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Dairy and Rural
Development
Foundation



ANNUAL PROGRESS REPORT - YEAR FOUR

October 31, 2015

Dairy Project

Agreement No:
391-A-00-11-01206-00

Disclaimer: The views expressed in this publication do not necessarily reflect the views of the U.S. Agency for International Development or the United States Government.



It gives me immense pleasure in presenting you the Annual Progress Report of Year-4 of the project. Having successfully achieved our first three year targets—impacting over 30,000 rural households—the Dairy Project received a two-year extension to expand the scale and scope of its interventions. During the extension phase, we have gone for higher training targets including the upgradation of 100 local farms and construction of 10 bio-gas units, and focused on cluster formation so that our beneficiaries can work together more closely. I am confident that the achievements of the first four years will continue onward into the final year of the project and hope the efforts of the project will sustain.

Sincerely,

A handwritten signature in cursive script, appearing to read "J. Moser".

Jack Moser
Chief of Party
USAID DRDF – Dairy Project



“If you try to put social and cultural development ahead of economic development, it doesn’t work. You have to do it all together”

Agha Khan IV
September, 2008



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Acronyms

AI	Artificial Insemination
AITs	Artificial Insemination Technicians
AOR	Agreement Officer's Representative
BOG	Board of Governors
DRDF	Dairy and Rural Development Foundation
FM	Field Manager
FO	Field Operations
GM	General Manager
LBEs	Livestock Business Entrepreneurs
LHW	Livestock Health Worker
LN	Liquid Nitrogen
M&E	Monitoring and Evaluation
MTs	Master Trainers
NGO	Non-Governmental Organization
PD	Project Director
PMU	Project Management Unit
PVTC	Punjab Vocational Training Center
SMs	Social Mobilizers
SOP	Standard Operating Procedures
TOR	Terms of Reference
TOTs	Training of Trainers
UAF	University of Agriculture Faisalabad
US	United States
USG	US Government
USAID	United States Agency for International Development
OIG	Office of Inspector General
UVAS	University of Veterinary & Animal Sciences
Vanda	Concentrated animal feed, locally known as “Vanda”
VTIs	Vocational Training Institutes
WLEWs	Women Livestock Extension Workers
ZM	Zonal Manager
PEEP	USAID – Punjab Enabling Environment Program
ASF	Agribusiness Support Fund
L&DD	Livestock and Dairy Development Department
LUMS	Lahore University of Management Science

Executive Summary

The dairy and livestock sector contributes 11 per cent of the total gross domestic product of Pakistan. The country has an estimated 67 million cattle, with seven million families earning their income from small scale dairy farming. However the milk yield per animal are still quite low. Most of the dairy farmers do not follow progressive dairy farming practices and have limited access to veterinary and breed improvement services. It is in this context that the Dairy Project's extensive training programs for dairy farmers, Women Livestock Extension Workers (WLEWs) and Artificial Insemination Technicians (AITs) are playing an important role in transforming the livelihoods of rural communities. The Dairy Project is aimed at fostering sustainable increase in dairy and livestock productivity through adoption of best dairy farming practices, breed improvement, availability of timely extension services, and promotion of livestock businesses. Also, the Dairy Project contributes to the USAID's strategic objective of creating job opportunities and increasing incomes in Pakistan. The Dairy Project has continued trainings for AITs, WLEWs and farmers in the fourth year of its implementation. It has also facilitated farmers who wanted to upgrade their farms so as to take a step towards adopting best dairy farm practices. During Year-4, the Dairy Project covered around 27 districts in Punjab, mainly in the South Punjab; the majority of the beneficiaries come from the districts Bahawalpur, Vehari, Lodhran, Khanewal and Multan. The project upgraded 40 farms in the reported year; it contributed **PKR 23,957,723 (USD 230,363)** towards the upgradation, whereas the farmers contributed **PKR 32,825,918 (USD 315,634)**. The project targeted 1:1 ratio of the investments in the upgradation of the dairy farms however the ratio came out to be \$1 to \$1.37 as the farmers were willing to invest more than the 50 per cent share. Farm economists were also deployed to these farms to provide advisory services to run the farms effectively. Majority of the upgradation requests were for shed constructions.

Farm Upgradation

\$1 contribution is matched by

\$1.37 contribution by the farmer

The Dairy project laid down a massive target of training 22,275 farmers in Year-4, and it was a challenge for the project to mobilize such a huge number of farmers. Moreover, in light of the Punjab Livestock and Dairy Development (L&DD) department's new policies, the project experience a great of difficulty in ensuring it was operating in accordance with the new policies. The project's AI component, in particular, was significantly impacted. The project also faced challenges in its Women Livestock and Extension Workers (WLEW) component. These challenges pertained to social constraints and limited access to input supplies.

Despite these difficulties, the project trained a total of 21,726 farmers, partly due to the heavy rainfalls Pakistan witnessed this year. Majority of the farmers were given awareness on dairy farming practices, which was around 95 per cent, and 5 per cent were given structured trainings. These farmers exhibited a positive response to the trainings with an average increase of 8.1 per cent¹ in the milk yield. In order to further reinforce farmer mobilization and create mass awareness about the best dairy farm practices, the Communications Team successfully organized a series of street shows with mobile float announcements, reaching out to more than 20,000 rural men and women in the dairy community. With respect to the new government policies, the project revised the duration of its AI training program from one-month to six-months, causing many delays and interruptions—which explain the variance in the AI training target and achievement. However, the trained AITs in Year-4 are earning on average PKR 5,672 (USD 55) per month and performing 21 cases with a conception rate of 67 per cent. Furthermore, the project continued its efforts to empower the rural

¹95% of farmer beneficiaries received only the awareness sessions on best farming practices, whereas 5% received best dairy farming training.

women community and trained a total of 1,032 WLEWs. The average monthly income of the newly trained WLEWs and the WLEWs who have attended refresher courses is PKR 1,032 (USD 10) and PKR 2,457 (USD 24), respectively.

In order to overcome the social and cultural constraints, the project was engaged in a number of mass awareness activities, such as street shows with mobile float announcements, to highlight the role of women in the livestock and dairy sector, and their contribution towards dairy development. The project also began connecting the WLEWs to input suppliers and dairy farmers through cluster formations. Figure 1 illustrates targets and achievements for the reporting period.

The Annual Progress Report—Year Four describes the Dairy Project’s operations and progress during the period October 1, 2014 to September 30, 2015. In addition, the report also includes the project’s progress during the silent period, July, 2014 to September, 2014. A few stories of successful and hardworking beneficiaries have also been added to highlight the Dairy Project’s success in achieving the envisioned results.

Targets vs. Achievement -Year 4

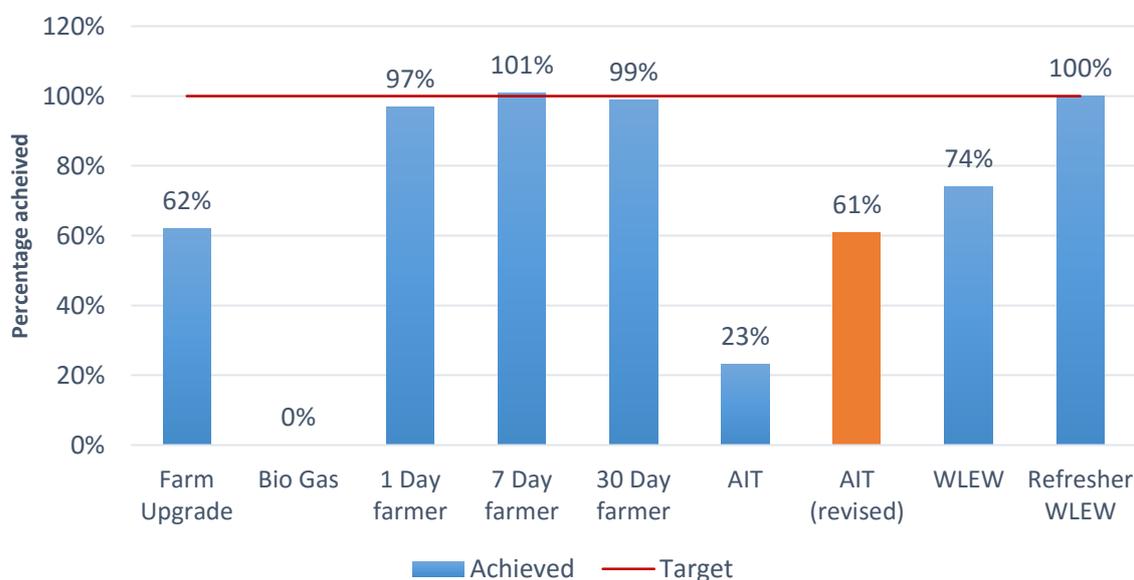


Table 1 Target vs. Actual

Project Financial Summary

- I. Agreement No.: 391-A-00-11-01206-00
- II. Date of Authorization: January 28th, 2011
- III. Date of Commencement of Project: July 15th, 2011 (Under Modification No. 2 to the Agreement)
- IV. Total USAID Contribution: US \$ 21,018,293/-
- V. Amount Obligated till September 30, 2015: US \$ 20,918,293/-
- VI. Total Project Funds Expended till September 30, 2015: US \$ 16,980,929/-
- VII. Funds Allocated for Year-5 (1st Oct, 2015 to 14th Oct, 2016) : US \$ 4,037,364/-

Background and Scope

The Dairy Project commenced in July 2011 under USAID Pakistan's Economic Growth Strategy with the Dairy and Rural Development Foundation (DRDF) as the implementing partner. The DRDF is a not-for-profit, non-government entity established in 1996 by progressive cattle breeders, extension workers, and the milk processing industry. The DRDF has worked extensively with dairy producers across Punjab on various activities including breeding, feeding, management and health improvement. The Dairy Project contributes to the United States Agency of International Development's (USAID) strategic objective of creating job opportunities and increasing incomes. More so, the activities of the Dairy Project are aligned with Pakistan's development agenda, and its goal and objectives reflect national and regional priorities. The Dairy Project is being implemented in all four provinces, with a major focus on Punjab. The project's Head Office is based in Lahore with zonal offices in Bahawalpur, Vehari and Burj Attari. The project has a five-year implementation time span, from July 2011 to October 2016. For a detailed overview of the training program see [Annex I](#)

The dairy and livestock sector contributes 11 percent of the total GDP of Pakistan. Around 7 million families are associated with this sector. More than half of the dairy farmers belong to Punjab. Majority of dairy farmers are owners of small herds (two to three animals) and have limited access and knowledge of progressive dairy farming practices and quality extension services that can significantly improve the milk yield and farmers' dairy income.

In this context, the project aims to foster sustainable increase in dairy and livestock productivity through adoption of best dairy farming practices, breed improvement, availability of timely extension services and promotion of livestock businesses. The Dairy Project's mission comprises of the following key objectives:

- a) Train and build the capacities of dairy farmers in best farming practices
- b) Develop human resource to provide artificial insemination and basic veterinary services at village level
- c) Promote entrepreneurship through training unemployed youth and build linkages with input suppliers and clients
- d) Facilitate rural farmers financially in upgrading their farms to incorporate modern dairy practices

In order to achieve the above mentioned objectives, the implementation strategy of the Dairy Project includes the following components:

- I. Training and support for 49,100 dairy farmers from around Pakistan
- II. Training and support for 3,000 Artificial Insemination Technicians (AITs)
- III. Training and support for 6,000 Women Livestock Extension Workers (WLEWs)
- IV. Awareness campaign that will increase knowledge of best dairy farm practices
- V. Facilitate in upgrading 100 dairy farms and 10 Biogas plants

This Annual Progress Report (APR) describes the Dairy Project's operations and progress during Year-4, i.e. October 1, 2014 to September 30, 2015. However from July to September 2014 the project had a silent period for the two year extension phase. This progress during the silent period has also been included in this report. The report also highlights the project's achievements, major challenges, lessons learnt and the way forward.

Progress Highlights at a Glance

After successfully completing the first three year objectives, the Dairy project received a two year extension to continue to implement the same strategy and scale-up its objectives. During October to December, 2014, the project was predominately occupied in planning, hiring and acquiring training and zonal sites. During the reporting period, the project underwent an audit from Office of Inspector General (OIG) without any objection (zero-objection). The project relaunched its operations by January 2015. It continued its trainings for AITs, WLEWs and farmers and also started the selection of farmers eligible for farm upgradation. During Year-4, the Dairy Project trained beneficiaries from 26 districts across Punjab, with a major focus on the south (Bahawalpur, Lodhran and Vehari etc.) Selection and screening of farmers, AITs and WLEWs is carried out through community mobilization against set criteria. A total of **22,894** individuals were given training relating to the modern dairy farming and extension services. These efforts have resulted in an **11%** increase in milk yield for the trained dairy farmers, whereas the trained AITs and WLEWs (previously unemployed) earn **PKR 9,193 (USD 90)** and **PKR 1,085 (USD 10)**, respectively. The parent organization, Dairy and Rural Development Foundation (DRDF), is working on establishing dairy clusters—a dairy input and output supply hub to link and sustain the project beneficiaries once the project ends.

The Project employed its specialists to help device a data collecting software with a help of a third party software house. The software collects data at different stages of the operations, which will help the Monitoring and Evaluation (M&E) and the Field Operations teams to monitor and verify operations in real time. The table below presents quarter-wise targets and achievements for each of the three training components ([Annex-5](#) gives a detailed breakdown of monthly training). The project was unable to meet all its training targets since it took some time to restart its operations after the silent period (July 2014 – September 2014). Moreover, in light of the Punjab Livestock and Dairy Development (L&DD) department's new policies, the project faced some challenges to be in line with the new policies. The project's AI component, in particular, was significantly impacted. We feel confident that the remaining training targets will be achieved during Year-5.

Beneficiary Type	Jul-Sep 2014		Oct-Dec 2014		Jan-Mar 2015		Apr-Jun 2015		Jul-Sep 2015		Total	
	T	A	T	A	T	A	T	A	T	A	T	A
Training of farmers on best farming practices	0	0	0	0	4,675	3,488	8,800	9,933	8,800	8,305	22,275	21,726
Training of Women Livestock Extension Workers (WLEWs)	0	0	0	0	408	147	408	522	409	363	1,225	1,032
Training of Artificial insemination Technicians (AITs)	0	0	0	0	200	39	200	97	200	0	600*	136
<i>T=Targets A=Achievements</i> <i>*The target of 600 is according to the AIP-4, when the project had to train 1,000 AITs in Phase-2 of the project. However, the targets have been revised in July 2015 to train a total of 445 AIT (222 in each year) in Phase-2.</i>												

Table 2 Target vs. Achievements Year-4

Training of Farmers

Performance Indicators-Farmer Training	Targets	Achievement
<i>Increase in milk productivity after applying at least three learned best practices</i>	At least 10 percent increase in milk yield	Training: 11 percent*
<i>Increase in the project-assisted household real annual income from dairy activities</i>	At least 10 percent increase in household real income	23 percent
<i>Percentage of project-assisted farmers using at least three best practices relative to the baseline</i>	60 percent farmers adopted three or more best practices	73 percent

**In Phase-2 majority of the farmers (95 per cent) were trained under only awareness on best farming practice whereas only 5 per cent were trained under structured training.*

Table 3 Performance summary – Farmers

Training of WLEWs

Performance Indicators-WLEWs Training	Targets	Achievement
<i>Income of WLEWs from livestock services relative to the baseline</i>	Average income of at least PKR. 2,000 per month	WLEW - PKR. 1,085 Refresher* - PKR. 2,457
<i>Number of Farmers served by a WLEW in a month</i>		WLEW - 8 Refresher - 17
<i>Number of villages served by a WLEW in a month</i>	On average 1 village per WLEW	2
<i>Number of project-trained WLEWs providing services as self-employed extension workers</i>	At least 60 percent of the trained WLEWs providing livestock services	WLEW - 41 percent Refresher - 93 percent

**Refresher is a 15-days retraining given to already trained WLEWs*

Table 4 Performance summary – WLEWs

Training of AITs

Performance Indicators-AITs Training	Targets	Achievement
<i>Monthly income of AITs from providing AI services relative to the baseline</i>	On average income of at least PKR. 3,000 (US\$ 32)per month	PKR. 9,139
<i>Percentage of imported semen used</i>	At least 20 percent of the total applied semen by an AIT	10 percent*
<i>Ratio of insemination procedures to pregnancy</i>	At most 1.7 insemination per pregnancy	1.5
<i>Percentage of AITs providing professional services to communities</i>	60 percent of AITs	92 percent

**A sanction imposed by the Punjab Livestock department on usage of imported semen.*

Table 5 Performance summary - AITs

Geographical Coverage

The Dairy Project's field offices and training sites have been established at the following sites: Burj Attari (District Sheikhupura), Sukheki (District Hafiz Abad), Vehari (District Vehari) and Bahawalpur (District Bahawalpur). Through these sites, the project is achieving the envisaged training targets. During the past four years, the project not only focused on Punjab but also tapped into other provinces; the project's success can now be assessed across Pakistan. In Year-4, the project focused on South Punjab, and the major operational districts were Lodhran, Vehari, Bahawalpur, Multan, Khanewal, Bahawalnagar and Sahiwal. Following figure shows the districts covered by the Dairy Project over the past four years.

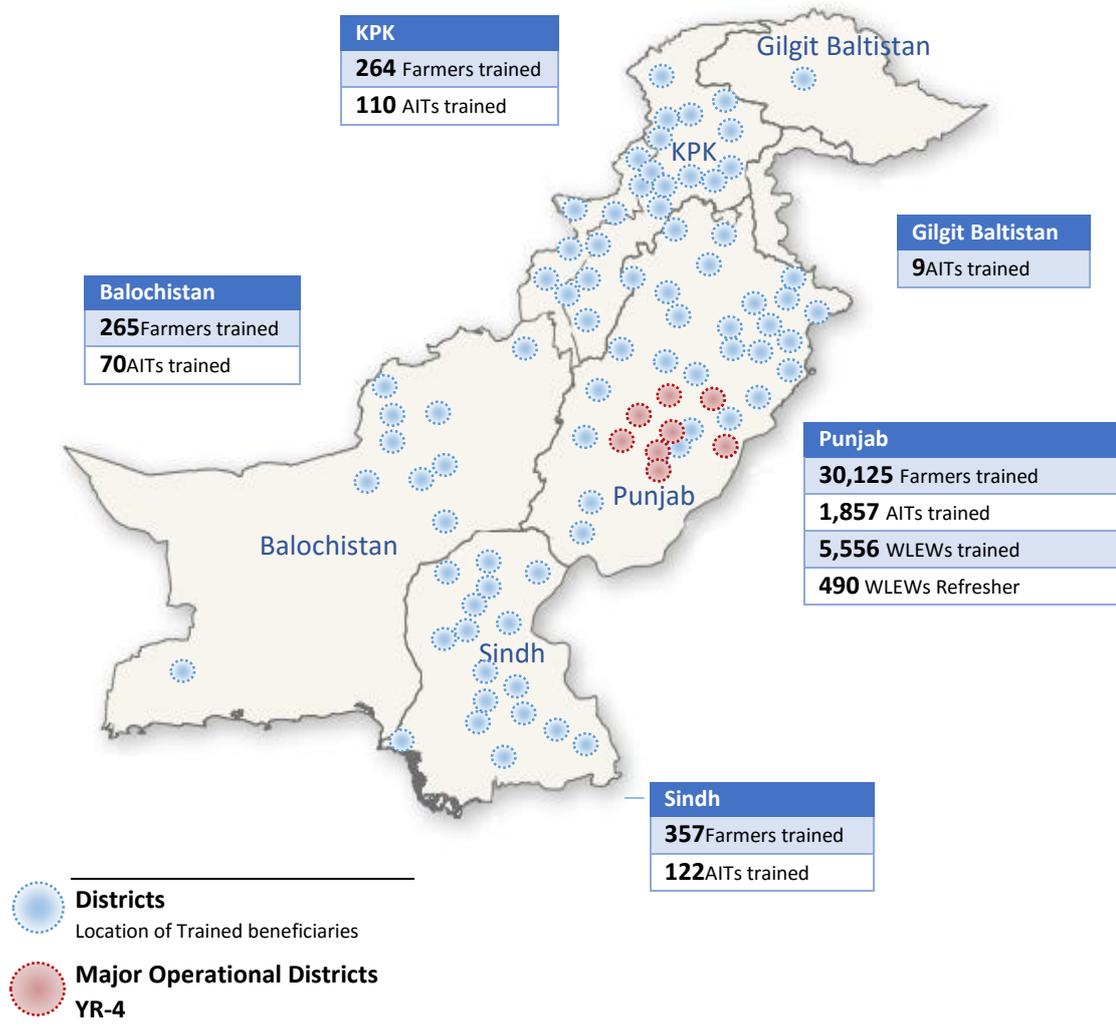


Figure 1 Geographical coverage of the project

SECTION 1: FUNDS EXPENDED DURING REPORTING YEAR

“Charity bestowed upon those who are worthy of it is like good seed sown on a good soil that yields an abundance of fruits. But alms given to those who are yet under the tyrannical yoke of the passions are like seed deposited in a bad soil. The passions of the receiver of the alms choke, as it were the growth of merits”

-Lord Buddha

80% of funds directly spent on beneficiaries

Expense Categories under Cooperative Agreement	Budgeted	Amount in US Dollars	Variance
Personnel Cost	1,230,561	871,881	29%
Travel	328,786	296,343	10%
Equipment and Supplies	1,215,155	595,209	51%
Other Direct Costs	1,475,580	1,535,728	(4%)
Total	4,250,082	3,299,161	22%

Table 6 Expense of the project - Categories under Cooperative Agreement

Percentage of Expense by Category

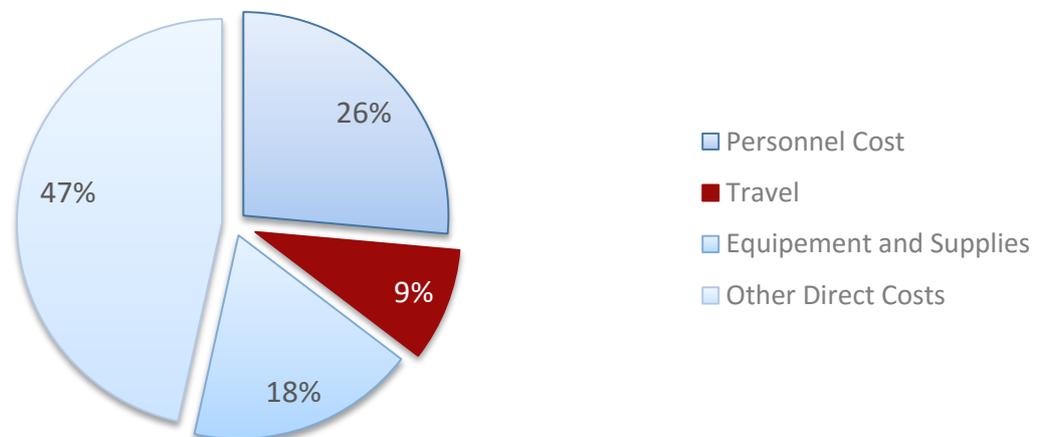


Figure 2. Expense distribution by category

In Year-4 the variation in the actual expenditures and forecasted budget is due to a number of reasons. Few of the major contributors were as follow:

1. The differential in the budgeted and the actual personnel cost is due to, the management decision of hiring in phases as per need.
2. Due to a change in livestock policy by Punjab Livestock Department, the project had to revise its training methodology. This meant shifting from one month trainings to six months training. As a result, the number of beneficiaries passed out was below target and secondly there were delays in rewarding the qualified AITs with bikes. As there were delays in bike distributions less number of bikes (worth USD. 360,000) were purchased in Year-4 compared to what was forecasted.
3. The activities of sexed semen and the strategy to effectively distribute it are under discussion and review. Therefore, no expense was incurred by this activity in Year-4. Also constructions of biogas plants have not yet started due to delays in finalizing the companies to install these plants. These were planned to begin in Year-4 but will begin in Year-5.the budgeted amount for both of these activities were USD. 175,000.
4. There were delays in the startup of the farm upgradation activities; hence the project could not meet the number of targeted farms in Year-4. However, the farm upgradation targets will be met during Year-5 and total spending on this activity would be USD. 80,000.

Forecasted Expenditure for Year-5

The below table provides a snapshot of budgeted expenditures for fifth year of the project. The budget forecasting is done keeping in view the training targets and associated activities in Year-5.

Expense Categories	Year 5 (Oct 2015 to Sep 2016) Amount in US Dollars
Personnel Cost	1,440,310
Travel	219,778
Equipment and Supplies	795,254
Other Direct Costs	1,582,022
Total	4,037,364

Table 7 Forecasted budget for Year-5

SECTION 2: PROGRESS AND PERFORMANCE

The training progress and effect on livelihood(s) are monitored and evaluated by the Monitoring & Evaluation (M&E) team of the project. The M&E team conducts sample based quarterly surveys to obtain the necessary data to evaluate the project's performance. However, in Year-4, due to the low extension budget, the M&E team planned its quarterly survey in the most cost effective way. Instead of conducting the survey at the end of every quarter to measure the performance, the team conducted two quarterly surveys. One survey was conducted in January 2015 while the other was conducted in the month of October 2015. An evaluation and baseline study was completed by a third-party in June 2015. In the quarterly surveys, data is collected against performance indicators of all three components of the program for the previous quarter. The statistics for the Annual Progress Report are calculated as simple averages of data from the two quarterly surveys. For brief details on evaluation methodology see [Annex-2](#).

Farm Upgradation and Biogas Plants

Dairy Project is providing technical and financial support to farms with herd size of 15-30 milking animals, so that these upgraded farms can serve as a training and motivational model for neighboring small dairy farmers. On these farms, one-day training and practical demonstrations on implementation of best farming practices is given to the nearby farmers. Apart from the training, the farmers can revisit the farms to seek guidance. This is a much faster way to spread awareness among the rural dairy population, and facilitates the farmers who want to upgrade their farms but don't have the required resources.

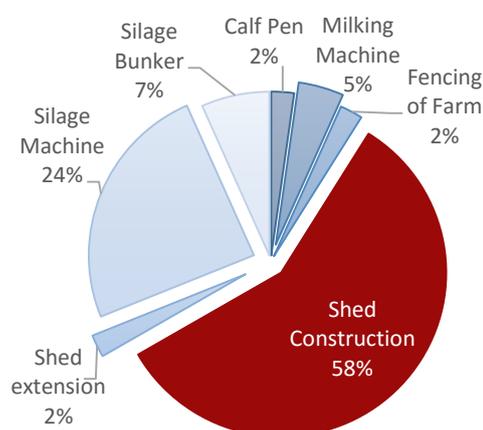
Feeds and fodder is a major nutrient for the health and milk production of the dairy animals constitutes a major part in the cost of production at dairy farms. As part of the Dairy Project's vision to enhance rural incomes, the project aims to shift 10 irrigation tube wells running on fuel/electricity to manure biogas units. Biogas will help reduce the energy cost by reutilizing the waste of the dairy farm i.e. cow dung. The slurry from these biogas units will be used as manure/fertilizer thereby improving the fertility of the surrounding cultivated land as an additional benefit to the farmer.

Farm Upgradation Highlights

In Year-4, the project was successful in selecting 89 farms for upgradation. These farms are located in the district of Vehari, Bahawalpur, Khanewal, Lodhran and Multan. The target of completing 65 farms by September 2015 was unable to be achieved. Due to the unexpected heavy rains Punjab, the Dairy Project was unable to complete its target of upgrading 65 farms by September 2015. Instead, the project was able to upgrade 40 farms. Table 8 shows the type of upgradation performed. Once the farm is selected and the agreement has been signed between both the parties, the farm is open for One-day and Seven-day farmer trainings, and is accessible for five years.

Request of upgrades	Count
<i>Calf Pen</i>	1
<i>Fencing of Farm</i>	1
<i>Milking Machine</i>	2
<i>Shed Construction</i>	26
<i>Shed extension</i>	1
<i>Silage Bunker</i>	3
<i>Silage Machine</i>	11
Grand Total	45

Table 8 Farm Upgrades by Category



The Dairy Project contributed a total of **PKR 23,957,723 (USD 230,363)** for the upgradation of the 40 farms, whereas the farmers contributed **PKR 32,825,918 (USD 315,634)**². This investment in upgradation would be the first step towards viable commercial dairy farming for small dairy holders. Apart from the upgradation of these farms the project has a Farm Economics team which gathers data on a monthly basis and, provides advisory services to such farms. From analyzing the data, it was observed that the production cost on the selected farms that were adopting traditional practices was, on average, higher than the dairy standards. Hence, the farm upgradation team is providing helpful solutions to decrease such costs making them more cost effective.

Biogas Plant Highlights

The project was unable to establish any biogas plant in Year-4. However, significant progress has been made with several meetings with biogas installation companies conducted, and the design work of biogas units finalized. There were delays in the advertisements in notifying the community about the project facilitating them in constructing such biogas plants. Once advertised, a selection committee was also established that was able to acquire applications against the advertisements. The scrutiny of these applications is under process.

PHOTO: DAIRY PROJECT

Farm-Upgradation

Farm up-graded for Mr. Mehrban in 66WB

² The contribution of farmer is calculated on the basis of initial feasibility. The figure may increase with the completion of up-gradation work.

Training and Support for Dairy Farmers

The Dairy Project is creating awareness about best practices through various trainings for dairy farmers. Previously, the trainings included Two-day training for traditional small farmers, Four-days training for progressive farmers, and One-month training for commercial farmers and farm managers. In the extension of two years, the project shifted from Two-days training to One-day trainings, Four-day training to Seven-day trainings and continued the One-month training program. Through these trainings the , farming community is significantly adopting modern dairy farming techniques, resulting in increased milk production and long term development in the dairy sector.

Farmers' Training Highlights

In the current reporting period, a total of **22,275** farmers were targeted for trainings. A total of **21,726** famers were trained in Year-4, which included **20,647** traditional small farmers who attended One-day training, **1,005** progressive farmers who attended Seven-days training ,and **74** farm managers and commercial farmers who attended the One-month training. The project came short of the set target for the year, but not by much considering the number of individuals to be mobilized for one-day trainings. To date, the Dairy Project has successfully trained a total of **31,011** farmers against its overall target of **31,375** farmers. After the successful completion of trainings, Seven-day farmers are provided with a small support kits. Furthermore, all the trained farmers were provided vital follow up support on a regular basis. Additionally, this year female farmers were also included in the farmers training. These females play a vital role in small rural dairy farming. Out of the 21,726 farmers trained, **2,599** (12%) were female farmers who attended One-day and Seven-day training sessions.

		Variance
Beneficiaries targeted during the reporting period	22,275	-2.46%
Beneficiaries reached during the reporting period	21,726	
Beneficiaries targeted to date*	31,375	-1.16%
Beneficiaries reached to date*	31,011	
*30 th of September, 2015		

Table 9 Trained vs. targeted farmers

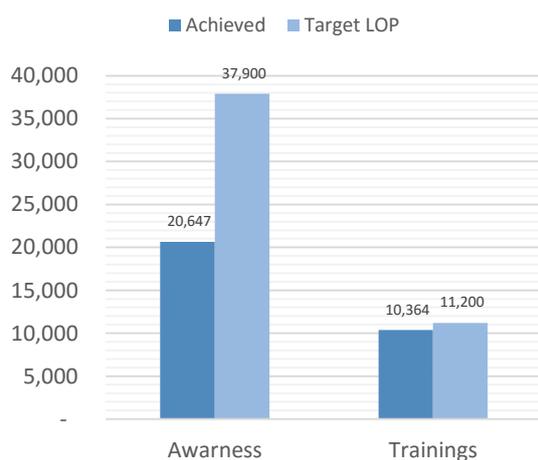


Figure 4 Life of project targets and trainings provided



Figure 3 Target of Year 4 and training target achieved

The project had planned to conduct farmer days with an objective of creating mass awareness about the best dairy farming practices. It was also planned to introduce input suppliers of the dairy sector and few of our trained extension workers so as to complement their business. However in Year-4, the project was able to carry out this activity at a low scale, and only the project-trained beneficiaries were introduced to the community. Proper stalls were setup by the beneficiaries to

promote their extension business. These farmer days provide an opportunity for the farmers to get their animals treated free of cost by these extension workers. The Dairy Project follow up teams were also available to provide any advice to the local farmers on dairy farming. Due to prevailing security concerns, the project was able to conduct a total of 26 farmer days conducted compared to the target of 80

Silage demand is increasing since the day the project started to give awareness to the farming community about the importance of fodder preservation. The project has its own silage making machinery and a team which facilitates the farmers in making the silage and spreads awareness about it. The project had planned to conduct 80 silage shows in year-4 and successfully organized 88 of such shows which covered an area of 305 acres of land with an estimated attendance of 3,060 farmers in total.

Below are the performance indicators set by the M&E team to measure the impact of the intervention(s). These indicators were evaluated Bi-annually. The first survey was conducted in January, 2015 which evaluated the beneficiaries from Phase-I of the project, and the second one in October, 2015 which only evaluated the beneficiaries trained in Phase-2. These indicators were then averaged out to get an accurate impact for Year-4. For detailed methodology refer to [Annex-2](#).

Indicators	Targets	Oct-Dec 2014	Jul-Sep 2015	Weighted Average
<i>Average increase in the project-assisted household real annual income from dairy activities relative to the baseline</i>	At least 10 percent increase in the household's income from dairy activities.	23% - Reported Annually		23%
<i>Percentage of farmers getting vaccination done, for FMD and HS, for their dairy animals</i>	At least 40 percent of the farmers.	85%	92%	90%
<i>Average monthly (per animal owned by project-assisted household) quantity of milk produced relative to the baseline</i>	At least 10 percent increase in milk yield.	17%	8.1%*	11%
<i>Percentage of farmers using services of WLEWs relative to the baseline</i>	At least ten percent farmers using services of WLEWs.	10%	23%	19%
<i>Percentage of project-assisted farmers using at least three best practices relative to the baseline</i>	60 percent farmers adopted three best practices	78%	71%	73%
<i>Number of project-assisted farmers trained in business practices, and book-keeping</i>	97.7 percent farmers	100%	100%	100%

**95% of farmer beneficiaries received only the awareness sessions on best farming practices, whereas 5% received best dairy farming training.*

Table 10 Performance indicators - Farmers

The survey conducted in the month of January included the beneficiaries from the Phase-I of the project (Year-1 to Year-3), whereas the survey conducted in the month of October included only the beneficiaries who were trained in Phase-2 (Year-4) of the project. Hence some of the performance indicators show a declining trend. Since the survey was carried out for the newly trained farmers (majority One-day farmers) in the latter month(s), there is slow increase in their

performance indicators. In Phase I, the average milk yield increase was 17 percent whereas, it was 8.1 per cent in Year-4. To get a more accurate measure of the increase in the milk yield (phase-1 and phase-2), we have taken a weighted average of the two values. The weighted average of the increase in the milk yield is 11 percent compared to the baseline values, which is marginally above the set target. This increase in the milk yield are due to the awareness provided to these farmers in adopting the best practices of the dairy farming, which is quite low in small scale dairy farmers available in the rural areas of Pakistan. On average, 73 percent of the trained farmers are adopting more than three best practices after receiving awareness. Disease outbreaks such as Foot and Mouth disease (FMD) and Hemorrhagic septicemia (HS) in the dairy animals are quite common in Pakistan. More emphasis is given on the importance of vaccination against such diseases by the Dairy Project in their training module(s). Due to these efforts, on average 90 percent of the trained farmers are timely vaccinating their animals against these diseases.

Farm Manager Training

The project trained 74 individuals in farm manager and commercial farmer training. Most of the individuals were from the farming community and wanted to either expand their farming business or learn how to manage a commercial farm. The trainings to such farmers are given on the Nestle Sukheki training farm, which houses approximately 300 dairy animals and has a state of the art modern shed. This gives a good exposure to the trainees on the best practices followed in the dairy farming industry, along with one-month in-class training. At the time of the training, 88% of the beneficiaries on average were working, out of which 65% were working in the dairy sector.

Out of the 10 per cent unemployed beneficiaries, 75 per cent have been actively applying for farm managing jobs. While the beneficiaries working on their own dairy farms, 97 per cent are adopting more than three best practices. Hence, the milk yields of such farms have increased by 24 per cent in total and the milk sold in the market has increased by 30 percent. We estimate that the total worth of milk sold annually to the processors by the 74 trained farmers will be PKR 16,080,534 (USD 152,458).



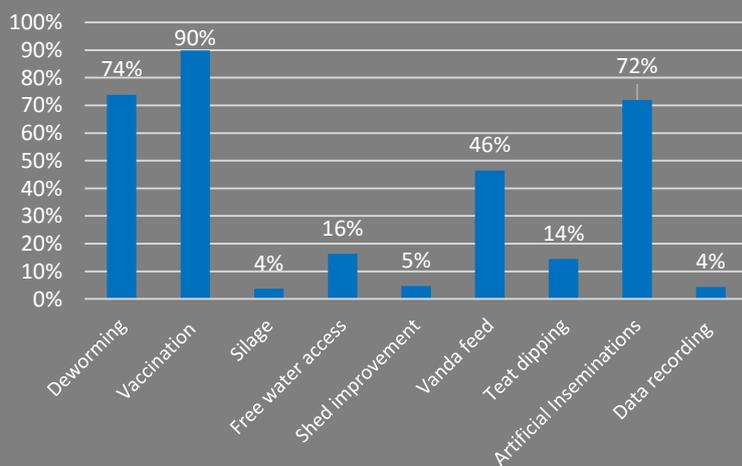
Dairy Farmers
 Women play an integral part in dairy farming in rural areas of Pakistan. They take care of the household animals to maintain their good health. Considering the importance of women in the dairy sector, the Dairy Project has included female dairy farmer trainings to their interventions, and trained a total of 2,599 females since January 2015.

PHOTO: DAIRY PROJECT

Improving dairy farming practices

- A total of 10,364 farmers received trainings on the best farming practices, and short awareness sessions were held for 20,647 farmers,
- On average, 73% of trained farmers adopt more than three best farming practices.

Best Farming Practice Adoption



Training and Support for Artificial Insemination Technicians (AITs)

One of the most important components of the Dairy Project is training on Artificial Insemination (AI). It has a long term objective of breed improvement. Trainees are given lectures and practical demonstration on business, marketing and road safety in the Burj-Attari and Bahawalpur training sites. Visits to Sukheki farm and cattle markets are also part of the AI training. The final examination and practical are administered by University of Veterinary and Animal Sciences (UVAS), Lahore. After successful completion of trainings, AITs are provided with a support kit that includes a liquid nitrogen gas cylinder for semen storage, semen straws, and other necessary equipment.

AITs Training Highlights

The beneficiaries trained in Year-4 under the AIT training component undergo five-week training as per the previous practice. However, with the new Livestock Breeding Act, the project had to re-design its AIT training to increase the training duration to six months. As a result, the project fell short of the training target set for Year-4 in the AIP-4. The target was revised in July 2015 by the approval of USAID to train a total of 445 AITs in Year-4 and 5. In the current reporting period, **136** AITs were trained from a total of four districts. As of September, 2015, the project has trained a total of **2,168** AITs.

		Variance
Beneficiaries targeted during the reporting period (as per AIP-4)	600	-77.33%(AIP-4)
Beneficiaries targeted during the reporting period (revised)	222	-38.74%(revised)
Beneficiaries reached during the reporting period	136	
Beneficiaries targeted to date*	2,222	
Beneficiaries reached to date*	2,168	-2.43%

*30th of September, 2015

Table 11 Trained vs. Targeted AITs

In order to facilitate the work of established entrepreneurs (AITs), the project also provides a motorbike to the trained AIT, upon successfully meeting the performance criteria. The trained AITs in Year-4 had to be given bikes on a 50% cost sharing basis. However, in the reporting period, the remaining AITs trained in the last three years were evaluated and given bikes as per criteria of Year-3. The project awarded 222 motorbikes among AITs. A total of **1,719** AITs received motorbikes till September 30th, 2015. The distribution of bikes is shown in the following table:

Province	Bikes Distributed in	
	Year-Four	Lifetime of Project*
Punjab	136	1,481
Sindh	27	84
Khyber-Pakhtunkhwa	6	101
Balochistan	47	47
Gilgit-Balistan	6	6
Total	222	1,719

*from July 2011 till 30th of September 2015

Table 12 Bike distribution district wise

The project re-attained the training site in Burj Attari and setup a new training site in Bahawalpur to continue AI trainings in Year-4. There was a slight delay in the acquisition of these training sites due to administrative issues, hence the first batch of the Year-4 AITs passed out in the month of March after receiving one-month training. With the implementation of the new Livestock policy in Punjab, the project had to put a lot of effort in ensuring the quality of AI training. During this process, there were further delays in the trainings and the project had to revise its training to six-months. With this

change, now it is more challenging to mobilize the community, but the quality of trained AITs will definitely improve. These AITs now under go three months of in-class training and three months apprenticeship on selected dairy farms.

The project was unable to distribute the subsidized sexed semen's to the farmers as committed in the AIP-4. With the change in the Livestock policy, imported semen was banned by the Government of Punjab for the time being. Hence, the project is reviewing its new strategy to benefit the farming community, and would decide after having discussed the matter with the Livestock Secretary, whether to proceed with the distribution of the subsidized sexed semen in Year-5.

Below is the table of performance indicators to measure the performance of the trained AITs by the project.

<i>Indicators</i>	Targets	Oct-Dec 2014	Jul-Sep 2015*	Weighted Average
<i>Average per month income of AITs from providing extension services relative to the baseline</i>	At least Income PKR. 3,000 (US\$ 32) per month	PKR. 9,371	PKR. 5,672	PKR. 9,139
<i>Number of insemination procedures performed per AIT/per month</i>	On average 20 insemination per month by an AIT	34	21	33
<i>Number of villages served by project-trained AIT</i>	On average 4 villages per AIT	9	7	9
<i>Percentage of AITs t providing professional services to communities</i>	60 percent of AITs	92%	98%	92%
<i>Conception rate of service provided by project trained AIT**</i>	Conception rate of 60 percent	Straws 53% Overall 67%	56.0% 63.7%	53.2% 66.8%
<i>Percentage of imported semen used</i>	At least 20 percent of the total semen applied	10%	15%	10%***
<i>Percentage of AITs attending follow up meetings</i>	At least 70 percent of the AITs attending such meetings	Data not collected	88%	88%
<i>Number of AITs trained in book-keeping, business management</i>	100 percent	100%	100%	100%

**Beneficiaries trained in Phase-2 of the project evaluated*

***Conception rates mentioned are in 2 ways. One is calculated considering the total straws kept (total pregnant/total straws kept) and the other is calculated simply by dividing total pregnant animal by total tests.*

****Sanction imposed by the Punjab Livestock department on import/usage of imported semen.*

Table 13 Performance indicators AITs

Due to the change in Livestock policy in Punjab, there were a few hurdles the project had to face in implementing the AI component. However, after redesigning the AI training curriculum and timeline, the component is still achieving amazing results (Table 13). Even with a sudden change in the policy, the average income of the newly trained AITs is estimated to be PKR. 5,672—which is above the set target. The weighted average of the average income of all the trained AITs is estimated to be PKR 9,139 per month. As a result of the training, the trained beneficiaries have attained a steady source of income and also provide quality AI services to the dairy farmers. From the surveys we can

estimate that the average conception rate of the insemination is around 67 per cent—similar to the national average.

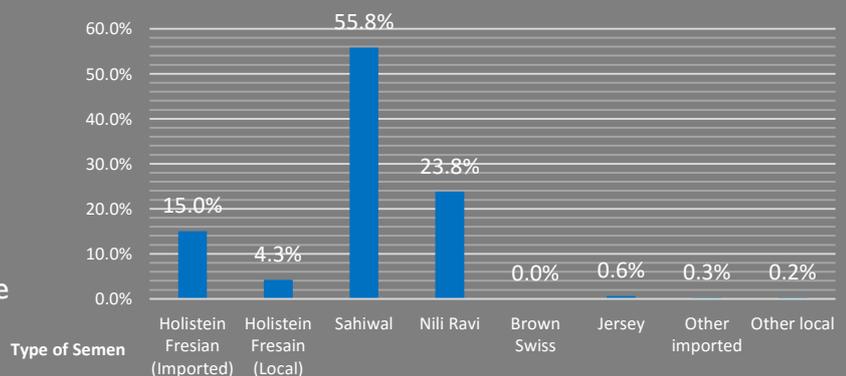


PHOTO: DAIRY PROJECT

Artificial Insemination Technicians
Master Trainer training beneficiaries in Burj-Attari

Improving the Breeds of Dairy Animals through Artificial Insemination

- Total of 2,168 young unemployed rural men trained as artificial insemination technicians
- Conception rate of animals inseminated by the trained AITs on average 53 percent



Training and Support for Women Livestock Extension Workers (WLEWs)

Women Livestock Extension Workers (WLEW) is an important component of the Dairy Project as it ensures provision of timely quality extension and basic veterinary services to dairy farmers at their door steps. Moreover, this component serves the long term goals of female empowerment and establishing women as credible entrepreneurs in rural areas. With a high non-active rate of trained WLEWs witnessed towards the end of Phase I, the project decided to start providing refresher trainings to WLEWs so they could once again be motivated to initiate their businesses. The training is followed by one-month technical support to the trained WLEWs. Farmer help camps are also arranged in the last week of training of each batch (in selected villages) to treat animals free of cost. Furthermore, visits of model dairy farm, veterinary hospital and milk collection center are also arranged for trained WLEWs, to give them practical insight about modern farm practices and animal treatment.

WLEWs Training Highlights

A total of **1,032** WLEWs were trained in the reporting period against a target of **1,225**. From the 1,032 trained **490** were refresher trainings and **542** were new WLEW trainings. The targets for Year-4 were not achieved due to delay in startup of WLEW trainings (started in February 2015). WLEWs in Year-4 were mostly trained from districts Bahawalpur, Lodhran and Pakpattan. Whereas, refresher trainings were given in districts Vehari, Multan, Khanewal and Lodhran. To date, the project has trained **6,046** WLEWs from the project's envisaged target of **6,225**.

		Variance
<i>Beneficiaries targeted during the reporting period</i>	1,225	-15.75%
<i>Beneficiaries reached during the reporting period</i>	1,032	
<i>Beneficiaries targeted to date*</i>	6,225	-2.87%
<i>Beneficiaries reached to date*</i>	6,046	
<i>*30th of September, 2015</i>		

Table 14 Trained vs. targeted WLEWs

The project mobilization team conducted a total of 508 community meetings in the reporting year. Due to social unacceptability for women working outside their homes, the team faces a challenge in mobilizing the non-working female community. More so, the selection of (minimum) matriculated women is another challenge.

Farmer help camps were a part of the WLEW trainings. In these camps the farmers are invited to bring their animals and get them vaccinated or treated free of cost by the trained WLEWs. The project ensures that such treatments by the newly trained WLEWs are done under the supervision of their Master trainers. A total of 76 farmer help camps were conducted which were attended by 5,779 farmers. Such camps introduce WLEWs to the farmer community and help establish their credibility.

Considering market linkages are crucial for this component, the project developed a sustainable model before entering Year-4 of the project. It had planned to link the WLEWs to different stake holders in the dairy sector, develop clusters and hire a marketing and supply linkage team with in the project. DRDF also planned to provide their services by establishing a pilot input center on three upgraded farms to serve as a cluster input center. However, not much was done in this area. The project introduced the beneficiaries to the local community and suppliers in their induction meetings. Also, the trained WLEWs are provided with contact numbers of key input suppliers in their area. However, this is still not enough to make the component sustainable in the future. The project will make efforts in developing the clusters it had planned in its model and also work on developing a link between the farmers and the WLEWs in terms of milk chain, in which WLEWs can also work as a Milk Collection Agent. On the other hand, DRDF will also have to provide their

support in setting up input supply centers and provide a team of market linkage agent and customer relation officer to help the cluster members negotiate effectively with the input suppliers. Following are the performance indicators related to the trained WLEWs by the project.

<i>Indicators</i>	Targets	Oct-Dec 2014	Jul-Sep 2015	Weighted Average
<i>Average per month income of WLEWs from livestock services relative to the baseline</i>	Income of at least PKR. 2,000 per month	PKR. 1,091	PKR. 1,032	PKR. 1,085
<i>Number of farmers using the services of project trained WLEW per month</i>		18	8	17
<i>Number of villages served by project-trained WLEW per month</i>	On average 1 village per month	2	2	2
<i>Number of project-trained WLEWs providing services as self-employed extension workers</i>	At least 60 percent of the trained WLEWs providing livestock services.	35%	97%	41%
<i>Number of WLEWs operating/managing project-supported milk collection points in project-assisted communities</i>	At least 20 Milk Collection Points	16	16	16
<i>Number of WLEWs trained in business practices, book-keeping, and milk collection</i>	100 percent	100%	100%	100%

Table 15 Performance indicators WLEWs

The project continues to put its effort in empowering the rural women in Punjab region. However, there are other factors which need to be addressed to make these efforts more fruitful. Social constraint is one of the major issues these rural women face when they compete with male extension workers working locally. Due to these social constraints, these women are not able to work to their full potential. The average income of these trained WLEWs over the past four years is estimated to be PKR 1,085 per month. Retention rate of these trained beneficiaries is around about 41 percent; there is a high dropout rate because the morale of trained WLEWs falls when they experience discriminating attitude. However, there are few strong women in the region who fought against such barriers and managed to establish their business in their villages. Such WLEWs are also given refresher courses by the project to further increase their foothold in the area. The following table shows the average incomes of such WLEWs.

Indicators	Targets	Oct-Dec 2014	Jul-Sep 2015	Weighted Average
<i>Average per month income of WLEWs from livestock services relative to the baseline</i>	Income of at least PKR. 2,000 per month (US\$ 32)	-	PKR. 2,457	PKR. 2,457
<i>Number of farmers using the services of project trained WLEW per month</i>		-	17	17
<i>Number of villages served by project-trained WLEW per month</i>	On average 1 village per month	-	2	2
<i>Number of project-trained WLEWs providing services as self-employed extension workers</i>	At least 60 percent of the trained WLEWs providing livestock services.	-	93%	93%

Table 16 Performance indicators Refresher WLEWs

The WLEWs that are given refresher courses earn an average monthly income of PKR 2,457. These WLEWs perform, on average, 42 treatment/vaccination cases, sell 9 units of nutrient inputs for the dairy animals, serve 17 farmers and cover two villages. The refresher courses have been successful in raising the incomes of the WLEW. The project makes efforts to introduce the extension workers to input suppliers—at least two suppliers on average. In order to overcome the social and cultural constraints, the project was also engaged in a number of mass awareness activities, such as street shows with mobile float announcements, to highlight the role of women in the livestock and dairy sector, and their contribution towards dairy development.

Women Livestock Extension worker

Beneficiaries under practical training in Farmer Help Camp
– Vehari 2015



PHOTO: DAIRY PROJECT

Improving the Lives of Rural Women

- Trained a total of 5,556 non-working rural women
- Estimated trained women providing their services – 41 percent

Touchin Lives of rural women



Mass Communication and Awareness Campaign

The Dairy Project's Mass Awareness Campaign aims to translate the project's advocacy and outreach efforts to highlight the assistance that the USG is extending through USAID for economic growth of Pakistan through dairy and livestock development.

Dairy Project's print and electronic media campaigns are not only promoting the implementation of best dairy farming practices, but are also creating awareness about project's interventions, significant accomplishments and impact amongst Pakistan's general public which includes government institutions, dairy industry, input suppliers, universities and other stakeholders. During Phase I, the Dairy Project's mass communication campaigns successfully raised awareness about best dairy farming practices among two million dairy households, public and private stakeholders across Pakistan.

During the first year of extension phase, (October 2014 – September 2015), the Communications Team continued providing support to achieve the project's objectives, and successfully reached out over 600,000 rural households (including public/private stakeholders) across Punjab. A brief overview of a series of initiatives is given below.

The USAID – DRDF Dairy Project diary & calendar was designed and published for the year 2015. Through the diary/calendar, the importance of dairy and livestock sector in the economic growth of Pakistan, the key issues and challenges in dairy and livestock sector and the role of USAID-DRDF Dairy Project in contributing to the sector were highlighted. More than 900 diaries and calendars were distributed. The Team provided support in the efficient roll-out of the MoU signing ceremonies between USAID-DRDF Dairy Project and the University of Veterinary and Animal Sciences, Lahore, (UVAS) held on March 25, 2015, and between DRDF and COMSATS Sahiwal (CIIT) held on September 10, 2015 to collaborate in the training of project Master Trainers and staff and other training programs in the livestock and dairy sector.

Furthermore, the Communications Team helped exhibit the Dairy Project stall at the Dawn Sarsabz Pakistan Agri Expo held on March 19-20, 2015 at the Lahore Expo Center. U.S. Consul General Harkenrider along with Dr Farrukh Javed, Minister of Agriculture, Punjab inaugurated this two-day agricultural exhibition and conference organized by the Dawn Media Group. The exhibition showcased key USAID projects working for Pakistan economic growth and better livelihoods. The Dairy Project's stall became popular among the visitors primarily due to its traditional village set up, one-to-one live interaction of project-trained beneficiaries and certified veterinarians who answered visitors' queries on best farming practices, trainings, shed construction, farm management etc. Over 400 people visited the Dairy Project's stall, and gained an insight on the scale, scope and significant accomplishments of project.

Continuing the tradition of past years, the team designed, published and disseminated the Dairy Project Portal – Volume 3, Issue 1 and 2 (newsletter) on a wide scale. In this respect, around 500 copies were distributed among public and private stakeholders, and around 64 organizations were reached out. To further scale-up the dissemination level, the same newsletter, highlighting key project activities and accomplishments was also uploaded on project website, Facebook and shared with USAID DOCs.

On June 11, 2015, the Dairy Project participated in a live radio show "Aap Hum Aur Behtar Zindagi" on FM 101, a leading radio "infotainment" network channel in Pakistan. It was an interactive, live program, which highlighted key facts and achievements on USAID's Dairy Project. Mr. Sajjad Moghal, Senior Development Specialist, USAID Punjab, Dr. Umar Farooq, General Manager Field Operations, Dairy Project, and three project-trained beneficiaries—Azra Parveen (WLEW), Ghulam Nabi (AIT) and Muhammad Jameel (dairy farmer)—represented USAID – DRDF Dairy Project on the radio show.

The Communications Team provided support in the efficient roll-out of the Second Dairy & Livestock Sector Donors' Conference held on June 16, 2015. The conference was hosted by USAID

– DRDF Dairy Project, in collaboration with Livestock & Dairy Development Department (L&DD), Government of Punjab, and USAID Punjab Enabling Environment Project (PEEP). The conference brought together various organizations, agencies and policymakers involved in the dairy and livestock sector in Punjab. The purpose of this conference was to promote public and private sector cooperation in the dairy and livestock sector and examine which institutions and projects are involved in the sector so that potential synergies and overlaps may be identified. Provincial Director USAID Punjab, Dr. Miles Toder, Deputy Secretary (Admin) L&DD, Mr. Irfan Khalid, Dr. Talat Pasha, Vice Chancellor University of Veterinary Sciences (UVAS) and Mr. Sajjad Moghal, Senior Development Specialist USAID Punjab were present at the conference. Other donor agencies present included Austrade Commission, Plan Pakistan, and Agribusiness Support Fund (ASF). The team also oversaw the revision of the USAID – DRDF Dairy Project Corporate Documentary. The objective of this revision was to update the documentary and highlights the Dairy Project’s five technical components, their objective, selection criteria, training and methodology, benefits and impact. The Documentary was disseminated to key public and private stakeholders (along with the Dairy Project Portal) and uploaded on the project website and Facebook page for widespread coverage.

The Dairy Project has strategically incorporated social media as part of its outreach and advocacy efforts to advance its objectives. Keeping in view the importance of social and digital media in modern society, the Communications Team customized and revised its Project website and actively promoted Dairy Project’s significant activities, interventions and impact on Facebook to reach out to a wider audience.

To reinforce the community and outreach efforts, the Communications Team organized street shows with mobile float announcements. The basic objective of this campaign was to raise awareness on the significance of implementing best dairy farming practices, to help ensure the farming communities improve their dairy business, milk yield and incomes. Secondly, it aimed to support Field Operations to sensitize the rural community about the Dairy Project’s interventions, and ensure enrollment for particularly One-day training program. During a short span of just two months (September-October), 42 street shows with mobile float announcements were rolled-out in Vehari, Multan, Khanewal and Lodhran, with a significant turnout of over 20,000 farmers, including a sizeable proportion of rural women.

The Communications Department provided necessary support to other departments as and when required, including reviewing and editing reports, proposals, letters and project advertisements. Furthermore, to ensure effective project promotion and dissemination among internal and external stakeholders, the team also designed and printed mobilization and training material, such as training curriculums, streamers, banners, flip charts, brochures, record registers, certificates, stationary items, staff cards etc.

Mass Communication

Street Show – Bahawalpur 2015



SECTION 3: HUMAN RESOURCE AND CAPACITY BUILDING

During Year-4 of the Dairy Project, the HR department has hired the best human capital to achieve operational targets. The main focus of the HR department in Year-4 was on Human Resource Development (HRD), which would help the employees to utilize their hidden capabilities to meet the goals of the Dairy Project. HR facilitated the project staff to be part of the training sessions, symposiums and seminars organized by recognized institutions such as LUMS, UVAS, UAF, COMSATS, as well as other technical training providers. See Table 17 below.

Moreover, there was initiation of employee's recognition and rewards ceremony to boost the morale of staff at work place so as to promote healthy competition and positive team spirit. Employees' orientation sessions about policy and code of conduct were organized at the field operational unit level to promote work place ethics.

<i>Training Title</i>	<i>Month</i>	<i>Institute</i>	<i>No. of Participants</i>
<i>All capacities</i>	ongoing	USAID	4
<i>ISDAR Conference</i>	Mar-15	UVAS	6
<i>HR/Administration/Procurement/ Project Management/ Forensic Audit/ Financial Management/M&E</i>	November- 2014 to May 2015	ASP-LUMS	12
<i>WINROCK Biogas Conference</i>	Jun-15	Bio Gas	8
<i>Effective Communication Skills</i>	Jul-15	COMSATS	90
<i>Training of Trainers (TOT) course on capacity building</i>	Aug-15	COMSATS	20
<i>Executive Certificate in Agribusiness Management</i>	Mar 2015-	LUMS	1
<i>Veterinary Epidemiology</i>	Oct-15	UAF	11
Grand Total			152

Table 17 Training Category by HR

SECTION 4: ISSUES, LESSONS LEARNT AND WAY FORWARD

Component	Challenge	Solution/Recommendations
Artificial Insemination Technician	<ul style="list-style-type: none"> • Placement of AITs for the 3 month Field Training on farms. • Trainees faced difficulty in achieving targets of AI due to absence of breeding season. 	<ul style="list-style-type: none"> • Dairy Project coordinated with Livestock Department to use their CVH/AI Centers/Institutions for on field training of AITs and approval from Secretary Livestock is in process. • AI-Team of Master Trainers used to do regular monitoring for analyze working status of trainees in field and linked trainees to local VA/AITs to undergo AI targets.
	Unavailability of Bovine FRO (Bovine Female Reproductive Organs) for AITs Bahawalpur	Already discussed with DLO Multan to assist our Bahawalpur team for provision of FRO from Multan slaughter house.
One Month Farm Managers	Availability of farm owner for a month, due to harvesting of crops.	Farmers were advised to plan their activities or send their nominated persons for training
Farm Upgradation	Un-trained labor at construction site	Team Engineer guided people to work
	Farm up-gradation team was untrained regarding construction	Team Engineer guided technical team
	Farm upgradation process was very slow in beginning and unavailability of up-graded farms for farmer training	Team motivated and mobilized farmers to fasten the upgradation procedures/Documentation, Now, a large number of upgraded farms in area is available for farmer training
One Day farmer Training	<ul style="list-style-type: none"> • Training centers are not spacious. • Some of farm owners were not showing positive attitude. • Selection of farmers was not easy due to harvesting season. • Street shows activity along with training activities. 	<p>At those farms where training centers are not spacious then training at the Dera or any other room was allowed to team with complete visit of farm.</p> <p>Team wise duty have been assigned to coordinate for street show activity. Taking attendance and controlling of huge community is a challenge. To make these shows as safe as possible security guards were hired for the venue.</p>

Component	Challenge	Solution/Recommendations
7 days Farmer Training	Due to harvesting and cotton season, during mobilization people showed interest but after some days they excuse due to busy schedule	Farmer were mostly unavailable during this season but strong mobilization was done and committed group have been selected for training including female farmers
Women Livestock Extension Worker	<ul style="list-style-type: none"> • Selection of beneficiaries in the available short time of mobilization is a challenge. • Un-availability of CNIC and certificates of those candidates who have lost then or have married and moved to other places is a challenge. • Market linkages to WLEW. • Minimum education criteria of women. • Working of WLEWs under legislations because livestock department called and forbade some of WLEWs to stop their practice. • WLEWs are getting maximum profit from vaccination but Government has banned some of the vaccines in medical stores and that's why it is not available to WLEW. • Mass free vaccination campaign started through livestock department. • Chiller agent of Nestle is also selling Vanda to farmers that is why Vanda business of WLEWs is disturbed. 	<ul style="list-style-type: none"> • Male and female mobilizer conducted male and female meetings to get trust of community and family. • Those candidates who don't have CNIC are not entertained for training. • 5 hours of training ensured by MTs by giving more time on practice. • Induction meetings/farmer days have been conducted by teams for the support of WLEWs in the community • Finding mature and married educated women is a challenge for mobilization and training teams.

SECTION 5: ENVIRONMENTAL COMPLIANCE

The Environment, health and safety issues pertain to the adoption of best management practices, health safety measures relating to liquid nitrogen gas and organs handling, proper disposal of waste (empty medicine bottles, syringes, semen straws, sheaths and animal organs), syringe handling and compliance to product specifications.

An Environmental Mitigation and Monitoring Plan (EMMP) was developed which listed mitigation measures for each component. In the beginning, environmental awareness material was reviewed for all the components and new material for the One-day farmer training component was developed to spread environment-related awareness to the project trained beneficiaries.

Furthermore, environmental awareness refresher sessions were conducted with the field teams in the beginning to develop a thorough understanding about environmental compliance procedures and ensure that master trainers are imparting training to the beneficiaries in an effective manner.

Moreover, in order to strengthen the environmental compliance in the field, two designated safety health and environmental officers were hired. After orientation by the Safety Health and Environment (SHE) specialist, the SHE officers were sent in the field to monitor environmental compliance and provide guidance to the field staff. SHE officers have close coordination with the field teams on a case to case basis, and provide guidelines/instructions to the field staff for improved environmental compliance.

REPORT ON ENVIRONMENTAL COMPLIANCE

The findings in this report are based on training curriculum review, physical inspection of sites and random visits to classrooms by Safety Health and Environment (SHE) team.

In order to fulfill requirements under EMMP, various guidelines were developed for safe disposal of the waste generated as result of trainings. Additional guidelines include health and safety measures and environment measures to avoid any harm or injury to the stakeholders and the environment. A component wise description of environmental compliance is given below.

Component 1: Farmer Training

Seven-day/One-month Farmer Training:

Lesson plan of the farmer training component was reviewed to find out whether environment-related material had been incorporated into the lesson plan. It was observed that they are covering best farm management practices such as breeding and treatment, calf-rearing, milking, feeding, housing system, agronomy, heifers and buffalo management and heat spotting.

Health safety measures like a treatment stall or restraining methods during pregnancy examination, vaccination, deworming, and artificial insemination etc. were communicated to the farm managers. Teat sanitization, organoleptic and surf tests are described in detail to check the milk quality so that milk from the infected animal(s) can be separated. During farmer training sessions, farmers/farm managers are briefed on how to handle manure. Teat dipping process, bio security, significance of racking was described to the farmers so that they could avoid the diseases occurring in animals.

Issues prevalent in the Seven-day trainings included:

1. Training was conducted at certain farms where no best farm practice was prevalent
2. Physical demonstration of different practices like teat dipping, surf test etc. was not performed in all the sessions
3. Training room was very congested
4. Washroom ware was not functional at the training farms
5. Medicine/ solution bottles provided to farmers for teat dipping were already broken

However, the situation significantly improved in Year-4, and the positive attitude of the zonal management in this respect bodes well for environmental compliance. One of the issues which requires further attention is the provision of basic welfare facilities such as washrooms at training classes. Therefore, the training site needs to be selected carefully.

One-day Farmer Training:

Training curriculum of the One-day training farmer is not detailed and focuses mostly on pictorial training. Thus, the environmental compliance practices are included into their curricula in pictorial form.

As far as the implementation of the practices is concerned, some of the issues faced during the early months of Year-4 were:

1. Awareness on several topics relating to safety, health and environment was not provided to farmers.
2. Lack of proper entry protocols at farms.
3. Absence of good housekeeping at training sites.
4. Trainings took place at some farms where best farm practices were not adopted.
5. Physical demonstration of different practices like teat dipping, surf test etc. was not performed.
6. Water troughs, of the farms where training was carried, were contaminated with Algae

However, eventually farm owners were informed about the significance of these practices and the Dairy Project master trainers went over the environmental aspect of modern farming in greater detail.

1. Master trainers perform surf test, mastitis prevention test during the training.
2. Environment component of the training module(s) is studied during classes.
3. Sanitation conditions have improved.
4. Water troughs are cleaned in many farms at regular intervals; the SHE team monitors this cleansing practice.

Silage Making:

During the silage making shows, farmers are briefed on environmental considerations and safe handling of the equipment. Safety measures like dust masks, safety guards and maintenance of the silage machines were taught to the trainees.

As per the guidelines, only experts were permitted to run silage machines. Safety guards must be in place at all times when silage machines are in operation. The person operating the silage machine should wear secure clothing (dangri) and safety boots. However, the situation was not optimum in the beginning. Some of the issues were:

1. Safety guard was not used on silage machines
2. Protective equipment like air masks and safety shoes were not used, and workers were exposed to chopped fodder
3. Plastic sheet was not placed at the base of the silage bunker at few farms
4. The tractor, with the attached silage machine, was moved at night.

After highlighting these issues to the management, the tractor and machine is not handled during late hours. Plastic sheet is also placed at the base of the silage bunkers. Safety guard usage has been observed in most of the silage shows as well.

Farm Upgradation:

For the upgraded model farms, a few parameters were established and its compliance was observed. Site safety clearance, tree cutting, water quality and topography of the site to avoid ponding at the farms were some of the main parameters of concern.

Major Issues observed at site quiet frequently included:

1. Cutting of trees were observed at sites without providing a remediation plan
2. Water for animals drinking was bacteriologically contaminated at some farms
3. Child Labor was observed at some farms
4. Electrical poles were present in the premises of some sheds

In Year-4, many of these issues have been resolved:

1. Tree plantation took place

2. The water bore and water distribution system of water-contaminated farms has been changed in two farms. However this issue is still prevalent at some farms since the farm owner is not willing to spend money on this. The Dairy Project field teams are trying to enlighten them about the severity of this issue.
3. Electrical poles have been shifted to a safe distance from the farm premises.

Component 2: Artificial Insemination Technicians Training

All the Artificial Insemination Technicians (AITs) sites impart training on best practices, and the lesson plan covers the best artificial insemination practices.

AITs were taught about best AI practices like proper heat spotting & semen handling. Theoretical and practical training was provided to the AITs on health safety measures like liquid nitrogen handling, storage of semen, and semen straw handling.

Handling of liquid nitrogen and use of personal protective equipment (safety goggles & cryogenic gloves) was communicated to the beneficiaries. Transportation of liquid nitrogen has been done in a way so that no one sits in the container in which liquid nitrogen cylinders are transported. This precaution is taken to avoid asphyxia and cold burns; proper storage of liquid nitrogen has been described to avoid asphyxia.

All AI trainees wear Dangri (overalls), gum boots and gloves during practical training on live animals to minimize the chances of transferring diseases to human beings. Face masks and aprons were also worn by the trainees during practical demonstrations. Animal organs are stored in refrigerators until properly disposed to inhibit bacterial growth.

Crush was used at the Burj Attari site to control the animals during live artificial insemination practice/demonstrations to prevent injuries. However, issues relating to the restraining of the animals at Bahawalpur training site exist.

Generally, sheaths and contaminated polythene gloves were kept covered, but there were instances where the gloves and sheaths were left exposed in (lid-less) dustbins, consequently spreading pathogenic bacteria into the environment. Initially, animal organs were not disposed properly and were thrown into the TMA waste bins without any treatment. This issue was discussed with the zonal management and, for the convenience of the staff, and autoclave was added into municipal waste stream—after giving these organs heat treatment—to convert them into harmless municipal waste by killing the pathogens. At the Bahawalpur site, organs were dumped into a limed pit for their bio-degradation in a safe manner.

Component 3: Women Livestock Extension Worker (WLEW) Training

WLEW training took place at designated training centers in two districts: Bahawalpur and Vehari.

Best basic livestock extension practices were taught to the WLEWs and health safety measures like handling of medicines and syringes were incorporated into the lesson plan.

Medicines were protected from sunlight during outdoor sessions in Bahawalpur and Vehari sites, thereby complying with the product specifications. Moreover, expiry dates were checked before using medicines at these sites.

Previously, it had been observed that the one syringe was used for several animals, but after highlighting this concern with the top management, the situation has improved considerably.

The practice of handling syringes with bare hands was observed, which make WLEWs vulnerable to needle prick injuries and zoonotic diseases. However, needle cutters were made available in both sites for immediate disposal of used needles and it is being ensured that gloves are used when handling syringes.

CONCLUSION/Way Forward:

By and large, the Dairy Project is in compliance with EMMP and has a minimal environmental adverse impact. However, there were instances where compliance was not observed in its full capacity. In such cases, necessary directions were given to relevant departments, and mitigation measures were undertaken to resolve these issues. Overall, the project activities had a positive environmental impact on the community. Furthermore, biogas plants are also going to be constructed, and the SHE department is determined that they are built and operated according to the environment, health and safety concerns.



PHOTO: DAIRY PROJECT



PHOTO: DAIRY PROJECT

ANNEX 1: OVERVIEW OF THE TRAINING COMPONENTS

Farm Upgradation and Biogas plants

The first objective of the farm upgradation is to provide an on-the-ground model for small dairy holders at village level, where they could observe the best dairy farming practices that are being implemented. Secondly, since access to the large mega farms for all small dairy farmers in a village is not possible, the universal training coverage is achieved by upgrading these farms and providing training access for the village and the surrounding area. Thirdly, these upgraded model farms serve as a meeting point and input supply hub for project-trained beneficiaries. The project aims to upgrade 100 farms with herd size of 5-25 dairy animals over the project life.

Animal nutrition is an essential part of animal health and milk productivity, and fodder is an important nutrient for these animals. Cost of production of fodder is a major concern for the farmer. The objective of establishing biogas plants is to shift irrigation tube-wells running on fuel/electricity to manure biogas units. The slurry produced from these biogas units will also improve the fertility of the land which is another benefit accrued to the farmer. The project aims to develop five biogas plants during its extension phase.

Training and Support for Dairy Farmers

The primary objective of providing training and support to dairy farmers is to improve prevalent dairy farming practices for improved livestock productivity and increased incomes of rural households assisted by the project. The Dairy Project also strives to increase mass awareness to create a demand for extension services of WLEW and AIT. This will result in better breeds and increased milk production. Through these trainings, the Dairy Project will achieve its primary goal of creating incomes and employment opportunities for rural Pakistanis associated with the dairy sector, resulting in economic growth for the country.

Training Methodology, Curriculum and Follow-up Support:

These trainings cover topics such as improved feeding and animal nutrition, basic level animal health management, feeding, farm equipment management, shed management, and the importance of improved breeds. One-month advanced trainings for farm managers include separate components on basic bookkeeping and business skills. Knowledge of the basic business know-how adds to the skills of farm managers. This is how, all trained farmers will have a better understanding of the milk value chain and how to profitably create linkages within it. The Project has an ambitious plan to train 48,600 farmers and 500 farm managers and commercial farmers over a period of five years with the following specific targets to achieve:

- a) One-day training for 37,900 traditional farmers
- b) Two-day training for 5,000 traditional farmers
- c) Four-day training for 3,700 progressive farmers
- d) Seven-day training for 2,000 progressive farmers
- e) One month training for 500 commercial farmers and farm managers

Training Methodology and Locations

The Dairy Project started farmers' trainings at two model trainings and demonstration farms of Nestle located at Sukheki, Pindi Bhattian, district Hafiz Abad and Renala Khurd, district Okara. Customized training modules were developed for the training purpose.

However, keeping in view the cost and time factor involved in boarding and lodging of farmers at these model farms, the project, therefore, decided to arrange two more model farms at Khanewal, Kamalia, and Multan. Owned by private farmers, these farms are equipped with necessary infrastructure and facilities suitable for conducting training sessions for farmers, thus reducing transportation costs and enhancing training effectiveness.

Training Curriculum

Training contents of Two-day farmer training session include introduction to livestock breeds, cross breeding, feeding of dairy animals, yearly fodder planning, silage and hay making, calf rearing, health (FMD and HS, Vaccination), internal and external parasite control, Mastitis and its control, artificial insemination and its importance for breed improvement, milk and farm hygiene, sire selection criteria, body scoring, Estrus synchronization, heat detection at farm level, shed design, Oxytocin and dilemma of its frequent use, and , record keeping. Training contents of four days farmer training is more or less the same with more details.

Dairy Project provided training certificates and initial support kit to all these trained farmers at completion of the training. The kit includes teat cup, dip solution, drenching syringe, dewormer, feeding nipple, notepad and bag. In the second quarter of 2012, training contents of One-month training of dairy farmers and Farm Managers were prepared and submitted for review by University of Veterinary and Animal Science Lahore. After approval, a training manual for one-month training was prepared.

Follow-up Support

The team also provided technical support to trained farmers at their farms on need base e.g.in case of shed designing and other technicalities regarding dairy farming.

Training and Support for Artificial Insemination Technicians (AITs)

Training Methodology, Curriculum and Follow-up Support

Poor genetics is a major reason for low productivity per dairy animal. In order to improve the genetic potential of existing breeds, there is an immense need to introduce the trend of cross breeding through artificial insemination techniques for better milk production and profitable dairy farming in Pakistan. The Dairy Project's AI trainings will significantly empower unemployed youths as entrepreneurs offering breeding services to dairy farmers, who are in turn acquiring access to better quality semen supplies ensuring better breeding of animals. The overall aim is to ensure that through better breeding, farmers are able to increase their milk production and incomes. Income opportunities for both farmers and AI technicians are being created. The Dairy Project had committed to train a total of 3,000 individuals as AITs during the project life with 100 individuals each from Khyber Pakhtunkhwa and Sindh and 70 from Baluchistan provinces. At the beginning of Year-4, there was a change in the livestock policy by the government and the project had to revise its 1-month AIT training to 6-month. Due to change in training duration, the set target could not be achieved. Therefore, it will be revised in the upcoming AIP-5.

Training Methodology

Before the new livestock breeding act was announced by the government, Dairy Project offered five-week training to AITs with additional two-month follow up support provided by the project team but with the promulgation of new livestock breeding act, Dairy Project changed its training duration to six months. Trainings include a mix of theory, demonstration, field practical work and practical exercises related to insemination and the safe handling and maintenance of insemination guns, liquid nitrogen cylinders for transporting semen, and other AI supplies and equipment. Classroom trainings take place at AITs Centers (established by the Dairy Project) and the Government of Punjab's Vocational Training Institutes (PVTI). Potential candidates are selected through a rigorous procedure and sent to AIT training centers in Burj Attari and Bahawalpur where they are provided with major training facilities, accommodation, transportation, and refreshment. For field training, trainees are deputed on various dairy farms for three months. They assist veterinarian/senior AIT in treating bovine reproductive problems; carry out heat detection and pregnancy diagnosis tests. In addition, they also help in semen selection, bull selection and calving ease. The project provides each AIT with initial support kit upon successful completion of training

(containing Nitrogen Cylinders, Semen doses, and basic AI related equipment) and a motorbike (after AIT fulfills performance criteria-See heading below titled “Motorbike distribution”).

Training Curriculum

Training comprises of a mix of theory, practical exercises and field training related to artificial insemination and the safe handling and maintenance of the equipment. The theory contains knowledge about the history of AI along with its advantages and disadvantages, anatomy and functions of female reproductive system, estrus cycle, heat detection, artificial insemination, fertilization, factors affecting the conception rate, methods of pregnancy diagnosis, tagging and recoding of animals. The theory is applied in the practical portion done at animal farms, slaughter houses and open animal markets. For the practical component, slaughter house training in particular, includes the post slaughter examination of reproductive organs. Dairy Project’s AI team at Burj Attari has also made a dummy cow for AI training. A steel frame was made by master trainers for the practice of students on the pelvic bone. Besides training in AI techniques, the project realizes the need to teach the trained AITs in basic bookkeeping and business skills which will aide them in becoming successful businessmen. The Dairy Project also helps them build linkages with input suppliers and other trustworthy vendors playing the role of middleman. Two-day road safety training by Atlas Honda motors is also a part of AIT training.

Follow up and Support Services

Upon successful completion of the training course, these AITs are provided with follow-up assistance to establish themselves as small scale entrepreneurs. A certification and graduation ceremony is held for each batch of these AITs wherein all participants are provided with a support kit to jump-start their businesses and hence improve their incomes. The distribution of kits plays a vital supportive role in launching the careers of ordinary and unemployed individuals as professionally trained AITs. The kit includes essential equipment such as AI cylinder, liquid nitrogen cylinders, insemination guns, semen straws, fifty semen doses, gum boots/sleeves and an AIT record register.

Dairy Project’s follow-up teams conduct follow-up meetings regularly. Meetings with a batch are conducted on weekly basis in the first month of completion of the training. After first month, frequency of such meeting changes into monthly basis and weekly meetings are now conducted with the latest batch of AITs. The purpose of these meetings is to resolve issues of AITs improve their technical skills and help them strengthen their market linkages. The issues related to supply of quality semen to AITs are also discussed and resolved in the follow up meetings. During the induction meetings, AITs are also formally introduced to communities to market their Artificial Insemination services for breed improvement.

Motorbike Distribution

To further facilitate these AITs, the Dairy Project also awards motorbikes to high achieving AITs showing excellent performance based on certain criteria. Initially the project awarded the bikes free of cost to these AITs but in Phase 2 of the project it was decided to distribute the bike on 50% cost sharing basis. The set criteria to measure the performance of AITs is as below:

a) Number of Inseminations: Minimum 30 inseminations are required in the first 90 days after completion of the training, which has been revised to minimum 60 inseminations required in 90 days, starting after 15 days of receiving of kit.

b) Conception Rate: Minimum conception rate of 40 per cent is required. For checking this, a palpation test is conducted on five randomly selected animals which have been inseminated 60 days before by the trained AIT. Three animals must be pregnant as per the criteria.

Whereas, all AITs undergoing six months training will be given motorbikes on 50% cost sharing basis upon successful completion of the training along with initial kits and certificate.

Training and Support for Women Livestock Extension Workers (WLEWs)

Training methodology, Curriculum and Follow up Support

In Pakistan, more than 80 per cent of rural women are involved in livestock management primarily in the field of feeding, watering, milking and medication. The females involved in livestock farming are poorly educated but they have the potential to learn and establish themselves as entrepreneurs and generate income. Due to lack of guidance, training, and access to markets and poor resources, they are unable to learn and adopt such income-generating activities by their own. Dairy project, through its training program for Women Livestock Extension Workers (WLEWs), is filling the void in Pakistan's dairy sector.

The Dairy Project will train 6,000 WLEWs by offering them one-month long training course. Also in the last two years of the project, the project aims to provide 1,000 trained WLEWs with refresher/advance courses. The curriculum for this training is updated in collaboration with the UVAS, Lahore. The training contents include basic animal health management, basic preventive animal health measure, identification of the most common diseases, immunization and basic treatment, animal nutrition and hygiene, and water management. Extension Worker trainings are conducted in village clusters (A cluster comprises of 10-13 villages), so that women can easily attend the training arranged adjacent to their homes. A training camp is also set up on temporary basis at each site. The program arranges for transport to and from the site as well. The master trainers are women veterinary graduates. The extension workers are also trained in feed supply and milk collection to give them the expertise to further grow their businesses. WLEWs are also being given bookkeeping and business training as well as linkages to service (including financial) and input suppliers along the dairy value chain. Upon completion of the course, WLEWs selected for animal nursing are given a veterinary kit, while WLEWs doing other livestock businesses are supported by a stock of animal feed. The program also provides workers with basic mobile phones to enable easy communication with the medicine and feed suppliers. The project has experienced a considerable increase in the demand for of livestock extension services provided by WLEWs to the farming community at their doorstep for improving livestock productivity and enhancing incomes of rural families. This is providing project trained WLEWs with income boosts and better livelihoods. Consequently, this ensures increased milk production and incomes in the dairy sector.

Training Curriculum of WLEWs

The training duration of the course is spread over one month period. All WLEWs, at the end of this one-month training, are tested through written as well as viva tests by academic staff of UVAS. The topics of WLEW training course consists of basics in animal health management, preventive animal health measure, identification of the most common diseases, immunization and treatment, animal nutrition and hygiene and livestock management. These extension workers are also provided trainings in feed supply and milk collection to give them additional knowledge in business management for their growth as entrepreneurs. Training modules include restraining, health, disease, parasites, infectious diseases of cattle and buffalo, infectious diseases of sheep and goat, non-infectious diseases, reproduction techniques, vaccination, calf care, milk, dairy farming, sheep & goat farming, poultry, medicines. Practical performance includes restraining, S/C and I/M injections, fat percentage and specific gravity of milk, deworming, bolus making, external parasite treatment, bandage, mastitis management. Also, WLEWs are equipped with basic bookkeeping expertise as well as facilitating their linkages with financial services and input suppliers along the dairy value chain. WLEW refresher/advanced training cover topics on animal health, diseases, stomach powder preparation, saline electuary, urea molasses block, marketing methodologies and environment. Besides providing training as WLEWs, master trainers also conduct farmer help camps amidst the training sessions in their respective villages to reinforce their technical skills and boost their morale and confidence with regards to dealings with the surrounding community. Normally, the cases dealt

at such training camps are related to deworming, diarrhea, mineral deficiency and ingestion etc. In the next stage, trained WLEWs visit dairy farms established as training centers where they are provided knowledge about silage making, animal care, shed design, milk test, and so on. Dairy Project also arranged visits of WLEWs to the civil veterinary hospitals to link them with the veterinary officers and assistants. It is expected that such visits will strengthen market linkages of WLEWs which will prove to be fruitful in future. After successfully completing the training course, WLEWs are formally inducted in their respective villages through an induction meeting where g master trainers formally inform the community about the technical skills, WLEWs have gained during certified training and the type of services that they are capable of providing to the farmers.

Follow up and Support Services provided by Dairy Project

Each qualified WLEW is awarded with a support kit consisting basic veterinary medicines and concentrated feed. Initially, the WLEWs are provided with follow up support twice in first month after training, followed by this, this meeting is conducted on monthly basis in which master trainers support them to resolve their issues and to strengthen market linkages for their smooth working. In the case of WLEW refresher/advanced training, follow up team will visit trainees in the first quarter after training and after that quarterly meetings will be conducted.

Market Linkages and Support Services to Farmers, WLEWs, and AITs

Follow up teams have taken various initiatives to develop the linkages between beneficiaries and the stakeholders like Khushhali bank, Zaria Taraqiati Bank, BARC Foundation, Kashf Foundation, NRSP, Akhuwat Foundation, Chenab Foundation, Pakistan Domestic Bio Gas Program (PDBP), Engro, Nestle' Pakistan, Haleeb and government livestock departments.

Dairy Point is one of the positive initiatives of Dairy Project. Dairy Point is a center where at least three different types of beneficiaries will provide their services to allied villages on larger scale with the help of different marketing companies. Its purpose is to provide a sustainable link to WLEWs and AITs so that they can purchase products (Vanda and medicine, semen doses, liquid nitrogen gas) at right price and places with great convenience. WLEW and AIT will play major roles in running modern dairy points. Four dairy points in Vehari, 15 in Multan and 7 in Hasil Pur have been established and working successfully in their related areas.

Further, Farmer Days have been arranged by the project to ensure sustainability of WLEWs can easily reach out the stakeholders for improved market linkages.

Support to Project Beneficiaries by Follow up Teams:

The Dairy Project teams have provided follow up support to project beneficiaries through weekly meetings, bi weekly meeting, monthly meetings, individual follow up at door step, inter-beneficiaries meetings, Farmer Help Camps and cluster formation. WLEWs were grouped in clusters, comprising of 20-25 WLEWs (in 10-13 villages) with an elected cluster head. By cluster formation, WLEWs place order in bulk through cluster head. The cluster strategy is being extended to incorporate project -farmers and AITs into the clusters. It strengthens beneficiary's linkages, increases their negotiation power to deal with suppliers and provide easy access to suppliers. A total of 148 clusters were established in Multan, Vehari and Kamalia zones. In year three, 50 clusters were established in Kamalia and Vehari.

Furthermore, cluster heads were employed by medicines and Vanda supplier companies on salary and commission basis. About 15 cluster heads from Multan zone have been employed by medicine company (Trust Pharma). Organon feed company distributed their discount cards with the help of follow up teams in Kamalia. These cards ensure a handsome profit margin for WLEWs. Nestle addressed aflatoxin issue and also shared facility of Nestle one stop shop with WLEWs through which WLEWs provided services to dairy farmers. Follow-up team established a pilot initiative of monthly saving system (known as "committee system" in Pakistan) to encourage savings and

promote inter-beneficiary linkages in some clusters, About 12 clusters in Vehari and 6 in Kamalia have adopted the committee system up till now.

Also, a help line service system is established in zones through which beneficiaries can easily contact with Dairy Project team to resolve their concerns Team resolved the concerns and supported them in their concerned product supply.

ANNEX 2: EVALUATION METHODOLOGY

The reported performance statistics are computed as combined averages of previous quarterly survey statistics. Averages tend to factor out any seasonality effects which adds up in the total impact of the project. Due to reduction in the extension budget the M&E team had to rely on 2 quarterly surveys rather than 4 for the whole year. The 2 quarterly surveys were carried out in January and October 2015. The average of these 2 quarters surveys were averaged out to compute an estimated performance/impact of the project over the year four. As the first survey was done only for the beneficiaries trained in the first three years of the project and the second survey of only the newly trained beneficiary, further weighted average was taken to get a better balance of the averages. The weighted average assigns weight to the two values from each survey conducted. The weights are assigned depending on the percentage of the type of beneficiary trained during Phase I and Phase 2. The formula for the weighted average is as follow:

$$\text{weighted average} = \frac{w_{t1}(x_{tjan}) + w_{t2}(x_{toct})}{w_1 + w_2}$$

Where w_{t1} the percentage of the type of beneficiary trained in Phase-I and w_{t2} is the percentage of the type of beneficiary trained in Phase-2, while x_{tjan} is the indicator value of the type of beneficiary surveyed in January 2015 and x_{toct} is the indicator value of the type of beneficiary surveyed in October 2015.

The status update was taken of the farmers who took one month farm manager and commercial trainings, telephonically by the M&E team themselves. These beneficiaries were questioned on their current working status and their performance on the dairy farms.

The methodologies used for evaluation surveys in the past are as follow.

Quarterly Survey Methodology:

The primary objective of the evaluation activity is to get a reliable indicator of the project's performance in three components vis-à-vis farmer, AIT and WLEW training. Given logistical and security constraints, it is not possible to cover all districts from where the Dairy Project has trained beneficiaries. Therefore, for sampling purposes, a random sample is picked from approximately 85% of the trained beneficiaries in Punjab.

For sampling purposes proper statistical methods are adopted to determine the sample size for the survey. Confidence level of 90 per cent and significance level of 5 per cent is kept to gain more accurate insights to the impact of the project. Farmers baseline are collected at the time of their trainings so that they can be compared to the data collected later through the surveys. This way the recall error is minimized in the analysis of the data.

Survey tools are designed in accordance with the projects key outcome indicators illustrated in M&E Activity Plan. Keeping in view the experiences from the past quarterly surveys, survey tools are refined and necessary questionnaire added to gather more insights into the impact of trainings provided by Dairy Project. Enumerators' training is an essential part of quality data fetching. A complete training session is organized in Vehari and Bahawalpur field offices for all the enumerators conducting the survey. Enumerators are introduced to the probing methods and all research instruments are briefed one by one. After complete orientation on probing techniques and survey instruments, mock sessions are held which are observed by trainers. Later trainers provide their feedback on mock sessions one by one to each participant for improvement.

After the questionnaires are finalized and well briefed to enumerators, a pilot is carried out selecting few of the nearby beneficiaries so that the enumerators can get a better understanding of the whole interviewing process and also refines the tool even further. After successful pilot testing and

planning, the survey is carried out by two main working zones of the project which are namely Vehari and Bahawalpur.

To ensure the quality of data, the project's M&E has a complete monitoring plan which is implemented with the help of M&E zonal staff. M & E officers make random checks on the interview sessions carried out by the enumerators to ensure accuracy of the data collected. Complete data flow procedures are documented with all the data quality and verification checks explicitly mentioned. After receiving the questionnaires from the enumerators and before it is entered in to the database, the data is verified by Monitoring and Evaluation Officer and Assistant Zonal Manager at two different stages to ensure the quality of data. Even though the data is received after rigorous checking, the analyst further cleans it and checks for errors and outliers to have a refined data set for analysis.

ANNEX 3: KEY EVENTS

Sr #	Date	Event	Location	Media Coverage/Press Release	Remarks
1	September 25, 2014	USAID's Public Communication Project –TV Shoot for "Roshan Hai Zameen"	Multan & Vehari	N/A	The purpose of this TV Shoot was to raise awareness about best dairy farming practices among the rural farming communities. Three beneficiaries hailing from Bootay Wala village, district Multan and 553/EB, district Vehari took part in this TV shoot.
2	October 2014	Online Job Management Portal – Project Website	N/A	N/A	The Communications Team setup an online job management portal on the project website, publicizing several job openings available at the Dairy Project.
3	December, 2014	Diary and Calendar 2015	N/A	N/A	Designed, developed and disbursed Dairy Project's diary and table calendar 2015 among Dairy Project staff and stakeholders.
4	January, 2015	Training Curriculum and Mobilization Material	N/A	N/A	Designed and developed training curriculum and mobilization material for all three components: WLEW, AIT and dairy farmers (one-day, seven-day and one month).
5	January 22, 2015	UVAS Job Fair	UVAS, Lahore	N/A	The Job Fair provided students and alumni with an opportunity to meet with the Dairy Project's representatives and discuss various internship and career opportunities available.
6	February 20, 2015	LUMS Internship Fair	LUMS, Lahore	N/A	Dairy Project's impressive stall attracted over several students who showed keen interest in joining the Dairy Project.
7	March 19-20, 2015	Dawn Sarsabz Agri Expo 2015	Expo Center, Lahore	N/A	The purpose of the Expo was to provide a platform to a diverse range of public and private stakeholders, from across Pakistan to exhibit and participate to promote agriculture sector. Over 400 individuals visited the Dairy Project's stall during the two-day exhibit and learnt about the best farming practices, trainings, shed construction and farm management, and also got an insight into the scale, scope and significant accomplishments of the project. r
8	March 25, 2015	MoU Signing Ceremony with UVAS	UVAS, Lahore	N/A	The University of Veterinary and Animal Sciences (UVAS) Lahore signed a Memorandum of Understanding (MoU) with Dairy and Rural Development Foundation (DRDF) to collaborate in training of master trainers and other training programs for the development of dairy sector.

Sr #	Date	Event	Location	Media Coverage/Press Release	Remarks
9	April 27, 2015	Employee Recognition & Reward Ceremony 2015	Pearl Continental Hotel, Lahore	N/A	The purpose of the Employee Recognition and Reward Ceremony was to acknowledge the efforts of each individual who played an instrumental role in helping the Dairy Project achieve successful milestones during its first three years (and first two quarters of Year 4).
10	June 11, 2015	FM 101 Radio Show "Aap Hum Aur Behar"	Islamabad	N/A	The show highlighted the key facts and achievements of USAID's Dairy Project as well as the assistance that the USG is extending through USAID toward policy research and analysis that will lead to effective policy making in the areas of economics and agriculture.
11	June 16, 2015	Second Dairy and Livestock Sector Donors' Conference	Faletti's Hotel, Lahore	Press Release – United States Fosters Dairy, Livestock Public-Private Partnerships	The objective of this conference was to bring together organizations, agencies and policymakers involved in the dairy and livestock sector in Punjab to identify which projects are involved in the sector and gain a better understanding of how economic development can be maximized.
12	June - July, 2015	Dairy Project Portal-Volume 3, Issue I (newsletter)	N/A	N/A	The newsletter gave a walkthrough of the Dairy Project's significant accomplishments, activities, and highlights to a wide audience of institutions, organizations and individuals in the dairy sector. Around 450 copies were distributed among public and private stakeholders, key project staff and Government administration, while about 64 organizations were reached out through this exercise.
13	June, 2015	Website Customization	N/A	N/A	The Communication Team signed an agreement with a web developer for the customization, maintenance and revision of the project website. As part of the agreement old and outdated pictures/images, statistics, success stories and information pertaining to the project's interventions were replaced by new, up-to-date content/images.
14	July 30, 2015	Dairy Project Exhibit at USAID DOCS Forum	N/A	N/A	Communications Team participated in USAID's Communication Working Group (CWG) meeting hosted by Training for Pakistan Project in Islamabad. Three contending projects including Training for Pakistan Project, Small Grants and Ambassador's Fund and Dairy Project gave a brief overview of their activities for the month of June-July. Dairy Project team

Sr #	Date	Event	Location	Media Coverage/Press Release	Remarks
					presented and competed very well and received fantastic claps staying runner-up.
15	July 2015 – September, 2015	USAID – DRDF Dairy Project Documentary	N/A	N/A	The objective of this revision was to update the outdated statistics and footage, as well as to include all five technical components, their objectives, training and methodology, benefits and impact. The documentary shoot took place in three locations: PMU office, Burj Attari and Vehari zones.
16	August 2015 – October 2015	Street Shows with Mobile Float Activity	District(s) Multan, Vehari, Khanewal, Bahawalpur and Lodhran	17 Urdu & 8 English local and national newspapers	As part of its community outreach and advocacy efforts, the Team organized a series of street shows with mobile float announcements in the districts of Multan, Vehari, Khanewal, Bahawalpur and Lodhran. The Dairy Project has conducted 42 street shows with mobile float announcements with a high turnout of more than 20,000 people.
17	September 10, 2015	Memorandum of Understanding (MoU) between DRDF & COMSATS, Sahiwal	COMSATS, Sahiwal	17 Urdu & 8 English local and national newspapers	Dairy and Rural Development Foundation (DRDF) and COMSATS, Sahiwal, signed a Memorandum of Association (MoU) to collaborate in training of Dairy Project trained Master Trainers and staff.
18	September, 2015	Dairy Project Portal-Volume 3, Issue 2 (newsletter)	N/A	N/A	The newsletter gave an overview of the Dairy Project’s team, interventions, accomplishments and activities to a wide audience of institutions, organizations and individuals in the dairy sector. Around 400 copies have been distributed among public and private stakeholders, key project staff and Government administration, with more to follow.
19	July 2014 – September 2015	Publications, brochures and Posters for awareness and information	N/A	N/A	Designed and printed mobilization and training material, such as streamers, banners, modules, flip charts, brochures, record registers, and certificates for beneficiaries for raising awareness about the Dairy Project’s interventions.

Table 18 Key Events organized in Year-4

ANNEX 4: COMMUNICATION PRODUCTS DEVELOPED

Title	Component	Media Type	Release Date	Language
Staff Appreciation Certificates	Dairy Project Staff	Certificate	July-August , 2014	English
Dairy Project's Advertisements	Mass Awareness	Advertisement	July 25, Oct 12,19, 26, 29, Nov 6, 23, Dec 21, 25, 2014	Urdu
Dairy Farmer Steamers for Classroom for OIG Visit at Sukheki	Dairy Farmers	Flex steamers	October 27, 2014	Urdu
Event Backdrop, Flex Skins for OIG Visit at Sukheki	All three components (Artificial Insemination Technicians, Women Livestock Extension Workers, Dairy Farmers)	Flex Skins	October 27, 2014	English
Staff Business and ID Cards	Dairy Project's PMU and Field Staff	Cards	December 31, 2014	English
Dairy And Calendar	Dairy Project	Dairy and Calendar	January 1, 2015	English
One day and seven day Dairy guide for farmers	Dairy Farmer		January 2015	Urdu
UVAS Job Fair training and Marketing Material (standees, backdrop, banners, brochures, factsheet).	Dairy Project	Branding Material	January 22, 2015	English and Urdu
One-day and seven day farmer trainings	Dairy Farmer	Certificates	January 2015	English
Farmer banners and streamers	Dairy Farmer	Banners and Streamers	January 29 2015	Urdu
One day and seven day module	Dairy Farmer	Module	January 2015	Urdu
Dairy Project Envelopes , writing pad , pens , file folders	Dairy Project	Stationary	February 2015	English
Banners-farmer, WLEW, Welcome Banners	WLEW,	Banners	February 12, 2015	Urdu
WLEW Record registers, WLEW Modules,	WLEW	Record register and module	February 12, 2015	Urdu
Project Brochure-Naveed-e-Subha, AIT, WLEW, Dairy Farmer, One-month	AIT, WLEW, Dairy Farmers	Brochure	February 24, 2015	Urdu
Flip Charts for WLEW and Farmer Training	WLEW and Farmer	Flip Charts	February 2015	Urdu
Hand bills for WLEW	WLEW	Handbills	February 2015	Urdu
Chara Jat Booklet for Dairy Farmers	Dairy Farmer	Booklet	February 2015	Urdu
Complaint Cell cards	Dairy Project	Complaint cards	February 2015	Urdu and English
DAWN Expo Brochures (Silage brochure, aflatoxin brochure, Souvenir Bags including keychain, bags and mugs, English and Urdu brochure	Dairy Project	Brochures	March 19 and 20 2015	English and Urdu

Title	Component	Media Type	Release Date	Language
MOU Signing at UVAS (Backdrop, file folders, standees)	Dairy Project	Branding Material	March 25, 2015	English
Staff Business and ID Cards	Dairy Project	Cards	March 27, 2015	English
Handbills (AIT)	AIT	Promotional Material for Beneficiaries	April 7, 2015	Urdu
Employee Reward ceremony-backdrop, streamers, certificates and shields	Dairy Project		April 22, 2015	English
Appreciation Certificates for Dairy Project Staff	Dairy Project	Certificates	April 24, 2015	English
Donors Conference Branding and Marketing Material including backdrop, standees, invitation and organizer cards, factsheet.	Dairy Project	Branding and Marketing Material	June 13, 2015	English
Dairy Project Portal-Volume 3, Issue 1	Mass Awareness	Newsletter	June 23, 2015	English
AIT Record Register	AIT	Record Register	July 2, 2015	Urdu
WLEW Steamers for Classroom	WLEW	Flex steamers	July 03, 2015	Urdu
Project Branded Envelopes	Dairy Project	Stationery Items	July 27, 2015	English
Record Registers for Dairy Farmers	Dairy Farmers	Record Register	August 03, 2015	Urdu
Record Registers for WLEW	WLEW	Record Register	August 06, 2015	Urdu
WLEW Refresher Module	WLEW	Training Module	August 06, 2015	Urdu
Certificate (One-Day)	Farmer	Certificate	August 06, 2015	English
Mobile Float Activity-Street Shows (Streamers, flyers, float skins, 3D art work,	Mass Awareness	Mobile Float Activity	August 13, 2015	Urdu
Dairy Guide (farm Managers)	Dairy Farmers	Training Module	August 25, 2015	Urdu
Brochures (AIT. Farmer, Naveed-e-Subah, WLEW)	AIT. Farmer, WLEW	Brochures	September 01, 2015	Urdu
MoU COMSATS (Backdrop. Name cards)	Dairy Project		September 07, 2015	English
One Day Dairy Guide	Dairy Farmer	Module	September 21, 2015	Urdu
Dairy Project Portal, Vol3-Issue 2	Mass Awareness		September, 2015	English/Urdu

Table 19 Communication Products Developed in Year-4

ANNEX 5: SUMMARY OF TRAINING CONDUCTED

	FARMERS			AITS	WLEWS	
	1-DAY	7-DAY	1-MONTH		WLEWS	REFRESHER
July-14	-	-	-	-	-	-
August-14	-	-	-	-	-	-
September-14	-	-	-	-	-	-
October-14	-	-	-	-	-	-
November-14	-	-	-	-	-	-
December-14	-	-	-	-	-	-
January-15	64	-	-	-	-	-
February-15	1,555	94	-	-	-	-
March-15	1,617	158	-	39	18	129
April-15	2,830	63	26	56	118	107
May-15	3,300	129	-	41	106	32
June-15	3,421	141	23	-	79	80
July-15	2,545	154	-	-	92	41
August-15	2,729	207	-	-	74	31
September-15	2,586	59	25	-	55	70
Grand Total	20,647	1,005	74	136	542	490

Table 20 Trained beneficiary numbers month wise



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FROM THE AMERICAN PEOPLE

Empowering Rural Youth

USAID-DRDF Dairy Project trains a young artificial insemination technician for dairy breed improvement.



“I was provided with a kit, which included nitrogen gas for safe storage of semen and other equipment. I have inseminated 100 animals, out of which 55 are inseminated. I am able to earn almost 6000 per month and support my family. Thank you USAID!” says Shabir.

Muhammad Shabir, Artificial Insemination Technician, resident of 70 D.B, tehsil Yazman District Bahawalpur.

Artificial Insemination Technician, Muhammad Shabir, is a 22 year old rural resident of 70 D.B, tehsil Yazman District Bahawalpur. Although Sarfaraz is educated and had passed his matriculate examination, it was not easy for him to find work.

In December’ 2012, Shabir heard about USAID-DRDF Dairy Project’s Artificial Insemination Technicians Training through community meeting arranged by social mobilizer. He applied for training as AI, to become an earning hand for his family and able to improve livestock health and breed. Through training, he learnt how to carry out a palpation test, rod passing, AI skills and reproductive issues.

USAID-DRDF Dairy Project’s Artificial Insemination trainings aim to significantly empower unemployed rural youth as entrepreneurs who can offer services to dairy farmers. These farmers benefit from access to better quality semen supplies ensuring breed improvement among animals. The overall aim is to ensure that through better breeding, farmers are able to increase their milk production and incomes.

“Dairy farmers demand my services so that they can have improved breed animals with high milk yields and greater market value. They are satisfied with my timely services,” says Shabir. He was provided with a kit, which included nitrogen gas for safe storage of semen and other equipment.

“I have inseminated 100 animals, out of which 55 are inseminated. I am able to earn almost PKR 6000 per month and support my family. As part of an extra income, I carried out 175 Pregnancy diagnoses in last three months and earned PKR 20000 from it”, says Shabir

Becoming a part of USAID- DRDF Dairy Project AIT training has proved to be fruitful for Shabir and his family. He feels satisfied with the newly-learnt skill as it benefits the community. He is a motivated person who wants to achieve his future aims; he wants to take livestock extension diploma in future.

“I am excited to continue my work as an AIT, as the demand for artificial insemination and better breeding facilities is increasing by the day. Thank you USAID!” says Shabir.



SUCCESS STORY

Improving Income Levels

The Dairy Project aims to train young, educated rural youth for better breed services.



“I have inseminated about 150 animals out of which about 60-65 animals are pregnant. My income has increased from PKR 8,000 – 10,000 to PKR 14,000 per month, which enables me to provide a share in household income.”, says Ghufuran.

Muhammad Ghufuran , Artificial Insemination Technician
Chak 60 D.B, tehsil Yazman,
district Bahawalpur

Muhammad Ghufuran’s previous job as a rickshaw driver meant he was always uncertain about the income he would make on a monthly basis, as it would depend on the number of passengers. There was no permanent source of income. He heard about the Dairy Project’s Artificial Insemination Technicians’ training program for young, educated rural men in a community meeting and, upon consultation with his family, decided to apply for it.

During the training, Ghufuran learnt various techniques including detecting an animal’s heat, rod passing to artificially inseminate the animal, palpitation test, conducting accurate pregnancy tests and other breeding techniques.

According to Ghufuran, “I have inseminated about 150 animals out of which about 60-65 animals are pregnant. My income has increased from PKR 8,000 – 10,000 to PKR 14,000 per month, which enables me to provide a share in household income. I recently purchased a UPS for my family, with the profits earned.”

In addition to artificial insemination services, Ghufuran also offers value addition services that help supplement his additional income, “I provide pregnancy diagnosis services along with artificial insemination services, and earn an additional PKR 1500-3,000 from 25 to 30 pregnancy diagnoses in last three months.” says Ghufuran.

The overall aim of AI Training is to ensure that through better breeding, farmers are able to increase their milk production and incomes. The Dairy Project aims to train 2,445 Artificial Insemination Technicians (AITs). As of August 2015, over 2,168 AITs have been trained and are now providing breed improvement services to farmers in over 20,000 villages across Pakistan, with an average income of PKR 10,500/- (\$100 approx.)

Upon successful performance criteria, the Dairy Project awarded Ghufuran with a motorbike on a 50 per cent cost share basis. “My community is satisfied and acknowledges my efficient AI and basic animal health care services. My family is also very happy with this advancement and I aim to further excel by taking a diploma in livestock extension services.” he says.



SUCCESS STORY

Transforming Livelihoods

USAID-DRDF Dairy Project transforms livelihoods of rural communities through adoption of best farming practices within the dairy sector.



At one-day farmer trainings, I realized the importance of modern dairy farm practices and techniques; such as, vaccination, balanced diet, shelter and free access to clean water. I implemented these techniques and later attended one-month farm manager course to learn more.”

Azam Bashir from Basti Sheen Mar Moza Qadir wah Tehsil, District Vehari,

Muhammad Azam Bashir lives in Basti Sheen Mar Moza Qadir wah Tehsil, District Vehari, with his wife and a son. He heard about USAID-DRDF Dairy Project’s trainings through Dairy Project’s Team, followed by community meeting and application process of farm up graduation.

U.S. Agency for International Development (USAID), and Dairy and Rural Development Foundation (DRDF), through their Dairy Project, are providing trainings to dairy farmers to foster sustainable increase in dairy and livestock productivity through adoption of best dairy farming practices.

Farmers are trained in improved feeding and animal nutrition, basic level animal health management, shed management and the importance of improved breeds through artificial insemination. These trainings for dairy farmers in best practices will increase milk yields of animals and subsequently boost farmers’ incomes.

With Azam’s involvement in the USAID-DRDF Dairy Project trainings, his farming techniques have improved. He says “At one-day farmer trainings, I realized the importance of modern dairy farm practices and techniques; such as, vaccination, balanced diet, shelter and free access to clean water. I implemented these techniques and later attended one-month farm manager course to learn more.”

According to Azam, “It has helped me increase my animals’ milk yield from 55 to 75 liters on an average and thus has boosted my three months income from PKR 60,000 to PKR. 80,000. I spend the profit earned on the education of my family members and other household expenses.”

In the future, he plans to run dairy farm on commercial bases and to install biogas and milking parlor.



SUCCESS STORY

Learning Best Dairy Farm

USAID trains dairy farmer to improve animal health and productivity.



“I now allow my animals to move freely to have free access to water. Moreover, no vaccination was given to the animals. I was not aware of the benefits of deworming, which protects dairy animals against intestinal parasites.” says Abdul.

Abdul Majeed, Chak no 577 E.B, Tehsil and District Vehari.

Abdul Majeed, a 59 years old rural resident of Chak no 577 E.B, Tehsil and District Vehari, heard about USAID-DRDF Dairy Project through social mobilization team at his village.

U.S. Agency for International Development (USAID), and Dairy and Rural Development Foundation (DRDF), through their Dairy Project, are providing trainings to dairy farmers to foster sustainable increase in dairy and livestock productivity through adoption of best dairy farming practices.

Farmers are trained in improved feeding and animal nutrition, basic level animal health management, shed management and the importance of improved breeds through artificial insemination. These trainings for dairy farmers in best practices will increase milk yields of animals and subsequently boost farmers’ incomes. Abdul has learnt about these best farming practices.

“I now allow my animals to move freely to have free access to water. Moreover, no vaccination was given to the animals. I was not aware of the benefits of deworming, which protects dairy animals against intestinal parasites.” says Abdul.

Abdul’s monthly income has gone up from PKR 40,000 to PKR 50,000-55,000 per month. His animal herd size has increased from 22 animals to 23 animals. He spends his profits on his family, children and their education.

Confident by the key insights the Dairy Project’s training had given him, Abdul has decided to build a modern dairy shed for greater care of his animals and increased milk production.



SUCCESS STORY

Realizing Potentials

USAID-DRDF Dairy Project trains rural woman with new skills and techniques to provide timely basic livestock health and extension services.



“I feel proud to be a bread-winner for my family and to contribute towards improved health and education of my younger siblings and myself.”

Nadia, Dairy Project trained Woman Livestock Extension Worker (WLEW) from Basti Mulah Faqeer, Tehsil, district Multan.

19 years old, Nadia is a resident of Basti Mulah Faqeer, Tehsil, district Multan. She had an opportunity to hear about the USAID-DRDF Dairy Project at a community meeting of her village. After which she appeared in an interview and got selected for Livestock Extension Service training. USAID-DRDF Dairy Project through its Women Livestock Extension Services trainings select the unemployed, marginalized rural women and empower them through the provision of knowledge, such as animal vaccination, deworming, animal health management, importance of nutrition and vaccinations against diseases. It provides official certification from the University of Veterinary and Animal Sciences as well as skills and tools to provide much-needed timely basic animal health care and management extension services in their villages. “I received Dairy Project’s fifteen-day advanced training which helped me get advanced techniques on animal health and management and to boost my entrepreneurial skills”, says Nadia.

She was provided with a free medicine tool kit and a mobile phone so she could contact suppliers whenever needed. She jointly works with AITs of her village and surrounding villages and shares 50 percent of her profit, i.e, PKR.30, 000 per month on an average.

“I am lucky to be part of USAID-DRDF Dairy Project Women Livestock Extension Service Training Program. Sitting idly at home bothered me. I wanted to do something productive for my village and now after this training, I have become a helping hand for my family and my village”, Nadia says on a positive note.

“It is nice to have a certified lady at door step. She provides timely services in case a doctor is out of reach for us.” says a village farmer.

With improves socio-economic conditions and knowledge, Nadia is now able to realize the potential in herself and wants to become a well-known practitioner in her village and provide timely basic animal health care and management extension services to the community at wide-scale.



SUCCESS STORY

Bringing Hope to Rural Woman

USAID-DRDF Dairy Project trains rural woman to provide basic animal healthcare services.”



“I am lucky to be part of USAID-DRDF Dairy Project Women Livestock Extension Service Training Program. Instead of doing nothing at home now I feel proud to do something productive for my village and also fulfill wished of my children.”Sumaira says on a positive note.

Sumaira Kausar, Dairy Project trained Woman Livestock Extension Worker (WLEW)
26 IWB Tiba Sultan Pur District
Vehari

The United States Agency for International Development (USAID) and Dairy and Rural Development Foundation (DRDF) through their Dairy Project are providing trainings to women from Punjab’s rural communities to become livestock extension workers.

“I received fifteen-day Refresher training which helped me further learn about animal health management, importance of nutrition and timely vaccinations against diseases, such as, mastitis and Foot and Mouth Disease (FMD). In this way, I was able to give livestock services to her village.” says Sumaira. Her expertise has not only catered to a substantial demand within her own village but also caters to veterinary needs in neighbor villages as well.

Sumaira happily reports that after her training she was able to accumulate a profit of PKR. 36490 earned over a span of three months by providing basic animal healthcare services.

“With the profit earned I was able to buy fridge, bike and also spent money on my children’s education,” shares Sumaira.

The Dairy Project team aims to continue providing support and guidance for women to be able to provide livestock extension support, and equip them with the knowledge, skills and tools to provide much-needed animal health care in her village.

“I am lucky to be part of USAID-DRDF Dairy Project Women Livestock Extension Service Training Program. Instead of doing nothing at home now I feel proud to do something productive for my village and also fulfill wished of my children.”Sumaira says on a positive note.



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