



## Training Workshop Ultra-High Density Plantation of Mango Orchards (6<sup>th</sup>-10<sup>th</sup> February 2018)



### Organized By

MNS University of Agriculture, Multan  
Pakistan Mango Growers Group  
Mango Research Institute Multan

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## **1. INTRODUCTION**

Mango is the second major fruit commodity grown in Pakistan having significant contribution towards national economy. This fruit brings around 60 million USD annually through its export earnings for the country. Recently decline in mango export volumes has been experienced from Pakistan to various high-end international markets including Japan, UK and Netherlands etc. Moreover, due to stringent quality and quarantine standards of various international markets e.g. Korean Republic and USA, the export volumes haven't increased even after attempts for many years.

The prevalence of different fruit skin blemishes is one of the key reasons for inferior quality and low market demand for Pakistani mangoes. The commercial commitments in international markets for the agreed volumes (quantity) of desired fruit quality are not fulfilled which has negative influence on the international trade. The rejections at different supply chain levels also influence the business relations among the supply chain partners. Resultantly, the stakeholders at various mango supply chain levels (especially orchard and packhouse) face high economic losses due the prevalence of different fruit skin blemishes.

One of the obvious reasons for the prevalence of such skin blemishes is the large tree height. More than 90% mango plantations in Pakistan are based upon 40 sq. ft and height usually goes above 50 ft. Such a height causes difficulties in on-tree practices e.g. canopy management/pruning, pesticide sprays, bagging etc. Resultantly, various insect pests, disease inoculums, dead wood etc harbor on the trees which causes different blemishes over the fruit skin. Moreover, the harvest operation also becomes very difficult over the tall trees; and the fruit faces sap contamination due to pedicel breakage in traditional harvest practice.

The tree canopy management and planting density have significant role in mango fruit yield, quality and value. In most of the mango growing countries, the high-density plantation system is being used for mango orchards. The new mango orchards in most of mango producing countries are being planted under medium, high and ultra-high plantations. However, in Pakistan, the traditional planting geometry is being practiced. As the land-resources are fastly decreasing in Pakistan due to urbanizing and hereditary land-fragmentation; there is need to explore and establish high efficiency plantation systems which could cater the maximum productivity with limited resources.

Keeping in view the global sustainable development goals and national strategic development pillars of Pakistan, this training was focused to create awareness in the mango industry and develop technical capacity for high density plantation of mango orchards.

## **2. DETAIL OF FOREIGN RESOURCE PERSON**

The resource person for the training course was Dr. Steven A. Oosthuysen, General Manager from HortResearch, P.O. Box 3849, Tzaneen 0850, South Africa, Tel: +27 79 886 2898; E-mail: hortres@pixie.co.za. Dr Steve Oosthuysen received his PhD in agriculture from the University of Stellenbosch in 1996, at which time he founded the private research company, HortResearch SA. Prior to this he worked for Merensky Holdings as head of Mango Research for 6 years. From 1996 to 1999, he was contracted to SQM, the Chilean fertilizer producer and world fertilizer supplier, as Projects and Market Development Manager for Southern Africa. From 1999 to 2017 his contract was extended to Global Projects and Market Development Manager. SQM operates in more than 100 countries worldwide, with a strong presence in Southern and North Africa, North and South America, Central America, Europe, the Middle East, China and South East Asia. He obtained his MBA in 2000. Dr Oosthuysen travelled abroad 13 or more times a year for a

period of 17 years, having become familiar with the fertilizer industries of the countries SQM operates in. Currently Dr Oosthuysen is focusing on product marketing research, servicing clients worldwide. His activities include product registration and promotion based on independent research. He participates at conferences and is involved in product promotion. Dr. Oosthuysen has published in excess of 150 scientific papers and articles.

### 3. PARTICIPANTS

The participants mainly included the mango growers from Punjab and Sindh; however, processors, traders, researchers, scientists and service providers were also present.

#### Group A:

Following persons participated in first training session:

Sr	Name of Participant	Affiliation
1.	Mr. Mumtaz Khan Manais	Citrus and Mango Grower, Tiba Sultan Pur, Vehari
2.	Mr. Allah Bakhsh Malik	Mango Research Institute Multan
3.	Prof. Dr Ishtiaq A. Rajwana	MNS University of Agriculture, Multan
4.	Mr. Tariq Malik	Mango Research Institute Multan
5.	Major (R) Tariq Khan	Lutfabad Mango Farms and Processing Facility
6.	Malik Muhammad Ali Khokar	Mango Grower, Multan
7.	Syed Zahid Hussain Gardezi	Mango Grower, Multan
8.	Malik Zafar Hussain Mahay	Mango Grower, Multan
9.	Dr. Shah Nawaz Khan	Mango Grower, Mailsi
10.	Mr. Azam Sabri	Mango Trader, Multan
11.	Mr. Ali Khuzaima Khan	Mango Grower, Multan
12.	Mr. Abdullah Chawan	Mango Grower, Multan
13.	Nawab Muzaffar Khan Khakwani	Mango Grower, Multan
14.	Col. Afzaal	Mango Grower, Bahawalnagar
15.	Mr. Umar Qureshi	Mango Grower, Muzaffar Garh
16.	Syed Ahyar Ali Shah	Mango Grower, Darbelo, Sindh
17.	Mr. Nisar Khaskheli	Mango Grower, Tali Mirwah Khaipur, Sindh
18.	Mr. Faysal Murtaza	Mango Grower, Jalal Pur Pirwala
19.	Mr. Liaqat Ali	Mango Grower, Kabirwala
20.	Mr. Ajay Barwani	Mango Grower, Mir pur Khaas
21.	Mr. Meer Hayder Kazmi	Mango Grower, Shujabaad
22.	Mr. Allah Nawaz Khan	Mango Grower, Multan
23.	Mian Khalid Shamshir Qureshi	Mango Grower, Kahror Pacca
24.	Mr. Ghulam Qadir Bhutta	Mango Grower, Jalal Pur Pirwala
25.	Syed Asad Ali Shah	Mango Grower, Naushero Feroz, Sindh
26.	Syed Nadeem Shah Jamoot	Mango Grower, Matiari, Sindh
27.	Syed Aman Ullah Hussaini	Mango Grower, Nawab Shah, Sindh
28.	Hafiz Muhammad Ammar	Jaffer Brothers Ltd
29.	Hafiz Muhammad Faisal Madni	Jaffer Brothers Ltd
30.	Mr. Faheel Ahmad	Jaffer Brothers Ltd
31.	Mr. Sajjad Ahmad	Jaffer Brothers Ltd
32.	Mr. Allah Dewaya	Mango Grower, Muzaffar Garh
33.	Mr. Mushtaq Khan	Mango Grower, Muzaffar Garh
34.	Sheikh Mehmood Akhter	Mango Grower, R.Y. Khan
35.	Seth Muhammad Akbar	Mango Grower, R.Y. Khan

<b>Sr</b>	<b>Name of Participant</b>	<b>Affiliation</b>
36.	Mr. Sheharyar Niazi	Mango Grower, Mian Channu
37.	Mr. Amir Husnain Khan	Mango Grower, R.Y. Khan
38.	Mr. Jahanzeb Khan Dharala	Mango Grower, Multan
39.	Mr. Imran Ali Bozdar	Mango Grower, Sanghar, Sindh
40.	Mr. Muhammad Aslam Mari	Mango Grower, Hyderabad, Sindh
41.	Mr. Muhammad Waris Bhatti	Mango Grower, Muzaffargarh
42.	Mr. Osama Mohammad Khakwani	Mango Grower, Bahawalnagar
43.	Syed Wajahat Gardezi	Mango Grower, Multan
44.	Mr. Zulfiqar Ali Khan Kachelo	Mango Grower, Mir Pur Khaas, Sindh
45.	Mr. M. Taha Memon	Mango Grower, Tando Allah Yar, Sindh
46.	Mr. Iftikhar Ahmad Goraho	Mango Grower, Naushero Feroz, Sindh
47.	Mr. Abdul Qadir Panhwer	Mango Grower, Sanghar, Sindh
48.	Mr. Meer Zohad	Mango Grower, Mir Pur Khaas, Sindh
49.	Mr. M Umar Bhagio	Mango Grower, Mir Pur Khaas, Sindh
50.	Mr. Muhammad Khan Kori	Mango Grower, Mir Pur Khaas, Sindh
51.	Pir Muhammad Amin	Mango Grower, Hyderabad, Sindh
52.	Mr. Amjad Ali Jamali	Mango Grower, Hyderabad, Sindh
53.	Agha Zafarullah Khan Durrani	Mango Grower, T. Ghulam Ali, Sindh
54.	Dr Maqsood Ahmad	Mango Grower, Tando Allah Yar, Sindh
55.	Mr. Pervaiz Ali Goraho	Mango Grower, Naushehro Feroz, Sindh
56.	Mr. Ghulam Qasim Jiskani	Mango Grower, Khairpur, Sindh
57.	Mr. Masood Nabi Dogar	Mango Grower, Khairpur, Sindh
58.	Mr. Raees Altaf Mari	Mango Grower, Khairpur, Sindh
59.	Ch. Kashif Islam	Mango Grower, Lodhran
60.	Mr. Ansar Nawaz	Mango Grower, Multan
61.	Mr. Allah Bakhsh	Nestle Pakistan
62.	Mr. Samiullah	Nestle Pakistan
63.	Mr. Mehboob Elahi	Nestle Pakistan
64.	Ch. Qaisar Mehmood	Nestle Pakistan

### **Group A-1:**

Following persons participated in second training session:

<b>Sr</b>	<b>Name of Participant</b>	<b>Affiliation</b>
65.	Mr. Karni Singh Sodha	Mango Grower, Umar Kot, Sindh
66.	Mr. Abdul Ghaffar Grewal	Mango Research Station, Shujabad
67.	Prof. Dr Shafqat Saeed	MNS University of Agriculture, Multan
68.	Dr. Muhammad Amin	MNS University of Agriculture, Multan
69.	Syed Mahmood Nawaz Shah	Mango Grower and Exporter, Tando A. Yar, Sindh
70.	Rana Asif Hayat Tipu	Mango Consultant and Input Supplier, Multan
71.	Dr. Arshad Mahmood	Plant Pathologist, AARI, Faisalabad
72.	Mr. Umar Draz Khan Khichi	Mango Grower, Mailsi
73.	Sardar Shafique Haider Laghari	Mango Grower, Sadiqabad
74.	Mr. Adnan Haider Laghari	Mango Grower, Sadiqabad
75.	Malik Wazir Gul	Mango Grower, Sadiqabad
76.	Mr. Shafiq Ur Rehman	FFC, R.Y.Khan
77.	Mr. Sarfraz Sipra	Qarshi Industries
78.	Mr. Rashid Afzal	Qarshi Industries

<b>Sr</b>	<b>Name of Participant</b>	<b>Affiliation</b>
79.	Dr Shehzad Sami	Mango Grower, Chani Ghot
80.	Mr. Saleem Khan Khichi	Mango Grower, Mailsi
81.	Malik M. Ajmal	Mango Grower, Chani Ghot
82.	Mr. Ali Inam Khan	Mango Grower, Lodhran
83.	Mr. Usman Khan	Mango Grower, Faisalabad
84.	Dr. Qaiser Rasheed	RCA Khanewal
85.	Mr. Muhammad Ahmad Langrial	Mango Grower, Khanewal
86.	Mr. Kashif Shehzad Ch.	Mango Grower, Mailsi
87.	Mr. Zeeshan Haider Laghari	Mango Grower, Sadiqabad
88.	Mr. Taimoor Khawaja	Mango Grower, Muzaffar Garh
89.	Mr. Ayub Bilal Goraya	Mango Grower, Kot Addu
90.	Rai M. Saleem Kharal	Guava Grower, Okara
91.	Ms. Rabia Sultan Gormani	Mango Grower, Muzaffar Garh
92.	Mian Ameer Jhandir	Mango Grower, Lodhran
93.	Mr. Muhammad Azam Sheikh	Mango Grower, Multan
94.	Mr. M. Mubashir	Mango Grower, Khanewal
95.	Mr. Iftikhar Ahmed	Floriculture Substation, Multan
96.	Mr. Mubashir Durrani	Mango Grower, Multan
97.	Mansoor Zahid	Qarshi Industries
98.	Muhammad Ishaq	Qarshi Industries
99.	Syed Ahmer Gillani	Mango Grower, Bahawalpur
100.	Mr. Muhammmad Asif	Kot Smaba R.Y.K
101.	Mr. Jahanzaib Ismail Sahu	Mango Grower, Tallumba
102.	Mr. Zain ul Abideen	Mango Grower, Tallumba
103.	Mr. Abdul Rashid Zahid	Mango Grower, Bahawalpur
104.	Mr. Abdul Rehman Randhawa	Mango Grower, Bahawalpur
105.	Mr. Sarwar Hayat	Guava Grower, Rai Wind, Lahore
106.	Mr. Mujeeb Arjumand	Mango Grower, R.Y.Khan
107.	Mr. Maqbool Ahmad	Mango Research Institute Multan
108.	Mian Iftikhar Ahmad	Mango Research Institute, Multan
109.	Mr. Atif Iqbal	Mango Research Institute Multan
110.	Mr. Riaz Hussain	Mango Research Station Shujabad
111.	Mr. M Kashif Khan Khakwani	Mango Grower, Multan
112.	Mr. Muhammad Ahmad	Mango Grower, Kot Addu
113.	Mr. Shaheer Masood	Mango Grower, Rahim Yar Khan
114.	Mian Haroon Jhandir	Mango Grower, Mailsi
115.	Mr. Fahad Khan Khakwani	Mango Grower, Multan
116.	Mr. Salman Sargana	Mango Grower, Khanewal
117.	Mr. Abdul Ghaffar Yousufani	Mango Grower, Tando Allah Yar, Sindh
118.	Mr. Khawaja Shoaib	Mango Grower, Multan
119.	Mr. Ahsan Arbab	Mango Grower, Hala
120.	M. Raheel Dahir	Mango Grower, Rahim Yar Khan
121.	Dr. Muqarrab Ali	MNS University of Agriculture, Multan
122.	Dr. Kashif Razzaq	MNS University of Agriculture, Multan
123.	Dr. Abid Hussain	MNS University of Agriculture, Multan
124.	Dr. Sarfraz Hashim	MNS University of Agriculture, Multan
125.	Mr. Asif Mahmood Arif	MNS University of Agriculture, Multan
126.	Dr. Ambreen Naz	MNS University of Agriculture, Multan
127.	Prof. Dr Nazim Hussain Labar	B.Z. University, Multan

#### **4. PROGRAMME**

<b>Workshop-Group A</b>	6th & 7th February 2019
<b>Farmer Field Day</b>	8th February 2019
<b>Workshop-Group A1</b>	9th & 10th February 2019

This training programme included the in-house lectures and in-field practical activities for high density plantation of mango orchards and covered following topics:

##### **1. Essential Basics –current status**

- 1.1. The Mango Tree
- 1.2. Phenology, growth cycle
- 1.3. Flowering
- 1.4. Fruit production
- 1.5. Root growth
- 1.6. Suitable temperatures
- 1.7. Significance of soil moisture
- 1.8. Soil drainage
- 1.9. Wind
- 1.10. Implications for management
- 1.11. Establishment and management of young trees
- 1.12. Orchard soil

##### **2. Management – current status SA**

- 2.1. Key issues regarding the tree
- 2.2. Popular World varieties
- 2.3. Popular Indian varieties
- 2.4. Suitable soil
- 2.5. Suitable climate
- 2.6. Water, rainfall, irrigation
- 2.7. Wind
- 2.8. Row orientation
- 2.9. Planting spacing
- 2.10. Planting time
- 2.11. Fertilization of young trees
- 2.12. Pruning and tree training
- 2.13. Mango tree decline
- 2.14. Flowering
- 2.15. Harvesting, harvest treatment, packing
- 2.16. Yield

##### **3. Sun, soil, water and atmosphere – a progression to irrigation and nutrition management**

- 3.1. Source of energy
- 3.2. The elements
- 3.3. Soil formation
- 3.4. Our atmosphere
- 3.5. Significant details about soils
- 3.6. Soil texture
- 3.7. Particulate constitution
- 3.8. Significance of clay
- 3.9. Cation exchange capacity
- 3.10. Organic matter degradation
- 3.11. Humic and fulvic acid
- 3.12. Soil fertility
- 3.13. Basics of water content and water fluctuation

- 3.14. Water movement profiles in relation to soil texture
- 3.15. Soil structure
- 3.16. Soil salinity
- 3.17. Root uptake of water and nutrients
- 3.18. Movement of nutrients and water in the soil
- 3.19. Significance of root exudates and root ion exchanges
- 3.20. Basics of water
- 3.21. Hydration of salts
- 3.22. Nutrient salts
- 3.23. Water quality
- 3.24. Contributors of salinity
- 3.25. Significance of chloride
- 3.26. Water and soil salinity measurement
- 3.27. Interactions between nutrients regarding root uptake
- 3.28. Coping with salinity
- 3.29. Water pH
- 3.30. pH scale
- 3.31. pH measurement
- 3.32. Nutrient-salt availability in relation to pH
- 3.33. Phosphate in the soil and its relationship with other soil constituents
- 3.34. Tree performance in relation to soil and water pH
- 3.35. Soil preparation prior to planting
- 3.36. Interpretation of soil analysis results

#### **4. Mango Tree Growth and Development**

- 4.1. Growth and development, a process of building
- 4.2. Building materials only used
- 4.3. Phloem nutrient mobility and the relevance of this
- 4.4. Movement in nutrients into the root and up the plant
- 4.5. Soil nutrient availability interactions of direct relevance
- 4.6. Soil norms
- 4.7. Nutrient deficiency symptoms
- 4.8. Solutions to solve deficiency problems, e.g. iron deficiency
- 4.9. Water and nutrient movement in the xylem
- 4.10. Irrigation management
- 4.11. Use of tensiometers
- 4.12. Phytophthora rot and cultural methods to minimize root disease pressure
- 4.13. Importance of soil drainage
- 4.14. The mode of action of phosphite
- 4.15. Orchard floor mulching
- 4.16. Soil mycorrhizae
- 4.17. Stimulation of the development of surface roots and the benefits thereof
- 4.18. Foliar feeding in perspective
- 4.19. Conditions and situations favouring spray nutrient uptake
- 4.20. Nutrient ion chelation and the benefit of chelates
- 4.21. Iron chlorosis in mango
- 4.22. Practical fertilization
- 4.23. Leaf sampling
- 4.24. Fertilizers
- 4.25. Timing of fertilizer application
- 4.26. Nutrient content of tree nuts

#### **5. Mango tree Spacing and Size Maintenance**

- 5.1. Canopy size maintenance pruning
- 5.2. The importance of sun exposure

- 5.3. Planting density and overcrowding
- 5.4. Planting basics and the determination of ideal tree dimensions
- 5.5. Juvenility
- 5.6. Orchard progression strategies
- 5.7. Hedge pruning
- 5.8. Tree topping and balanced side pruning
- 5.9. Flower bud renewal
- 5.10. Young tree training
- 5.11. Central leader or bush canopy
- 5.12. Orchard space utilization
- 5.13. Density numbers exercise
- 5.14. Tree thinning

## 6. Mango Disorders, Diseases and Pests, Control Measures

- 6.1. Anthracnose
- 6.2. Soft brown rot
- 6.3. Stem end rot
- 6.4. Weevil, gall fly, thrips, fruit fly, inflorescence eating larvae
- 6.5. Internal breakdown, Jelly Seed, Soft Nose
- 6.6. Scouting and the putting out of fires
- 6.7. Prevention of pest repercussions

## 06th and 07th February 2019

The participants of Group A got training during these days.



Glimpses of Day-1 (06<sup>th</sup> February 2019)



**Glimpses of Day-2 (07<sup>th</sup> February 2019)**

**8th February 2019**

Following activities were conducted on 8<sup>th</sup> February:

1. Visit to Agro-Food Processing Facility, Industrial Estate, Multan
2. Visit to Mango Nursery, Mango Research Institute, Multan
3. Visit to Mango High Density (10ftx10ft) Block, Mango Research Institute, Multan
4. Visit to MNS-UAM Research Farm (C-Block) including Hydroponic Unit, Hi-Tech Green House, Nursery Tunnel and Quarantine Lab
5. Plantation of Ultra High-Density Block at MNS-UAM
6. Participation in seminar entitled 'Science for Farmers- Mango Ultra High-Density Plantation'

Over 200 persons participated in this mango industry-oriented seminar. The participants included:

- Farmers
- Traders
- Exporters
- Processors (fresh and value-added products)
- Policy makers/Political leads
- Researchers
- Students
- Extension workers





Glimpses of Day-3 (08<sup>th</sup> February 2019)

## 09th and 10th February 2019

The participants of Group A-1 got training during these days.



Glimpses of Day-4 (09<sup>th</sup> February 2019)





**Glimpses of Day-5 (10<sup>th</sup> February 2019)**

## **5. KEY FINDINGS**

### **Advantages of UHDP Technology**

Ultra-high-density plantation or small tree system technology is applicable to small- and large-scale growers. Overall, the technology can provide following commercial benefits:

1. Significant increase in mango orchard productivity up to 40 tons per hectare
2. Efficient utilization of inputs e.g. pesticides, nutrients and water
3. Ease and increased efficiency of farm management practices e.g. spray application, pruning, bagging, harvesting etc
4. Effective pest and disease control
5. Increase in export surplus
6. Improvement of fruit quality, market competence and value

### **Prospects**

For adoption of this technology, following initiatives are required in near future at earliest:

1. Capacity building of industry through exposure visits to internationally established ultra-high-density orchards
2. Awareness seminars in perennial fruit growing hubs in whole country
3. Focusing all types of perennial fruit plantation geometries including trees, shrubs and vines e.g. mangoes, citrus, peaches, plums, apricots, apples, olives, grapes etc
4. Initiating comprehensive research activities
5. International trainings for technical human resource development
6. Developing video, audio and written guidelines for the industry
7. Developing technical team/farmer advisory services for the adoption of STS technology

## 6. ANNEXURES

### Annex-1: Screen shots of some slides of lectures delivered by the resource person

# Mango Small Tree Systems

## Introduction



HortResearch SA



Pakistan STS Mango Course  
January, 2019

## Floral Induction Mango

Step I - Pruning the trees back



HortResearch SA

Macadamia Course  
May 3 and 4, 2018

Step II - Just when the new growth is to begin developing, apply PBZ (Austar)



5 ml product per square m tree canopy cover

HortResearch SA

Macadamia Course  
May 3 and 4, 2018

Application time



Influenced new shoots



HortResearch SA

Step IV - when flowering is seen to be just starting - terminal bud swelling



Apply  $KNO_3$  (3% - 3 kg per 100 l) at two week intervals three times - spray full cover

Waking up the trees to get concentrated flowering



Intense uniform flowering

HortResearch SA

## Benefits

- Easy *total* tree and fruit access
- harvesting
- pruning
- specific fruit manipulations
- spray application
- malformation removal \*\*\*\*\*

HortResearch SA

Pakistan STS Mango Course  
February, 2019



http://www.khabrain.com Email: daily.khabrain@gmail.com khabrain@khabrain.com

ABC CERTIFIED

بہترین شہرہ نامہ ملتان اور پاکستان کا پہلا اور سب سے زیادہ پڑھنے والا اخبار (آرٹو گریف) سے شائع ہونے والی واحد

جسٹس: شعیب ملتان

Daily Khabrain

روزنامہ

ابلیہ: استغاثہ شہر

جلد 27 | شمارہ 249 | ہفت روزہ 1440 الی 1441 | 9 فروری 2019ء | 26 تا 27 مارچ 2019ء | قیمت 20 روپے



ملتان کے دوران کانگرسوں سے متعلق ہائی ڈیجیٹل پالیسیوں کا عملی مشاہدہ بھی کر سکتے ہیں۔

زریعی یونیورسٹی چھوٹے پیمانے پر اپنی شناختی دستاویز کر رہی ہے۔ ڈاکٹر آصف علی

ملتان کے دوران کانگرسوں سے متعلق ہائی ڈیجیٹل پالیسیوں کا عملی مشاہدہ بھی کر سکتے ہیں۔

زریعی یونیورسٹی چھوٹے پیمانے پر اپنی شناختی دستاویز کر رہی ہے۔ ڈاکٹر آصف علی

بانی لٹریچر

میڈیاں عامر محمود

روزنامہ دنیا

ملتان

جلد نمبر 8 | جمعرات 1440 الی 1441 | 7 فروری 2019ء | 26 تا 27 مارچ 2019ء | شمارہ 37 | ہفت روزہ 357 | فون: 061-4540116-9 | فیکس: 061-4540107 | صفحات 12 | قیمت 20 روپے

زریعی یونیورسٹی کے زیر اہتمام 4 روزہ ٹریننگ سیشن کا آغاز

آرمی کالج کیلئے آپریشن کا نظام ڈرپ یری سیشن کے ذریعے بہتر بنانا ہوگا۔ ڈاکٹر سٹیون

ملتان (خصوصی رپورٹر) نواز شریف زریعی یونیورسٹی کے شعبہ بانی ٹریننگ کے زیر اہتمام چھوٹے پیمانے پر اپنی شناختی دستاویز کر رہی ہے۔ ڈاکٹر آصف علی

ملتان کے دوران کانگرسوں سے متعلق ہائی ڈیجیٹل پالیسیوں کا عملی مشاہدہ بھی کر سکتے ہیں۔

زریعی یونیورسٹی چھوٹے پیمانے پر اپنی شناختی دستاویز کر رہی ہے۔ ڈاکٹر آصف علی

4577928-7 | فون: 4577928

بہترین شہرہ نامہ ملتان اور پاکستان کا پہلا اور سب سے زیادہ پڑھنے والا اخبار (آرٹو گریف) سے شائع ہونے والی واحد

جسٹس: شعیب ملتان

روزنامہ دنیا

ملتان

جلد 15 | شمارہ 24 | ہفت روزہ 1440 الی 1441 | 9 فروری 2019ء | 26 تا 27 مارچ 2019ء | قیمت 20 روپے



4577928-7 | فون: 4577928

بہترین شہرہ نامہ ملتان اور پاکستان کا پہلا اور سب سے زیادہ پڑھنے والا اخبار (آرٹو گریف) سے شائع ہونے والی واحد

جسٹس: شعیب ملتان

روزنامہ دنیا

ملتان

جلد 15 | شمارہ 22 | ہفت روزہ 1440 الی 1441 | 9 فروری 2019ء | 26 تا 27 مارچ 2019ء | قیمت 20 روپے



زریعی یونیورسٹی کے زیر اہتمام 4 روزہ ٹریننگ سیشن کا آغاز

آرمی کالج کیلئے آپریشن کا نظام ڈرپ یری سیشن کے ذریعے بہتر بنانا ہوگا۔ ڈاکٹر سٹیون

ملتان (خصوصی رپورٹر) نواز شریف زریعی یونیورسٹی کے شعبہ بانی ٹریننگ کے زیر اہتمام چھوٹے پیمانے پر اپنی شناختی دستاویز کر رہی ہے۔ ڈاکٹر آصف علی

ملتان کے دوران کانگرسوں سے متعلق ہائی ڈیجیٹل پالیسیوں کا عملی مشاہدہ بھی کر سکتے ہیں۔

زریعی یونیورسٹی چھوٹے پیمانے پر اپنی شناختی دستاویز کر رہی ہے۔ ڈاکٹر آصف علی





### **Annex-3: Organizing Committee**

1. Prof. Dr. Asif Ali Vice Chancellor, MNS-UAM
2. Prof. Dr. Zulfiqar Ali, Director ORIC, MNS-UAM
3. Prof. Dr. Mirza Irfan A. Baig, Dean FA&ES, MNS-UAM
4. Mr. Allah Bakhsh Director, Mango Research Institute, Multan
5. Major (R) Tariq Khan, Lutfabad Mango Farms and Processing Facility, Multan
6. Khawaja Muhammad Shoaib, Multan
7. Mr. Zafar Hussain Mahay, Muhammad Farms, Tataypur, Multan
8. Mr. Jahan Zeb Dharala, J.Z. Enterprises and Mango Farms, Tataypur, Multan
9. Mian Khalid Shamsher Qureshi, Mango Grower, Bahawalpur
10. Mr. Rana Asif Hayat Tipu, Trigon International, Multan
11. Dr. Muhammad Amin, Assistant Professor, Horticulture, MNS-UAM
12. Dr. Kashif Razzaq, Assistant Professor, Horticulture, MNS-UAM
13. Dr. Rao M. Ikram, Assistant Professor, Horticulture, MNS-UAM
14. Dr. Umar Farooq, Associate Professor, FST, MNS-UAM
15. Dr. Muhammad Usman Jamshed, Assistant Professor, SES, MNS-UAM
16. Dr. Hafiz Nazar Faried, Assistant Professor, Horticulture, MNS-UAM
17. Dr. Sami Ullah, Assistant Professor, Horticulture, MNS-UAM
18. Dr. Gulzar Akhtar, Assistant Professor, Horticulture, MNS-UAM
19. Mr. Riaz Ahmed, Transport Officer, MNS-UAM