements in the practices. However, in order to see the sustainability these surveys need to be repeated periodically.
24. Despite the progress made in training, the mission is concerned with the delays in the inclusion of the priority training on ‘farming as a business’, where farmers should be supported in the preparation of basic bookkeeping, simple business plans etc. that will help them to survive and move towards commercialization.
25. 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 whose tasks include: i) professional business development support to implementing parties (farmers dairy associations, GDFAL and DDFAL, Project team); ii) analyse, investigate and deliver concrete implementation plan to successfully establish a working model for the supply and value chain of raw milk in selected regions; iii) provide technical knowledge in developing appropriate business and marketing plan/strategy; iv) design the overall supply chain that covers collection, transportation, quality control, sales, and pricing; v) develop strategic plans to make sure that the project works with utmost efficiency in the first years of the implementation and forecasting plans for the successive years including risk factors and measures to be taken, growth considerations and financials; vi) the development of technical standards for all required equipment, devices and other goods for procurement; vii) work closely with investors to identify their organizational capabilities and develop appropriate action plans that are doable; viii) monitor the implementation plan and make sure that the activities are in line with the plan and ix) identify areas of failure or ineffective procedures, investigate the source of issues, and develop appropriate action plans to correct the processes
26. Given the frustration of farmers with the local dairy industry including middlemen collecting the milk with prices that are not satisfactory for the producers, the expectations with establishing the milk collection centres is high. Although it has been reported that meetings of PDA with local dairies did not improve the relationship between dairies and farmers, the involvement of the dairies in the Project activities is fundamental. A collection centre in Cildir district reported of

- good relationship with a dairy in Kars with higher than accustomed prices being paid for the milk; an example proving possible changes. As outlined in last year's supervision report, establishing linkages to the private sector in the value chain are important. However, the proposed workshops involving relevant value chain actors have not yet been conducted.
27. Under Component 2, construction of the **Ardahan Livestock Market (ALM)** is continuing. An increase in the cost last year resulted in changes in the design of the market where the planned administration building was downsized. Wholesale traders interviewed during the supervision mission highly appreciate the construction of the market but were disappointed about the decision on the scaling down. The TA that will be hired by the Ardahan Municipality through SERKA (Serhat Development Agency) for management and operations of the ALM would also develop recommendations regarding improvements to the services that would be in demand by the potential users of the ALM.
28. In the context of the livestock market in Ardahan the establishment of further markets in the regions e.g. in Göle District of Kars where livestock production is the single sector for income generation. Traders and the Mayor of Ardahan clearly stated that smaller satellite markets could become a risk for the larger market although market places such as Göle are of interest for farmers and traders. It was recommended to allow one market day on the livestock market in Göle to collect animals from nearby villages for the larger Ardahan market. Parallel operation of several markets could weaken both market locations. It is recommended to develop a master plan for the provinces to define and assess the relevant locations for livestock markets.
29. **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 for greenhouse and open field vegetable production and orchard establishment and maintenance); farmers training courses (e.g. production of marketable fruits and vegetables, efficient irrigation, primary agro-processing, storage/post-harvest technologies and horticultural production for women); and farmers exchange visits for fruit and vegetable production.
30. Vegetable and ornamental crop production: There are two main activities: i) demonstrations, and ii) co-financing program. For demonstration purposes, 2 plastic greenhouses (200 m<sup>2</sup> each) were constructed in Kağızman/Kars that will be used for commercial vegetable production (tomato, pepper) as well as ornamental plants, a subsector with high demand especially from municipalities. The Project's cost calculations indicated the financial viability of the investment for both vegetables and ornamental plants. The cumulative investment costs were USD 17,000 including construction and the production inputs. However, the PMU seeks lower-cost types that would enable them to expand the program with more beneficiaries being able to afford them. In addition to these commercial greenhouses, 15 family greenhouses (9 in Selim and 6 in Sarıkamış districts of Kars) were established; they are in demand, especially to demonstrate vegetable production to improve the diet of the rural households but also as introduction into commercial greenhouse production. Women who received training in advance run all the greenhouses. Seven women from Kağızman were given the opportunity to visit the ornamental plant greenhouses in Uzundere in Erzurum, a neighbouring province where the greenhouses are managed by an informal group of women farmers. The participants contacted the members of the group and received information about the production, management of the group and their marketing strategies.
31. Preparations for 2014 co-financing program for greenhouses almost complete. Announcement of the program is expected by the end of June 2014 and will be for Kağızman district in Kars. The PDFAL planning to complete the constructions by fall. The program for support to lowland farmers in Yusufeli district of Artvin is still under considerations. The construction of plastic tunnels for those farmers who would continue production at higher elevations has been discussed with the PDA director in Artvin. According to the recent announcement by the government, inundation of the agricultural land along the Choruki River due to dam construction will not take place until 2018. Therefore, farmers prefer to continue production in their lowland. On the other hand, the process of state land allocation to those who have to move higher

- elevations has already started. This will increase the plot sizes for individual farmers and allow them to reach economies of scale.
32. **Fruit production:** No new demonstrations were conducted since 2013 but the co-financing program for orchard establishment has gained momentum. Four orchards in Kağızman/Kars have been established; 3 with walnuts and 1 with apple. The mission had the opportunity to visit one of the walnut orchards that was technically sound. Applications from Yusufeli farmers that were mostly for walnut orchards were not endorsed by MFAL due to a number mistakes/gaps in the application forms. Therefore, the applications were cancelled and the new announcement for the co-financing program will be made by the beginning of July not to miss the fall season for planting. In order to avoid such problems, PMU is preparing a checklist for those who are preparing and controlling the application forms.
  33. The mission had the opportunity to visit an orchard demonstration that was established last year in Kağızman/Kars and met with the demonstration farmer who is experienced in orchard management. The apricot orchard that is 5 da has expanded by the farmer but with apple (Fuji variety) to manage the risk of early frost damage of apricots.. The demonstration field covered 5,000 sqm planted with apricots. The investment costs for the co-financed expansion summed up to TL 25,000 whereof the farmer financed TL 10,000. The investment is financially viable; the produce will be sold at farm gate to traders exporting to Russia and Azerbaijan.
  34. Challenges for the further implementation of the modern orchard co-financing program are mainly seen in the financial viability of the investments. Based on cost calculations prepared by the Project modern orchards require a minimum plot size to be viable. This affects in particular regions with small land plots while the feasibility will also depend on the crop chosen for the orchard. Given the differences of the selected provinces it is recommended to define individual strategies for each province. It is recommended to clearly define what are viable and sustain investments for the different project regions. In this context, the Project should consider also non-agricultural employment and investments.
  35. A further challenge in the development of orchards is the obligation to fence the plot co-financed with Governmental support. Fencing cost can go up to TL 6,000 impeding the investment. The mission discussed the issue with the PMU and Ministry and it was agreed that the Ministry would get a waiver for the project area by modifying the guidelines. It is recommended to accept simple fences set up by the farmers and to include their labour contribution as in kind own contribution to the investment.
  36. In the context of provision of contributory grants the ratio of local contribution has been discussed since the design report emphasised on the need to subsequently adjust the ratio set in the light of experience gained in the Project. Based on Project experiences it is recommended to increase the grant contribution to 70% to attract more farmers for the program.
  37. **Farmer training** in horticultural production has started in 2013 with a training course in olive tree grafting followed by practical courses in Egridir and in Izmir. An ambitious training program for horticultural production and orchard and greenhouse management is outlined in the 2014 AWPB. The preparations are in process.
  38. **Sub-component 1.3. Supporting Non-Farm Employment:** Several factors have contributed to the rising demand for skills in the labour market including technological and organizational change, need for productivity increases, developments in trade etc. During last supervision mission it was agreed in collaboration with the GDAR project staff and the PMU to examine opportunities for micro and small enterprise development through a series on topical studies to identify opportunities with potential for further support. Until to date no progress has been made in this sub-component; the agreed studies are still pending.

Agreed action	Responsibility	Agreed date
Development of provincial strategies addressing the local conditions	PMU, PDFAL, DDFAL	Sept 2014
Implementation of value chain analysis (through TA) in livestock, dairy and horticultural sector	PMU	As soon as possible
Preparation of comprehensive feasibility studies for future livestock markets	PMU, MFAL, Municipalities	Oct 2014
Preparation of detailed long-term training program (with annual adaptations to progress) with focus on farming as a business alongside technical trainings.	PMU/MFAL	Sept 2014
Conduct technical studies (through TA) to get to viable technical solutions in the field of modern barns, greenhouses, fencing and other related investments	PMU	Nov 2014
Refrain from further promotion of modern barn investment until viable solutions have been identified	PMU	July 2014

## Component 2 – Village Infrastructure

39. **Overview:** Expenditures foreseen under Component 2 for 2014 are USD 2.7 million, intended for: i) the finalization of the ALM; ii) the implementation of 2 livestock handling facilities (squeezing chute, working alleys, weighing scale, loading ramp, and disinfection dip); iii) the implementation of 7 protective fenceings for livestock in the pasturelands; and iv) the procurement of design services for village infrastructure to be implemented in 2015. Due to the late start of the construction season, no expenditures have been incurred, to date, in respect of these activities, but the main conditions for the Component to meet its annual financial and physical targets by end 2014 are in place. MFAL and the PMU are noticeably taking action to overcome the challenges relating to the completion of physical works and to the operational sustainability of the ALM. While the project is well positioned to meet its annual targets, implementation is lagging at least 2 years behind schedule in respect of cumulative targets. The main challenges to the successful implementation of the Component are linked to the relatively short time available to carry out technical feasibility assessments, design and construction of additional small scale infrastructure investments for which project villages have requested support to the PMU. Upon completion of the 2014 construction programme the available balance for civil works to be financed with IFAD loan proceeds is estimated to about USD 4.6 million<sup>2</sup>, of which projects at an advanced design stage account only for 15%. The PMU has developed a draft investment plan extending up to 2017, i.e. assuming a 2 years extension of the IFAD Loan. Evidence from feasibility studies is still required in order to consolidate this investment plan identifying a pipeline of subprojects to be implemented supporting the request for a project extension anticipated to the mission by MFAL. Actions agreed to speed up this process and to improve overall performance hence the **moderately unsatisfactory** rating of the Component are detailed in this Aide-Memoire.
40. **Ardahan Livestock Market (ALM).** A thorough review of the designs of the ALM has been carried out by the designers under the coordination of MFAL, paving the way to lifting the 4 months suspension of the works and to restating construction by end April 2014. The review has been carried out in line with the recommendations of the 2013 supervision mission and comprised mainly of: (i) reducing the thickness of C20 concrete slabs for the paddock pavements from 20 cm to 15 cm of reinforced (mesh) concrete; (ii) a combination of fencing, slope dressing, concrete wall and roadside ditches to prevent uncontrolled access; (iii) removal of the administrative building and use of an existing building for administrative purposes; (iv) removal of the open paddock area “18”; (v) container-type toilet facilities. The amended contract price is USD 3.1 million, or 9.4% higher than the original contract price. A settlement

<sup>2</sup> Subject to release of IFAD Loan funds by the Ministry of Development for the cost increase of the ALM before end 2014

has been reached with the designers/supervisors about the continuation of their assignment at no additional cost for the project.

41. The mission visited the site and noted progress in the execution of the earthworks, foundation and retaining walls, which are 90% complete in the 8 paddocks included in the design. Casting of the anti-seismic foundation beams has been completed in 2 of the 3 covered paddocks and 6 concrete columns and beams to support the steel roof structure are also complete. The first truckload of steel (20% of the total 300 tons) has been delivered to site. The technical specifications require the use of ready mix concrete, contributing to the standard quality of the visible concrete works. Discussions undertaken with the contractor's engineers have been geared to ensure that appropriate actions are taken by the in respect to: i) sorting and compaction of the backfill material under the concrete floor slabs; and ii) mobilizing an additional crew with a set of plywood formwork to allow casting of two sets of 6 columns in parallel. Following the 4 months suspension of the contract and due to an earlier 2 months extension of the completion date, the temporary acceptance is scheduled before year end. This target is deemed technically feasible, subject to the contractor taking appropriate actions as noted above.
42. Capacity: Based on the revised design, the facility will have the capacity of 1 080 sheep and 2 060 cattle. A maximum of 360 cattle will be in a closed barn and 730 in semi-opened paddocks, while all the other paddocks will be opened. The anticipated benefits include reduced transaction costs to farmers, reduced occurrence of outbreaks and incremental sales for most of the 15,000 registered farmers across the 5 Districts of Ardahan, which are mainly livestock keepers. Considering the projections of benefits assessed by the PMU and the latest update of the investment cost, the IRR drops to 8%.
43. Support for operations: Following up on a recommendation from the 2013 supervision mission, albeit with some 2 months of delay, the PMU has taken action to increase the likelihood of institutional, financial and environmental sustainability of the ALM upon completion of the construction. The ToRs for a team of specialized consultants to develop an operational plan for the ALM have been finalized and submitted for financing to the SERKA Development Agency, which will announce the outcome of the application over the next 3 weeks. The mission commends the proactive approach of the PMU to mobilize co-financing of project activities. It was agreed that a key aspect to be dealt with in the study will be the development of a management plan for the use or safe disposal of the animal waste produced in the ALM.
44. Budgeting: The mission notes that the budget allocated in the 2014 AWPB for the finalization of the ALM does not include the USD 265,000 cost increase resulting from the design review carried out in early 2014, hence MFAL would take action to allocate such additional resources to AKADP from either IFAD Loan or Government budget during the forthcoming annual project performance review in September 2014.

Agreed action	Responsibility	Agreed date
Mobilization of TA for the management of the ALM	PMU, UNDP	30 August 2014
Increase AKADP annual Loan budget allocation	MFAL	30 September 2014
Temporary acceptance of construction at the ALM	MFAL, UNDP	20 December 2014

45. **Village infrastructure.** Investments in village infrastructure facilities identified for implementation which are at an advanced stage of design cover 16 villages. These include 2 livestock handling facilities, 7 protective fencings and 7 gravity fed livestock water supply systems in the pastures. The overall outreach target of these investments is 2,450 HH across the three project Provinces: Kars (10); Ardahan (3); and Artvin (3).
46. Livestock handling facilities and protective fencings. The design packages for livestock handling (for a.i., vaccinations, etc.) and protective fencings, serving 900 HH in aggregate, have been completed during the period under review. The tender for the construction/installation will be

announced before end-June to allow for use of such facilities prior to the end of the grazing season. The mission notes that the identification of investments in livestock handling facilities constitutes a relevant innovation in the context of rural Turkey and it has been carried out following an ad hoc survey involving veterinaries and end beneficiaries. Site specific factors are considered in the design of the protective fencings and two type drawings have been developed to suit different road access conditions and sale practices. The mission recommends, however, to carefully consider the operational aspects for the collective use of these facilities, also considering the number of animals in a specific village. The option of installing protective fencings along consolidated transhumance routes shall be also considered. These relatively low costs investments (about USD 100,000 to serve 9 villages) will be piloted with Government financing in 2014. Replication on a wider scale with loan proceeds would be subject to assessment of results during 2015.

47. Access to Water. In line with the project design, during the period under review the PMU has completed the analysis of the benefit streams (in terms of reduced milk and meat loss) generated by the 7 livestock water supply systems in Kars Province for which the Field Engineer had completed a technical assessment. The procurement of a topographic survey along the proposed pipeline alignment required at 2 sites is still pending and needs to be procured in due course in order to finalize the design package. While technically feasible, a proposal for livestock water supply drawing water from a 120m deep borehole for which geophysical investigations have been carried out in 2013 was rejected for implementation due to major concerns over the its sustainable operation. The mission concurs with MFAL's approach to livestock water supply development focusing either on gravity fed systems or on shallow wells that can be fitted with solar pumps.
48. A demand assessment carried out by the PMU Field Engineer and covering 90% of the project villages in Kars and Ardahan<sup>3</sup> reveals the continued demand for gravity fed livestock water supply systems in the pastures, which was also confirmed by the field visits undertaken by the mission. Some 13 villages in Kars and 13 in Ardahan have applied for the development of such systems, followed by the demand for Livestock Watering Ponds in a total of 17 villages across the two Provinces. The mission recommends that building on this set of applications, the PMU focuses on the identification and design of additional livestock watering facilities based on spring tapping or shallow wells for the remainder of 2014, covering also Ardahan Province, where promising investment opportunities had been already identified in 3 villages<sup>4</sup> during the July 2012 IFAD implementation support mission. The mission emphasises that a sizeable tender package (indicatively 12-15 subprojects) of such investments shall be prepared before end 2014, hence allowing for the completion of tendering prior to the start of the 2015 construction season. Failure to meet this target would severely undermine the overall performance of the Component. The implementation mechanisms to carry out these works (either through UNDP or through the SPA under national procurement)<sup>5</sup> need also to be defined and administrative arrangements finalized in parallel to the preparation of the construction packages.
49. Link to value chains. In connection with the strengthened value chain approach, the mission supports the concept of extending the list of villages eligible for village-based infrastructure to the primary production areas, when the infrastructure directly contributes to the consolidation of the value chain (e.g. livestock water supply facilities in the villages delivering the milk to a project- financed collection centre).
50. **Investment perspectives** The PMU has developed a draft investment plan extending up to 2017, i.e. assuming a 2 years extension. Investments in small scale piped livestock watering facilities which are in high demand are at the centre of the investment programme. The PMU

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<sup>3</sup> The identification of 176 villages eligible for project activities throughout the life of the project has been completed.

<sup>4</sup> Tahtakiran, Yenidemirkapi, Baştoklu

<sup>5</sup> See AKADP 2013 Supervision Mission Aide Memoire para. 44 and the Procurement section of this Aide Memoire

has gained sufficient experience in budgeting and carrying out feasibility assessments of these facilities. However, the plan includes alternative options that are yet to be evaluated and supported through ad hoc feasibility studies as well as through the evaluation of the outcomes of the pilots (for the case of fencing and livestock handling facilities). To this effect, the mission welcomes MFAL's renewed and proactive engagement to support the planning exercise by fielding an experts' mission to the project sites to assess the feasibility and draw preliminary cost estimates for small scale irrigation works to be carried out in conjunction with land consolidation. The assessment of Livestock Watering Ponds construction would build on available studies and consultations with other relevant central agencies (DOKAP).

51. Ardanuç LSM. The mission reiterates the recommendation that a feasibility study be carried out to support decision making on the inclusion of the construction of the Ardanuç Livestock market in the project implementation pipeline. While legal issues concerning the alienation of the proposed sites are reportedly solved, the study shall cover all operational aspects and provide a preliminary cost estimate based on site specific requirements in terms of access and capacity. The Ardanuç DDFAL has renewed its commitment to complete the study and submit it for review to the PMU and to MFAL experts.
52. Pasture roads. Follow up on the use, benefits and durability of investments in pasture roads grading (financed entirely by the Government and implemented by the SPA) and in galvanized steel troughs carried out by the project in previous years is yet to be undertaken as part of the overall M&E activities. The assessment shall be geared to inform decision-making about the possible replication of such investments. The lack of analyses on completed projects provides continued evidence of the yet underdeveloped M&E system.
53. Nevertheless, the latest demand assessment carried out by the Field Engineer across the project villages reports 6 requests for troughs, while the demand for pasture roads rehabilitation remains widespread as confirmed by the mission field visits. Parallel financing in the amount of USD 500,000 has been reportedly secured by the Government to carry out pasture road grading in Ardahan through the SPA, but information about the villages included in the programme was not yet available at the time of the mission.
54. **Conclusion**. Considering the PMU implementation experience and given the short timeframe to carry out field activities in the project area, it is the mission assessment that it is highly unlikely that the Component would reach more than 60% of its outreach target (60 villages) and 60% of disbursement from the IFAD Loan within the current completion date of September 2015. However, the commitments and the proactive engagement of MFAL's management witnessed during the mission provide a sound basis for the project to develop over the next 3 months a credible pipeline of project investments for the period 2015-2017 that would substantially improve the Component's overall performance.

## D. AKADP implementation progress

### Project Implementation Performance

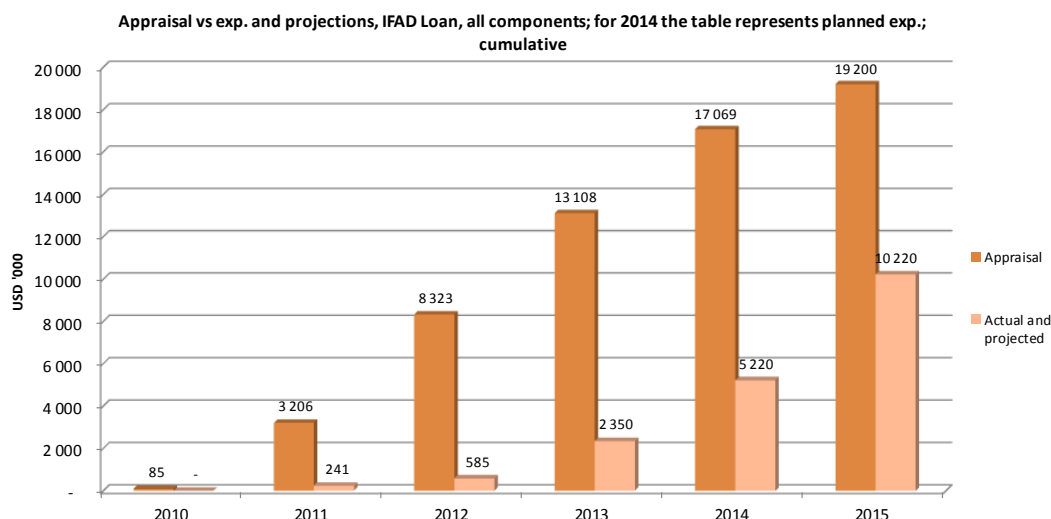
55. **Project Management**: Project management remains **moderately satisfactory** and continues to be carried out by the PMU located in the Kars PDFAL. As of the beginning of 2014, the overall guidance and supervision of AKADP has been transferred to the Department Land Rehabilitation and Irrigation Systems of GDAR at MFAL.
56. The principal functions of the PMU are to carry out the overall programming and budgeting of Project activities, take the lead in Project implementation in cooperation with the PDFAL s/ DDFAL and monitor and document Project progress. Currently, the PMU comprises the Regional Administrator (RA) with overall responsibility for coordination, a Field Civil Engineer, an Agricultural Economist and two Procurement Officers. One of the Procurement Officers, recently transferred from the previous posting at Artvin is also supporting the RA in M&E. An



- additional M&E Specialist will not be hired. As foreseen at design, the Kars PDFAL has seconded two Rural Development Specialists to the PMU.
57. Under the terms of 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.
58. With support from the PMU, the PDFALs/DDFALs are responsible for the management of smallholder investments under Component 1. All PDFAL and DDFALs have staff involved in the implementation of the Project at the field level.
59. Staff turnover at the PDFALs/DDFALs, both at technical and managerial levels continue to hamper envisaged progress. It must be noted that staff shortages particularly at the DDFAL remain as a chronic issue in the region.
60. Since the 2013 mission two PDFAL directors and seven technical staff have been replaced and shortages exist in all except three districts. Only one technical staff, the veterinarian, is in place at the Ardahan PDFAL. These shortages are reflected in the moderately unsatisfactory implementation. The PMU has developed a routine to summon all staff – new as well as current – to both briefing on the Project and update on developments. This comprises overviewing of the development objectives and targeting aspects, relevant design and implementation documentation and reactions of the Project to changing circumstances.
61. Brief and implementation-oriented reference manuals/checklists for each type of activity will be prepared for distribution to PDFALs/DDFALs by the end of the 2014 production season, to also incorporate the new lessons learned. The Project is also expected to further compile detailed ‘user’s manuals’ for co-financed investments (e.g. greenhouses, barns and orchards) including information on husbandry best practices, input use, yield estimation etc. for distribution to beneficiaries. These measures would provide the PDFALs/DDFALs staff with a permanent and living toolkit that would help mitigate the loss of accumulated practical know-how suffered due to frequent staff rotation.
62. **AWPB and Progress Report.** The AWPB is satisfactory and provides a comprehensive, detailed and succinct overview of activities. The AWPB for 2014 was received by IFAD end January and no objection was provided in early February. AWPB’s and Progress Reports are generated with the Planner, an Excel based software for IFAD reporting that organises and produces reports on quantitative Project data on the aspects of budget, expenditure, procurement, timing of activities, Project outputs and RIMS. IFAD had not received a full-fledged Progress Report at the time of the mission. The Project however remedied this by providing IFAD with a set of comprehensive and detailed tables, produced with the Planner, outlining progress spending and outputs until 30 April 2014. In view of this this; the AWPB and Progress Report are together rated **moderately satisfactory**. Together with the Regional Administrator the mission reviewed the progress achieved so far against 2014 AWPB targets. Most key activities had been initiated timely. Accordingly, coherence between AWPB and implementation is **moderately satisfactory**.
63. **Spending until Project end.** The AWPB for 2014 abides under a tight spending regime on the IFAD loan, with expenditure capped to approximately USD 2.9 million. The reason is a prevailing Government policy to restrict the use of external financial sources as a measure to remedy Turkey’s current account deficit.
64. With this budget, the Project’s estimated cumulative spending is some USD 5.2 million by end 2014 from the IFAD loan, 30% of the USD 17 million foreseen during design. Assuming the Project spends the currently projected USD 5 million in its last year 2015, this leaves a balance

on the IFAD loan in the amount of approximately USD 9 million at Project end, as can be seen from Table 1.<sup>6</sup>

**Figure 1: Cumulative Appraisal Cost vs. Projected Spending – IFAD Loan**



65. It was agreed that MFAL will evaluate the situation by end June 2014 in light of incurred expenditure from the IFAD loan, and propose a strategy and detailed actions to achieve a higher disbursement by the end of the Project. In light of the significant amount of funds projected to remain unspent at the end of 2015, the MFAL will have to consider whether there is sufficient justification to request IFAD for an extension of the Project, as well as cancellation of a portion of the Project funds.

Agreed Action	Responsibility	Agreed Date
MFAL will evaluate and propose a strategy and detailed actions to achieve a higher disbursement from the IFAD loan by the end of the Project	MFAL	End June 2014

66. **Monitoring and evaluation.** Monitoring and evaluation is **moderately unsatisfactory**. Data on Project spending and outputs is satisfactory, but the Project has not yet developed a system to monitor outcomes and impacts. The mission would like underline that momentum has picked up and outcomes and impacts need careful monitoring in the remainder of the Project. Despite slow progress and limited outputs, the mission underlines the necessity to derive the lessons learned so far and provide feed-forward to improve service delivery and promote scaling up. It is recommended that improvements and enhancements to the M&E system be made as soon as practicable to capitalize on the successes and learn from failures.
67. The Project M&E Officer has still not been recruited. The PMU Regional Administrator who had absorbed the responsibility for the monitoring of Project along his other duties is currently in the process of handing over a major portion of this responsibility to the Project's second Procurement Officer who has relocated to from Artvin to Kars. The mission found that this individual has suitable background and capacity to assume such tasks. This M&E/Procurement Officer will be located in the PMU and act under the overall supervision and guidance of the Regional Administrator. The mission endorses this transfer of duties, as it will release the capacity of the Regional Administrator towards his key functions

<sup>6</sup> NB these are approximate estimates, given that the appraisal target USD 19.2 million on the IFAD loan is expressed in USD while the loan is allocated in SDR whose USD value is subject to fluctuation in exchange rates.

68. The PMU uses an Excel based database. The mission reviewed the database and found it satisfactory. The data of the database feeds into the Planner, which is updated periodically by the M&E/Procurement Officer, and the UNDP Administrator. Consequently, reports on the Project's spending, outputs, timing of procurement etc. are easily accessible, comprehensive and precise.
69. Impact measurements are due. Currently the management does not have access to information on the quality and impact of Project activities on a systematic basis primarily because the M&E system is yet unable to generate any information on outcomes. As recommended by the 2013 supervision mission, the Project will employ a team of suitable surveyors e.g. university students from the local universities, to conduct periodic field surveys with Project beneficiaries and PDFAL and DDFAL staff starting in June 2014 and continue until access to sites becomes limited in winter. The surveys will be repeated at the beginning and end of the respective agricultural calendars of the provinces and be based on questionnaires standardised for each type of Project activity. With the implementation of new project activities in the pipeline (e.g. the pilot installation of livestock handling facilities) it becomes of paramount importance that M&E generate inputs and information to allow making informed decisions about the potential for scaling-up of activities during the remaining implementation period. The same applies to activities that were completed in previous years such as the provision of cattle troughs and financing for pasture road rehabilitation.
70. The objective of the surveys would be to: (i) provide management with information on quality and usefulness of Project activities for planning and taking remedial action; (ii) collect qualitative data on Project activities to identify success stories and models for replication; and (iii) collect quantitative data on the incomes and assets of the beneficiaries, thus providing the Project with a dataset for quantitative impact evaluation. The quantitative data would, through extrapolation from relevant beneficiary strata, allow evaluation of impact on at least the following levels: (i) incremental increase in farmer income and assets measured by IRR and NPV; (ii) employment creation; (iii) incremental increase in regional economic activity; and (iv) incremental increase in tax revenue to the government.
71. By the end of August 2014, MFAL has confirmed that it will provide the PMU with the requisite support to develop the questionnaires, train the surveyors; propose the mechanisms and procedures for information flow for maintaining and updating the database. It was agreed with MFAL that such support would also comprise drafting of guidelines and templates for managing the inputting of the data in a databank, guidelines for analysing data and drafting concise reports on project impact. If the PMU needs such technical assistance after August, external TA will be hired for this purpose. The ToR for this TA can be developed by the PMU based on the one ready for the M&E Specialist that had been planned to be recruited.
72. The Regional Administrator has commenced the development of a Database on the Project's Outputs and Impacts (DOI). The DOI will store and organise the data collected during the field surveys, and will be finalised by end August 2014. The existing database on Project spending and outputs will be integrated with the DOI. The DOI is based on Microsoft Access. Eventually, a front-end application could be developed to grant access to Project data also to other Project stakeholders such as MFAL, PDFALs, and DDFALs.
73. **Knowledge management.** Knowledge management is **moderately unsatisfactory**. It remains limited to the Project's periodic reporting to IFAD. The limited depth and breadth of knowledge management activities is partially due to the slow implementation progress, partially to limited PMU capacity and lack of funds for such activities.
74. Basic knowledge management activities should be initiated immediately. The Project should prepare Learning Materials on the various types of support extended by the Project. This should comprise detailed 'user's manuals' for co-financed investments (e.g. greenhouses, barns and orchards) to provide information on best husbandry practices, inputs, expected yields etc. These manuals should be supported by films that document the establishment of Project

demonstrations and co-financed investments. The PMU is collecting material for the manuals and films in the course of Project implementation, and will have completed this work by the end of the season.

75. The Project webpage should be completed. It would i) disseminate information to beneficiaries and other stakeholders about the Project's benefits and modalities for participation, and ii) upload the Learning Materials. It was agreed that the PMU and UNDP will explore the possibility to set up the website in two stages: i) a simple site architecture for purposes of information dissemination to be established by end of July 2014; and ii) a more sophisticated and user friendly design necessary to accommodate the Learning Materials, to be launched by end of December 2014.
76. Documentation should be improved. The Project should document results on farmer training and demonstrations to track changes in behaviour and investment patterns, once comprehensive results are available from the Periodical Field Surveys.

Agreed Action	Responsibility	Agreed Date
Recruit suitable surveyors such as university students to conduct surveys with beneficiaries on Project activities.	PMU	End July 2014
Provide the PMU with technical assistance for managing field surveys and related data flows, analysis and reporting.	MFAL	End August 2014
If MFAL technical assistance for managing field surveys and related data flows, analysis and reporting, proves not to be sufficient by end August 2014, hire external TA to support the PMU	PMU/MFAL/UNDP	Early September 2014
Contract Short term Evaluation Expert	PMU	End July 2014
Finalise the Microsoft Access based database to store all Project data on inputs, outputs, outcomes and impacts.	PMU/Regional Administrator	End July 2014
Compile detailed 'user's manuals' and films for investments.	PMU Agricultural Economist	End December 2014
Explore the possibility to establish the Project webpage for dissemination of information on i) project benefits and participation modalities and ii) learning materials.	PMU/UNDP	End August (for i) End December (for ii)
Document results on farmer training and farmer demonstrations in terms of change in behaviour and investment patterns.	PMU/M&E Officer	Continuous

77. **Gender focus.** Gender focus in implementation is rated **moderately satisfactory**. Gender empowerment continues along traditional lines and division of labor on-farm. Women have received awareness training in ornamental plant production and small greenhouses where vegetables for home consumption are produced. At all demonstrations visited, it was observed that men and women farmers who traditionally share the workload represented the beneficiary households equally.
78. In early 2014, training on livestock husbandry and dairy production was carried out at the SÜTAŞ facilities in Aksaray. The participants comprised 25 couples that allowed both the male and female beneficiaries to be together and receive complimentary training.

#### Targeting Approach and Poverty Focus

79. Targeting approach and poverty focus in is rated moderately satisfactory. The long distances and inclement winter weather in the Project region are hurdles regarding identification of commercially oriented smallholder farmers as candidate beneficiaries. The migration of the young population and the limited competitiveness of agricultural production in the selected regions render it challenging for farmers to break with traditions, to decide on long term investments and to change behaviour. Identifying innovative commercially oriented farmers who are pursuing business opportunities will be important for the Project to create business models stimulating others to follow.

80. In areas selected for IFAD support almost all households are smallholders. Still, it will be crucial for the “better-offs” to be included because of their important role in value chain development. Getting sustainable access to value chains will require certain quantities of good quality agricultural products that are generally produced by better-off farmers. The products and quantities produced in the rural areas will remain limited due to the agricultural land or finance allocated for market-oriented production. To obtain a stronger position in the value chains and in the markets, farmers need to be guided to join forces or organize regardless of their size. Farmers marketing groups/cooperatives should be supported according to the interest of the farmers to join and according to the market demand for produce. A mix of poor and better-off farmers will strengthen the group as well as the bargaining power of the group.
81. In Yusufeli province, the vegetable farmers are being forced to move production to their plots at higher elevations. The design of the Project has been proactive in recognizing this need for to shift and is expected to work closely with the Artvin PDFAL and Yusufeli DDFAL to develop synergy between the ongoing efforts of MFAL (i.e. through support of seedling production at the higher elevations) in expanding the demonstration program to these areas.
82. **Partnerships.** The PMU has mobilized the Ardahan Municipality to apply to the SERKA regional development agency for their support of the TA needed to prepare the urgently needed operational guidelines for the ALM.

## **E. Fiduciary aspects**

83. **Financial management.** The Financing Agreement signed between IFAD and the Government of Turkey stipulates that the project funds (IFAD loan, Government contributions and UNDP grant) shall be administrated by UNDP. A Service Agreement, acceptable to IFAD, was signed between MFAL and UNDP on 10 January 2011, but had retroactive effect from the entry into force of the project (July 2010). This specifies that UNDP shall support the Project in dealing with flow of funds arrangements, recruitment of PMU staff and contracting of technical assistance, accounting, auditing and assistance in the procurement process. The signing of the Service Agreement was also an additional general condition precedent to the withdrawal of funds.
84. For the provision of the above mentioned services, UNDP charges an Implementation Support Service (ISS) fee of USD 100,000.00 per year and a General Management Service (GMS) fee, representing 3% of the total amount of Project related expenditures (financed from IFAD, Government and UNDP funds). GMS is also considered Project expenditure. ISS is deducted at the end of each year, while the GMS on quarterly basis, and reconciled at the end of the year.
85. Staffing. The fiduciary team is composed of: (i) at PMU level - two Procurement and Finance Assistance, one located in Kars and one in Artvin; (ii) at UNDP level – a Project Administrator fully dedicated to the project and a Procurement Administrator, partially assisting the project; (iii) at MFAL level –staff partially in charge of project.
86. Accounting. UNDP uses IPSAS – accrual basis of accounting. The project transactions are recorded in the Atlas accounting software, currently used by UNDP, and in the Planer recording system, developed by IFAD and maintained concomitantly by the UNDP Project Administrator, MFAL staff and PMU staff at regional level. As the UNDP corporate system does not have features to distinguish the expenditures by category and component, but only by activity and source of financing, using a parallel system is necessary to ensure the reporting is in line with IFAD requirements. The data is systematically cross referenced between the two systems, but also between the three parties involved (UNDP – MFAL – PMU).
87. The exchange rate applied TL -USD is the transaction rate, and not the historical one, as the all payments eligible under IFAD financing are processed from the UNDP USD Account.
88. Flow of funds. The PMU does not manage funds, as the regional unit does not operate a bank account or cash through a petty cash system. This proved to be a challenge during

implementation, whereas even small payments have to go through the official channels – all payment requests, for recurrent costs or implementation related activities, are submitted for approval to MFAL, and subsequently processed by UNDP.

89. The IFAD financing proceeds are received in the Designated Account (DA). The account is denominated in USD and is held at the Central Bank of Turkey. The MFAL is designated by the Borrower to operate the account, through its signatories - the Head of Department of Rural Affairs and the Director General and Deputy Director General of the Directorate of Agrarian Reform. The closing balance, as of 31 May 2014, is USD 635,800.02.
90. As for the Project Account (PA), UNDP is authorised by the Borrower to use its official corporate accounts - in USD for the IFAD loan and UNDP grant proceeds, and in local currency (TL), for Government Contributions. However, Atlas software displays the income and balance of the Government contribution funds in USD. The Service Agreement stipulates that the UNDP grant funds will flow directly in the UNDP USD Account, and not anymore through the Treasury account, as in the case of the previous IFAD investments administered by UNDP.
91. The UNDP USD Account is held in the Bank of America, New York. As for the account in local currency, it is held in the Garanti Bank, Turkey. UNDP maintains distinct books in the Atlas software to distinguish the projects managed and the different sources of financing, through a system of codes and account identifiers, as follows: 77193 – project id; 30051 – IFAD loan funds; 30071 – Government contribution funds; 11999 – UNDP grant funds.
92. The levels of responsibility for the approval of a Purchase Order are assigned as follows: Programme Specialist and Coordinator (PO less than USD 2,500.00), Programme Manager (PO between USD 2,500.00 and USD 5,000.00), Operations Manager (PO between USD 5,000.00 and USD 30,000.00) and Resident Representative and Deputy (PO more than USD 30,000.00).
93. The closing balances as of 31 May 2014 are as follows: IFAD loan funds – USD 1,281,061.83; Government contribution funds: USD 97,058.64; UNDP Funds: USD 30,301.94.
94. The mission undertook an exercise of reconciliation of the designated account, presented below:

**Table 1: Reconciliation DA – 31 May 2014**

Advance	USD 2,500,000.00
Amount Recovered	-
Balance	<b>USD 2,000,000.00</b>
Balance of the DA	USD 635,800.02
Balance of PA	USD 1,281,061.83
Expenditures incurred and not yet claimed	USD 582,898.18
Discrepancy	- USD 239.97

95. The gap of USD 239.97 is the result of applying the July exchange rate when recording the PMU salaries for the month of June 2013 – USD 303.41 less than the actual spending. In addition, the October 2013 salary of Mahmut Sevgi was recorded incorrectly – USD 64.44 more than the actual amount spent. These payments have already been claimed for replenishment to IFAD, leaving a gap in the DA of USD 239.97. This will be rectified in the next WA.
96. The performance of the financial management is considered **satisfactory**.
97. **Disbursement.** At the time of the mission, 6 WAs have been disbursed, three under the initial deposit and 3 under replenishment, for a total of USD 4.34mill. (equiv. SDR 2.83mill.). This

- represents 23.51% of the loan allocation and is considered to be an unsatisfactory disbursement. The disbursement factor is 0.30, way below the optimal factor of 1. Additional expenditures for a total of 582,898.18 have been incurred and not yet claimed; this will increase the disbursement rate with approx. 5%.
98. From the November 2013 supervision mission, only one WA has been submitted to IFAD for replenishment, for a total of USD 0.65mill. (equiv. SDR 0.42mill.). This provided an increase of approx. 4% of the disbursement rate.
99. The disbursement is very low and way behind the schedule. With the completion date approaching (30 September 2015), it is unlikely that the project will utilise entirely the loan proceeds. The 2014 AWPB envisages activities for a total of USD 3.91mill. - USD 2.87mill financed by IFAD loan and USD 1.04mill. by the Government. Nevertheless, the IFAD disbursement rate would not exceed 35%. Moreover, the Government, through the Ministry of Development, determines for each year the budget limit for the external funded projects. In this case, the 2014 provided allocation is USD 1.66 mill, from which USD 0.69 mill. represent IFAD allocation and USD 0.96mill. Gov. allocation. To this we should add the carry forward of funds from 2012/2013, as follows - USD 1.36mill. for IFAD loan and USD 0.17 for Gov.
100. Hence, in the current year the project would not be able to spend more than USD 2mill. from the IFAD loan funds, less than the AWPB estimated amount. Nevertheless, the MFAL is closely following with the Ministry of Development and expecting an extra budget allocation by the end of the year.
101. The 2014 AWPB has been approved by IFAD in February 2014. As of today, the financial performance is very low (4%). The major activity planned is the construction of the Ardahan Livestock Market, which is under way, with no interim payment processed in 2014. It is estimated that 2 interim payments will be submitted in June for processing, fact that will give a boost to the financial performance.
102. The mission reviewed the supporting documentation related to the expenditures claimed in the WA 6 understatement of expenditures modality. The documentation adequate and available and the filing system considerably improved from the last supervision mission.
103. **Counterpart funds.** The three co-financiers of the project are: (i) the Government of Turkey (GoT), providing in cash financing for project activities, and in kind financing to cover the tax exemption and MFAL and PDFAL staff cost; (ii) UNDP, providing a grant of USD 0.25mill. for technical assistance, training and workshops; and (iii) the project beneficiaries of the grant programme.
104. The Government of Turkey contributes towards the project in cash and in kind. The GoT is financing in cash projects activities and some recurrent costs, for a total of USD 0.23mill, representing 21% of the appraisal target. As for the 2014 AWPB, the performance reached is very low (6% of the target). The in kind contribution represents the tax exemption and the cost of the MFAL and regional staff in charge of the project. The tax exemption applies to all goods, works and services financed by the project, with the exception of the petrol; however the tax percentage is covered from the in cash contribution. The in kind contribution is monitored by the MFAL and PMU staff. The performance reached is 5% of the appraisal target. No delays have been faced in the provision of the contribution.
105. UNDP allocates USD 50,000.00 per project year to finance technical assistance, training, workshops and conference services. Up to date, 68% of the grant funds have been utilised (USD 0.17mill.)
106. The project beneficiaries, individuals and farmer unions, are co-financing 40% and 20% respectively of the contributory grant programme. The contribution of the farmer unions was amended during the previous supervision mission, from a share of 40% to 20%. The total, in cash, sum to USD 0.49 million representing 12% of the appraisal target.

107. The provision of counterpart funds is considered satisfactory.
108. **Compliance with financing covenants.** The compliance with the financing covenants is satisfactory. The details with regards to the status of implementation and compliance with Financing Agreement covenants can be found in Appendix 6.
109. **Procurement.** The mission reviewed the 2014 procurement plan and the register of contracts available at UNDP. Some suggestions have been provided in order to improve the quality of future plans, e.g. to include the financiers for each procured item. The register of contracts is up to date and the procurement documentation (bidding documents, evaluation committee minutes, copy of contracts etc.) is available and properly filed.
110. The procurement of goods, works and services is carried out by: (i) UNDP, for complex works and service, (ii) PMU, with the support of UNDP, for small civil works, designs, training and goods (e.g. seedlings, seeds) and (iii) individuals and farmer unions participating in the grant programme, supported by the PMU and UNDP in the preparation of bidding documents, evaluation process, award of contract. With regards to the latter one, two tenders for Milk Collection Centres, one in Kars and one in Ardahan, amounting to USD 0.13mill each, are underway.
111. Nine (9) contracts and an amendment were awarded in 2014. The amendment is related to the contract for the construction of the Ardahan Livestock Market and was signed on 7 April 2014. It accommodated an increase of 9.4% of the contract cost, owed to the elevation of the road crossing the market and miscalculations in the bill of quantities. All 9 contracts are financed from Government contributions, and the procurement process was carried out, in 8 of 9 cases, by the PMU. The mission reviewed the bidding documents and the evaluation committee minutes for the following contracts: (i) TUR10-000017941 – purchase of seeds and fertilizers; (ii) UNDP TUR RLA 01/14 – provision of consultancy services for the milk supply centres; (iii) TUR10-000017943 – purchase of agricultural machinery; (iv) TUR10-000017943 – purchase of turnkey greenhouses; and found these to be in order. The only comment is related to procurement of turnkey greenhouses, whereas the timeframe between advertisement and bid submission was found to be too short (12 days). It is recommended to maintain a timespan of minimum two weeks.
112. As per the final design report and the Letter to the Borrower, the procurement carried out by the project must be in line with IFAD guidelines. However, the project proposed and MFAL accepted to undertake the procurement for the construction of livestock water systems, more specifically of **2 packages of works** (one in Kars and one in Ardahan), tentatively of 7 sub projects each, using the national procurement procedures. The works are of minor complexity and risk, in remote and scattered areas. The SPAs in Kars and Ardahan will be in charge of the process, which will comprise tender, award and supervision of works. A similar approach may be applied to the implementation of pasture roads rehabilitation works, with procurement undertaken directly by MFAL. IFAD requires an official communication from the Borrower in order to approve this request.
113. The performance of the procurement is considered **satisfactory**.
114. **Audit.** The Board of Treasury Controller commenced the FY2013 Audit Exercise in May 2014. The mission reminded the MFAL counterparts of the IFAD corporate deadline for audit submission, which is 30 June 2014. Rehber Audit and Consultancy Company carried out UNDP audit exercise. Both reports were not shared with the mission, as not yet available.



Agreed action	Responsibility	Agreed date
Rectify in the forthcoming WA the difference of USD 239.97.	Project Administrator	30 July 2014
FY 2013 Audit Report and Management Letter to be submitted to IFAD in line with IFAD corporate deadline.	MFAL/Treasury	30 June 2014
The source of financing to be included in the procurement plan.	PMU/MFAL	Submission of 2015AWPB.
Set timeframe for advertisement of minimum 2 weeks.	PMU/UNDP	Continuously
Provide official request to IFAD with regards to the procurement of works to be carried out by MFAL and SPAs, using national procurement procedures.	Borrower	30 June 2014

## F. Sustainability

115. The AKADP operates in a socio-economic as well as in an environmental setting that poses specific challenges to achieving sustainability of project interventions. Distance from the more developed regions and markets represents a constraint both for the establishment of trade links and for retaining human capital within the region. Climatic constraints of long and cold winters leading to short growing and construction seasons are also specific to the AKADP area and require specific technical solutions, resulting in comparatively higher investment costs and longer lead and completion times for activities. .

### Institutional Sustainability

116. At the central level, besides carrying out its inter-ministerial coordination and oversight functions, the Department of Land Management and Irrigation Investments of the GDAR has quickly developed a sense of ownership as an IFAD implementation partner; its technical capacity and outreach is capable of overcoming the issues faced at the local level. Engagement of other technical departments in MFAL depending on the specific expertise required to support implementation is also growing as confirmed by the strong commitments during earlier missions. At the provincial level, however, limited staff resources and high staff turnover at the PDFAL of during the review period still have negative consequences on efforts to build capacity through staff training and implementation experience. Collaboration with other institutions such as the SERKA Development Agency is noted as a positive development during the review period.
117. The ALM as largest project investment still poses a challenge in terms of institutional sustainability despite steps taken by the PMU to secure TA support to the Ardahan Municipality to identify an optimal institutional setup and management arrangement. The likelihood of sustainability will be increased if the professionally identified mechanisms are taken up by the Ardahan Municipality. As a prerequisite for sustainable operations, local authorities need to enforce necessary regulations that are conducive towards 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). Institution building is rated **moderately satisfactory**.

### Social Sustainability (Empowerment)

118. Cohesion and capacity to organize self-help activities at the village level under the coordination of the muhtar, in addition to the formal cooperatives or associations, is one of the key dimensions evaluated in the selection of investments in village infrastructure. The likelihood of social sustainability for such investments is confirmed by the commitment to contribute to the investment costs by collectively acquiring the land where livestock watering facilities are to be constructed, providing transport for construction materials or carrying out simple complementary works such as grassing of slopes and landscaping around the trough locations.

119. The identification of villages for piloting the installation of shared livestock handling facilities has been supported by ad hoc surveys following an awareness level village wide meetings; the operational aspects for the collective use of shared facilities such as pasture fencings are yet to be carefully considered to reduce the risk of conflicts among users. Empowerment is rated **moderately satisfactory**.

#### **Economic and Financial Sustainability.**

120. The mission rates the project's economic and financial sustainability moderately satisfactory. Since the 2013 mission the Project has gained momentum and investments (both demonstrations and co-financed) have progressed. It is commendable that the PMU has conducted detailed cost/benefit calculations assessing the viability of the supported investments and limitations for the smallholders in the Project area. Among the finding are that, under the prevailing economic circumstances, grass roots modern barn constructions require minimum 50 cattle to be financially viable. The PMU should re-visit and review location- and farmer-specific options for simple and low cost barn rehabilitation investments. While each rehabilitation activity (whitewash, ventilate, improve lighting and flooring, etc.) may be of low individual cost, the cumulative benefits are considerable. The scope, cost and implementation modality of such options will be examined by the PMU.
121. The sustainable operation of the ALM will benefit from the collaboration established between the PMU, the Municipal Administration, particularly in the person of the mayor, and the PDFAL. The study for the management model of the ALM that will be carried out using SERKA on behalf of the Municipality is geared to improve market management, waste management and access to the market by all beneficiaries.
122. The disbursement rate of the Project remains low and outputs are expected to remain below appraisal targets in the remaining lifetime of the Project. Unless an extension and funds reallocation is requested by MFAL, no significant changes in disbursement that could improve the likelihood of economic sustainability are expected.
123. Under MFAL's guidance, the project has taken action refraining from investments in deep boreholes for livestock watering due to major concerns over their sustainable operation in the region. To increase the likelihood of economic and financial sustainability, livestock watering would focusing either on gravity fed systems or on shallow wells that can be fitted with solar pumps.

#### **Technical Sustainability**

124. The project has supported the introduction of plastic tunnels and drip irrigation systems (Kağızman/Kars). All the materials procured are made and assembled in Turkey and are available locally. The main technical option considered for livestock water facilities is the development of simple piped networks operating on gravity only. Alternatively, solar powered pumps are the selected option for shallow wells, an increasingly more widespread technology in Turkey. Additionally, the agricultural machinery and equipment purchased by the smallholders for crop and livestock production are also all manufactured in Turkey.
125. After-sales services, skills, equipment and parts for repairs are available both from the private sector, the SPAs and Municipalities. The technical standards suitable for construction in extreme winter conditions were applied to the construction of the ALM. The mission rates the project's technical sustainability as **satisfactory**.

#### **Environmental Sustainability**

126. There are no environmental risks associated with project activities that have not been mitigated at design and implementation. Improvements in the farmers' capacity to produce more and better feed on-farm will reduce pressure on the rangelands and pastures. Better access to water will reduce livestock travel across the pastures and reduce compaction and damage to natural vegetation and reduce the risk water contamination by preventing direct access to the sources by means of piped networks and troughs.

127. The construction of livestock marketing facilities meeting the hygienic standards for waste disposal are expected to result in positive environmental impacts subject to compliance with the relevant environmental regulations. The development of a management plan for the use or safe disposal of the animal waste produced will be a key aspect to be dealt with thoroughly within the scope of the TA assignment to be undertaken for the ALM. The PMU and PDFAL in Ardahan have confirmed that the legal and bureaucratic requirements for the commissioning and operation of the ALM are under review and process. The mission rates the project environmental sustainability **moderately satisfactory**.

#### **Adaptation to Climate Change**

128. The smallholders in the Project area have been suffering from substantial climate adaptation deficit even under the prevailing conditions, particularly of long and cold winters that are barriers to production. The Project has introduced climate-smart approaches that are valid today in assisting to close the producers' adaptation gap. The farmers have begun to choose genus/varieties based on suitability to prevailing climatic conditions by slowly shifting away from risky and traditional varieties. Optimal use of small parcels by investing in plastic tunnel greenhouses, improving water consumption efficiency (thus milk conversion) of livestock by investments in the pastures for clean drinking water all address current and future risks of water shortage due to climate change.

#### **Exit Strategy**

129. The AKADP exit strategy comprises the mainstreaming of project approaches into the PDFALs' modalities for supporting agricultural production in the Project area. The M&E systems in place are being strengthened to best evaluate the outcomes of the AKADP, as well as the broader government programs. . Despite difficulties faced due to frequent staff turnover, the secondment of PDFAL's staff has proved successful in the other IFAD-financed projects in Turkey (DBSDP and SEDP) to build capacity and sense of ownership at the Provincial level, paving the way for a satisfactory implementation of the exit strategy. The value chain analysis and business plan to be developed for the ALM should include a clear ownership transfer strategy, to guarantee the sustainable and environmentally-benign commercial operation of this market after its expected completion in late 2014.
130. There remains 15 months to the AKADP Loan closing date. The PMU will develop a detailed exit strategy for the Project as a whole by Jan 2015, about one year before closing.

### **G. Impact**

131. Due to the delays in overall implementation and the limited amount of activities underway, the impact of AKADP-supported activities is still not visible. The envisaged improvements in M&E are expected to better identify the collective impact of AKADP, also covering training activities, on-farm demonstrations, the study tours etc. that are geared to increase target group's awareness of the opportunities offered by the project as well as other support extended by the MFAL and other development interventions.

#### **Physical and Financial Assets**

132. Physical and financial assets are rated **moderately satisfactory**. In some instances, in order to mobilize the required level of co-financing (e.g. for barn construction) the farmers have sold their animals. The barn investment will be revitalized when restocking with new cattle that are available from numerous government matching grant programs. This would result in a net increase of fixed assets for the beneficiaries.
133. Furthermore, milk collection centres including those operated by cooperatives, improved availability of feed and livestock water in the pastures are likely to trigger own investments and increase the number of animals, which is to be monitored as part of the overall project M&E system. Other matching grant provisions of the Project such as those for equipment and machinery have also contributed to the beneficiaries' fixed assets.

134. The ALM is a sizeable capital asset capable of generating substantial socio-economic benefits, particularly if professionally operated. This was highly recommended by the mission as well as other project stakeholders, including representatives of PDFAL and DDFAL) under a concession.

### Food Security

135. Food security is rated **moderately satisfactory**. Turkey maintains a positive trade balance of fruit and milk products indicating self-sufficiency. Data at the province level in the AKADP project areas is recommended to be re-assessed by the PMU based on available statistics at MFAL that are being updated under the TARBIL program. The AKADP-supported interventions offer the opportunity to improve farm production (through interventions geared towards dissemination of improved agricultural technologies and farming practices) as well as trade (through interventions geared towards the support of marketing activities, and resulting in better terms of trade for the small producers).
136. The Project is supporting small family-size greenhouses both to promote skills in greenhouse production as well as to diversify the limited, wheat- and milk product dependent, diets of the poorer households in the region. These also reduce the additional financial burden of having to purchase vegetables from the market.

### Increase in Incomes

137. Preliminary data from the monitoring of on-farm demonstration yields, suggest a ten-fold increase in production for maize. The PMU has carried out an assessment of the increase in incomes that would result from improved access to livestock water covering 7 facilities in the implementation pipeline, showing projected incremental returns to farmers as high as USD 100 per head of livestock. While these figures need to be reassessed as part of the overall M&E activities, discussions undertaken with farmers during the field visits confirmed that the positive impact of such investments in terms of reducing milk and meat losses. The increased farmers' income in connection with the expected reduction of transaction costs and improved animal health at the ALM is estimated to be sizeable, and preliminary forecasts reveal an expected increase in farm-gate price at least about 30% per head of livestock sold. This figure is yet to be validated by the consultants that would undertake the detailed study on the ALM operations aspects to be concluded before September 2014, and monitored throughout the rest of the project's lifespan.

### Policy Impact

138. IFAD's projects are proportionally small in the context of the Turkish rural development programmes. Some of the concepts developed under the SEDP and DBSDP have proven useful for replication and scaling up with AKADP. The construction of the ALM would lay the ground for implementation of MFAL's policies in respect to livestock registration and trade, also serving as an important tool in the region for the livestock market regulation. At the local and MFAL level, the ALM is also seen as the seed planted to develop a livestock exchange for the Kars-Ardahan region.

## H. Conclusion

139. Despite the continuing lag in disbursement and field activities the mission observed that the Project objectives had finally been understood and are being pursued. Notwithstanding the staff turnover issue, most staff were enthusiastic about continuing with the Project's activities. The PMU had been proactive at both the MFAL and local levels in mobilizing the limited technical, human and financial resources.
140. Much momentum had been gained. High level participation in the mission by the GDAR, completion of the long-awaited vehicle procurement (since 2011), the planned mobilization of non-Project resources in support of the operational aspects of the ALM, the on-going study tour

program and value chain TA for dairy products, and the demand generated from livestock owners for clean water in the pastures all indicated the will of Project management to compensate for the time lost. Priority actions for the remainder of 2014 and the winter of 2015, when the crop production becomes is over, have been discussed and agreed as follows:

- In order to complete and deliver the works on time, the PMU would follow up on the completion of the works at the ALM,
- To ensure speedy onset of effective operations of the ALM, the procurement of specialized Technical Assistance to ensure that detailed operational arrangements are in place before prior to its opening;
- The inclusion of the proposed Ardanuç livestock market in the investment pipeline would be subject to the findings of a comprehensive feasibility study to be prepared by the Artvin PDFAL experts.
- MFAL/GDAR's technical experts, with support from the PMU, would assess the feasibility of demand for additional investments for inclusion into the program for village infrastructure for 2015, and beyond in case MFAL requests an extension. These could include livestock watering facilities and pasture roads rehabilitation. The specific administrative arrangements for the implementation of these works with IFAD loan proceeds would be defined.
- Since MFAL's request regarding inclusion of the cooperatives and farmer's groups as eligible beneficiaries for matching grants was approved by IFAD, priority should also be given to the milk collection centers to respond to the demand of the stakeholders and to allow a concerted approach in livestock and dairy sector development.
- The Artvin PDFAL would work closely with the PMU to develop a programme of demonstrations and collect requests for investments using matching grants for: i) Yusufeli that would assist the producers to re-establish operations at higher elevations along the Chorouki River valley, as envisaged at design, and ii) the central villages of Artvin that have to move to higher elevations like the villages of Yusufeli.
- As a priority, all activities that relate to measuring the outcomes and impacts of the project would be initiated under an improved M&E system. MFAL would support the PMU to put in place a best-practice system for tracking Project performance with emphasis on managing field surveys, and related data flows, analysis and reporting. If such support has not proven sufficient by end August 2014, the PMU should hire external technical assistance. Such system could be expected to be adopted by GDAR in the monitoring of other current and future projects.
- With input from the provincial staff, the PMU would develop tailor-made investment strategies by taking into consideration the specific ecological and socio-economic conditions that vary considerably across the project's geographic coverage.
- A horticulture expert would be provided to the PMU by GDAR to assist in the technical aspects of establishing and monitoring of the demonstrations and other related investments.

141. IFAD and the Government of Turkey endorse the findings of the supervision mission.



## Appendix 1: Summary of project status and ratings

### Basic Facts

Country	Turkey			Project ID	1492	Loan/DSF Grant No.	803
Project	Ardahan-Kars-Artvin Development Project					Supp. Loan/DSF Grant	
Date of Update	20 June 2014					Financing terms	O
Supervising Inst.	IFAD/IFAD						
No. of Supervisions	3	No. of Implementation Support/Follow-up missions	2				
Last Supervision	20-31 October 2013	Last Implementation Support/Follow-up mission	21-27 July 2013				

				USD million Disb. rate %		
Approval	17-Dec-2009			Total costs	26.41	
Agreement	12-Apr-2010	Effectiveness lag	6.6	IFAD Total	19.20	
Effectiveness	02-Jul-2010	PAR value	-----	IFAD loan	19.20	19.97%
MTR				DSF grant		
Current completion	30-Sep-2015	Last Amendment		IFAD grant		
Current closing	31-Mar-2016	Last Audit		Domestic Total	7.21	
No. of extensions	0			Beneficiaries	3.99	
				Government (National)	3.22	
				UNDP	0.25	

### 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	4
2. Acceptable disbursement rate	2	2	2. Performance of M&E	3	3
3. Counterpart funds	5	5	3. Coherence between AWPB & implementation	3	3
4. Compliance with loan covenants	5	5	4. Gender focus	3	4
5. Compliance with procurement	4	5	5. Poverty focus	4	4
6. Quality and timeliness of audits	5	n/a	6. Effectiveness of targeting approach	4	4
			7. Innovation and learning	3	3
			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	3	1. Institution building (organizations, etc.)	4	4
2. Village Infrastructure Investments	3	3	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	3
			6. Potential for scaling up and replication	3	4

#### B.5 Justification of ratings

The AKADP entered into force in July 2010 and is about to complete its 4<sup>th</sup> year. Project implementation continues to remain

behind schedule with only 23.5% of the IFAD loan disbursed. A more stable cadre is in place and ownership has improved, both indicating the capacity to overcome the chronic staff shortage and turnover problems. Delays are generally associated with continuing problems of access to budget from the Ministry of Development. The ALM is planned to be complete in late 2014. This is expected to increase in the Project's budget allocation envelope for 2015. Winter has just ended and field activities are poised for accelerated execution, now with the support of the new Project vehicles that have been finally procured along with some of the other planned equipment in support of Component 1. The Ardahan Municipality has taken concrete steps by obtaining cross-support from SERKA (MoD) for TA to develop an environmentally – sound operations plan for the ALM. Furthermore GDAR has committed to being more proactive on supporting the PMU for M&E issues faced.

## Overall Assessment and Risk Profile

	Last	Current
C.1 Physical/financial assets	3	3
C.2 Food security	4	4
C.3 Overall <b>implementation progress</b> (Sections B1 and B2)	3	3

### Rationale for implementation progress rating

The AKADP entered into force in July 2010. As of June 20, 2015, 24% of IFAD loan was disbursed with three WAs under the initial deposit and 3 under replenishment, for a total of USD 4.34mill. (equiv. SDR 2.83mill.) . A more stable cadre is in place and ownership has improved. Delays are generally associated with continuing problems of access to budget from the Ministry of Development.

Procurement process in line with IFAD/UNDP procedures and documentation (register of contracts) is well organized and available.

Gender focus has improved with substantial female participation in the training programs and study tours. The family-type greenhouses as well as commercial ones are all operated by women.

Targeting of the project's activities has been in accordance with project design and AWPB across most activities. However the perturbations in the livestock market and increasing construction costs have negatively impacted particularly the smallholders whose investment priorities have changed. The PMU is proactive in developing alternative solutions to rapidly compensate for delays.

Poverty focus is being demonstrated by the small hobby greenhouses that improve and diversify diets and demonstrate the feasibility of covered vegetable production as an income generating opportunity for the region particularly in locations where plot sizes are very small.

Climate and environment focus remain on target with water saving technologies for small-scale irrigation and maximizing the efficiency of water available for livestock in the pastures being pursued. Best practice modalities for the operation of the ALM will be ensured by the Ardahan Municipality. Across all activities, improved adaptation of the smallholders to the current climatic conditions is being promoted to better prepare them for future changes.

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

The continuing uncertainties in the broader livestock sector have impacted negatively on the investment priorities of smallholders. The planned implementation arrangements appear to be finally in place with improved ownership by GDAR shown by their willingness to be more actively involved in providing technical support to the Project. Winter is just over and field activities, including civil works, have gained momentum. The pace of construction at the ALM has improved. Along with completing the procurement of vehicles and equipment, the winter was constructively used by project staff in delivering training on C1 to 1609 households. The improved ownership at the central level that was noted in October 2013 continues. Project appears capable of catching up if more time, that GDAR may wish to seize upon by requesting an extension. If this route is pursued the likelihood of achieving the development objectives of the project may increase.

### C.5 **Risks** Short description of major risks for each section and their impact on achievement of development objectives and sustainability

Continuing shortfall in budget allocations may elevate risk of low achievement of project objectives by the completion date of September 30, 2105. The activities appeared hindered only by insufficient funds.

Project implementation progress: There was little activity since the last mission due to known long and harsh winter conditions in the region thus some of recommendations of the last mission remain unattended and delays in implementation continue.

There remains substantial risk that Project achievements across the board will be considerably lower than anticipated at design. In terms of improving livestock and horticultural production of smallholders, village infrastructure and institutional strengthening are behind the appraisal and AWPB targets. Since the October 2013 mission only one application was received for replenishment.

Outputs and outcomes: Outputs remain low in proportion to low budget allocations thus risking achievement of objectives. The cumulative delays also resulted in substantially lower than anticipated benefits accruing to farmer. The training and demonstrations undertaken are expected to yield visible results this summer and fall. 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. Data on Project spending and outputs is satisfactory. Progress remained too slow to measure outcomes.

#### Sustainability

The start-up has been slow but momentum has been gained. Unless more time is available, substantial risks remain in reaching the intended objectives particularly in Ardahan (despite the ALM) and Kars.

The Project's 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

Progress on Agreed actions from October	Responsibility	Agreed date	Status
Conduct technical and financial feasibility for barn rehabilitation model for Artvin province	PMU	Dec 2013	On-going
Conduct a thorough assessment (through TA) for the (i) Ardahan Livestock Market; and (ii) milk collection centres mainly for management; (ii) access to capital (inclusive of operating capital); and (iii) organization of producers.	PMU	Feb 2014	Partially complied with, ALM pending.
Identification of additional infrastructure investments.	PMU	Dec 2013	Partially complied with
<b>Agreed actions for this Mission</b>			
Initiate impact surveys in activity areas as input for M&E	PMU	Beginning of July 2014	
Finalize Feasibility Study for the Ardanuc livestock market	PMU, DDFAL	End July 2014	
Apply to IFAD to modify matching grant ratios	PMU/MFAL	July 2014	
Complete operations and management study for ALM	PMU, Ardahan PDFAL	30 August 2014	
Develop Pipeline of for 2015-2017 including implementation arrangements (readiness for extension, if requested)	PMU, MFAL	15 September 2014	
Review of activity menus and provincial strategies for 2015 based on location (province/district)	PMU, P/DDFAL,	Sept 2014	
Increase AKADP annual Loan budget allocation from MoD for 2015	MFAL	30 September 2014	
Ready ALM for Temporary acceptance of construction	MFAL, UNDP	20 December 2014	
Horticulture expert provided by GDAR to support investment decisions	MFAL	September 2014	

Agreed action	Responsibility	Agreed date
Initiate impact surveys in activity areas as input for M&E	PMU	Beginning of July 2014
Finalize Feasibility Study for the Ardanuc livestock market	PMU, DDFAL	End July 2014
Apply to IFAD to modify matching grant ratios	PMU/MFAL	July 2014
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Ready ALM for Temporary acceptance of construction	MFAL, UNDP	20 December 2014
Horticulture expert provided by GDAR to support investment decisions	MFAL	

## 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.

Narrative Summary	Impact and Results Indicators	Means of Verification	Assumptions and Risks
Sub-component 1.2: Horticulture production improved	By end of PY5, in 3 selected project districts: <ul style="list-style-type: none"> <li>• 30% increase in greenhouse vegetables production by 100 farmers.</li> <li>• 400 producers shifting to market-oriented fruit and vegetable varieties</li> <li>• 20% increase in volume of horticulture produced by targeted villages</li> <li>• 25% increase in value of horticulture sold from targeted villages</li> </ul>	PMU reports. Annual Farmer survey. Technical and financial feasibility reports. Participatory Impact Monitoring. PDA and DDA data.	
<b>Component 2: Village Infrastructure upgraded/ established</b>	By PY5: <ul style="list-style-type: none"> <li>• At least 50% of targeted smallholders have access to improved livestock water facilities.</li> <li>• At least 50% of targeted smallholders have access to piped irrigation.</li> <li>• At least 75% of targeted villages have access to improved pastures and range lands.</li> <li>• At least 50% of farmers in participating villages have access to improved livestock marketing facilities.</li> <li>• At least 75% of targeted shepherds have access to adequate shelters in pastures/rangelands.</li> <li>• At least 75% of households in targeted village have sustainable access to sanitation facilities.</li> <li>• 100% of villages have put in place plans for O&amp;M of upgraded/established infrastructure.</li> </ul>	PMU reports. Technical and financial feasibility reports. Participatory Impact Monitoring. PDA and DDA data. Procurement reports. Contractor reports.	
<b>Component 3: Institutional Strengthening and Project Management</b> Institutions providing appropriate services to targeted smallholder producers sustainably strengthened  Project effectively and efficiently managed	Each PY: <ul style="list-style-type: none"> <li>• 10% increase in number of annual village visits by P/DDAs.</li> <li>• 10% increase in the number of field days conducted by DDAs.</li> </ul> By the end of PY5: <ul style="list-style-type: none"> <li>• 10% increase in number of farmers applying to P/DDA for information.</li> </ul> Each PY following PY1: <ul style="list-style-type: none"> <li>• 10% increase in number of villages where on-farm demonstrations are carried out.</li> <li>• 5% increase in the number of farmers applying to P-DDA for assistance in improving profitability.</li> <li>• At least two training seminars delivered to women in collaborating villages.</li> <li>• Project physical and financial progress against Final Design and AWPB targets.</li> <li>• All progress and financial reports submitted on time.</li> <li>• Quality of all audits, procurement and financial reports, acceptable to IFAD and the borrower.</li> </ul>	PMU reports. Farmer survey. PDA and DDA data.  PMU reports. AWPB. Review by IFAD and the Government.	Required "culture" change towards responsiveness to clients supported by ministerial, district leaders.

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

Agreed action	Responsibility	Agreed date
Initiate impact surveys in activity areas as input for M&E	PMU	Beginning of July 2014
Finalize Feasibility Study for the Ardahan livestock market	PMU, DDFAL	End July 2014
Apply to IFAD to modify matching grant ratios	PMU/MFAL	July 2014
Complete operations and management study for ALM	PMU, Ardahan PDFAL	30 August 2014
Develop Pipeline of for 2015-2017 including implementation arrangements (readiness for extension, if requested)	PMU, MFAL	15 September 2014
Review of activity menus and provincial strategies for 2015 based on location (province/district)	PMU, P/DDFAL,	Sept 2014
Increase AKADP annual Loan budget allocation from MoD for 2015	MFAL	30 September 2014
Ready ALM for Temporary acceptance of construction	MFAL, UNDP	20 December 2014
Horticulture expert provided by GDAR to support investment decisions	MFAL	



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

RIMS report, year 2013	Annual				Cumulative		% of appraisal	Sum of actuals of previous years
	Unit	Plan	Actual	% of annual	Appraisal	Actual		
Total outreach								
People receiving Project services	Total	52 302	984	2%	67 200	6 251	9%	5 267
People receiving Project services	Male	26 214	531	2%	33 800	3 273	10%	2 742
People receiving Project services	Female	26 089	453	2%	33 400	2 978	9%	2 525
Component 1 Smallholder and Non Farm Enterprise Investments								
People receiving Project services	Total	2 257	954	42%	2 170	1 200	55%	246
People receiving Project services	Male	1 180	504	43%	1 533	728	47%	224
People receiving Project services	Female	1 078	450	42%	637	472	74%	22
Component 1.1 Improving Livestock and Husbandry Practices								
People receiving Project services	Total	1 305	897	69%	1 990	1 065	54%	168
People receiving Project services	Male	685	467	68%	1 371	621	45%	154
People receiving Project services	Female	620	430	69%	619	444	72%	14
Modern barns constructed/rehabilitated	#	21	1	5%	210	1	0%	-
Modern barns constructed/rehabilitated	HH	21	1	5%	210	1	0%	-
*Households receiving animal health services, inputs and equipment (milking machine, baling machin, other)	#	227	171	75%	-	171	0%	-
*Households receiving animal health services, inputs and equipment (milking machine, baling machin, other)	HH	227	171	75%	-	171	0%	-
*People trained in livestock production and technologies	#	49	29	59%	-	29	0%	-
*People trained in livestock production and technologies	Male	65	37	57%	657	126	19%	89
*People trained in livestock production and technologies	Female	-	-	0%	73	4	5%	4
*People trained in livestock production and technologies (demonstrations)	#	-	-	0%	-	3	0%	3
*People trained in livestock production and technologies (demonstrations)	Male	-	-	0%	-	65	0%	65
*People trained in livestock production and technologies (demonstrations)	Female	-	-	0%	-	10	0%	10
*People trained in business and entrepreneurship	Male	-	-	0%	189	-	0%	-
*People trained in business and entrepreneurship	Female	-	-	0%	21	-	0%	-

RIMS report, year 2013		Annual			Cumulative			Sum of actuals of previous years
	Unit	Plan	Actual	% of annual	Appraisal	Actual	% of appraisal	
Total outreach								
People receiving Project services	Total	52 302	984	2%	67 200	6 251	9%	5 267
People receiving Project services	Male	26 214	531	2%	33 800	3 273	10%	2 742
People receiving Project services	Female	26 089	453	2%	33 400	2 978	9%	2 525
Component 1 Smallholder and Non Farm Enterprise Investments								
People receiving Project services	Total	2 257	954	42%	2 170	1 200	55%	246
People receiving Project services	Male	1 180	504	43%	1 533	728	47%	224
People receiving Project services	Female	1 078	450	42%	637	472	74%	22
Component 1.1 Improving Livestock and Husbandry Practices								
People receiving Project services	Total	1 305	897	69%	1 990	1 065	54%	168
People receiving Project services	Male	685	467	68%	1 371	621	45%	154
People receiving Project services	Female	620	430	69%	619	444	72%	14
Modern barns constructed/rehabilitated	#	21	1	5%	210	1	0%	-
Modern barns constructed/rehabilitated	HH	21	1	5%	210	1	0%	-
*Households receiving animal health services, inputs and equipment (milking machine, baling machin, other)	#	227	171	75%	-	171	0%	-
*Households receiving animal health services, inputs and equipment (milking machine, baling machin, other)	HH	227	171	75%	-	171	0%	-
*People trained in livestock production and technologies	#	49	29	59%	-	29	0%	-
*People trained in livestock production and technologies	Male	65	37	57%	657	126	19%	89
*People trained in livestock production and technologies	Female	-	-	0%	73	4	5%	4
*People trained in livestock production and technologies (demonstrations)	#	-	-	0%	-	3	0%	3
*People trained in livestock production and technologies (demonstrations)	Male	-	-	0%	-	65	0%	65
*People trained in livestock production and technologies (demonstrations)	Female	-	-	0%	-	10	0%	10
*People trained in business and entrepreneurship	Male	-	-	0%	189	-	0%	-
*People trained in business and entrepreneurship	Female	-	-	0%	21	-	0%	-



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

**Table 5A: Financial performance by financier as of 31 May 2014**

Financier	Appraisal (USD '000)	Disbursements (USD '000)	Per cent disbursed
IFAD loan	19 200.0	2 290.1	12
UNDP grant	250.0	170.1	68
Government	1 114.1	230.6	21
Government (tax)	2 107.1	112.0	5
Beneficiaries	3 997.7	486.5	12
<b>Total</b>	<b>26 668.9</b>	<b>3 289.2</b>	<b>12</b>

**Table 5B: Financial performance by financier by component (USD '000) as of 31 May 2014**

	IFAD loan			UNDP grant			Government			Government (tax)			Beneficiaries			Total		
Component	Appraisal	Actual	%	Appraisal	Actual	%	Appraisal	Actual	%	Appraisal	Actual	%	Appraisal	Actual	%	Appraisal	Actual	%
Component 1 <sup>7</sup>	7 666.7	693.4	9					153.3			34.1		3 568.8	486.5	13	11 235	1 367.3	12
Component 2 <sup>8</sup>	8 151.8	718.3	9				211.9	2	1	1 581.4	56.6	4	424.9	0	0	10 370	776.9	7
Component 3 <sup>9</sup>	3 381.5	878.4	26	250	170	68	902.2	75.3	8	525.7	21.3	4				4 553	1 144.6	25
<b>Total</b>	<b>19 200</b>	<b>2 290.1</b>	<b>12</b>	<b>250</b>	<b>170</b>	<b>68</b>	<b>1 114.1</b>	<b>230.6</b>	<b>21</b>	<b>2 107.1</b>	<b>112.0</b>	<b>5</b>	<b>3 993.7</b>	<b>486.5</b>	<b>12</b>	<b>26 139</b>	<b>3 289.2</b>	<b>12</b>

*Note: the disbursement rate of IFAD financing in the tables 5A and 5B represent the actual disbursement undertaken by the project, without the initial deposit.*

<sup>7</sup> Smallholder Investments.

<sup>8</sup> Village Infrastructure Investments

<sup>9</sup> Institutional Strengthening and Project Management

**Table 5C: IFAD loan disbursements (SDR, as at 31 May 2014)**

Category	Category description	Original Allocation	Revised Allocation	Disbursement	Balance	Per cent disbursed
I	Civil Works	5 130 000	5 130 000	303 753	4 826 246	5.92
II	Vehicles, Equipment and Goods	330 000	330 000	34 918	295 081	10.58
III	Technical Assistance, Training and Workshop	1 470 000	1 470 000	76 918	1 393 081	5.23
IV	Co-financing of Investments	3 370 000	3 370 000	459 558	2 910 441	13.64
V	Agricultural Inputs	940 000	940 000	26 349	913 650	2.80
VI	Recurrent Costs	800 000	800 000	315 591	484 408	39.45
	Unallocated	40 000	40 000		40 000	0
	Initial deposit			1 622 786	-1 622 786	
	Total	12 080 000	12 080 000	2 839 877	9 240 122	23.51

*Note: the disbursement rate of IFAD financing in the table 5C represents the disbursement from the IFAD Loan Account, including the advance /initial deposit.*

## 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	Complied with.	

Section	Covenant	Target/Action Due Date	Compliance Status/Date	Remarks
<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 compliance.	Partially complied with.	The 2014 AWPB was submitted to IFAD at the end In January 2014 and approved on 10 February 2014.
<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.	Not complied with	

Section	Covenant	Target/Action Due Date	Compliance Status/Date	Remarks
GC 9.03	The Borrower shall: (a) each Fiscal Year, have the accounts relating to the Project audited in accordance with auditing standards acceptable to the Fund and the Fund's Guidelines on Project Audits (for Borrowers' Use) by independent auditors acceptable to the Fund; (b) within six (6) months of the end of each Fiscal Year, furnish to the Fund a certified copy of the audit report. The Borrower shall submit to the Fund the reply to the management letter of the auditors within one month of receipt thereof.	Audit report provided to IFAD by 30 June annually.		The FY2013 Audit Report is expected to be submitted not later than 30 June 2014.
GC 11.01	The Financing and all Loan Service Payments shall be exempt from all Taxes, and all Loan Service Payments shall be made free and clear of Taxes.	Continuous.	Complied with.	



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

### **Learning**

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The opportunities for KM are becoming more available as the M&E system matures and becomes functional. Study tours have been very effective knowledge transfer mechanisms where the smaller and poorer farmers of the region were exposed to modern dairy and livestock husbandry and horticulture practices for the first time ever. The quality of the demonstrations still poor. Lessons are being learned about the need to develop tailor-made strategies and activities down to the district-level to accommodate the variations in agro-ecology and farmers' shifting priorities. The Project's management has begun to appreciate the concept of "lessons learned".

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### **Innovation: Describe any interesting innovation noted during supervision**

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The introduced drip irrigation is both climate-smart and cost efficient while improving both productivity and options for crops that can be produced in greenhouses, large and small. The Project's M&E is earmarked to be supported by GDAR that is in the process of rolling out its land parcel identification system-based TARBIL MIS.

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