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AGRICULTURE TECHNOLOGY PROGRAM (AgTech)

QUARTERLY REPORT III OF PROJECT YEAR IV
(APRIL 2014 – JUNE 2014)



JULY 2014

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(April 2014 – June 2014)

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DISCLAIMER

The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

ACRONYMS

| | |
|------|--------------------------------------|
| AI | Artificial Insemination |
| B2B | Business-to-Business |
| GOT | Government of Turkmenistan |
| HH | Household |
| IPM | Integrated Pest Management |
| LN | Liquid Nitrogen |
| LNG | Liquid Nitrogen Generator |
| LOI | Letter of Invitation |
| MFA | Ministry of Foreign Affairs |
| MoA | Ministry of Agriculture |
| PMEP | Project Monitoring & Evaluation Plan |
| Q | Quarter |
| SLU | State Livestock Union |
| TOT | Training of Trainers |
| USG | United States Government |
| WTO | World Trade Organization |

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PROJECT OVERVIEW

This report summarizes project activities conducted by Weidemann Associates, Inc., a Crown Agents USA company, in implementing the Agriculture Technology Program (AgTech) for Turkmenistan during the period of April 2014 through June 2014.



The third quarter's (Q3) highlights included training seminars on WTO Veterinary Standards as part of the preparation for WTO accession, supporting and strengthening the horticulture and livestock trade sectors, as well as trainings on water saving irrigation technologies and increasing forage crop yields.

Per the Ministry of Foreign Affairs' (MFA) approval and requests, AgTech completed several international STTA activities in collaboration with the State Universities, the Ministry of Agriculture (MoA) and the State Livestock Union (SLU). AgTech continues to produce and disseminated booklets and other multimedia of various subject matters to increase accessibility to services, training and advertising tools to promote best practices and celebrate the project's widespread impact.

Cumulatively, the project is on schedule to complete its activities and is revising its training activities to adapt to the current demands. With support from our private sector partner, Chevron, the project is increasing the capacity of veterinarians and farmers to transform the Turkmen dairy industry in Turkmenistan and support the high local demand for meat and dairy products.

As of June 30, 2014 the project estimates that \$3,180,988.60 has been spent of the obligated \$4,074,491 funds.

LIVESTOCK COMPONENT

Breeding Improvement: Supply Breeding Supplies and AI Training

The AgTech Project has trained 60 AI specialists to increase their knowledge in AI. Having access to a genetic supply from AgTech and the necessary tools, the specialists helped to produce a more diverse and hearty breed of cattle in Turkmenistan. The successful training and dissemination of information has led to multiple project milestones:

SUCSESSES:

- AI project-trained specialists inseminated 559 cows bringing the total number of inseminated cows to 4,856 as of 2012.
- 176 calves were born, bringing the total to 1,412 as of June 30, 2014.
- AgTech has provided each of the active Project AI specialists with a small amount of Limousin and sexed semen doses on a regular basis, as compensation for their efforts in tracking and recording AI activities and new born calves in their respective regions. To date, the Project has recorded the birth of 20 Jerseys and 5 Limousin calves in Ahal and Dashoguz provinces. These new breeds were introduced by the Project in July 2013. The Project learned that an increase in demand for Limousin beef breeds has been established among livestock farmers
- The Project indicated a steady increase in demand for the Limousin beef breeds.
- Information gathered from 12 households demonstrates that there is a 100% increase in milk yields **(see Annex 1-Table 1-before and after comparison of crossbred heifers calved)**

CHALLENGE:

- Documenting new born calves has been a challenge. The record keeping by owners is of poor quality, if available. Thus, record keeping of milk yield and income increases as a result of increased use of AI services and improved breeds remains the primary challenge for capturing project impact.

Supporting Artificial Insemination (AI) Centers and Farmers

AgTech continues to provide support to existing AI Centers, including the provision of marketing, promotional materials, and word-of-mouth networking to increase farmers' understanding of the availability and benefits of using AI services.

As a result of changes in GOT's policy towards foreign assistance, the Project has modified its initial plan to establish fully-functional AI centers in Lebap and Balkan. The Project is focusing its efforts on providing technical support to local livestock farmers and entrepreneurs who are interested in AI services.

SUCSESSES:

- The project identified and assisted 4 entrepreneurs in the Lebap, Ahal, and Dashoguz regions in completing and submitting AI trade license applications to the State Livestock Union (SLU). The project believes these applications are currently under consideration, with a decision potentially forthcoming by the end of 2014.

CHALLENGE:

- SLUs' evaluation process and decision criteria are not clear, suggesting that the SLU has not fully developed the licensing processes and procedures since its reorganization in 2013.

US Based AI and Heat Detection Training

AgTech completed the first round of a month-long US based pilot training for a small group of Turkmen AI specialists. Ms. Yekaterina Chikhnyayeva (Ahal) and Mr. Nury Annayev (Mary), the first two training participants, returned from Davis, California in mid-April. The training was led by AgTech's international livestock consultant Dr. Thomas Graham and took place on a number of commercial dairy farms. The intensity of the trainings, although quite standard on U.S. farms, was challenging for the participants who have never set foot on such vast dairy commercial farms. Therefore, in consultation with the training providers and participants, the project modified the training.

SUCSESSES:

- Participants reported that the pilot training was both useful and informative. The participants confirmed that the pilot training helped to increase their ability to detect pregnancy. Following the training the participants increased their ability to detect pregnancies via palpation method. Instead of detecting within 90 days of gestation, the participants are now able to detect within 35-40 days of gestation.
- Each participant reported a better understanding of how to operate the ultrasound equipment and understood the importance of its utility.
- These achievements symbolize a significant step forward for the Project and its beneficiaries. The improved techniques which permit the participants to detect early pregnancy and more accurate insemination allow for a reduction in time between the gestation period and maximization of milk production.



CHALLENGE:

- The project planned for a second round of US-based training in May 2014 that would have included 2 representatives, Mr Gurban Nurmamedov (Lebap velayat) and Mr.

Bahrambay Rozmetov (Dashoguz velayat). However, despite that all travel preparations were made and approvals received, the project was forced to postpone the training. Mr. Rozmetov informed its representatives he was unable to travel due to health and family matters. The project, in full collaboration with USAID, determined to postpone the second pilot training and to select three instead of two candidates to participate in order to avoid future cancellations.

HORTICULTURE COMPONENT

Greenhouse Improvement Program

Q3 typically coincides with a peak in the growing and production season. During this quarter the greenhouse producers and farmers are concentrating on harvesting and planting their crops. Greenhouse construction and renovation activities are planned to resume in Q4. Therefore, as of the end of Q3, the total number of built or reconstructed greenhouses for the



Project year 4 remains to be at 35. The number is expected to remain steady until the end of Q4 at which time the target of 50 greenhouses is expected to be achieved.

Horticulture Production and Improvement

Following requests from the MFA, AgTech has ceased field trips to provinces and minimized direct interactions with farmers and growers.

Instead, the Project is acting as a liaison between the project horticulture partners and farmers, in order to provide them with the necessary technical and informational support. Each member of the small greenhouse farmer groups can become a point of contact for horticulture farmers and growers in their respective provinces. By training and preparing project partners as extension specialists, AgTech expects that project results and achievements will not only be maintained by the small group of beneficiary growers in each province, but they will expand their reach ensuring long-term sustainability.

AgTech has been able to foster linkages not only between local farmers and local horticulture experts, but also between local growers and foreign suppliers. In year 3 of the Project, AgTech sent horticulture project partners on a study tour to the Ukraine Branch of the Dutch seed company, Rijk Zwaan. In year 4, AgTech's horticulture partner in the Ahal District, Charymyrat Orazgeldiyev, with assistance from the AgTech Project, has been working directly with Rijk Zwaan to import seeds to Turkmenistan.

This collaboration between AgTech, a Global Supplier, and small farmers clearly demonstrates

“If it wasn't for the project, I would still be growing alfalfa and I wouldn't have the ability to receive a higher income. Your seminars have brightened my view towards better income crop cultivation and I found answers to all the doubts I had.”- Mrs. Shakirova Nazira, USAID AgTech Horticulture Seminar Participant

how the Project's strategy of functioning as a liaison has produced successful results and how its benefits will continue after the Project's completion.

SUCCESES:

- In Q2, AgTech's partner, Mr. Orazgeldiyev, imported high quality tomato and cucumber seeds directly from the Dutch supplier, Rijk Zwaan, with logistical help from AgTech. Today, Mr. Orazgeldiyev produces more than 200,000 seedlings and supplies them to greenhouse producers in several neighboring counties of the province.
- The Project assisted Mr. Orazgeldiyev with establishing regular contact with the supplier's representatives in Germany. As a result of these efforts, AgTech's partner is negotiating directly with the supplier for the second batch of seed imports.
- Additionally, with minimal assistance from AgTech, Mr. Orazgeldiyev provides consultation and advice to all his clients and farmers regarding fertilizer and pesticide application, growing techniques, and disease prevention measures.
- It is now a regular practice for the Project horticulture partners in different provinces to regularly contact each other in order to receive consultation on certain plant diseases or other horticulture problems. Regular communication and close cooperation between the project partners in provinces were initiated by the AgTech Project during the second and third year in order to improve horticulture production and achieve better results. The communication continues with minimum or no Project interference.
- As a result of this cooperation and project assistance, in Q1 -Q3 of the Project's fourth year, the project has recorded that a total of 454 greenhouse farmers and producers have increased their yields from vegetable production by more than 50% compared to the previous season.



Mr. Charymyrat Orazgeldiyev

CHALLENGE: Licensing rules and regulations in relation to vegetable seeds, pesticide and fertilizer imports remain to be the main challenge in domestic input supply market. The challenge to imports also impacts the local horticulture producers' ability to significantly increase vegetable production and meet the local market's demand for fresh vegetable products.

PROGRAM DEVELOPMENT AND SUPPLEMENTARY ACTIVITIES

In the third quarter, the GoT requested the Project to work more closely with the public sector specialists and counterparts such as the Ministry of Agriculture (MoA), the State Livestock union (SLU), the Agriculture University and the Academy of Science of Turkmenistan. The local

counterparts and beneficiaries for all approved Project STTA are selected and proposed by the MFA. Consequently, the Ministry of Foreign Affairs (MFA) approved two new STTA consultancies on forage crops management and WTO Veterinary Standards. The activities had to be postponed due to time restrictions encountered by the local counterparts. AgTech also conducted two STTA activities on livestock development and water efficient technologies. AgTech will use the approved STTA opportunities to work with the GoT counterparts in order to improve and contribute to the enabling environment and cement Project results achieved throughout the last four years.

Seminar on Livestock Development for the Agriculture University and the State Livestock Union of Turkmenistan

In May, with support from the MFA and MoA, AgTech carried out a presentation and a seminar for the Agriculture University on the livestock sector development in Turkmenistan. The seminar provided an opportunity for industry representatives to discuss important issues related to the local livestock sector, and share knowledge on gaining state support, policies needed to increase domestic livestock production, and key sector recommendations. Participants in this event included specialists from the State Livestock Union of Turkmenistan and lecturers from the Livestock and Veterinary Departments of the State Agricultural University.

SUCCESSSES:

- The Project retained Dr. David Ward, a Senior Officer (former) of the Animal Production and Health Division of the Food and Agriculture Organization of the United Nations (FAO), to lead a seminar on international best practices in the areas of livestock management, effective breeding, feeding techniques, and veterinary care procedures.
- Dr. Ward offered tailored recommendations that accounted for the local conditions in Turkmenistan and will be helpful in ensuring sustainability following the Project's closure.
- This seminar complemented the previously-held artificial insemination and breeding exercises by providing an assessment for supporting comprehensive development in the livestock sector and designed to

Next Steps:

The Project plans to organize three more Seminars on Horticulture, Dairy Production and Cattle Feed in order to demonstrate best practices for the participants. This activity will benefit greenhouse producers and livestock farmers as well as provide knowledge sharing opportunities to GoT Agriculture ministries.



maximize meat and dairy production.

Seminar on the water saving irrigation technologies for the Agriculture University and the State Food Industry Union of Turkmenistan



Per MFA’s recommendation, AgTech held a seminar for the Agriculture University and the State Food Industry Union of Turkmenistan in June. The seminar focused on water saving irrigation methods. With support from the MFA and the MoA of Turkmenistan, this seminar provided an opportunity for participants to discuss water conservation matters, agricultural irrigation, water management policies, regional issues, sector challenges and the irrigation infrastructure. Participants included specialists from the State Food Industry Union and the Ministry of Water Resources of Turkmenistan as well as academics from the Water Conservation Department of the S.A. Niyazov Turkmen Agricultural University.

SUCSESSES:

- Dr. Robert Richardson, an expert in irrigation technology, introduced best practices in water conservation and discussed how water-saving irrigation methods can enhance the production of vegetables and other crops in greenhouses and outdoor production.
- Dr. Richardson offered tailored recommendations to challenges as they related to Turkmenistan’s unique climate and offered suggestions for the participants to help mitigate those challenges.

Seminar on growing and maximizing the yields of forage crops for the Agriculture University and the Academy of Science of Turkmenistan

AgTech prepared a seminar for the Agriculture University and the Academy of Science of Turkmenistan on growing and increasing yields of forage crops in Turkmenistan. Topics such as cultivating high-value forage crops in Turkmenistan’s unique climatic and soil conditions were highlighted. This seminar was designed to expand on the USAID-organized artificial insemination and livestock sector development seminars held over the last year, as part of the comprehensive effort to better enable Turkmenistan’s agricultural sector maximize its meat and dairy production. The participants included specialists from the Academy of Science and academics from the Agronomy Department of the S.A. Niyazov Turkmen Agricultural University.

SUCSESSES:

- Dr. Gregory Sullivan, an international expert in crop science focused on explaining and demonstrating crop management strategies and growth techniques designed to boost the nutritional value and yields of forage crops, such as those used in the production of animal feed.

Seminar on the WTO Veterinary standards and measures for the Ministry of Agriculture of Turkmenistan



In late June, AgTech completed the final part of the seminar devoted to World Trade Organization (WTO) accession issues related to animal health, trade of animal products, and food safety for the MFA. This seminar complimented the WTO SPS seminar held for the State Quarantine Service and Plant Protection Department of the Ministry of Agriculture of Turkmenistan in March 2014 and was one of several that USAID has organized with the Government of Turkmenistan in order to examine benefits and challenges of joining the WTO. Participants of this event included specialists from the State Veterinary Service, MoA, the S.A. Niyazov Turkmen Agricultural University, and the Academy of Sciences of Turkmenistan.

SUCSESSES:

- Dr. Max Coats led the seminar on WTO regulations provided for the specialists of the State Veterinary Service of the MoA and the Academy of Science of Turkmenistan.
- Presenters and participants of the seminar discussed how countries developed their own sanitary and veterinary standards based on scientific recommendations and international best practices.

Publications

During the reporting period, AgTech continued the production and dissemination of booklets, brochures and leaflets for horticulture farmers and producers. Due to the busy growing season, project produced booklets on pest and disease control for greenhouse vegetables. The booklets are in high demand among farmers and beneficiaries. Project booklets and handout materials for farmers are produced with appropriate terminology in two languages, Russian and Turkmen, to accommodate all beneficiaries. AgTech will continue to produce additional copies of materials, including information on soil testing, drip irrigation, fertilizer application, and pest and disease control as needed by horticulture farmers and other project beneficiaries.

CHEVRON FUNDED ACTIVITIES

LIQUID NITROGEN GENERATOR

The Chevron funded liquid nitrogen generator (LNG) - procured from a US-based manufacturer Kelvin International Corporation in Year Two by AgTech - has been supplying project AI activities and beneficiaries through Q3 of Project year four. In this quarter the project AI centers and project participants have received on average 41L of LN per month for a total of 1471 Liters of LN since the first quarter (**see Annex 2**). Targets and results remain the same as the previous quarter. The

project looks forward to collaborating on new co-funded initiatives through the end of the year and into the final year of the project.

SUMMARY OF STAFFING MATTERS

In the third quarter, the AgTech Home Office underwent staffing changes. Following Mr. Charles Yesolitis's departure, Ms. Elina Pavlova, the former Project Coordinator assumed Mr. Yesolitis's responsibilities of a Project Manager. Likewise, Ms. Ann Przybyl replaced Ms. Pavlova as the Project Coordinator and Jason Bohoney assumed the role of a Technical Manager in place of Wesley Weidemann.

PMP TARGETS AND DEVIATIONS

| PERFORMANCE INDICATOR | PERFORMANCE INDICATOR DEFINITION | YEAR 4 PROPOSED | YEAR 4 TOTAL (Q1+Q2+Q3) |
|--|---|------------------|------------------------------------|
| 50% increase in HH income | <i>Horticulture HHs and farms increasing income by 50%</i> | 500 | 454* |
| | <i>Livestock HHs and farms increasing their income by 50%</i> | 500 | N/A** |
| Person hours of training completed in private sector productive capacity supported by USG assistance | <i>Number of hours of training completed by beneficiaries and training participants, disaggregated by gender</i> | 1600 | 1907 |
| Farmers, processors and others who have adopted new technologies or management practices | <i>Number of beneficiaries and training participants using new technologies or practices as introduced by the project, disaggregated by gender and region</i> | 250 | 845 |
| Quantity of produce grown and/or sold | <i>Farmers, buyers or labs are using AI, improved feed, vet services, greenhouses, drip irrigation, grading, post-harvest packaging practices training</i> | Baseline + 300 % | Cumulative will be provided in Q4* |
| Value of produce sold to local and international markets | <i>USD value of goods in livestock and horticulture sector disaggregated by product and veleyat</i> | Baseline + 50% | Cumulative will be provided in Q4* |
| Number of agriculture-related firms benefiting directly from USG supported interventions. | <i>Number of input providers and buyers strengthened to provide farmers with necessary inputs.</i> | 300 | 5 |
| Number of greenhouses constructed or improved | <i>Number of greenhouses constructed and/or renovated in each veleyat</i> | 50 | 35* |
| Land under improved technologies or management practices | <i>Indicates the number of ha under greenhouse or livestock project activities (existing and new land).</i> | 200 | 1.5* |

*Due to restrictions set forth by the MFA, gathering information and travelling to the field was impossible after May 2014. Therefore, indicators and figures provided in the tables reflect data gathered in April through May from Mary and Lebab regions, and April - June from the Ahal region.

**Due to the remote and sparse location of many livestock households, documenting all newborn calves remains one of the main challenges. Another major challenge is poor record keeping, if any, by farmers. Farmers rarely record increases in milk yields and income as a result of increased use of AI services and improved breeds. In Q3 the project was able to monitor 12 project heifers.

ANNEX I

TABLE 1: MILK YEILDS FOR PROJECT ARTIFICIALLY INSEMINATED COWS

| INSEMINATION DATE | BREED | MOTHER | D.O.B. | 1 ST INSEMINATION | MILK YEILD/ DAY | MILK AVG BEFORE (in liters) |
|-----------------------|-------|--------------|------------|------------------------------|-----------------|-----------------------------|
| 25.04.2011 | BS | Local cow | 27.01.2012 | Local bull | 14 L | 7L |
| 10.05.2011 | HO | Monbelliarde | 09.02.2012 | AI by Katya | 21 L | 8-10L |
| 19.05.2011 | BS | Local cow | 24.03.2012 | Local bull | 15 L | 8 L |
| 13.06.2011 | HO | Local cow | 02.04.2012 | Local bull | 16 L | 7-8 L |
| 14.06.2011 | HO | Local cow | 28.02.2012 | Local bull | 15 L | 8 L |
| 19.06.2011 | BS | Monbelliarde | 23.03.2012 | AI by Katya | 18 L | 8 L |
| 22.07.2011 | HO | Local cow | 23.04.2012 | AI by Katya | 14 L | 7 L |
| 10.08.2011 | HO | Local cow | 17.05.2012 | Local bull | 16 L | 7 L |
| Apr/2011 | HO | Monbelliarde | Jan/2012 | AI by Katya | 22 L | 9 L |
| 18.06.2011 | HO | Local cow | 25.03.2012 | AI by Katya | 15 L | 8 L |
| June/2011 | BS | Local cow | April/2012 | AI by Katya | 14 L | 9 L |
| July/2011 | BS | Local cow | April/2012 | AI by Katya | 16 L | 9 L |
| AVG MILK YEILD | | | | | 16.3L | 8L |

TABLE 2: HORTICULTURE HH-S AND FARMS INCREASED THEIR INCOME BY 50% IN YEAR 4*

| VELEYAT | MORE THAN 50% TOTAL Q1+Q2+Q3 (Y4) |
|--------------|-----------------------------------|
| Ahal | 113 |
| Mary | 166 |
| Lebap | 175 |
| Total | 454 |

*The 3Q of year 4 was a period of harvest for Greenhouse farmers. Farmers (the majority of whom grow vegetable during 1-st and 2-nd quarters) planted crops up to their greenhouses' full capacity. Due to restrictions set forth by the MFA, gathering information and travelling to the field was impossible after May 2014. Therefore, the figures provided in the tables reflect data gathered in April through May from Mary and Lebap regions, and April - June from the Ahal region.

TABLE 3: NUMBER OF TRAINING HOURS COMPLETED BY BENEFICIARIES AND TRAINING PARTICIPANTS DISAGGREGATED BY GENDER AND REGION Q1+Q2+Q3

| REGION | Q1+Q2 | TOTAL PROJECT TO DATE |
|---------------|-----------|-----------------------|
| Akhal | 6 | 50 |
| Mary | 18 | 146 |
| Lebap | 9 | 112 |
| Balkan | 2 | 10 |
| Dashoguz | 0 | 11 |
| Total: | 35 | 329 |

TABLE 4: NUMBER OF GREENHOUSES (GH) CONSTRUCTED AND/OR RENOVATED THROUGH 3Q (THERE IS NO GH CONSTRUCTIONS DURING 3Q)

| REGION | MALE | FEMALE | TOTAL FOR Y4 |
|------------------|-------------|------------|--------------|
| Ahal | 886 | 287 | 1173 |
| Mary | 136 | 162 | 298 |
| Lebap | 176 | 179 | 355 |
| Dashoguz | 39 | 6 | 45 |
| Balkan | 28 | 8 | 36 |
| Sub-total | 1265 | 642 | 1907 |

TABLE 5: GH HORTICULTURE INDICATORS (DISAGGREGATED BY VELAYATS)

| VELAYAT | FARMERS WITH >50% INCREASE IN INCOME | INCREASE IN PRODUCTION | INCREASE IN VALUE |
|---------|--------------------------------------|------------------------|-------------------|
| Ahal | 113 | 114% | 95% |
| Mary | 166 | 184% | 206% |
| Lebap | 175 | 171% | 248% |

Annex 2 CHEVRON FUNDED ACTIVITIES

TABLE 6: LN DISTRIBUTION YEAR 4 (LITERS)

| | Oct 2013 | Nov 2013 | Dec 2013 | Jan 2014 | Feb 2014 | Mar 2014 | April 2014 | May 2014 | June 2014 | Totals |
|--|-------------|-------------|-------------|-------------|-------------|-------------|---------------|-------------|--------------|-------------|
| Mary AI (Nury Annayev) | 50 | 50 | 50 | 50 | 50 | | 50 | | 50 | 350 |
| Dashoguz AI | 50 | 50 | | 61 | 50 | 61 | 50 | | 50 | 372 |
| Katya (Ahal) | 34 | 35 | 35 | | | 30 | | | 34 | 168 |
| Sahabatly livestock farm (Anzarov) | | | | 50 | | | 40 | 50 | 50 | 190 |
| Sha yoly livestock farm (Ahal) | | 35 | | | | | 20 | 10 | 10 | 75 |
| Altyn Halka livestock farm (Ahal)- Yazmyrat | | 10 | | | | | 6 | | | 16 |
| Gurban Nurmammedov (Lebap) | | 11 | | 11 | | | 11 | | 11 | 44 |
| Turkmenmallyary (Ahal) | | | 10 | | | | 8 | | | 18 |
| Allaberdy livestock farm (Ahal) | | | | | | | 10 | 6 | 6 | 22 |
| Ag Tech Office | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 160 |
| Ajayip Ussat livestock farm (300 cattle) (Ahal) | | | | | | | | | 25 | 25 |
| AI Specialist Hemrakuly (Lebap) | | | | | | | | | 11 | 11 |
| Total | 154 | 211 | 115 | 192 | 120 | 111 | 215 | 86 | 267 | 1471 |

TABLE 7: ACTING AI TECHNICIANS AND LIVESTOCK FARMERS USING PROJECT SEMEN AND LN

| | Name | Region |
|----|------------------------------------|-------------|
| 1 | Nury Annayev | Mary |
| 2 | Katya Chiknyayeva | Ahal |
| 3 | Yazmurat aga | Ahal |
| 4 | Yolaman | Ahal, Tejen |
| 5 | Allaberdy aga | Ahal |
| 6 | Anzarov Sahavatly (livestock farm) | Ahal |
| 7 | Sha Yaly (livestock farm) | Ahal |
| 8 | Batyr | Dashoguz |
| 9 | Gairat Hudaishukurov | Dashoguz |
| 10 | Murat Nurmatov | Dashoguz |
| 11 | Ahmedov | Dashoguz |
| 12 | Rozmetov Bahrambay | Dashoguz |
| 13 | Gurban Nurmammedov | Lebap |
| 14 | Navarov Allanazar | Dashoguz |
| 15 | Hemrakuly | Lebap |
| 16 | Ajayip Ussar (livestock farm) | Ahal |