Event Report

DICE-AFS Innovation Event 2022

October 30-31, 2022

MNS University of Agriculture, Multan

Compiled and edited by:

Prof. Dr. Nasir Nadeem
Department of Agribusiness and Applied Economics

Dr. Sami Ullah
Assistant Professor
Department of Agribusiness and Applied Economics

Contents of Report

Summary

Innovation is aimed to bring new ideas and technologies that increase productivity and generate greater output and value. In countries like Pakistan, which face severe climate changes and poverty, a sustainable supply of food has become the pivotal agenda for policymakers. Innovative ideas to address these issues and research-based solutions for regional issues can solve these challenges. DICE is a strategic initiative of the DICE Foundation, USA, aimed at nurturing innovations and entrepreneurship culture in the country at all levels. DICE foundation has been mobilizing Academia, Industry and Government institutions across Pakistan since 2007 by organizing innovation events in the country every year. The idea is that all stakeholders should come to a common platform to showcase innovations and technologies, share knowledge and enhance collaboration with each other for the rapid implementation of the new products and ideas which are necessary to address challenges and socio-economic development of the country. The DICE foundation backs multidisciplinary innovation events in almost 8 different domains of professional education such as Energy, Textile, Health, Engineering, Computer Sciences and Agriculture & Food Sciences etc. Among many platforms provided by the DICE foundation, DICE Agriculture and Food Sciences (AFS) stands out due to its novelty and importance to sustain a population in terms of food, fibre and shelter. Whereas, the DICE Innovation event caters to the susceptibility of innovations in different domains and calls upon nationwide institutions to share their prospects within a conducive environment.

As the food supply is under severe threat due to climatic changes, which is quite evident after the recent floods, research-based solutions and innovative ideas that are readily adaptable and serve the purpose are much needed. MNS University of Agriculture Multan took the privilege of hosting this event in Multan for the first time in 2019, then in 2021 and 3rd time in 2022 since its incubation in Pakistan from 2007. The event successfully showcased the participation of 23 universities and 141 proposals were displayed. The total number of participants was more than 1800. The Event was graced by renowned personalities who appreciated the work of students and encouraged them to step up and play their role in the progress of the nation. The event also showcased a machinery and technology display, a seminar on “sustainable availability of healthier food /diet in current climate change context”, a food street and fun fair and several other scientific activities and cultural festivity. The said event proceeded as a platform to bring along people from academia,

industry and chambers of commerce to act as stakeholders and future investors/users of advancements in the agriculture and food industry.

DICE- Agriculture and Food Science 2022

MNS University of Agriculture, Multan is an HEC recognized higher education institution that started its academic activities in 2012. During the short period of its existence, the University has made rapid progress in terms of expansion of its academic programs, students' enrolment, physical infrastructure, campus network, and hiring of highly qualified and experienced academic and administrative staff. As a matter of fact, MNSUAM has been considered as one of the fastest growing academic institutions in the country. The primary objective of the University is to elevate the socio-economic status of farmers and to provide education in various faculties of agriculture and other branches of knowledge, make provisions for research and development and service to society. There is a strong sense of openness at MNSUAM as the University actively interacts with the surrounding institutions and society at large through continuous dialogues and knowledge exchange. With a learning-based environment and new perspectives, the University aims to contribute to a better future. Agriculture is and will remain the largest employer of the workforce and a source of livelihood for the masses. Pakistan's population is expected to surpass 300 million by 2050, which implies that agriculture production ought to enhance out of ever-shrinking cultivated areas to take care of future demand.

MNSUAM focuses on providing opportunities for showcasing innovative and entrepreneurial ideas and providing a platform for academia industry linkages. The students of MNSUAM had participated in various innovative competitions across Pakistan and get recognition for their ideas.

The MNS University of Agriculture, Multan in collaboration with the DICE (Distinguished Innovations, Collaboration and Entrepreneurship) foundation USA organized DICE AFS & Innovation event 2022 Innovation Competition and Industrial Expo at University on 30-31 October 2022. The event was attended by hundreds of students, faculty, and industry from all across Pakistan. Students displayed their Agriculture and Food Science related projects in DICE-AFS- 2022 along with the display of agro-based industrial stalls. During the event, almost 141 ideas were presented by the students. Several renowned speakers (domestic & international) from academia, industry and government/sector also participated in national Seminar sessions and shared their experiences on various topics. Various notables from academia and

Industry stakeholders attended the event. Print & electronic media at the local, as well as national level, provided coverage for the event and exhibition.

DICE Foundation, USA

DICE-Agriculture & Food Sciences and Mega Event is one of the major initiatives of the DICE Foundation. Since its inception in Pakistan in 2007, It has been conducted multiple times at the University of Agriculture, Faisalabad. In 2019 MNSUAM took pride in organizing DICE-AFS for the first time in south Punjab and 2nd Dice was organized in December 2021. In 2022, with the collboration of the DICE Foundation, MNSUAM organized the DICE-AFS Innovation Event 2022 on 31 October 2022. The annual DICE Innovation & Entrepreneurship event is one of the major initiatives of the DICE Program and has been conducted every year since 2007. The idea behind the event is to motivate academia, industry, government, entrepreneurs and expatriates to come to a common platform to showcase innovations and technologies, share knowledge and further collaborate with each other for the rapid development of innovative products, necessary for the socio-economic development of the country.

DICE Foundation is a non-profit, tax-exempt organization, registered in Michigan, USA. DICE Foundation in collaboration with its domestic and international partners, is pursuing a DICE Program in Pakistan. To foster a culture of Innovation and Entrepreneurship in the country and transform Pakistan into an innovation-driven economy, the DICE foundation has taken several initiatives such as DICE Agriculture & Food Sciences Innovation Event, DICE-Automotive, DICE-Energy, DICE-Health, DICE-Textile and DICE Information & Enabling Technologies. MNS University of Agriculture, Multan organized DICE-AFS Innovation Competition and Industrial Expo to encourage the participation of students with their innovative ideas in the field of Agriculture and Food Sciences.

DICE-Agriculture & Food Science and 2022

The major objectives of the DICE-AFS Innovation Event 2022 are as follows:

Objectives

- To foster a culture of Innovation and Entrepreneurship in the country and make it part of the Nation's DNA
- To establish a strong linkage between academia and agriculture and food sciences industry and provide a common platform for academia, industry, government, entrepreneurs and expatriates to interact, share knowledge and collaborate on innovations and commercialization, to promote the indigenous agriculture and food sciences industry in the country
- To create a positive and favourable image of Pakistan's agriculture and food sciences industry in the community of the nation.
- To speed up the technology revolution in Pakistan by motivating both academia and industry to acquire, promote and utilize state-of-art technologies/high-tech software for the rapid development of innovative agriculture and food products.
- To inculcate entrepreneurial skills in the outgoing graduates and post-graduates to enable them job providers rather than job seekers.

Participation Criteria

The following Participation criteria were developed for the participating teams in the DICE-AFS Innovation Event 2022:

- Student teams working on Agriculture and Food sciences-related research/innovations, from any HEC, recognized degree awarding university/institution across the country.
- Each team can have a maximum of three members. Preferably each team should have one member from the Agriculture and Food Sciences Industry.

The innovative projects were from any of the following thematic areas

- Agriculture, Food & Veterinary Sciences
- Biological, Medical & Physical Sciences
- Engineering & Technology, Computer Sciences & Information Technology
- Arts & Humanities, Business & Social Sciences

Registration Process

Following registration process was chalked out to follow to get registered for the event:

An online registration portal was created as https://mnsuam.edu.pk/index.php/afs

A team member for each project should register on the Innovation Portal.

(http://www.diceinnovationportal.com)

The registering teams were to follow the following key steps:

Step 1

Register yourself as team leader at DICE-AFS by **Signing Up**

Step 2

Visit your email account for the **Activation of Account**

Step 3

Submit your innovative idea after getting **Signed In**

Step 4

Register your proposal on DICE Innovation Portal

www.diceinnovationportal.com

Project Requirements

The project requirements were as follows:

- Participating teams were to submit an innovative project idea, a one-page project description and details of team members at the time of registration.
- Teams were to utilize state-of-art technologies/software to design the innovative product concept.
- Projects having strong potential to benefit local industry/ economy were given special consideration.
- Teams were to submit the complete project report including the business plan prior to the final event before the deadline (report template was available on the (http://mnsuam.edu.pk/diceafs/) website).
- Teams were to display their projects on the final day of the event and were to present for evaluation.

Judgment and Evaluation

A panel of Judges consisting of experts, from both academia (the majority of judges from outside of the host institution) and industry were exclusively invited for the evaluation. All displayed projects were reviewed by DICE-AFS judges and out of them, the top 13 projects were recommended for the first three positions and 10 projects for a special prize. The following Evaluation Criteria were planned to evaluate the projects.

- Degree of Innovation (20%)
- Value for money (20%)
- Readiness for commercialization (prototype, business plan) (20%)
- Importance for the community (20%)
- Presentation (20%)

DICE-2022 Winners & Awards

In order to acknowledge the endeavours of students, cash prizes and shields were awarded to the DICE-AFS-2022 participants. First, second and third prizes were given to the winners as per the above-mentioned criteria by DICE Foundation USA.

Prizes & Shields

- First and second prize is given in each of three groups of disciplines:
    - **Group A:** Engineering & Technology, Computer Sciences and Information Technology
    - **Group B:** Physical Sciences and Agricultural Sciences
    - **Group C:** Arts & Humanities, Business and Social Sciences
    - **Group D:** Biological Sciences, Medical Sciences and Veterinary Sciences
- A Cash Prize of Rs 100, 000 along with DICE shields are awarded to 1st position holders.
- A Cash Prize of Rs 60, 000 along with DICE shields are awarded to 2nd position holders.
- A Cash Prize of Rs 40, 000 along with DICE shields are awarded to 3rd position holders.
- Special prizes of Rs 10,000 are awarded to 10 teams.
- All Participant teams will be awarded certificates of participation.
- Industry participants (those having stalls) were given DICE 2022 shields.
- All invited speakers, judges, and chief guests were awarded DICE 2022 shields

DICE-AFS Winners & Awards

In order to acknowledge the considerate efforts of students, cash prizes and shields were awarded to the DICE-AFS-2022 participants. First, second and third prizes were given to the winners as per the following criteria.

- First Prize: Cash Prize of Rs. 100,000/- along with DICE-AFS | 2022 Shield
- Second Prize: Cash Prize of Rs. 60,000/- along with DICE-AFS | 2022 Shield
- Third Prize: Cash Prize of Rs. 40,000/- along with DICE-AFS | 2022 Shield
- Top ten best of the best projects were awarded cash prizes Rs.10,000/-
- All participating teams were awarded certificate of appreciation

Prominent Participation

MNS University of Agriculture Multan in collaboration with DICE, USA, organized 3rd one-day "Agriculture and Food Sciences Innovation Event" on 30-31 October 2022. Mr. Hussain Jahanian Gardezi, Provincial Minster for Agriculture inaugurated the event. He said that Innovation is need of time in agriculture and food sciences to ensure food security through a healthy diet. He said Universities are engines of research and the promotion of innovation and entrepreneurship through such activities is inevitable. Vice Chancellor, MNS University of Agriculture Multan, Prof. Dr. Asif Ali Khan (S.I.) said that the university has provided a conducive environment for entrepreneurial activities to equip students with the required skills to promote a culture of business and entrepreneurship in agriculture. Secretary Agriculture (South Punjab), Dr. Faisal Zahoor said that Government has been focusing on Agriculture to ensure food security in the country through integrated efforts. He said Agriculture Department has been creating awareness among farmers to tackle the issue of climate change.

DG Agriculture, Dr. Anjum Butter said that Agriculture Department has achieved its target of cultivation of wheat which is a good sign for Pakistan where the food security situation has tightened due to drastic rains and floods. DG Research Dr. Nawaz Maiken said that Agriculture Research Wing has been working to develop new crop varieties which are vital to promote sustainable agriculture in the country.

Dr. Khurshid Qureshi, CEO, DICE said, in an era of climate change, it has become a huge challenge to feed ever-increasing population. He said countries like Pakistan have to develop local technologies to overcome such challenges in a sustainable way.

Several dignitaries participated in this event including, VC, Baha-ud-din Zakriya University Multan Prof. Dr. Kundi, VC, Cholistan University of Veterinary and Animal Sciences, Prof. Dr. M. Sajjad Khan, CEO, GAINS, Ms. Farah Naz etc.

Students and Faculty Members from 30 Universities presented more than 90 innovative business ideas. There were around 15 stalls of different industries and business firms set up at the event. Large numbers of students and families visited the stalls and appreciated the efforts of students. Students' projects were evaluated based on innovation, services to the community and several

other variables. Winning business ideas were awarded seed money to expand their businesses for the betterment of communities.

Participating teams exhibited their innovative ideas/concepts/products in this professionally designed exhibition. Several renowned speakers (domestic & international) from academia, industry and government also graced the appeared in national Seminar sessions and shared their notable experience on various topics. The Vice Chancellor of various universities, national and provincial ministers, and members of parliaments.

Fact Sheet

Participating Universities	23
Total Projects (Submitted)	141
Total Projects (Displayed at Event)	135
Foot Count	1600
Participating Teams in Food Street	15
National Speakers	10

DICE-AFS 2022 Winners

Position	Project Title	University	Prize
1st Position	Aerial Spraying Drone and Weed Detection	NCRA, NUST	PKR 100,000
2nd Position	Eco-Friendly thin PDLC films Technology	BUTTEMS, Quetta	PKR 60,000
3rd Position	Agriculture Water Indication System	GCT, (Women) Bahawalpur	PKR 40.000

Special Prize (PKR 10,000/- each)

Sr.No.	Project Title	University
1	Diabetes Mellitus control by E-health through on invasive device	MNSUAM
2	Eco friendly smart Organic paper soap	BUITEMS
3	Bio-methane Fuel Production from Agri. and Animal Waste: Green, Renewable, & Circular Economy energy	MNSUAM
4	Bio-degradable plastic	Dow University of Health Sciences, Karachi
5	Combining superior agronomic traits with heal tolerance in hemp to increase production potential in warm humid Gangetic Plains of Pakistan	UAF
6	High resolution flexible time temperature indicator (FTTI) for food quality control.	GIKJ
7	Formulation of Lavash Crackers by incorporation of spinach leaves powder and rosemary to target mental illness*	JUW
8	Innovative Stev- Barley Biscuits	UCP Lahore
9	Golden Drink - An immune booster Nano encapsulated curcumin drink	UMT
10	Stress Saviors	BZU

Seminar on sustainable availability of healthier food /diet in current climate change context

Department of Food Science and Technology in collaboration with GAIN organized the seminar on the eve of DICE-AFS 2022. The theme of the seminar was the "sustainable supply of food under changing climatic condition". The chief guest, Mr. Syed Hussain Jahania Gardezi said that sustainable food for ever-increasing population is a need of the time. He said the role of agricultural scientists is very important. The Worthy Vice Chancellor, Prof. Dr. Asif Ali. Various prominent speakers including Ms. Farrah Naz, Choudhary Faiz Rasool, Prof. Dr. Mubashir Mehdi, Dr. Muhammad Abdul Saboor, Engr. Mahmood Riaz, Mr. Munawar Husain, Prof. Dr Umair Arshad, Dr. Rao Wali Muhammad, Mubarak Ali Sarwar, Secretary Agriculture South Punjab, and Prof. Dr. Shafqat Saeed emphasized the importance of the sustainable provision of food under changing climatic conditions. Worthy speakers stressed on the adoption of a healthy diet which has low environmental impact should be promoted as an important climate change mitigation strategy. Typically, these diets are high in plant-sourced and low in animal-sourced and processed foods. Despite the fact that their environmental impacts vary, they are often referred to as 'sustainable diets'. The event ended at 2 pm and Dean FAES Prof. Dr. Shafqat Saeed concluded the session.

Food Street and Fun Fair

Food Street and Fun Fair were held on 31st October 2022 at MNS-University of Agriculture Multan in which students from different department like Food Technology, Agribusiness and Applied Economics, Institute of Plant Breeding and Biotechnology, Human Nutrition and Home-Economics participated in this event. Different student groups who secured funding from YES-Network for social entrepreneurship also participated in this event and represented different food products. The objective of the food street was to exhibit their skills in cooking and could get experience to start their own business in the near future. Participants visited the stalls and acknowledged and appreciated the efforts of the students.

Machinery and Technology Display

Machinery and Technology Display 2022 was organized by MNS University of Agriculture Multan., Agricultural Mechanization Research Institute, Noori Agro and Cotton Research Institute and other industries participated in this event University and institutes research outcomes were also displayed in the event Which included cotton harvesters, garlic planter, tree pruner, Cotton Stalk Puller Shredder, Solar desiccant dryer, High-efficiency seed drill, Honey Hives and high-efficiency irrigation system. Prototypes of a roller mill, cotton ginning machine, and automatic hatchery, autonomous car, prepared by the students of BSc Agro-Industrial Engineering Technology were also displayed at the expo. The display was helpful to aware the public and farmers of the development of new technologies in the field of agriculture. Such machinery and equipment could be utilized to increase the overall efficiency of farm operations right from sowing to harvesting and transportation. The nexus of Agriculture and Industry is in need of time to boost the economy of our country which more than half population depends upon the agriculture sector. At this event visitors and guests from different backgrounds visited the expo and shared their opinion as well for future research streams. The visitors appreciated the efforts of the university in organizing the successful event.

Cultural Festivity and Gala Dinner:

On the eve of DICE-AFS 2022, cultural activity was organized to celebrate the richness of cultural diversity, via showcasing the talents of university students to preserve, value, and promote nationalism. Furthermore, all artists and cultural professionals have benefited from the interchange and the diversity among participants who have joined from all over Pakistan. The said event provided a platform for the student to create harmony and develop contacts for the future. The MNS University of Agriculture Multan believes in collaboration and has always succeeded with the approach in all segments of society.

Program Closing Ceremony

The Innovation event was concluded by Syed Hussain Jahanian Gardezi; Provincial Minister of Punjab for Agriculture. He addressed the participants regarding the need for modern and innovative solutions to lead the nation towards a sustained and progressive future. The sustainable

supply of food for the increasing population under changing climatic conditions is the need of the time. The government has been focusing on innovative ideas for the sustainable provision of a healthy diet to the masses. He concluded by wishing the start-ups well, both in the partnership with their prospective sponsors, He encouraged start-ups to be benefited through valuable mentorship support, capital access, start-up incubation opportunities, and launchpads to be connected to the rest of the world. This will provide aspiring entrepreneurs with the resources and environment to help unlock the value of innovation and translate innovative ideas into commercialized products and services. Lastly, he extended his congratulations to the winners of the DICE AFS Innovation Event and motivated them to transform these ideas into workable solutions.

A vote of thanks by Prof. Dr. Asif Ali, Vice Chancellor of MNS-UAM and Patron in Chief of the DICE AFS Innovation Event 2022 was extended to the chief guests and participants.

Sponsors

The DICE-AFS and Innovation Event – 2022 organizers are obliged to the following sponsors for providing sponsorships for DICE-AFS & Innovation Event 2022.


BASF
We create chemistry


SUNCORP


ALI AKBAR
GROUP
PAKISTAN


POLARIS
LIFE SCIENCES


fertiscience
creating value, pursuing excellence


NBP

Pictorial view of inauguration

Pictorial view of visiting stalls

Pictorial view of Machinery and Technology Display


CCRI, Multan
Compost Windrow Turner
ALP-AE-066
Organic Compost
Compost Handling
Compost Process
Compost Piling
Windrow Turner to improve the compost quality
Machine Objectives:
The most simple and cost effective method to produce high quality compost for soil fertility.
Maintain the Oxygen percentages of greater than 10 % inside the pile.
Provide the ideal moisture content is around 50 to 60 % with proper mixing of compost.
Maintain the carbon to nitrogen (C:N) ratio of about 30:1 from the initial stage to 10 to 20:1 as till the proper digestion of compost Pile.
Provide the ideal range of temperature for effective composting is between 45 to 65°C through proper mixing.
Reduce the Compost size with turner blades motion.
Simple controls and excellent visibility for the driver and operator.
Composting Process
Principal Investigator:
Dr. Engr. Sarfraz Hashim
Co-PI:
Dr. Alamgir Akhtar Khan
Dr. Muqarrab Ali
Research Associate:
Engr. Aftab Khaliq
Team Member:
Dr. Tariq Sultan,
Dr. Imran Ali
Engr. Farrukh Ehsan
Department of Agricultural Engineering
Faculty of Agricultural Biosystem Engineering & Technology
MNS University of Agriculture Multan
Project Funded by PARC-ALP (AE-066)
UNITED AGRO
Manufacturer

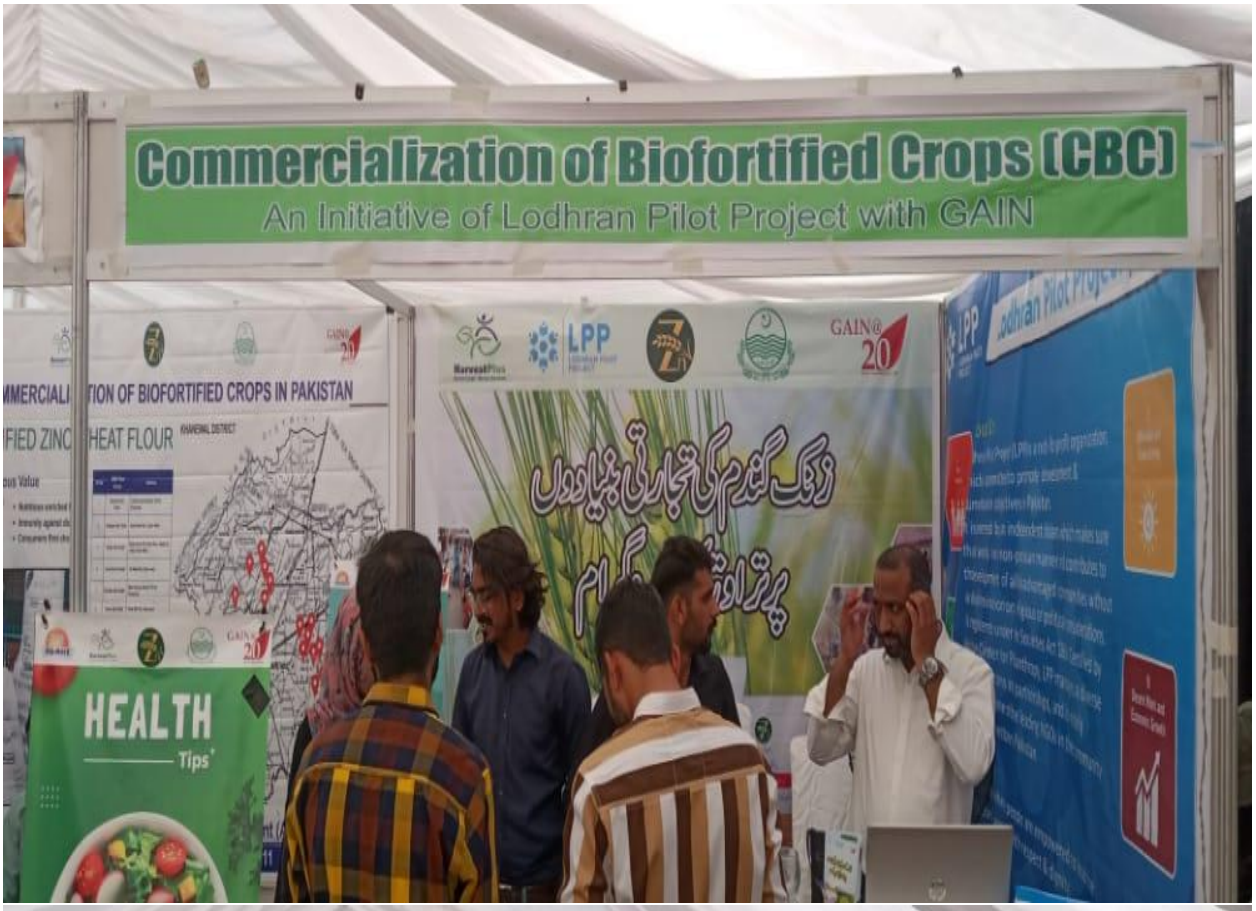
Pictorial view of Stalls


Green Agriculture Services
Green Agriculture Services Multan
Trainings

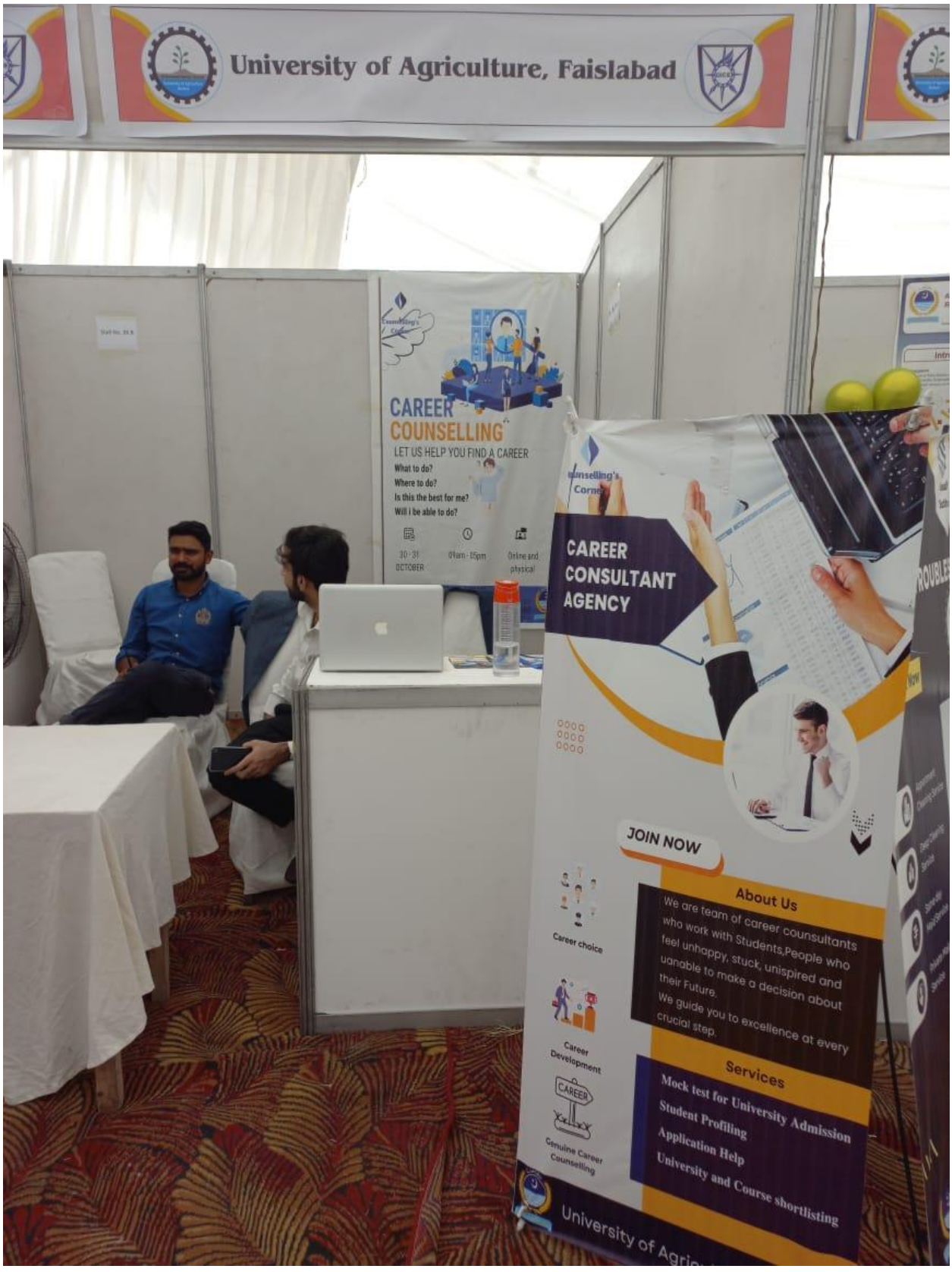

MNS University of Agriculture, Multan
DEPARTMENT OF AGRONOMY
ORGANIC COMPOST
ENRICHED COMPOST


BASF
We create chemistry
BASF
We create chemistry
BASF
We create chemistry


www.fertiscience.com
www.fertiscience.com
www.fertiscience.com
www.fertiscience.c
SKOPIK
BENDOZA
GOLD
JIAN
BRAY-KR
ZIONE
PIKASU
@fertiscience


Commercialization of Biofortified Crops (CBC)
An Initiative of Lodhran Pilot Project with GAIN
HEALTH
Tips


STRENGTHENING THE SUPPLY VALUE CHAIN OF BIOFORTIFIED ZINC WHEAT FROM FARMERS TO CONSUMERS
Overall vision Scale up Commercialization of Biofortified Foods to Sustainability improve diet quality and Tackle HIDDEN HUNGER
AGAHE
THE COMMERCIALISATION OF BIOFORTIFIED CROPS IN PAKISTAN
BIOFORTIFIED ZINC WHEAT FLOUR
Nutritious Value
About Us
CLIMATE CHANGE
IMPACTS


University of Agriculture, Faislabad
CAREER
COUNSELLING
LET US HELP YOU FIND A CAREER
What to do?
Where to do?
Is this the best for me?
Will i be able to do?
30 - 31 OCTOBER
09am - 05pm
Online and physical
CAREER CONSULTANT AGENCY
JOIN NOW
About Us
We are team of career counsultants who work with Students,People who feel unhappy, stuck, unispired and uanable to make a decision about their Future.
We guide you to excellence at every crucial step.
Career choice
Career Development
Genuine Career Counselling
Services
Mock test for University Admission
Student Profiling
Application Help
University and Course shortlisting


MNS UNIVERSITY OF AGRICULTURE MULTAN
Benefits
of Protein, Vitamins & Minerals
of Cancer
nt (Pre-mature aging)
Omega-3 & Omega-6
health
FIRST INTENSIVE FISH FARM OF PAKISTAN
IN-POND RACEWAY SYSTEM
(IPRS) DEMO SITE by USSEC
IN PAKISTAN
USSEC
US SOY
The Pioneer Foods
The Pioneer


University of Agriculture, Faislabad
Introduction
Materials and Methods
Purpose of Current Study
NIVERSITY OF AGRICULTURE,
FAISALABAD


University of Agriculture, Faisalabad
Saaf Suthrai
LEAVE YOUR TROUBLES with us
Highly Trained staff
Book Now
Appartment Cleaning Service
Deep Cleaning Service
Same day Maid Service
Private Maid Service
SAAF SUTHRAI
LEAVE YOUR TROUBLE WITH US
OUR SERVICES
1. HOME CLEANING
2. OFFICE CLEANING
3. OUTDOOR CLEANING
4. PRIVATE MAID SERVICE
Introduction
Study Parameters
Objectives
Research Plan
Materials And Methods


University of Agriculture, Faislabad
PROJECT TITLE
"COMBINING SUPERIOR AGRONOMIC TRAITS
WITH HEAT TOLERANCE IN INDUSTRIAL HEMP
TO INCREASE PRODUCTION POTENTIAL IN WARM SEMI-ARID AREAS OF PAKISTAN
SADIA
MEHMMOD


puchick.
E FOR LOCAL ARTISTS
@puchickstudio
DICE2022
A WEB SPACE FOR LOCAL ARTISTS
WHY PUCHICK?
FOLLOW THE PATH, BE ONE OF US
Electricity
Production With Agriculture Waste
F.M Marketing
Alternate Energy
Wood Gasification Power Plant
BENEFITS:
Management of Termites through Baiting
Termites are important pests of wood and wood products, trees and crops
Very difficult to control in existing structures
OUR CLAIMS
We provide effective
termites
Complete elimination
colonies
No drilling in the
Environment
control
Colony Elimination
HONDA
lenovo


riculture,
STS
DICE2022
Electricity
F.M Marketing
Alternate Energy
Management of Termites through Baiting
OUR CLAIMS
Electricity
Production With Biogas
F.M Marketing
Alternate Energy
BENEFITS:
Very Low Maintenance & Operational Cost
Regular Supply of the Gas All Over The Year
Liquid & Solid Fertilizers That Can Be Used In The Cultivation of Land As It Contain A Prominent KNP Ratio
Cleaner Environment
Advancement In Living Standard
Clean And Affordable Electricity, Which Can Be Sold to Utilities


MNS University of Agricultu
Multan
MNSUAM
presents
DICE2022
puchick.
A WEB SPACE FOR LOCAL ARTISTS
DICE2022
Electricity
Production With Agriculture Waste
F.M Marketing
Alternate Energy
Wood Gasification Power Plant
Management of Termites through Baiting
Termites are important pests of wood and wood products, trees and crops
Very difficult to control in existing structures
OUR CLAIMS
We provide effective control of termites
Complete elimination of termite colonies
No drilling in the building
Environment friendly termite control
nagement of Termites through Baiting
Ne Offer:
Effective long lasting control of termites
Complete elimination of termite colonies
No drilling in the building
Environment friendly termite control
mation & services, please contact
mabk12@gmail.com
AGENCY


The Women University Multan
The Women University Multan
Recycling Cloth
Department of Botany
MY BUSINESS PLAN

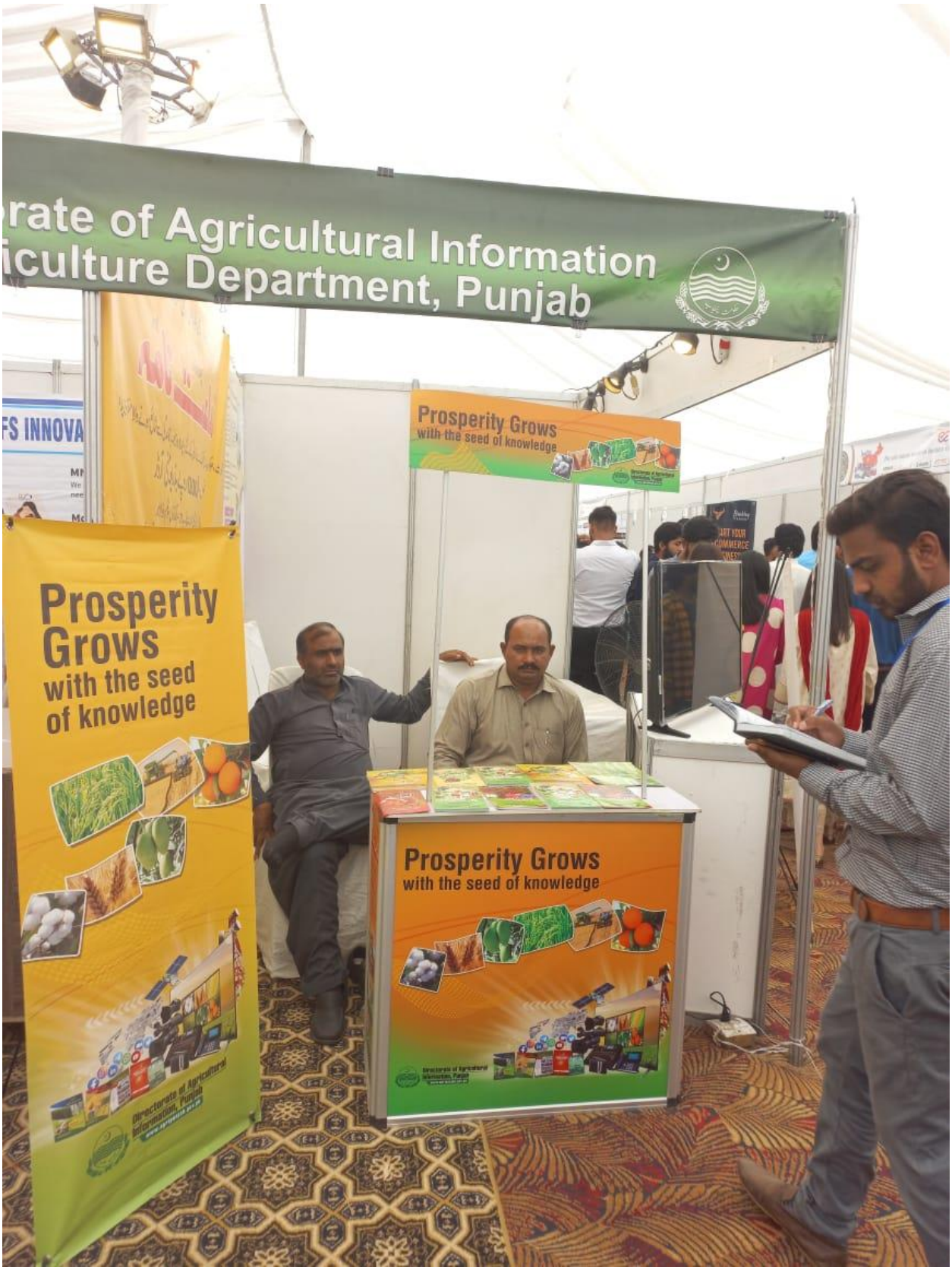

The Islamia University of Bahawalpur
HARIS HERBAL
There is a lot to love aboute Haris Herbal Handmade Products eco friendly, Economical Wonderful for your Skin Unprocessed, free from harmful additives, and crafted with care.
WHITENING LOTION
ROSE TONNER
WHITING SOAP
ROSE JEL
FANCY SOAPS
ALOE VERA JEL
SOAP BASE
WHITING CREAM
Problem Statement
SOLUTION
Business model
DICE AFS 2022


Multan
Stall No. 49 A
REGNANT BIOREFINE
(Sustainability is the key to better future)
Biodigester is a system that biologically digests organic material in anaerobic conditions (without oxygen). Microbes and other bacteria break down organic materials in a biodigester and produce biogas.
Crop waste
Food waste
Animal manure
Sewage Sludge
Biodigester
ORGANIC CROCKS
ORGANIC CROCKS
No Pollution is the Only Solution!
REUSE
RECYCLE
why
Organic Crocks ?
Biodegradable
Eco Friendly
Effective


Ghulam Ishaq Khan Institute of
Engineering Sciences and Technology,
KPK
BUITEMS
DICE AFS 2022
"Eco-Friendly Thin PDLC Films
BML


Balochistan University of Information Technology, Engineering and Management Sciences (BUITEMS), Quetta
BUITEMS
DICE AFS 2022
"Eco-Friendly Thin POLC Films Technology"
BUITEMS
Quality & Excellence in Education
Eco friendly thin films based smart glass panel technology
ABSTRACT
PET/ITO
PET/ITO


Bahauddin Zakariya University,
Multan
REGNANT BIOREFINERY
(Sustainability is the key to better future)
Biodigester is a system that biologically
digests organic material in anaerobic
conditions (without oxygen) . Microbes and
other bacteria break down organic materials
in a biodigester and produce biogas.
Crop waste
Food waste
Animal manure
Sewage Sludge
Biogas
Fertilizer
Regnant Biorefinery
FAQs
WHO WE ARE?
Regnant Biorefinery is a green tech-based startup developing biogas technology to meet household gas requirements.
WHAT IS BIOGAS AND HOW IS IT PRODUCED?
Decomposition of organic waste produces biogas in biodigester , after its purification, it can efficiently be used for cooking purposes.
SDGS WE ARE ADDRESSING
• Goal #7:Affordable and clean
• Goal #13:Climate Action
WHAT MAKES US DIFFERENT?
• Our biodigester is portable
• Filter unit provides single step upgradation of
• Economical


rate of Agricultural Information
iculture Department, Punjab
Prosperity Grows
with the seed of knowledge
Prosperity
Grows
with the seed
of knowledge
Prosperity Grows
with the seed of knowledge


Stall No. 56 B
ABCD AR game
ABCD-AR (Augmented Reality) Learning Game for pre-school kids
OUTCOMES
FLOW OF GAME
Model
ABCD AR game
ABCD-AR (Augmented Reality) Learning Game for pre-schoo
ABCD AR-Game is an interactive augmented reality game for pre-school kids to read, write and learn alphabets. The game is designed to be more engaging than traditional methods of teaching, which can often be boring for children. AR has the ability to superimposed computer-generated objects over the physical real-world, thus changing the perception of reality. Therefore, game has ability to bring children creativity and imagination to real world.
OUTCOMES
Enhance the learning capability
Increase creativity
Encourage kids
Increase attention and engagement
Make a child's fast learner.
Add information and meaning to the real object.
SCAN QRCODE
GAME INTERFACE
Team Leader: Fatima Aslam (fatima.aslam.cs@gmail.com)
Team member: Meraj Aslam
Supervisor: Dr. Abdul Razzaq (abdul.razzaq@mnsuam.edu.pk)
Department of Computer Science
Muhammad Nawaz Sharif University of Agriculture Multan


REACH & CONTINUING EDUCATION
MNS UNIVERSITY OF AGRICULTURE
MULTAN
S. NO
COURSE TITLE
DURATION
FEE
1 Cyber Security
2 Introduction to Amazon and Digital Marketing 1 Month 2000/-
3 The Science of Cooking & Baking 1 Month 2500/-
4 Computer Application in Office 15 Days
5 Business Management, Presentation Skills and Practices in 1½ Months
6 Chinese Language 1 Month
7 Landscape Designs 3 Months
8 Introductory Stitching Course
9 Spray Application Techniques and Selection of
Design of HEIS with Solar
ctor Operator
of Agriculture Machinery/Implements
Solid Works
eping
Pickles
DICE


MNS University of Agriculture, Multan
Stall No. 57 A
SITY OF AGRICULTURE MULTAN
SHAHRAN'S
ORGANIC
Apple Cider Vinegar
HARAN HERBAL AND FOOD SUPPLEMENT


Government College Of Technology,
Rahim Yar Khan
TEVTA
Technical Education and Vocational Training Auth
(TEVTA)
DICE AFS
31 Oct 2022
Innovation Competiti d Industri
TECHNICAL EDUCATION &
VOCATIONAL TRAINING AUTHO
(TEVTA)
Government College of Technology, R.Y.
CNC WRITER / ENGRAVER
what is the opportunity? / What do
drawing logo and sketching a picture.
delines/ schedule/ Duration
in touch with?
and a drawing maker.
of CNC writer working at Go
e of Technology, R.Y.Khan.
procedure/ Call on
ge of Technology, R.Y
PREFE
acer


Stall No. 60 A
Stall No. 60 B
NCRA
FRUIT MATIQS 2020
Non-destructively measure dry matter, brix, acidity, internal & external color.
Take measurements in seconds.
Works with dozens of commodites.
How it works
Applications
Specifications
200 - 1050 nm
AERIAL
Features


University of Management and Technology, Lahore
The Women University Multan
Smile Confidently
Thwart Mutans
DENTAL DECAY HURDLES YOUR SMILE, YOU ENJOY WITH YOUR LOVED ONES?
Use Thwart Mutans Mouthwash & Smile With Confidence!
THWART MUTANS contains C. murale plant extracts that fight against S. mutans (the major cause of tooth decay) and prevent teeth decay naturally within only 14 days of use!
Department of Zoology
The Women University Multan


Technology,
Government College Of Technology (Women),
Bahawalpur
cal Education and Vocational Training Authority
(TEVTA)
DICE AFS
31 Oct 2022
Government College of Technology, R.Y.Khan
5. Investment procedure/ Call on Projects
Project Name
PREFECT


FOOD SCIENCE & TECHNOLOGY
Al-Qalab
Presented by: Ali Murtaza Shah and Muhammad Hamad
Importance:
Benefits:
DICE
DICE
Al Qalab
"Let food be thy medicine, and medicine be thy food."


sity of Central Punjab,
Lahore
Stall No. 20 B
DICE
FOOD SCIENCE
& TECHNOLOGY
VERMICELLI BITES
Presented by: Afshan Ismail and Falah Noor
Importance:
Benefits:
Reduces blood pressure
Prevents future heart problems
Improves digestive system
Prevents constipation
Builds strong bones
Bioactive compounds:
Lactoferrin
Lignans
Antioxidants


University of Agriculture, Faisalabad
University of Agriculture, Faisalabad
AloFia
Healthy Sweets
Aloue vera Toffee
STEFRESHER
NUTRITIVE VALUES


Nur International University, Lahore
Stall No. 76 B
TRY IT ONCE TO BUY IT AGAIN!


University of Management and Technology, Lahore
LENTIL CHIPS
GLUTEN FREE
ALLERGEN FREE
VEGAN
LENORITOS
Lentil Chips
DICE-AFS 2022


University of Management and Technology, Lahore
University of Management & Technology
School of Food & Agricultural Sciences
DICE-AFS 2022
LACT-OVO COOKIES
Stall No. 82 A
Stall No. 82 B
VITAMIN D
IRON
Folic Acid


University of Management and Technology, Lahore
UMT
GOLDEN DRINK
INTRODUCTION
METHODOLOGY
BENEFITS OF CURCUMIN
JUICE PROCESS FLOW
PROSPECTS IN PAKISTAN
CURCUMIN BASED MANGO DRINK

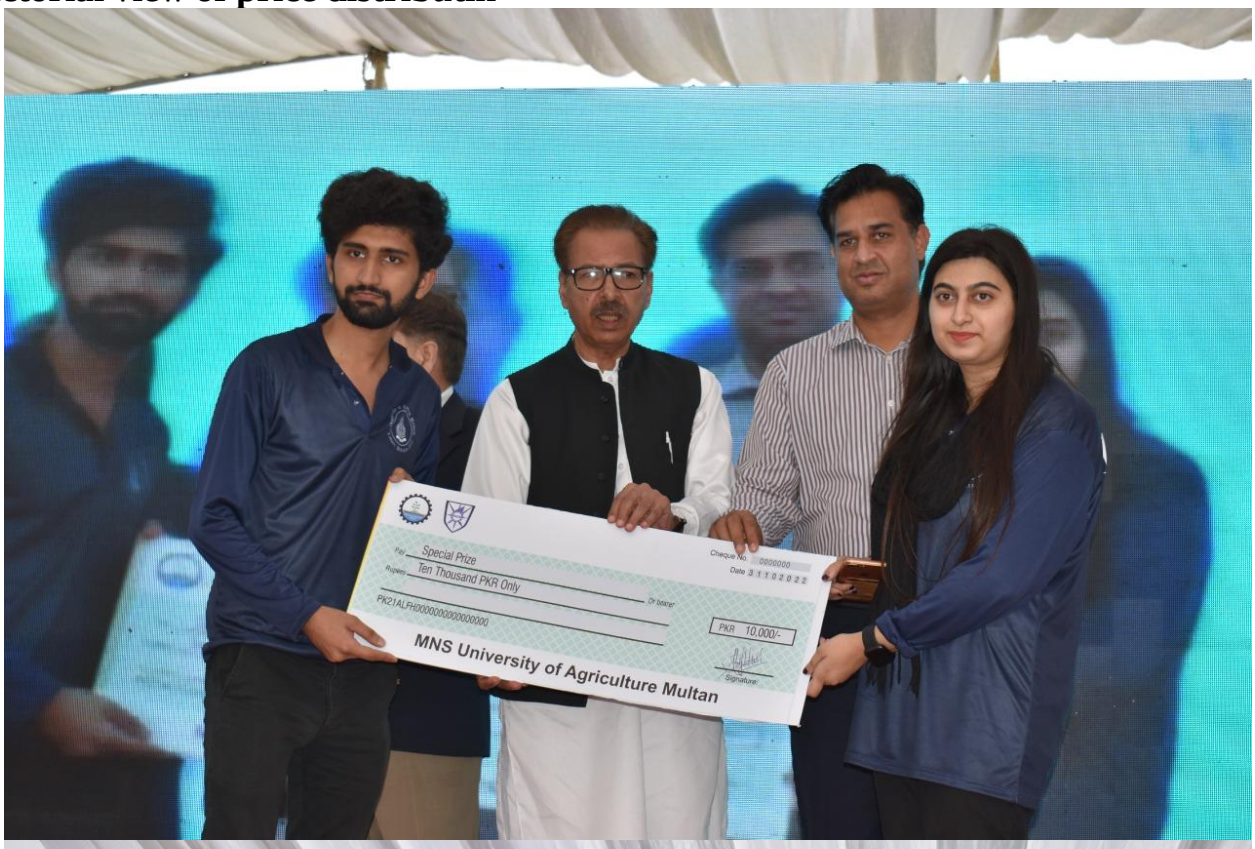

University of Ma
Technolog
UMT
Dice Agriculture and Food Sciences
DICE-AFS
GROUP MEMBERS:
MAHNOOR
M.ZEESHAN
CITRUS IN EVERY BITE
Ingredients
All purpose Flour
Sugar
Salt
Eggs
Butter
Orange Peel
Orange Juice
Vanilla Essence
Baking Powder
CITRUS
IN
EVERY
BITE


The Women University Multan
Muhammad Ins
Allied S
DPT. MMG
FROM FOOD FOR FOOD
DICE AFS 2022
30-31 October 2022
From Food For Food
Supervisor: Dr. Humaira Yasmeen
Members Iram Asim, Hubza Roari Khan, Hafiza Masuma Faheem
Abstract
Introduction
20 % of mango is made up of kernel, making up to 4575 % of the seed. Currently being usedn animalfeed but can be usedto produce flour or edibleoil.
Mango kernels are wasted every year in bulk. But it can provide as an alternative source for wheat flour with similar nutrient values then it would be great help in this era of inflation.
Methodology
Importance
Nutritional and chemical analysis
Collection & washing of kernels
Mango Kernel Flour
Drying & storage


DICE
AGRICULTURE AND
FOOD SCIENCES
INNOVATION EVENT
October
AR On
ABILITY OF H
TE CHANGE C
LPP
LODHRAN PILO
PROJECT

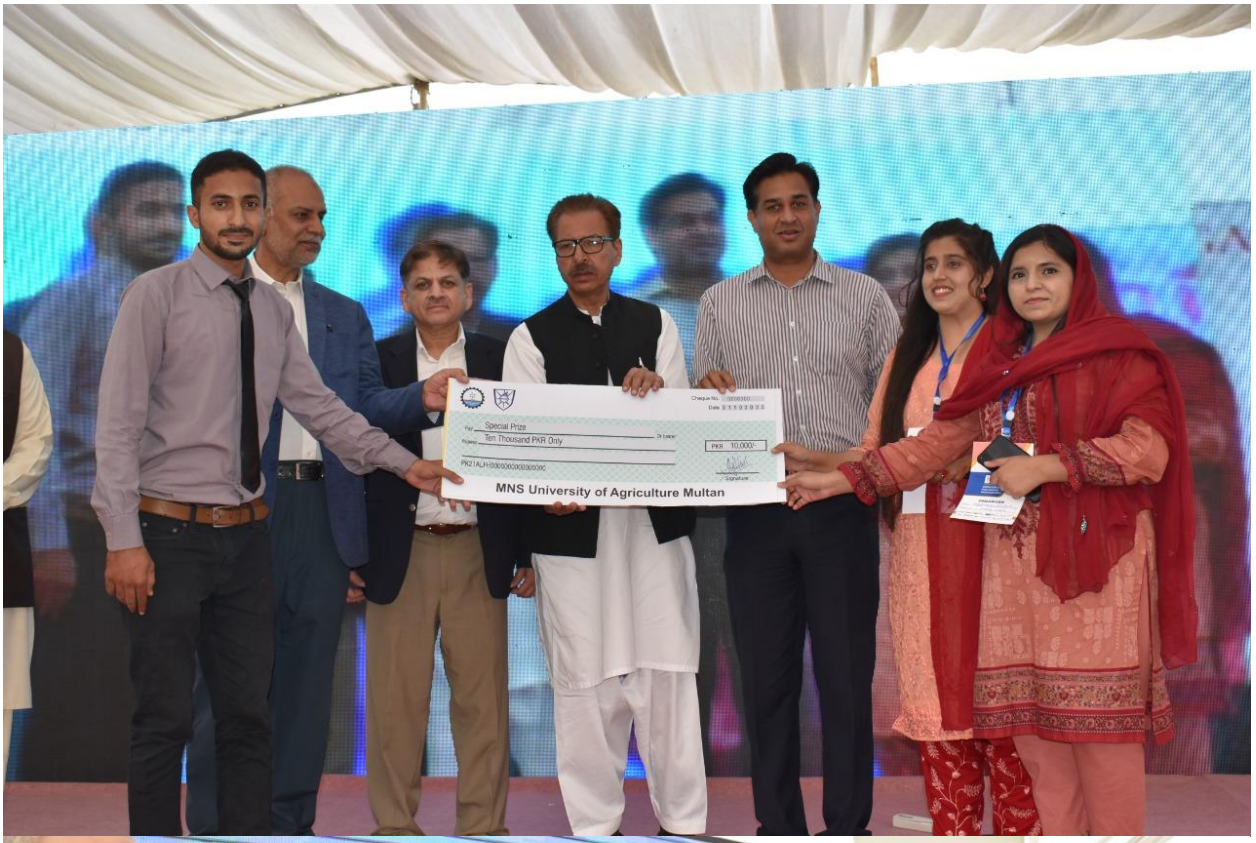

DICE
AGRICULTURE AND
FOOD SCIENCES
INNOVATION EVENT
October 31,
2022
MNS University of Agriculture

Pictorial view of price distributin




GAIN@
20
Better Nutrition for All
Special Prize
Ten Thousand PKR Only
MNS University of Agriculture Multan

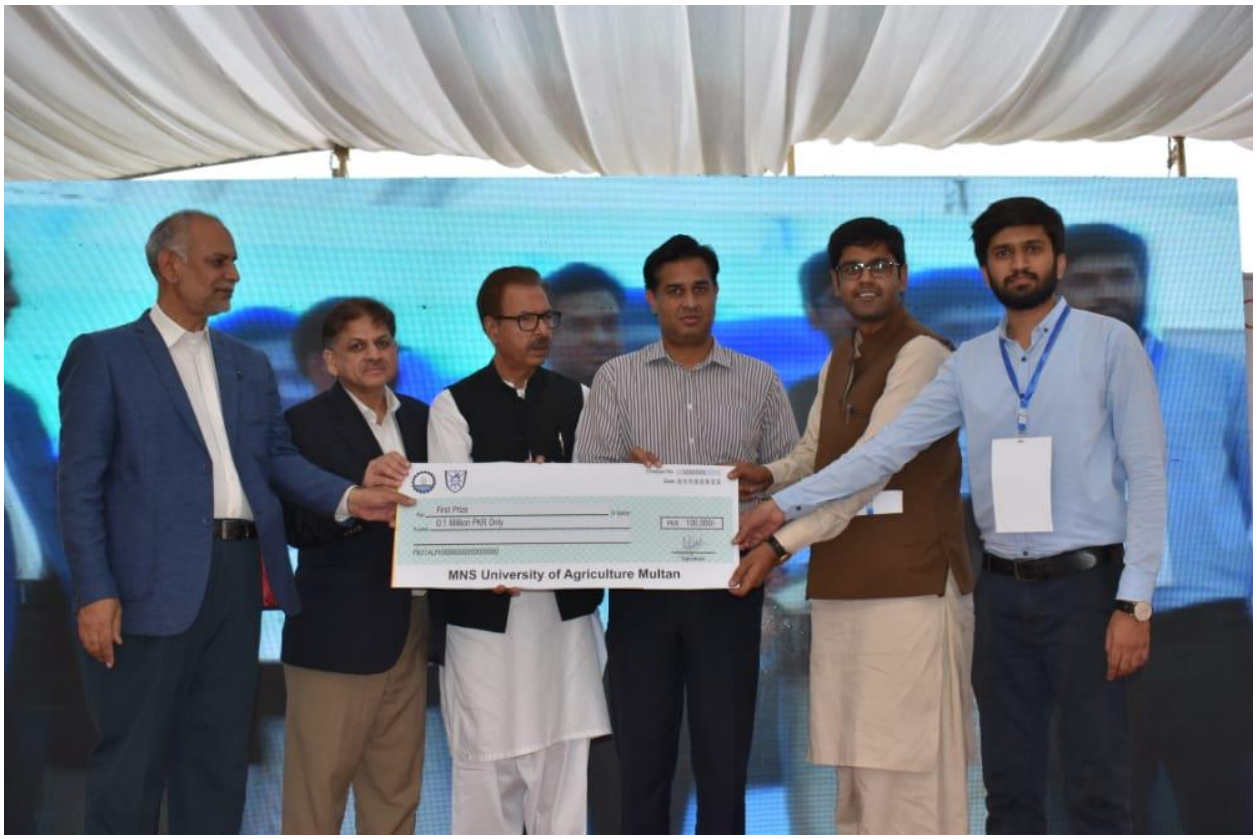

Special Prize
Ten Thousand PKR Only
PKR 10,000/-
MNS University of Agriculture Multan


Special Prize
Ten Thousand PKR Only
PKR 10,000/-
MNS University of Agriculture Multan


RISE AG
GROUP
Collaborating Towards Success


DICE


Second Prize
Sixty Thousand PKR Only
PKR 60,000/-
MNS University of Agriculture Multan


First Price
0.1 Million PKR Only
MNS University of Agriculture Multan

Cultural Night


WELCOME
TO ALL

Appendix-I
List of Ideas Applied and Selected

Sr. No.	Project Title/ Business Idea	Category	Institute	Team Leader	Team Members	Supervisor
1	Venova Burgers	Food Science	University of Central Punjab Lahore	Dr. M. Sajid Manzoor	Humna Mehmood	Dr. M. Sajid Manzoor
2	Al Qalab	Food Science	University of Central Punjab Lahore	Ali Murtaza Shah	Saliha Ishtiaq	Dr. Shoaib Younus
3	Edible Dust	Food Science	University of Central Punjab Lahore	Malik Muhammad Haroon Awan	-	Malik Muhammad Haroon Awan
4	Innovative Stev- Barley Biscuits	Food Science	University of Central Punjab Lahore	Hiba Naveed	Ahmad Faraz	Dr. Sanabil Yaqoob
5	Dates Pit Coffee	Food Science	University of Central Punjab Lahore	Ahmad Faraz	Hiba Naveed	Dr. Sanabil Yaqoob
6	Baked Oats	Food Science	University of Central Punjab Lahore	Fakharunisa	Irza Abid	Dr. Sanabil Yaqoob
7	WAMSEA ROSE BAR	Food Science	University of Central Punjab Lahore	Nawal Haroon	Wajeeha Batool	Dr. Kanza Aziz Awan
8	Whey-Grapico drink	Food Science	University of Central Punjab Lahore	Khadeeja fiyaz	Rida Iqbal	Ukasha Arqam
9	Vermicelli Bites	Food Science	University of Central Punjab Lahore	Afshan Ismail	Falah Noor	Dr. Shoaib Younus
10	OATMEAL GALLETAS	Food Science	University of Central Punjab Lahore	Ali Ijlal Aleem	Mehvish Iftikhar	Ms. Samia Tahir
11	Crazy nuts smoothery	Food Science	University of Central Punjab Lahore	Ali Ijlal Aleem	Hina Arshad	Mr.Waleed Sultan
12	Piquant rolls	Food Science	University of Central Punjab Lahore	Zahra Akbar Yazdani	Shazia Imran	Itrat Fatima
13	VEGETOS	Food Science	University of Central Punjab Lahore	Areeba Irfan	Zakia Akram	Dr. M. Sajid Manzoor
14	Fortified fruit bar	Food Science	University of Central Punjab Lahore	Zakia Akram	Areeba Irfan	Dr. M. Sajid Manzoor
15	Dry fruiteria	Food Science	University of Central Punjab Lahore	Maryam Nadeem	Omaima Maryam	Dr. Ayessha Murtaza
16	Strawberry fizz cocktail	Food Science	University of Central Punjab Lahore	Ummehani	Muhammad Saad	Dr. Kanza Aziz Awan
17	Crazy Banana Fryday	Food Science	University of Central Punjab Lahore	Ammar Wasim	TalhaWasim	Mr.Waleed Sultan

18	Peach Bunch	Food Science	University of Central Punjab Lahore	Fahad Jamil	Uneeb Zia	Dr. Kanza Aziz Awan
19	Immuno Drops	Food Science	Nur International university, Lahore	Adeenah Imran	Khansa	Dr. Zainab Akbar
20	CARDIOBARS	Food Science	Nur International university, Lahore	Memona Nadeem	Fatima Ali	Dr. Zainab Akbar
21	CardioBars for CVD patients	Food Science	Nur International university, Lahore	Areeba Zulfiqar	Memoona Nadeem	Dr. Zainab Akbar
22	Extraction of gelatin from Fish Waste	Food Science	University of Agriculture Faisalabad	Moazzam Khan	Hassan	Dr Amna Sahar
23	Sweet Flavourent	Food Science	University of Agriculture Faisalabad	Muhammad Zaman	Laiba Awan	Muhammad Zaman
24	Aloe Vera Candy	Food Science	University of Agriculture Faisalabad	Muhammad Aleem	Mudassar Afzal	Muhammad Aleem
25	Extruded snacks enriched with protein and carbohydrates: A remedy to malnutrition	Food Science	University of Agriculture Faisalabad	Muhammad Waseem	Lariab Haider Naqvi	Dr. Yaqoob Majeed
26	Freshness and Quality index of Foods: AI Based Technology	Food Science	University of Agriculture Faisalabad	Muhammad Waseem	Muhammad Muzzammil Sajjad	Dr. Yaqoob Majeed
27	Utilization of commercially available red bell peppers in traditional tomato sauce for the formulation of functional sauce enriched with healthy fats	Food Science	University of Management and Technology, Lahore	Aqsa Akhtar	Syed Mishal Rashid	Aqsa Akhtar
28	Development of Protein and Micronutrient Enriched Lentil Chips as Gluten-free Healthy Snacks	Food Science	University of Management and Technology, Lahore	Anum Ishaq	Tayyaba Akhtar	Anum Ishaq
29	Development of Novel Instant Bechamel Sauce	Food Science	University of Management and Technology, Lahore	Anum Ishaq	Ayesha Riaz	Anum Ishaq
30	Preparation of folic acid rich sauce	Food Science	University of Management and Technology, Lahore	Sadia Aslam	Zainab Nadeem Rai	Dr. Sadia Aslam
31	DEVELOPMENT OF VALUE-ADDED AND NUTRITIONALLY	Food Science	University of Management and Technology, Lahore	Wahab Nazir	Ms. Mubashir Munir	Wahab Nazir

	ENHANCED ROSE PETAL SAUCE					
32	Development of Mushroom and Chia Seed-enriched Functional Cookies from Oat and Buckwheat Flours for Lactating Mothers	Food Science	University of Management and Technology, Lahore	Hafiz Ubaid ur Rahman	Kainat Hassan	Hafiz Ubaid ur Rahman
33	Formulation of Micronutrient-enriched Beef Liver Creamy Pasta Sauce	Food Science	University of Management and Technology, Lahore	Abdul Rehman Jami	Iqra Nasim	Hafiz Ubaid ur Rahman
34	Golden Drink - An immune booster Nano encapsulated curcumin drink	Food Science	University of Management and Technology, Lahore	Rashid Iqbal	Ghulam Fizza	Dr. Nauman Khalid
35	Formulation of Banana-Infused Oat Flour Muffins	Food Science	University of Management and Technology, Lahore	Nauman Khalid	Muhammad Faran Asif, Nazir	Dr. Nauman Khalid
36	Development of Citrus Enriched Cookies	Food Science	University of Management and Technology, Lahore	Sadia Aslam	Muhammmad Rizwan	Dr. Sadia Aslam
37	Leinsamen Sauce (Multi Seed Sauce)	Food Science	University of Management and Technology, Lahore	Waqas Asghar	Muhammad Muwahid Amjad	Waqas Asghar
38	Development of Antioxidant-rich Ready-to-Eat (RTE) Energy Bites	Food Science	University of Management and Technology, Lahore	Waqas Asghar	Azka Sajid	Waqas Asghar
39	Thwart Mutans Herbal Mouthwash	Food Science	The Women University Multan	Anila Liaqat	Uzma Bilal	Dr. Shazia Perveen
40	From Food For Food	Food Science	The Women University Multan	Iram Asim	Hubza Ruatt Khan	Dr. Humaira Yasmeen
41	Evaluation of anti-clotting and thrombolytic potential of aqueous extract of Jasminum sambac	Food Science	Muhammad Institute of Medical and Allied Sciences, Multan	Gul-E-Mizgan	Qurat-Ul-Ain	Miss Saba Kousar
42	Utilization of water chestnuts in the production of cake	Food Science	Muhammad Nawaz Shareef University of Agriculture Multan	Qurat ul ain	Muhammad Kaleem	Qurat Ul ain
43	Development of olive oil enriched mayonnaise	Food Science	Muhammad Nawaz Shareef University of Agriculture Multan	Aliza Batool	Zahid Rafiq	Prof. Dr. Umar Farooq
44	OPTIMIZATION OF PERISHABLE FRUIT'S SHELF-LIFE THROUGH IoT	Food Science	Muhammad Nawaz Shareef University of Agriculture Multan	Syed Wajahat Mashkoor	Hafiz Muhammad Ajmal Naseer	Dr. Ayesha Hakim

45	Value Addition of storage tomatoes using AI	Food Science	Muhammad Nawaz Shareef University of Agriculture Multan	Mubeen Rauf	Syed Wajahat	Ms. Javeria Jabeen
46	Food Technology	Food Science	Government College Of Technology, Old Harapa Road, Sahiwal	Hasnat Ali	Muhammad Usman Hamid	Muhammad Usman Hamid
47	PAK-EcoMode	Food Science	Jinnah University for Women	Maliha Firdous	Saima Riaz	Ms. Aasma hashmi
48	CHOCOFLAX (Development Of Chocolate From Flax Seed And Coconut With Caramel)	Food Science	Jinnah University for Women	Syeda Nindya Tanver	Fatima Nishat	Dr Muhammad Arsalan
49	Replacement of whole wheat grain pasta from wholesome and nutritious beans pasta	Food Science	Jinnah University for Women	Meshal Anwer	Nihan Atif	Nida Kashif
50	Formation and characterization of low glycemic index bitter gourd candy for diabetic patients.	Food Science	Jinnah University for Women	Rimsha Zahid	Mutahira Wakeel Khan	Dr Muhammad Arsalan
51	Lavender Jam	Food Science	Jinnah University for Women	Kiran Adnan	Kainat Rauf	Ms Munzira
52	Development of mineral rich cupcakes with the incorporation of water chestnut flour.	Food Science	Jinnah University for Women	Asra Faizan	Ariba Usmani	Dr Muhammad Arsalan
53	Making nutraceutical milk supplement by utilization of Safed musli, water chestnuts and tragacanth gum for eliminate joint pain.	Food Science	Jinnah University for Women	Tooba Maqsood	Sadia Asghar, Sheema Erum	Ms Kanza Jamil
54	Utilizing ashwagandha extract for the development of nutraceutical tablets manifesting anti-anxiety effect paired with herbal seeds extract aiding in cognitive disorders.	Food Science	Jinnah University for Women	Faryal	Aimman Waqar	Aiman Yaseen Butt
55	Formation of non medicated anti-tussive and anti-influenzal lozenges for reducing covid related symptoms.	Food Science	Jinnah University for Women	Hafsa Anjum	Hania Aziz	Aiman Yaseen Butt
56	Development of milk toffee with the incorporation of Matricaria chamomilla (chamomile) to relief	Food Science	Jinnah University for Women	Afifa Shakel	-	Ms Aqsa Ajaz

	from GAD (Generalized Anxiety Disorder)					
57	Laveneach lemon instant drink.	Food Science	Jinnah University for Women	Nimra Arshad	Qandeel Ansar	Ms. Nida Iqbal
58	Preparation of goose berry jam with incorporation of flax seed for prevention of hair fall and boosting immune system	Food Science	Jinnah University for Women	Qudsia Baig	Rimsha	Mehak Ahsan
59	Study of Nutritional Profile of Muffins enriched with Calcium by using powders from different sources.	Food Science	Jinnah University for Women	Maheen Naz	Sumbul Humayoon	Rafia Masood
60	Development of innovative neutraceutical naan khatai with inclusion of tulsi seeds and strawberry for improving mental health	Food Science	Jinnah University for Women	Areeba Aslam	Fatima Zafar	Aiman Yaseen Butt
61	Formation of cucumis sativus and limonene candy, center filled with tamarind and mint to cure anxiety and depression	Food Science	Jinnah University for Women	Aarefa Yousuf	Javeria Amanullah	Ms. Khadija
62	Calcium Rich Oat-milk Cookies (Incorporation of eggshells and oat-milk)	Food Science	Jinnah University for Women	Amna Mahmood	Amna Jawaid	Saniya Tayyab
63	Formulation of Lavash Crackers by incorporation of spinach leaves powder and rosemary to target mental illness.	Food Science	Jinnah University for Women	Yusra Kirmani	Bisma Rashid	Ms Kanza Jamil
64	FORMULATION OF PANCAKE MIX BY INCORPORATION OF BOTTLE GOURD POWDER	Food Science	Jinnah University for Women	Alifyah Aun Ali	Alifyah Aun Ali	Ms Kanza Jamil
65	Utilization of fish skin and fish bones along with aloe Vera gel in the formation of quice for Alzheimer and depression	Food Science	Jinnah University for Women	Sheema Erum	Syeda Khuban Khawaja, Ttooba Maqsood	Ms. Anum
66	Cycle-Pay: A revamping project for better health	Food Science	Jinnah Sindh Medical University, Karachi	Dr. Hina Rehamn	Hisham Mustafa	Dr. Hina Rehamn
67	Sweet dream (Spray for depression)	Food Science	Salim Habib University, Karachi	Riffat Maryam Ansari	Filza Arzoo	Dr. Jamshed Arsalan,

68	Automatic Ambulant	Food Science	Salim Habib University, Karachi	Syeda Fakhra Jalal	Talha Khan	Gul Munir Deedar
69	Monolaurin additive with short chain fatty acid: A novel preventive and therapeutic approach against Coliballosis and Salmonellosis in commercial broiler	Agri. Business and Veterinary Sciences	University of Agriculture Faisalabad	Alishbah Roobi	Saima Ali	Dr. Muhammad Naeem Faisal
70	Anticoccidial efficacy of phytogenic substances in commercial broiler through the removal of ionophores	Agri. Business and Veterinary Sciences	University of Agriculture Faisalabad	Usman Haider	Najeeb Ullah Khan	Dr. Muhammad Naeem Faisal
71	Anti-bacterial efficacy of essential oils additive short chain fatty acids (SCFAs) in broiler through quorum sensing inhibition	Agri. Business and Veterinary Sciences	University of Agriculture Faisalabad	Lubna Majeed	Jawad Aslam	Dr. Muhammad Naeem Faisal
72	Investigating the Pro-Apoptotic Activity of Anthocyanin Rich Black Currant (Vitis Vinifera) in ROS-Mediated Mitochondrial Degradation Animal Model	Agri. Business and Veterinary Sciences	University of Agriculture Faisalabad	Momna Mehmood	Nabeel Ahmad	Dr. Bilal Aslam
73	Services and awareness	Agri. Business and Veterinary Sciences	University of Agriculture Faisalabad	Ali Haider	Sidra tul Muntaha	Dr. Waseem Ahmad
74	Consultancy Services	Agri. Business and Veterinary Sciences	University of Agriculture Faisalabad	Sohail Khalid	Afaq Ali	Dr. Waseem Ahmad
75	Early Detection of Diseases in cows using IoT and Sensors	Agri. Business and Veterinary Sciences	Muhammad Nawaz Shareef University of Agriculture Multan	Ahmer Hafeez	Dr. Abdul Razzaq	Dr. Abdul Razzaq
76	Industrial Symbiosis using Blockchain	Agri. Business and Veterinary Sciences	Muhammad Nawaz Shareef University of Agriculture Multan	Sundus Shafiqie	Syed Wajahat	Dr. Ayesha Hakim
77	Stress Saviours	Agri. Business and Veterinary Sciences	Bahauddin Zakariya University Multan	Syed Muhammad Musa Raza Bukhari	Bareera Tahir	Syed Ali Aqa Gardezi
78	Effect on bodyweight and physiochemical indices of growing rabbits fed on diet supplemented with Rumex vesicarius leaf meal	Agri. Business and Veterinary Sciences	Muhammad Institute of Medical and Allied Sciences, Multan	Perwasha	Qurat-Ul-Ain	Dr. Imran Ahmad Khan

79	Evaluation of therapeutic potential of curcumin with and without strengthening exercises in improving rheumatoid arthritis	Agri. Business and Veterinary Sciences	Muhammad Institute of Medical and Allied Sciences, Multan	Maliha Khalid Khan	Iqra Aslam	Dr. Imran Ahmad Khan
80	Recycle clothing app	Agri. Business and Veterinary Sciences	The Women University Multan	Dr.Abida Aziz	Rabia Aslam	Dr. Abida Aziz
81	Plant Terrarium	Agri. Business and Veterinary Sciences	The Women University Multan	Dr.Abida Aziz	Faiqa Tehseen	Dr. Abida Aziz
82	Handmade skincare products manufacturing to fight skin and hair ailments	Agri. Business and Veterinary Sciences	Islamia University Bahawalpur	Ghous Nazneen	Fahad	Dr. Asif
83	Organic Neem Pesticide	Agriculture Sciences	Dow University of Health Sciences, Karachi	Namira Irfan	Muhammad Tauseeq Haider Naqvi	Aliya Shujat
84	Biofertilizer with Azospirillum Brasilense as a Plant-Growth Promoting Bacteria for Agriculture Sustainability	Agriculture Sciences	Dow University of Health Sciences, Karachi	OMAIMA BOKHARI	Sehrish Butt	Sehrish Butt
85	Bio-degradable plastic	Agriculture Sciences	Dow University of Health Sciences, Karachi	Ahsan Khalid	Namira Irfan	Sehrish Butt
86	Eco friendly smart organic paper soap	Agriculture Sciences	Balochistan University of Information Technology, Engineering and Management Sciences (BUITEMS), Quetta, Pakistan.	Dr. Mujataba Ellahi	Syed Nasrudin	Dr. Mujtaba Ellahi Arain
87	Combining superior agronomic traits with heat tolerance in hemp to increase production potential in warm humid Gangetic Plains of Pakistan	Agriculture Sciences	University of Agriculture, Faisalabad	Sadia Qadir	Nimra Firdous	Zaheer Ahmad
88	Agriculture nanobionics: fabrication of pristine nanoparticles doped on	Agriculture Sciences	University of Health Sciences, Lahore	Ahsan Riaz	Salah Ud Din	Dr. Anam Munawar

	MoS2 nanosheets act as both nanopesticide and nanofertilizer					
89	Deep-SNP for marker validation in cotton	Agriculture Sciences	Muhammad Nawaz Shareef University of Agriculture, Multan	Mahak Rafiq	Varisha Umer	Dr. Ayesha Hakim
90	Thermo-tolerant cellulose degrading bacteria for decomposition of rice and wheat crop residue	Agriculture Sciences	Muhammad Nawaz Shareef University of Agriculture, Multan	Marina Qayyum	Muhammad Junaid Asim	Dr. Muhammad Baqir Hussain
91	Development of organic wastes- and biochar-based biofilters for safe use of wastewater	Agriculture Sciences	Muhammad Nawaz Shareef University of Agriculture, Multan	Haseena Bibi	Dr. Umair Riaz	Muhammad Usman Jamshaid
92	Formulation and evaluation of the anti-inflammatory effect of topical gel of Mangifera indica with and without phonophoresis	Agriculture Sciences	Muhammad Institute of Medical and Allied Sciences, Multan, Pakistan	Qurat-Ul-Ain	Mudasar Irfan	Imran Ahmad Khan
93	Development of Plant-based Meat Analogs	Agriculture Sciences	University of Management and Technology, Lahore	Nauman Khalid	Ali Arif	Nauman Khalid
94	Organic Crocks	Engineering and Information Technology	Bahauddin Zakariya University Multan	Sabooh ul Ain	Soha Ghaffar	Prof. Dr. Muhammad Najam-ul-Haq
95	Regnant Biorefinery	Engineering and Information Technology	Bahauddin Zakariya University Multan	Ammara Riaz	Abdullah Saleem	Prof. Dr. Muhammad Najam-ul-Haq
96	1.50-kilowatt Triple Repulsion BLDC MVP Motor	Engineering and Information Technology	Bahauddin Zakariya University Multan	Umer Farooq	-	Umer Farooq
97	Hatchery Incubator	Agri. Engineering	Muhammad Nawaz Shareef University of Agriculture, Multan	Hafiz Muhammad Inam Shafique	Mamoon Saleem	Dr Sarfraz Hashim
98	Carbon Monoxide Detector	Agri. Engineering	Muhammad Nawaz Shareef University of Agriculture, Multan	Ahmad Saeed	Abdul Razzaq	Dr. Nadeem Iqbal
99	Machine vision approach for early detection of rice leaf blast disease using transfer learning	Engineering and Information Technology	Muhammad Nawaz Shareef University of Agriculture, Multan	Syed Rehan Shah	Sehar Nadeem	Dr. Salman Qadri

100	Fruit Orchard Spraying Vehicle	Engineering and Information Technology	National Center of Robotics & Automation (NCRA)	Sarmad Farooq	Muhammad Talha Rafique	Dr. Nasir Rashid
101	Aerial Spraying Drone and Weed Detection	Engineering and Information Technology	National Center of Robotics & Automation (NCRA)	Sarmad Farooq	Adil Khan	Dr. Tahir Habib Nawaz
102	Fruit Matiqs	Engineering and Information Technology	National Center of Robotics & Automation (NCRA)	Sarmad Farooq	Adil Khan	Dr. Tahir Habib Nawaz
103	TENG as a power source	Engineering and Information Technology	Muhammad Nawaz Sharif University of Engineering and Technology	Muhammad Mehrtab Fida	Zain Javed	Engineer Humza khan
104	CNC Writer	Engineering and Information Technology	GCT Rahim Yar Khan (Mechanical)	Umer Qamar	Engr. Muhammad Rashid	Engr. Muhammad Rashid
105	Machine Learning Based Robotic Arm	Engineering and Information Technology	Government College Of Technology, (Male) Bahawalpur	Mudassir Bin Amin Bilal Ahmad	H. M. Usama Rehman, Muhammad Mahad	Engr. Rao Atif
106	Grass cutter machine	Engineering and Information Technology	Government College Of Technology, (Male) Bahawalpur	Muhammad Annas	Muhammad Zahid	Shahid Saeed
107	CNC Millinng Machine	Engineering and Information Technology	Government College Of Technology, Layyah	Shafqat Amjad	Muhammad Sammar	Muhammad Pervaiz
108	Tiller Machine	Engineering and Information Technology	Government College Of Technology, Multan	Ali Naqi	Muhammad Yousuf Saifullah	Ameer Hamza
109	Electronic Probe Center Gauge	Engineering and Information Technology	Government College Of Technology, Multan	Muhammad Haseeb	Mwadat Ali	Ameer Hamza

110	Intelligent Assistant	Engineering and Information Technology	Newports Institute	Ms. Rabia Ali Khan	Ahsan Fakhar	Dr. Shafiq-ur-Rehman Massan
111	Eco Friendly thin PDLC films Technology	Engineering and Information Technology	Balochistan University of Information Technology, Engineering and Management Sciences (BUITEMS), Quetta, Pakistan	Dr. Mujtaba Ellahi Arain	Ajab Khan	Dr.Mujtaba Ellahi Arain
112	High resolution flexible time-temperature indicator (FTTI) for food quality control.	Engineering and Information Technology	Ghulam Ishaq Khan Institute of Engineering Sciences and Technology, Topi, Swabi, KPK	Mubashar Ali	Hamza Abbas	Dr. Ali Turab Jafry
113	Smart Solar Power Bench	Engineering and Information Technology	Muhammad Nawaz Shareef University of Agriculture, Multan	Muhammad Zahid Rasheed	Muhammad Rafi Mehmood	Ms. Javeria Jabeen
114	Smart Health Care And Hospital Management System	Engineering and Information Technology	Muhammad Nawaz Shareef University of Agriculture, Multan	Mudasar Aslam	Saad Saleem	Dr. Nadeem Iqbal
115	Investigating the role of cotton trichomes in pest management using computer vision	Engineering and Information Technology	Muhammad Nawaz Shareef University of Agriculture, Multan	Memona Manzoor	Mahak Rafiq	Dr. Ayesha Hakim
116	Realtime Earthquake Detection Smart Bed	Engineering and Information Technology	Muhammad Nawaz Shareef University of Agriculture, Multan	Muhammad Faisal Ameen	Muhammad Faisal Ameen	Ms. Javeria Jabeen
117	Streamingo (video conference application)	Engineering and Information Technology	Muhammad Nawaz Shareef University of Agriculture, Multan	Hamza Qureshi	Sana Javaid	Dr. Nadeem Iqbal

118	Stegride	Engineering and Information Technology	Muhammad Nawaz Shareef University of Agriculture, Multan	Muhammad Nazim	Bakhtawar Abbas	Dr. Umer Chaudhary
119	Diabetes Mellitus control by E-health through Noninvasive device	Engineering and Information Technology	Muhammad Nawaz Shareef University of Agriculture, Multan	Attique ur Rehman	Shajjia Mazhar	Dr. Aamir Hussian
120	Smart Streetlight Monitoring System	Engineering and Information Technology	Muhammad Nawaz Shareef University of Agriculture, Multan	Arooj Sarfraz	Raja Shahzaib Ahmed	Dr. Aamir Hussian
121	ABCD-AR (Augmented Reality) Learning Game for pre-school kids	Engineering and Information Technology	Muhammad Nawaz Shareef University of Agriculture, Multan	Fatima Aslam	Meraj Aslam	Dr. Abdul Razzaq
122	Empowering The Extension Services with Artificial Intelligence for Cotton Crop in Multan.	Engineering and Information Technology	Muhammad Nawaz Shareef University of Agriculture, Multan	Varisha Umar	Fatima Aslam	Dr. Abdul Razzaq
123	Investigation Den	Engineering and Information Technology	Muhammad Nawaz Shareef University of Agriculture, Multan	Zahra Batool	Zubair Ahmad	Dr. Umer Chaudhary
124	Varietal discrimination of cotton seeds using digital image analysis	Engineering and Information Technology	Muhammad Nawaz Shareef University of Agriculture, Multan	Sania Luqman	Sehar Nadeem	Dr. Salman Qadri
125	Agriculture Water Indication System	Engineering and Information Technology	GCT (Women) Bahawalpur (CIT)	Neha Tahir	Nasir Mahmood	Nasir Mahmood
126	Automated IOT Based Accident location Detection & Rescue System	Engineering and Information Technology	GCT Bahawalpur (CIT)	Abdul Wahab	Husnain Ahmed, Muhammad Hamza	Engr. Hafiz Taimoor Ul Hassan
127	Arduino Based Object Detection System (RADAR)	Engineering and Information Technology	GCT Multan (Electronics)	Muhammad Zuanir Ashrif	Jaffar Ali, Rao Muhammad Athar	Engr. Attaullah

128	Economic valuation of market based services	Engineering and Information Technology	Muhammad Nawaz Shareef University of Agriculture, Multan	Shoaib	Hamza	Shoaib Nasir
129	Sugarcane disease detection using digital image processing	Engineering and Information Technology	Shah Abdul Latif University Khairpur	Sagar Rai	-	Dr Samina Rajper
130	Use of world most Pungent Bhut Jolokia chili in making insecticides for organic farming	Agricultural Scinece	Government College University Faisalabad	Bilal Hussain	Muhammad Usman	Syed Asif Ali Naqvi
131	Urban Pest Control Agency	Agricultural Sciences	Muhammad Nawaz Shareef University of Agriculture, Multan	Samiullah	Altaf Hussain	Dr. Nadeem Iqbal
132	Remote Computer Mouse Control	Engineering and Information Technology	Government College Women University Faisalabad (GCWUF)	Suneeza Hamid	Fatima Khatoon	Suneeza Hamid
133	E-Physiotherapist	Engineering and Information Technology	Sir Syed University of Engineering and Technology	Wahaj Rashid Khan	Hammad Javed	Haris Ahmed
134	Electronic vanity	Engineering and Information Technology	Government College Women University Faisalabad (GCWUF)	Suneeza Hamid	Arooba Abid	Suneeza Hamid
135	Breath-Ease "An ambuvent for covid 19 patients with pleth-capnography & remote wireless monitoring"	Engineering and Information Technology	Institute of biomedical engineering & technology, LUMHS Jamshoro	Warisha Shoaib	Chandrika	Engr Adeel Mehdi
136	Development of Camel milk (CAM) Ice cream	Food Science Technology	Lasbela University of Agriculture, Water and Marine Sciences, Uthal, Pakistan	Illahi Bakhsh Marghazani	Shadab Shaukat	Dr. Illahi Bakhsh Marghazani
137	Uni dehydrated products	Food Science Technology	Muhammad Nawaz Shareef University of Agriculture, Multan	Zahid Rafique	Syed Muhammad Naqi Abbas	Prof Dr. Umar Farooq

138	Multi Grain Flour	Food Science Technology	Muhammad Nawaz Shareef University of Agriculture, Multan	Muhammd Bilal	Azam Ghori	Dr. Shabbir Ahmad
139	Electricity Production from biogas	Engineering and Information Technology	Muhammad Nawaz Shareef University of Agriculture, Multan	Shoaib Abdullah Dar	Hammad Raza	Shoaib Abdullah Dar
140	Quantitative analysis of irrigation water quality parameters using sensors based dataset	Engineering and Information Technology	Muhammad Nawaz Shareef University of Agriculture, Multan	Sehar Nadeem	Sania Luqman	Dr. Salman Qadri
141	Bio-methane Fuel Production from Agri. and Animal Waste: Green, Renewable, & Circular Economy Energy	Engineering and Information Technology	Muhammad Nawaz Shareef University of Agriculture, Multan	Muhammad Maaz	Muhammad Umer Aslam	Dr. Sarfaraz Hashim

Appendix-II
Winner Details

DICE AFS 2022 Positions

Position	Project Title	University	Prize	Supervisor/ Focal Person Details
1st Position	Aerial Spraying Drone and Weed Detection	NCRA, NUST	PKR 100,000	M. Tahir Habib Nawaz, 03335674843 tahir.habib.nawaz@gmail.com
2nd Position	Eco Friendly thin PDLC films Technology	BUITEMS, Quetta	PKR 60,000	Dr. Mujtaba Ellahi Arain, 03332991136 mujtaba.ellahi@gmail.com
3rd Position	Agriculture Water Indication System	GCT, (Women) Bahawalpur	PKR 40,000	Nasir Mahmood, 0308-2418483

Special Prize (PKR 10,000/- each)

Sr. No.	Project Title	University	Supervisor/ Focal Person Details
1	Diabetes Mellitus control by E-health through Noninvasive device	MNSUAM	Dr. Aamir Hussian, +92 300 7317873 aamir.hussain@mnsuam.edu.pk
2	Eco friendly smart organic paper soap	BUITEMS	Dr. Mujtaba Ellahi Arain, 03332991136 mujtaba.ellahi@gmail.com
3	Bio-methane Fuel Production from Agri. and Animal Waste: Green, Renewable, & Circular Economy Energy	MNSUAM	Dr. Sarfraz Hashim, 03014060357 sarfraz.hashim@mnsuam.edu.pk
4	Bio-degradable plastic	Dow University of Health Sciences, Karachi	Sehrish Butt, 03333728841 sehrish.butt@duhs.edu.pk

5	Combining superior agronomic traits with heat tolerance in hemp to increase production potential in warm humid Gangetic Plains of Pakistan	UAF	Zaheer Ahmad, 03005127165 zaheer.ahmad@uaf.edu.pk
6	High resolution flexible time-temperature indicator (FTTI) for food quality control.	GIKI	Dr. Ali Turab Jafry, 03354494341 ali.turab@giki.edu.pk
7	Formulation of Lavash Crackers by incorporation of spinach leaves powder and rosemary to target mental illness.	JUW	Kanza Jamil, 03202503632 kanza.jamil1@gmail.com
8	Innovative Stev- Barley Biscuits	UCP Lahore	Dr. Sanabil Yaqoob, 03100279308 sanabil.yaqoob@ucp.edu.pk
9	Golden Drink - An immune booster Nano encapsulated curcumin drink	UMT	Dr. Nauman Khalid, 03335278329 nauman.khalid@umt.edu.pk Mr. Rashid Iqbal, 03217936355
10	Stress Saviors	BZU	Syed Musa Raza Bukhari, 03475246414 stresssaviors@gmail.com

Appendix-III

Panellist Details

Sr. No.	Name	Designation and Organization
1	Dr. Saeed Akhtar	Director & Prof. in Institute of Food Scinence Technolgy, BZU Multan
2	Mr. Saif-Ur-Rehman	CEO Family Foods
3	Mr. Muhammad Fawad Ahmad Khan Kaluchi	Manager Business Development Services, SMEDA
4	Dr. Aneela Hameed	Associate Professor,in Institute of Food Scinence Technolgy, BZU Multan
5	Dr. Shabir Ahmad	Assistant Professor, Dept of FST MNSUAM
6	Dr. Muhammad Riaz	Associate Professor, BZU
7	Mr. Naveed Hashmi	CEO, Hafeez Ghee
8	Ms. Filza Mumtaz	Founder/ CEO WEEN/ Shah Pvt. Ltd.
9	Dr. Muhammad Sanabil	Assistant Professor, UCP Lahore
10	Dr. Shamas Murtaza	Lecturer MNSUAM
11	Mr. Arshad Jamil	New Jersy USA
12	Mr. Syed Ali Aqa Gardezi	Incubation Manager Reginal Plan 9, Multan
13	Dr. Afshan Shafi	Assistant Professor, MNSUAM)
14	Ms.Benish Sarfaraz	Manager BIAEC, MNSUAM)
15	Prof. Dr. Asif Yaseen	Prof. BZU Multan
16	Mr. Ali Mohsin Gardezi	CEO, Fidak Farms Pvt. Ltd.
17	Dr. Muhammad Asaf Khan	Associate Professor, MNSUAM
18	Ms. Ms. Hira Javaid	Co-Founder Foster Learning, Lahore
19	Mr. Ali Iqbal	CEO Sybrid Ltd.

20	Dr. Nadeem Iqbal	Assistant Professor, Dept CS MNSUAM
21	Dr. Sami Ullah	Assistant Prof. in Dept.of Agri.Business, MNSUAM
22	Dr. Amir Bakhtavar	Assistant Professor, MNSUAM
23	Dr. M. Shoaib	Associate Professor, BZU
24	Dr. Umair Sultan	Assistant Prof. in Dept. of Agriculture Engg.