

**ASLP-PHDEB Mango Quality Improvement Workshops 2008
(Punjab)**

July 08 – 19, 2008

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1. Introduction

In order to continue the series of mango quality improvement workshops (2007) of PHDEB and ASLP Mango Supply Chain Management Project, and in follow-up of the decisions taken in the PHDEB Planning Meeting (March 2008), eight on-farm workshops on mango quality improvement (maturity determination, harvesting, desapping and packing) were conducted in R.Y. Khan (03) and Multan (05) in collaboration with the F&V Development and Diversification Project of Punjab Province (DIU R.Y. Khan & Multan), in which 384 stakeholders were directly educated for all the processes involved in mango quality improvement from harvest to retail. While another about 200 people were given briefing in in-door demonstration at Mango Show in R.Y. Khan and approximately the same number of people were briefed about the quality concept of mango in three days Mango Festival, Multan. Also published literature on the same was distributed among the participants of all the activities.

2. Objectives of the Workshops

The specific objectives of these workshops were as follows;

- Practical Demonstration cum Training on Orchard Management (better production practices) and Fruit Fly Management
- Post Harvest Management of Mango for Quality Improvement (Maturity Determination, Harvesting techniques, Desapping – Physical & Lime Treatment, Grading and Packing at Farmer's field)
- Capacity development and improvement in the technical skills of Fruit & Vegetable Development and Diversification Project (DIU R.Y. Khan & DIU Multan), Growers, Contractors, Commission Agents and Exporters
- Sustainable core group activities

3. Workshops Facilitators

The team of facilitators of these workshops was comprised of the following;

- Mr Muhammad Sohail Mazhar (Project Development Officer, ASLP Mango Supply Chain Management Project)
- Mr Asif Mahmood Qureshi (Assistant Manager Technical, PHDEB Multan)
- Sardar Muhammad Akbar (Deputy Director, F&V Project, DIU R.Y. Khan)
- Mr Javed Iqbal (Assistant Director, F&V Project, DIU R.Y. Khan)
- Chaudhry Khalid Mahmood (Deputy Director, F&V Project, DIU Multan)
- Mr Muhammad Akram (Assistant Director, F&V Project, DIU Multan)

4. Details of the Workshops

The activity focus was to train the trainers (extension wing of department of agriculture) and the on-farm labour involved in undertaking the complete procedure. A range of audience (academia, research, extension, growers, exporters, contractors, commission agents and farm labour) attended and learned about the processes involved in the workshops conducted at followings venues;

Day & Date	Venue
Tuesday, July 8 (R.Y. Khan)	Leghari Fruit Farm, Rahimabad, R.Y. Khan
Wednesday, July 9 (R.Y. Khan)	Dhillun Fruit Farm, R.Y. Khan
Thursday, 10 July (R.Y. Khan)	DJ Fruit Farm, R.Y. Khan
Saturday, 12 July (R.Y. Khan)	Mango Show, R.Y. Khan
Tuesday, July 15 (Multan)	Khakwani Fruit Farm, Multan
Wednesday, July 16 (Multan)	Bukhari Fruit Farm, Multan
Thursday, July 17 (Multan)	Khokhar Fruit Farm, Multan
Friday, July 18 (Multan)	Malik Fruit Farm, Multan
Saturday, July 19 (Multan)	Mehar Fruit Farm, Multan
Friday, 25 July to Sunday, 27 July Multan	Mango Festival, Multan

All the workshops contained the same contents, starting with briefing on orchard management, fruit maturity determination, harvesting, desapping and packing and fruit fly management techniques. In both the Mango Show, R.Y. Khan and Mango Festival, Multan; indoor demonstration on the quality aspects were presented as well as presentations were delivered on the same.

4.1 Mango Orchard Management & Fruit Fly Management

The audiences were given briefings on the better orchard management practices, leading to the production of better quality fruit. These include Pruning, fertilizer management, spray schedule management and irrigation etc. The orchard management tools kit were displayed at all the events and the people were educated for the GlobalGap certification.



CABI & F&V Project team briefing the audience about Fruit Fly Management

4.2 Fruit Maturity Determination

The workshops audiences were given training on fruit maturity determination by the use of maturity guide, refractometer, and rough estimate by visual observation of fullness of cheeks and skin appearance. The fruit, if not mature enough or becomes over mature, will have shorter shelf life compared with fruit harvested at proper level of maturity.



Fruit maturity determination

4.3 Fruit Harvesting

The participants were told to harvest the fruit along with about four to six inches stem to avoid the flow out of sap, which if comes out at any stage before proper desapping can deteriorate the appearance of itself as well as its surrounding fruits. The harvest along with stem can be done by specialized harvesting poles (manufactured by PHDEB) as well as secateurs. They were also told that we can manage the temperature, at least for consignments for high end markets, by managing harvest early in the morning followed by desapping and placing in shade during the day time and transportation in the evening.



Demonstration of fruit harvesting

4.4 Fruit Desapping

Fruit desapping, which is very important to get better return and even to get access to relatively high end markets, was taught to be conducted in different methods? The best available and efficient method for fruit desapping is Lime treatment; in which the fruit

harvested along with stem are de-stemmed and dipped in 0.5% lime solution for about two minutes followed by washing in clean water and air drying. The alternate methods involve de-stemming and keeping the fruit inverted for at least 30 minutes and even harvesting the fruit with about one inch stem followed by no treatment.



Demonstration of fruit desapping

4.5 Fruit Packaging

Fruit packing is another important area, which was addressed in an independent activity of ASLP Mango Supply Chain Management Project, has a vital role in fruit presentation at consumer's end. The activity audiences were trained in fruit packing in reference to the longevity of its shelf life and the quality and manufacturing issues of packing material were also discussed.

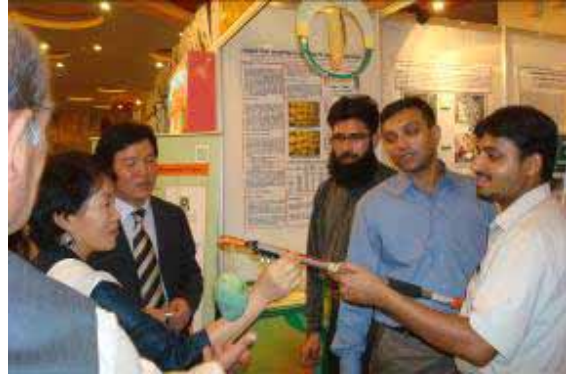


Demonstration of fruit Packing

4.6 Mango Show R.Y. Khan and Mango Festival Multan

The district government of R.Y. Khan organized a three days Mango Show in R.Y. Khan and the district government of Multan in collaboration of the Italian High Commission

organized the three days Mango Festival in Multan. A large participation of mango industry stakeholders and interested consumers was recorded at both the events. The ASLP project team and the PHDEB staff availed the opportunity of training the audience with the indoor demonstrations. Published material on the project activities was distributed and general awareness regarding improved mango quality was created.



Asif Qureshi describing Picking Poles at Mango Show R.Y. Khan & Multan

5. Impact of the Workshops

The ASLP-PHDEB Mango Quality Improvement Workshops have brought very positive feedback from the industry stakeholders wherever the team has conducted this exercise. A wide range of Pakistan mango industry stakeholders, beyond the ASLP Supply Chain Group members and PHDEB Core Group members, have started adopting the recommendations of the experts and the market feedback in year 2008 has reflected that domestic wholesale markets have started showing interest in trade of fruit consignments according to the advice of the ASLP-PHDEB experts, e.g.; a wholesaler in F&V market Lahore has agreed the added value of Rs.100 extra in fruit prepared according to the expert's advice over the Super quality according to the available market standards.