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Monitoring Peach & Potato Trainings on Pre-Harvest Best Management Practices



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Data Page

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Abstract:

As a part of monitoring Value Chain Development Program, monitoring of trainings on Peach & Potato Pre-harvest Best Management Practices was conducted. These training were held in district Swat, Khyber Pakhtunkhwa during the month of April and May 2012. Pre & post training questionnaires were administered with randomly selected 136 peach and 121 potato participants to measure the change in their knowledge as a result of their participation in the trainings. The report provides presents the detailed analysis of this monitoring exercise.

Acronyms

CAD	Computer aided design (garment cutting)
CMT	Cut manufacture and trim cost, but frequently used as contract labor cost
CPA	Critical path analysis
DPR	Daily production report
EMM	Efficient marker making
EXM	Export marketing
EU	European Union
GMT	Garment
GSM	Grams per square meter
KP	Khyber Pakhtunkhwa
MRP	Material resource planning
ITC	International Trade Center
PDS	Pattern design software
PKR	Pakistan Rupees
PPC	Production planning and control
PPM	Production planning and management
SME	Small and medium enterprise
SMV	Standard minute value
SWOT	Strengths, Weaknesses, Opportunities, Threats
TDAP	Trade Development Authority of Pakistan

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Executive Summary

As a part of monitoring Value Chain Development Program, M&E conducted real time monitoring of trainings on Peach & Potato Pre-harvest Best Management Practices in district Swat, Khyber Pakhtunkhwa (KP) during the month of April and May 2012. Pre & post training questionnaires were administered with randomly selected 136 peach and 121 potato participants to measure the change in their knowledge as a result of their participation in the trainings.

Peach Findings

- Monitoring observed a commulative increase in knowledge to 37% (26% pre training to 63% post training) about the important issues related to peach production technology and disease control.
- Participants showed highest increase of 52% (from 20% to 72%) in understanding about the composition of bordeaux mixture. (very effective antifungal solution composed of slaked lime, copper sulphate and water @ ratio of 1kg: 1kg: 100L.
- Another increase of 40% (from 38% to 78%) was observed on 'benefits of open center' (the pruning/training system in peaches during initial few years growth in the field in which the central branch growing up right is cut back and few selected lateral branches are left to grow).
- Lowest increase of 28% (from 27% to 55%) was recorded about the 'safety measures for spray' followed by 33% (from 33% to 66%) increase on the 'benefits of organic matter'.

Potato Findings

- The cummulative increase of knowledge was recorded at 41% (from 33% pre training to 74% percent post training) about the important issues related to potato production technology and disease control.
- Participants revealed highest increase of 68% (from 27% to 95%) knowledge in planting geometry that is "distance between rows and plants of potato" followed by another increase of 42% (from 14% to 56%) understanding in "disadvantages of insufficient distance between plants".
- Lowest increase of 12% (from 86% to 98%) was observed on "proper time for harvesting" indicating that the participants already have enough information about it.

Recommendations

- Trainings should be organized and completed before the initiation of the season of that specific crop so that the participants are able to apply all the learned techniques and good practices.
- The education level of the participants should be mentioned in the questionnaire which will be helpful for the facilitator in the future trainings while conducting the training sessions.
- Training should focus more on issues on which participants had little prior knowledge.

1.0 Introduction

The objective of the USAID Firms Project is to improve government service delivery and develop dynamic, internationally competitive private sector small and medium enterprises (SMEs) to accelerate sales, investment, and job growth to undercut the basis of extremism. Socioeconomic stabilization of vulnerable areas in Pakistan is in the strategic interest of and is an urgent priority for the U.S. Government. The primary prerequisite for this stabilization is a robust and competitive private sector resulting from a market-driven economic environment and enabling policies.

The USAID Firms Project has worked in 2012 with 226 potato SMEs in 6 geographical clusters in Upper Swat and 449 peach SMEs in 11 clusters of Middle and Lower Swat to upgrade their skills and increase revenues and jobs. The activity has resulted in a trained workforce of 151 potato SMEs and 356 peach SMEs in pre-harvest best management practices.

2.0 Objectives of the Monitoring

The overarching objective of the monitoring of pre-harvest trainings is to assess the effectiveness and impact of the training initiative. More specifically it aims to:

1. Assess the improvement in participants' knowledge as result of their participation in the project assisted training;
2. Assess the extent to which participants are applying the improved farming practices that they learned from the project assisted trainings; and
3. Assess the extent to which the improved farming practices have contributed to the overall goal of the potato program.

The ongoing monitoring and follow-up of the trainees would feed all of these three objectives. It is envisioned that comprehensive training impact would be required towards the end of the program to specifically achieve the third objective and evaluation of the training program.

3.0 Methodology

M&E department has introduced pre and post training assessment to measure the change in participants¹ knowledge level as result of their participation in the trainings. A closed ended pre/post training assessment questionnaire was developed in consultation with the Consultant, Value Chain Development and Training Specialist. The questionnaire included questions on the most important aspects of the training to see whether these subjects were adequately addressed by the facilitators and to gauge the extent participants were able to comprehend those topics. The pre training questionnaire was designed to be administered with the randomly

¹ A qualified participant, according the USAID Firms project PMP, is a person who attends at least 75% of the trainings session.

selected participants before the trainings started. Post training questionnaire were administered at the end of the training with the same participants who were selected for the pre training interviews.

As part of the monitoring exercise, M&E team visited eight trainings and administered pre and post training assessment questionnaire with randomly selected 257 participants.

Table 1: Cluster and sector wise breakdown of participants

Province/ District	Sector	Cluster Locations	Total # of participants	# of Participants interviewed
KP/Swat	Peach	Kota	42	36
		Nawakaly	44	36
		Chorkhay	42	36
		Shamozai	38	28
		Sub-Total	166	132
	Potato	Mankeyal/Behrain	39	32
		Kass Kalam	35	30
		Sakhra/Miandam	29	27
		Chirat	40	32
		Sub-Total	143	121
Total			309	257



Figure 1: Training being held at Swat-Khyber Pakhtoonkhawa

4.0 Findings and Recommendations

4.1 Results of the Pre/Post Training Assessment

Findings of these assessment exercises showed that:

Training sessions were effective in bringing about an improvement in participants' knowledge about peach and potato pre-harvest best management practices. The cumulative overall increase in the peach trainings was 37% which resulted in the overall knowledge gain to be around 64% and in potato it was recorded at 41% and 74% respectively. It is evident that trainings have been effective in improving trainees' understanding of critical issues related to 'pre-harvest best management practices' in both peach and potato sectors.

Cumulative findings are summarized in the following graph. Graphs showing the results of each training are presented in the following pages.

Peach:

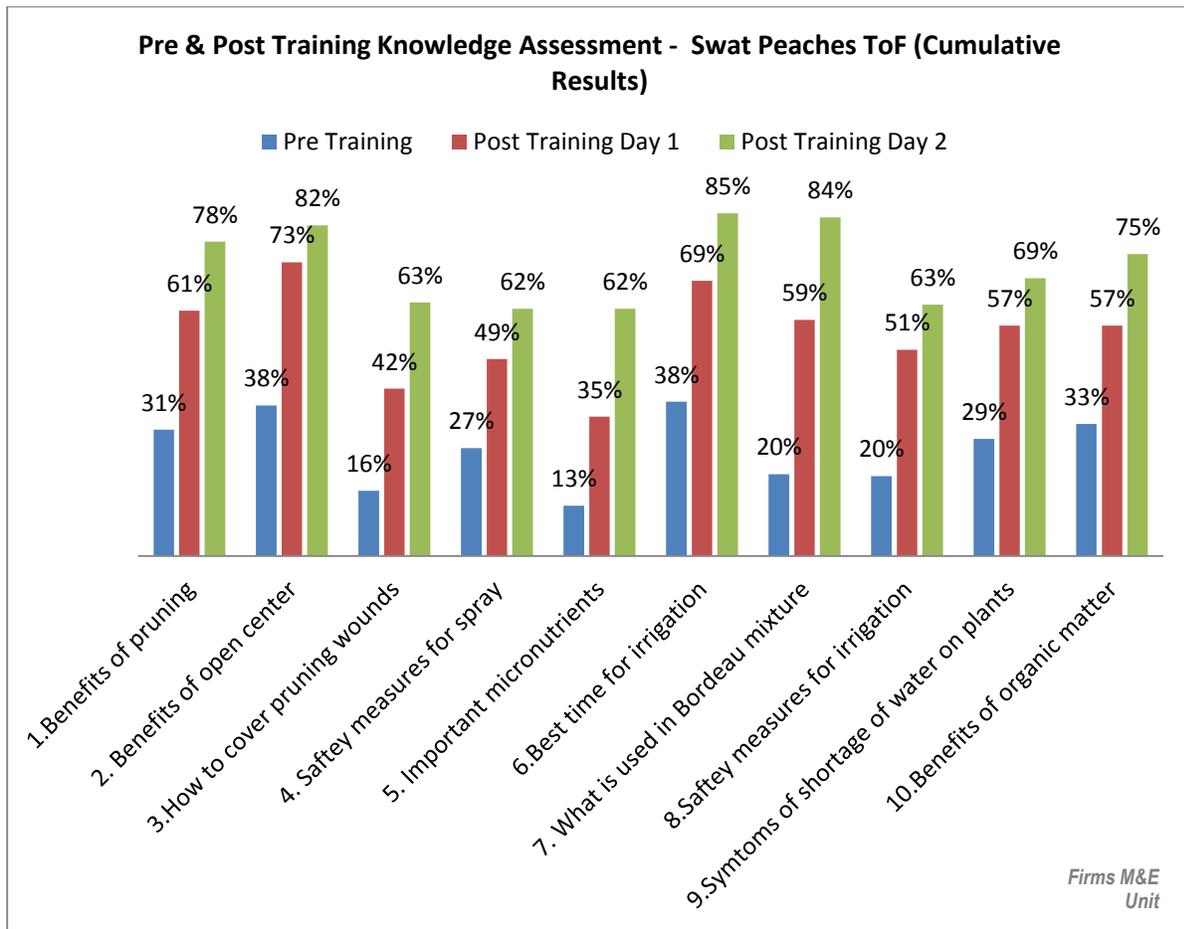


Figure 2: Swat Peaches ToF (Cumulative Results)

- Monitoring observed a commulative increase in knowledge to 35% (27% pre training to 62% post training) about the important safety measures for spraying the pesticides.
- Participants showed highest increase of 64% (from 20% to 84%) in understanding about the composition of bordeaux mixture (a very effective antifungal solution composed of slaked lime, copper sulphate and water @ ratio of 1kg: 1kg: 100L).
- Another increase of 44% (from 38% to 82%) was observed on 'benefits of open center' (the pruning/training system in peaches during initial few years growth in the field in which the central branch growing up right is cut back and few selected lateral branches are left to grow).
- Lowest increase of 35% (from 27% to 62%) was recorded about the 'safety measures for spray' followed by 40% (from 29% to 69%) increase on the 'shortage of water'.

Pre Post Knowledge Assessments of Peach Pre-Harvest Trainings in Swat, KP:

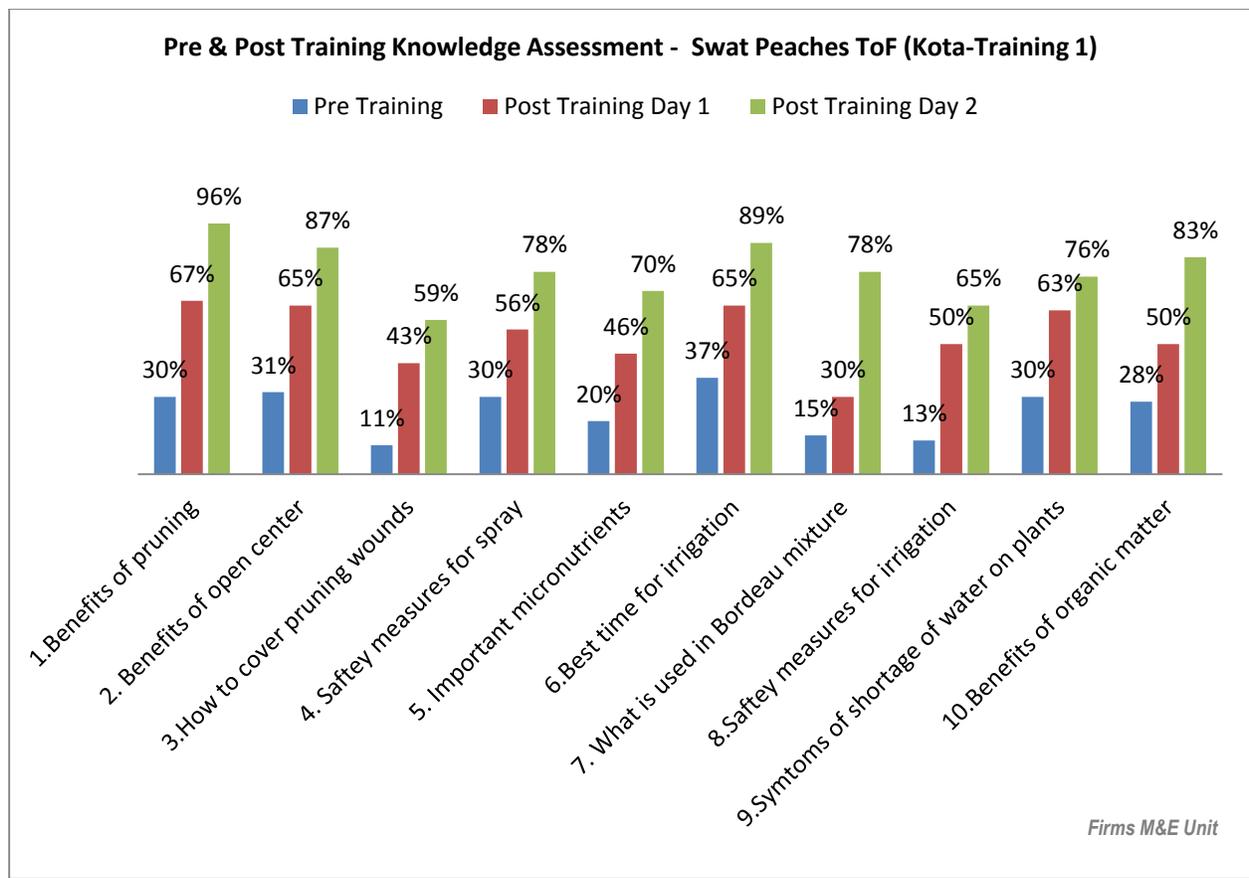


Figure 3: Swat Peaches ToF (Kota-Taining 1)

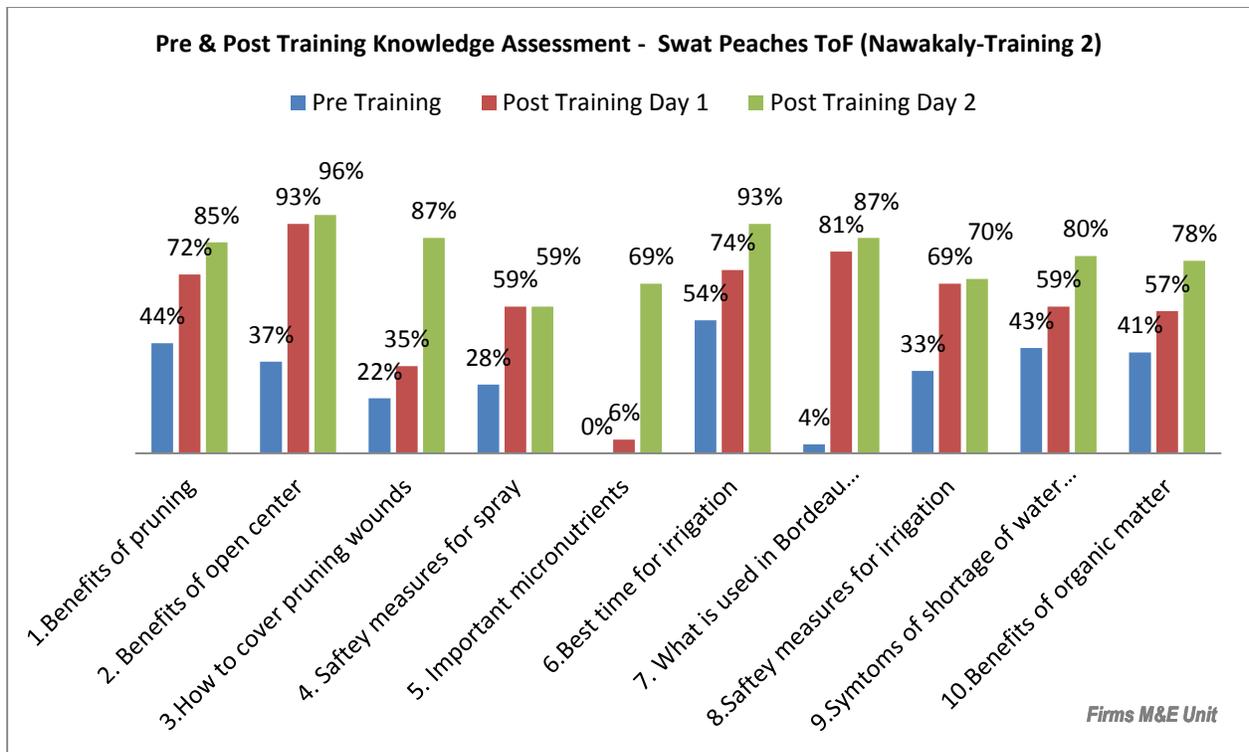


Figure 4: Swat Peaches ToF (Nawakaly-Training 2)

Pre Post Knowledge Assessments of Peach Pre-Harvest Trainings in Swat, KP:

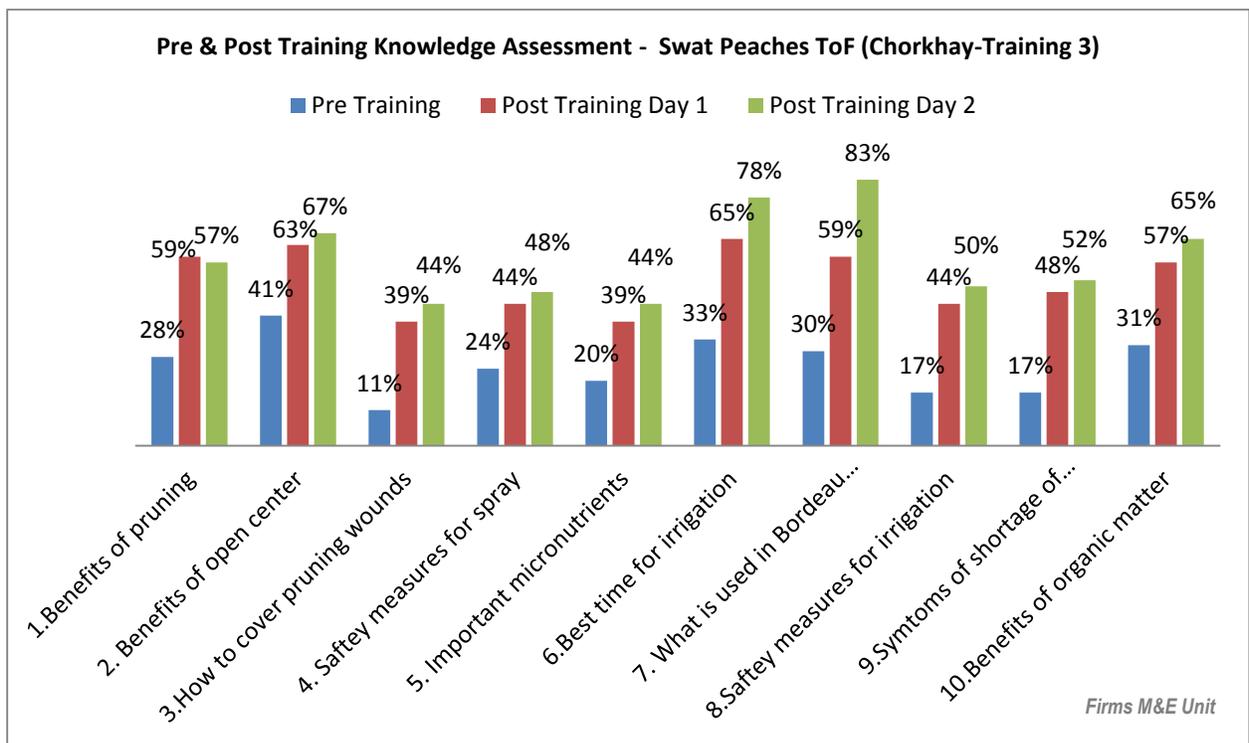


Figure 5: Swat Peaches ToF (Chorkhay-Training 3)

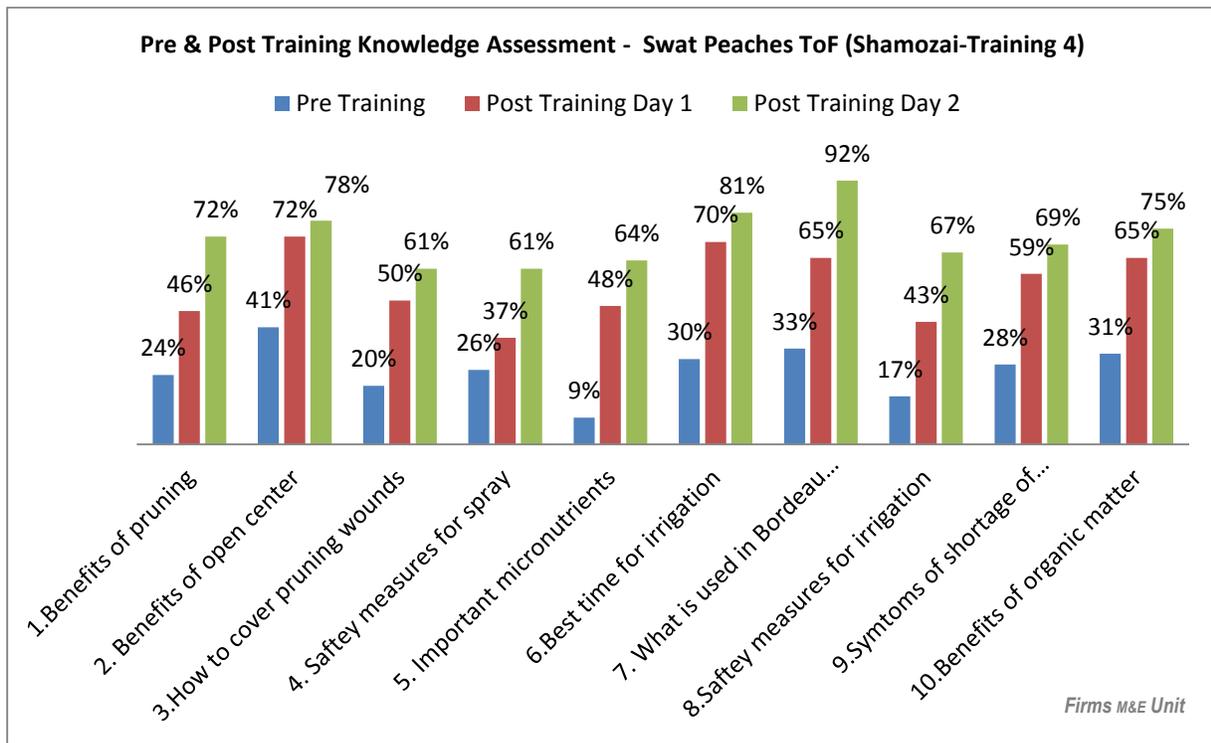


Figure 6: Swat Peaches ToF (Shamozai-Training 4)

Potato:

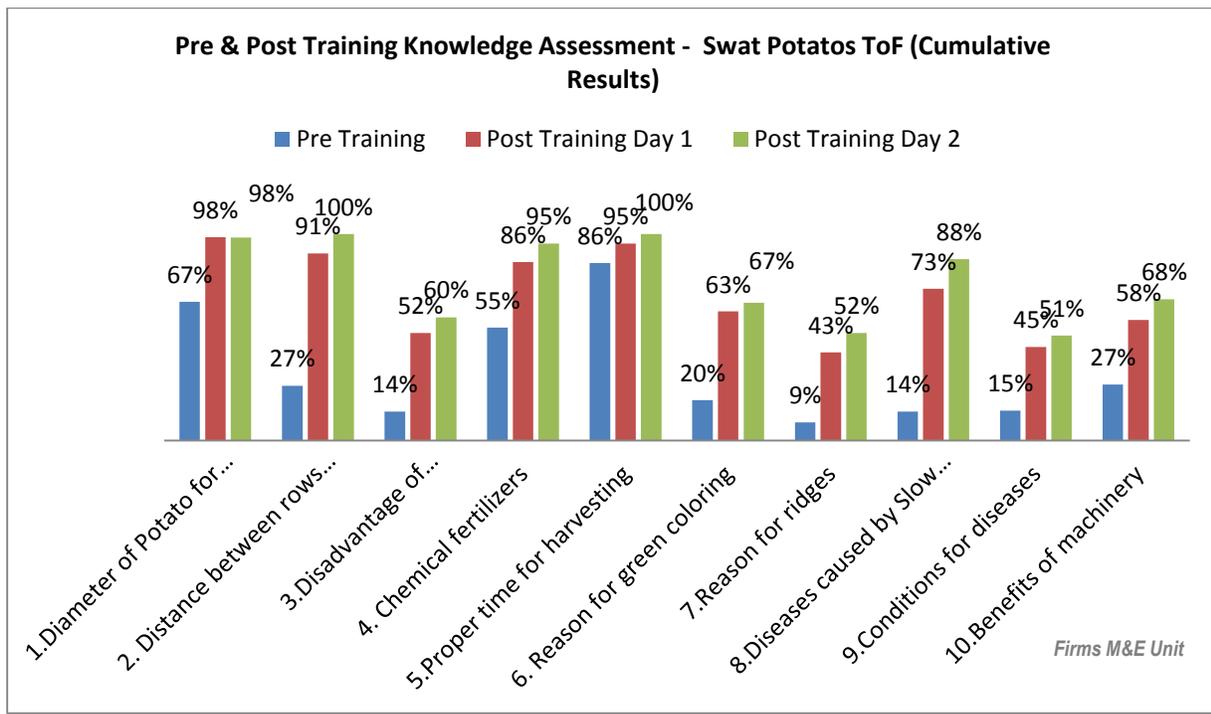


Figure 7: Swat Potatoes ToF (Cumulative Results)

- The cumulative increase of knowledge was recorded at 74% (from 14% pre training to 88% percent post training) about the important issues related to the diseases caused by Teeliya.
- Participants revealed highest increase of 73% (from 27% to 100%) knowledge in planting geometry that is “distance between rows and plants of potato” followed by another increase of 46% (from 14% to 60%) understanding in “disadvantages of insufficient distance between plants”.
- Lowest increase of 14% (from 86% to 100%) was observed on “proper time for harvesting” indicating that the participants already have enough information about it.

Pre Post Knowledge Assessments of Potato Pre-Harvest Trainings in Swat, KP:

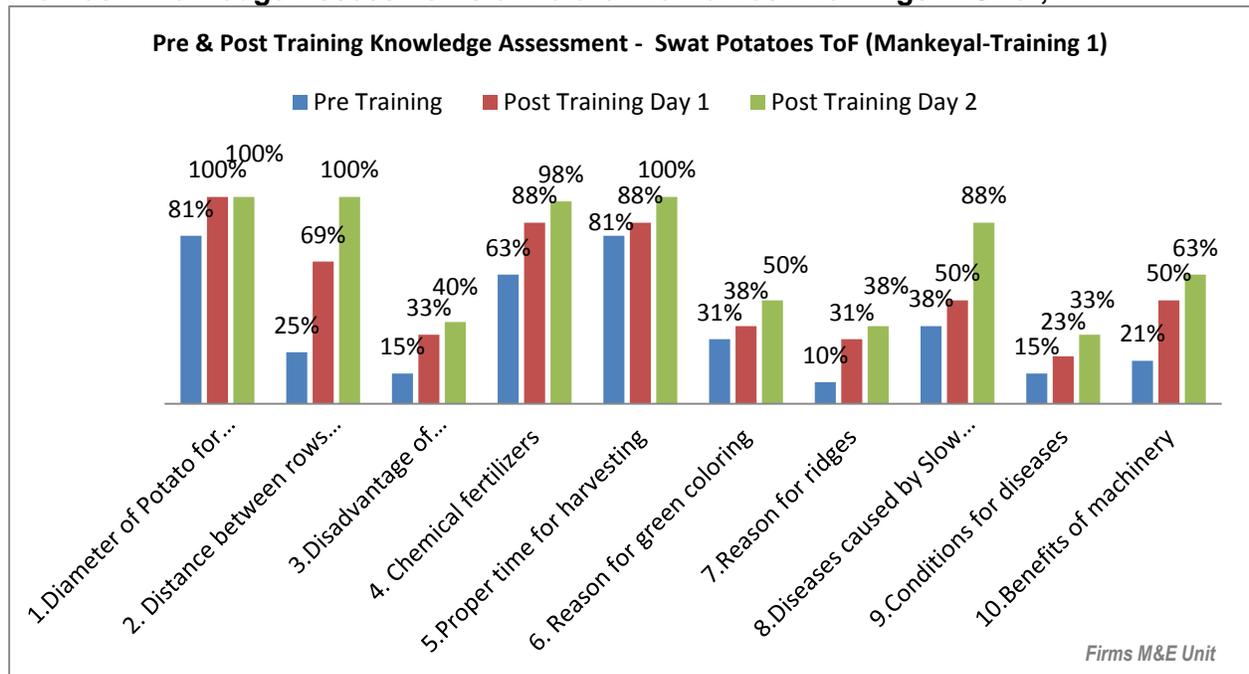


Figure 8: Swat Potatoes ToF (Mankeyal-Training 1)

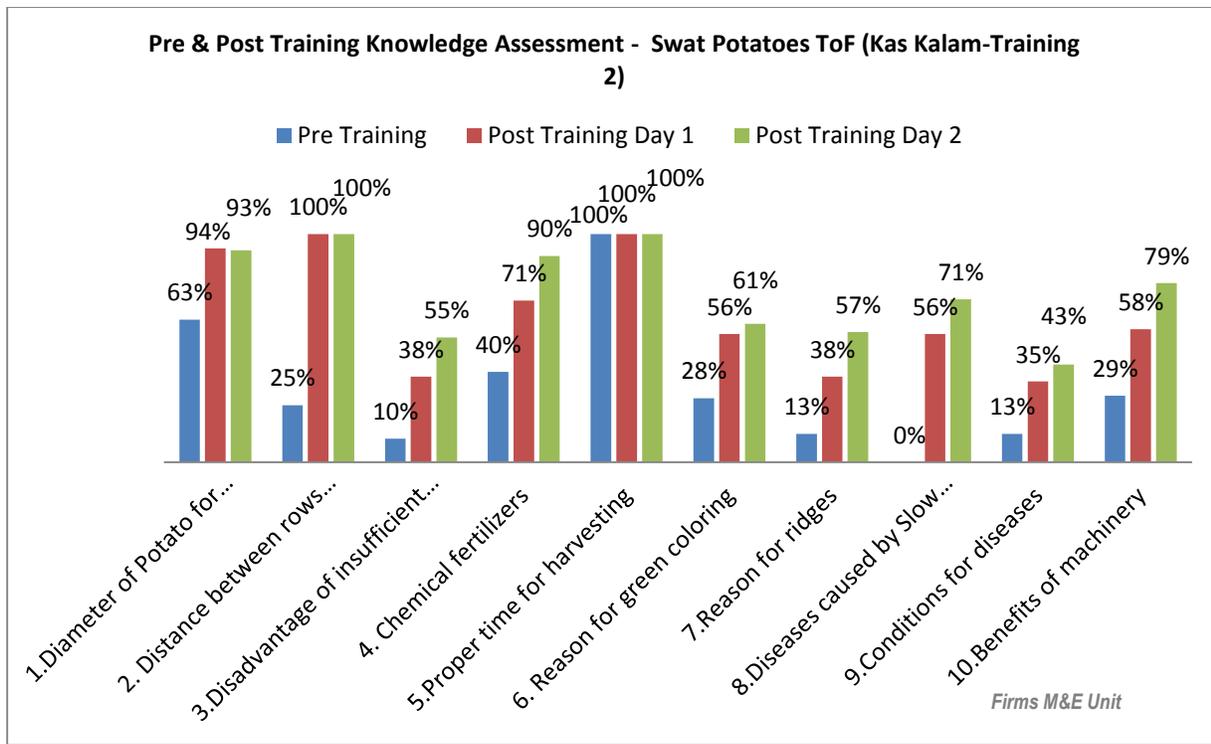


Figure 9: Swat Potatoes ToF (Kas Kalam-Training 2)

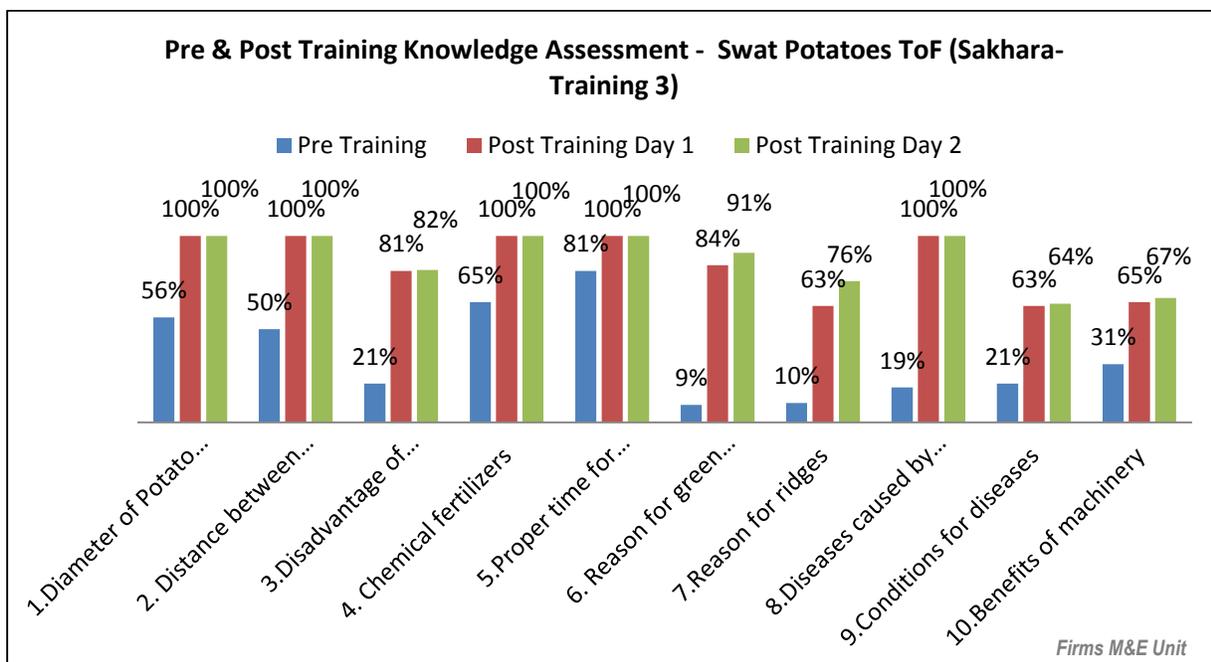


Figure 10: Swat Potatoes ToF (Sakhara-Training 3)

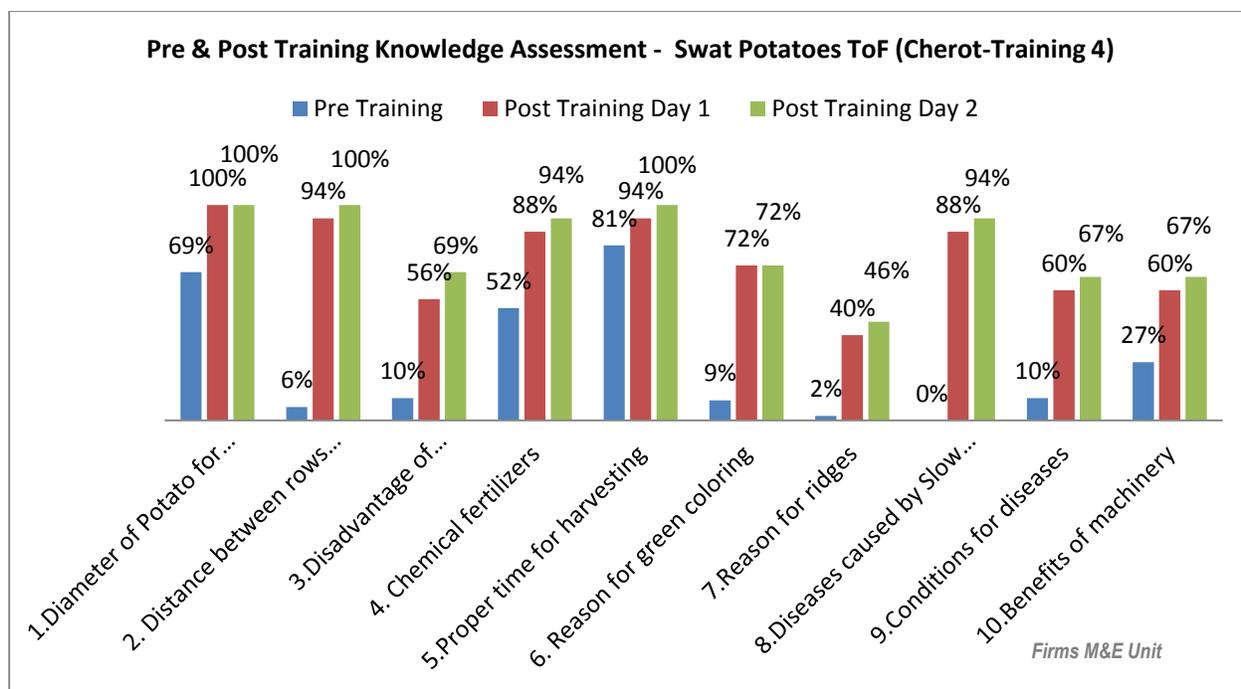


Figure 11: Swat Potatoes ToF (Cherot-Training 4)

4.2 General Recommendations

1. Trainings should be organized and completed before the initiation of the season of that specific crop so that the participants are able to apply all the learned techniques and good practices.
2. The education level of the participants should be mentioned in the questionnaire which will be helpful for the facilitator in the future trainings while conducting the training sessions.
3. Training should focus more on issues on which participants had little prior knowledge.

5.0 Conclusion

Value Chain Development Program is running a comprehensive training program to equip farmers about the best practices in farming, and hands-on farm management practices. Monitoring exercise not only showed that trainings have contributed to an increase in participants' knowledge level but also identified the gaps where improvements can be made. The exercise also highlighted how monitoring of the future trainings can be improved. Most of the findings and recommendations presented in this report have already been shared with the relevant team members and some of them have already been followed upon. M&E will continue to monitor all future trainings to assess the extent to which the improved farming practices have contributed to the overall goal of the peach and potato sector.

6.0 Annexure

6.1 Annexure -1: Pre-Post Training Questionnaires



USAID Firms Project: PRE-Training Knowledge Assessment for Formers on Peach Orchard Management							
1. TRNG Details	PRE TRNG	2. Prov.	3. District	4. Location of Training	5. Cluster Name		
2. Respondent Details		6. Name	7. Gender	M / F	8. Farm Name/Responsibility	9. CNIC #	
3. Interview Details			10. Interviewer's Name	11. Interview Date		MM / DD / YY	
4. Training Questionnaire (to be asked BEFORE the TRNG)							
13. کیا پھل کی پختگی سے پہلے اسے کاٹنا صحیح ہے؟ Correct Answers	14. پھل کی پختگی سے پہلے اسے کاٹنا صحیح ہے؟ Correct Answers	15. پھل کی پختگی سے پہلے اسے کاٹنا صحیح ہے؟ Correct Answers	16. پھل کی پختگی سے پہلے اسے کاٹنا صحیح ہے؟ Correct Answers	17. پھل کی پختگی سے پہلے اسے کاٹنا صحیح ہے؟ Correct Answers	18. پھل کی پختگی سے پہلے اسے کاٹنا صحیح ہے؟ Correct Answers	19. پھل کی پختگی سے پہلے اسے کاٹنا صحیح ہے؟ Correct Answers	20. پھل کی پختگی سے پہلے اسے کاٹنا صحیح ہے؟ Correct Answers

USAID Firms Project: POST-Training Knowledge Assessment for Potato Pre-harvest Training in Swat							
1. TRNG Details	POST TRNG	1. Prov.	2. District	3. Location of Training	4. Cluster Name		
2. Respondent Details		5. Name	6. Gender	M / F	7. Farm Name/Responsibility	8. CNIC #	
3. Interview Details			10. Interviewer's Name	11. Interview Date		MM / DD / YY	
4. Training Questionnaire (to be asked AFTER the TRNG)							
1. اٹو کے پھل میں کن سائز کا اٹو استعمال ہونا چاہیے؟ Correct Answers	2. 1. Gola size. 2. Approx 45 mm in dia. 3. Equal to the size of a medium egg.	3. اٹو کے فصل میں فصلوں کے درمیان اور فطار میں پھلوں کے درمیان صحیح فاصلہ کون سا ہے؟ Correct Answers	4. 2.5 ft X 0.67 ft.	5. پھلوں کے درمیان کم فاصلہ رکھنے کے کیا نقصانات ہیں؟ Correct Answers	6. 1. Competition among plants increases. 2. Sun light decreases. 3. Humidity enhances.	7. اٹو کے فصل میں کن کیڑوں کی کھپوں کی اشد ضرورت ہوتی ہے؟ Correct Answers	8. 1. Urea for nitrogen. 2. DAP for phosphorus. 3. Potassium sulfate and Pot chloride for potash
9. اٹو کے فصل میں کن کیڑوں کی کھپوں کی اشد ضرورت ہوتی ہے؟ Correct Answers	10. 1. Delayed irrigation. 2. High dose of fertilizer. 3. Best environment after a bad one.	11. اٹو کے فصل کی برداشت کتنے دنوں بعد شروع کرتی چاہیے؟ Correct Answers	12. 1. 100 -120 days.	13. بعض اوقات کھپت میں کچھ اٹو کی رنگت سبز پرجاتی ہے۔ وجہ بتائیے۔ Correct Answers	14. 1. Exposure to light. 2. Small ridges.	15. اٹو کے فصل میں بیماری سے کھپے کن حالات کا موجود ہونا خطرناک ہے؟ Correct Answers	16. 1. Presence of the organism. 2. Suitable environmental-temperature. 3. Humidity
17. اٹو کے فصل میں کن کیڑوں کی کھپوں کی اشد ضرورت ہوتی ہے؟ Correct Answers	18. 1. Time saving. 2. Perfection in work. 3. Increase production 4. Cost saving						

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