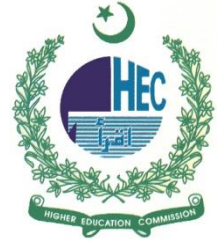




Sandia
National
Laboratories



Removing Policy Barriers Across the Food Value Chain

Muhammad Subhan Qureshi and
Zeeshan Saeed Shah
Dairy Science Park (Pakistan)

(Presented at RTAC-USAID/ASU-USA Virtual Conference "Public Interest
Technology For International Development")

<https://dairysciencepark.org/>

The Policy Barriers

- Public Sector Organizations (PSOs) with predefined mandates
- No space for out of box thinking
- Lack of coordination among PSOs
- No mechanism for conveying inputs from the PSOs to the private sector
- Serious issues of regulatory, marketing, financial and administrative nature
- Food inspection and QC regulations hostile for emerging entrepreneurs
- Young generation of farmers, butchers reluctant to enter into these professions
- Farming and processing units on way towards collapse



The Issues

Total value **Rs.1000 b**
An meat prod **Rs.200 b**

- Entrepreneurship contribution???
- Hygienic food production ????





- **Animal transportation ?**
- **Products processing ?**
- **Formal investment ?**

- Traceability of products ???
- QC certification ????



Dairy Science Park Approach 2011, IW-Dairy Science Park-I



Mr Zahid Shinwari President KPCCI, Mr Zafar Paracha, Prof M Subhan Qureshi, Prof Umer Sadique and Mithat Direk (Turkey) at Industrial Exhibition of DSP 2013



2013, IW-DSP-II, Peshawar

2015, IW-DSP-III, Peshawar



2017, IW-DSP-IV, Konya





2015 - Amsterdam
Sandia National Laboratory
USDS agreed on Biorisk
Management Collaboration

2016 - Dubai
Sandia National Laboratory-
Dairy Science Park BRM
Workshop





2016 - Bangkok
SNL-DSP Workshop on
BRM Curriculum
Development

2017 - Phuket
SNL-DSP BRM
Workshop on public
health awareness



AUP Curriculum Development Phase III



2017 - Colombo
SNL-DSP Workshop on
BRM integration into DVM
Curriculum

2018 - Amman
SNL-DSP Workshop on
BRM techniques in
Research Methodologies



2014 Minister Agric inaugurated Livestock Desk at KPCCI



KP Minister for Agriculture Sardar Ikramullah Gandapur inaugurating the Livestock Business Facilitation Desk-DSP at KPCCI with President KPCCI, and Dean FAHVS, AU-Peshawar, on May 21, 2014

2014 Univ Feed Mill functionalized

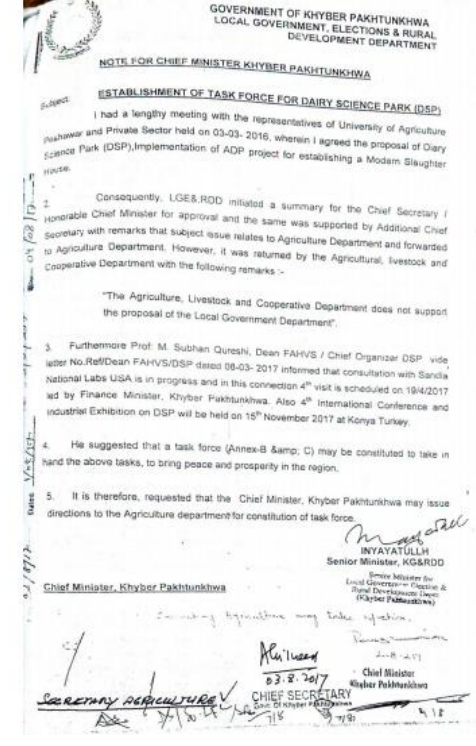




2016
MoU on Collaborative BRM
Initiative between KMU, UAP,
DSP and HEC

2017
MoU on BRM and Women
Entrepreneurship between
WUM, DSP and HED





- **Minister LGE&RD** chaired a high level meeting and agreed on establishing Task Force on Dairy Science Park; approved Rs.200 m for Slaughter-house
- **Additional Chief Secretary** appreciated DSP as “the innovative idea of the LG regarding establishment of Dairy Science Park at Peshawar to provide hygienic food production to the whole province
- **Chief Minister KP** approved Task Force for DSP on 2-8-2018; notification pending at Agriculture Department

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For Delivery Call:0336-9018888

Royal Dairy
Factory
Hayatabad





Entrepreneurship Development at UAP





NAKED NECK
MALES

Local poultry breeds
developed at UAP and Jabba,
Mansehra



Maggots Meal



Quails Entrepreneurship models

- Broiler farming
- Quails breeding
- Inputs supplies
- Meat processing
- Biotech Products
- Diagnostic/QC labs
- Packaging/marketing



Have a Batair Bar-b-q on Your Sunday!!

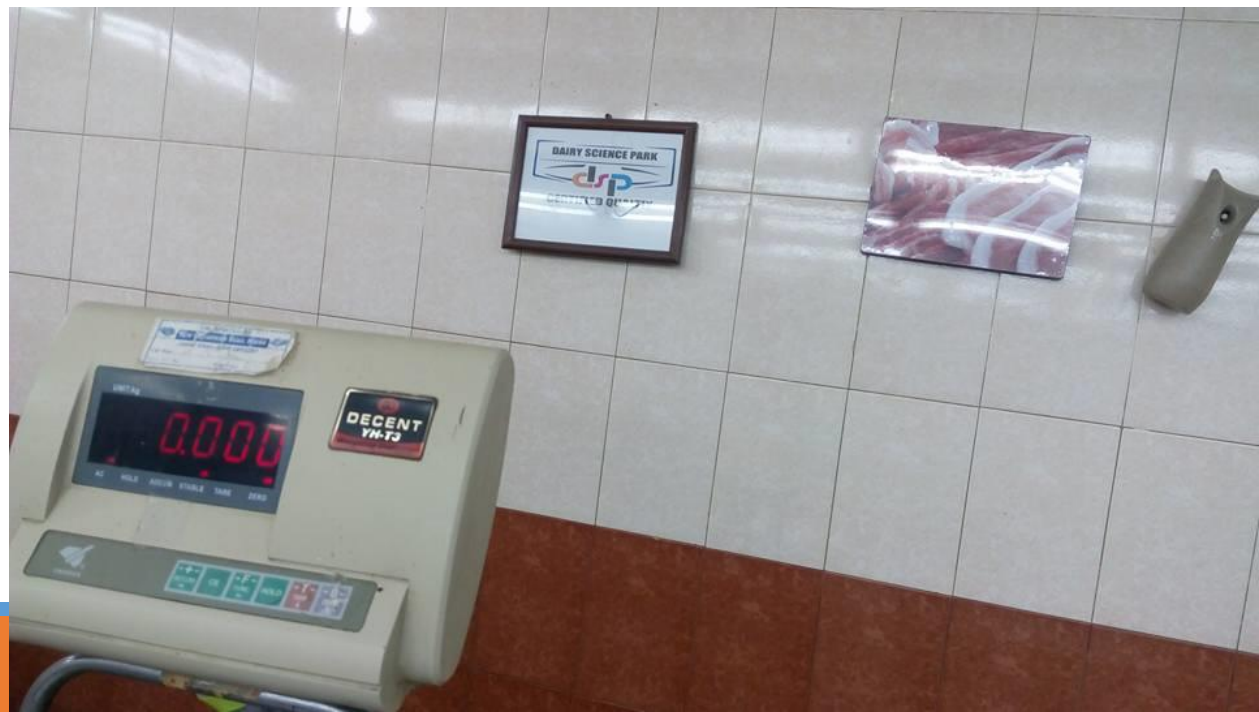


Free Home Delivery in Hayatabad

Call or Watsap:0336-9018888



Jan Meat Shop







Peshawar Meat



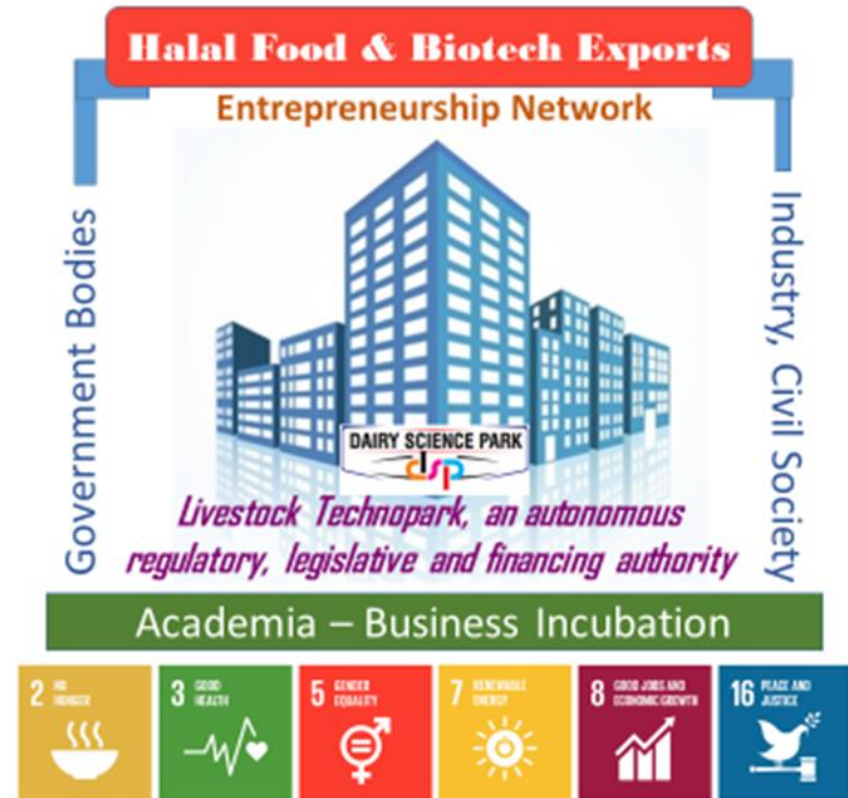
The Beacon of Hope

- Mr Kamran Khan is a young entrepreneur and an Animal Husbandry Graduate who started his career as dairy farmer and also marketed pure milk at somewhat higher prices.
- But the District Administration created hurdles through price capping
- Shifting to quails breeding, fancy birds' production, established a dairy processing unit, in the name of Royal Dairies, Dairy Products Outlet.
- Mr Khan may be presented as a model livestock entrepreneur, surviving all hardships that the industry is facing.
- He organized the farmer at KP-LFWA.



The Governance Model

- The Author has been involved with the provincial and federal governments, FAO, the academia and private sector for a long period of 36 years.
- An attempt to transform the current system of governance, concentrating the powers within a single stakeholder, into a new model with shared authority and responsibilities.
- All the stakeholders may be covered under the umbrella of Livestock Technopark

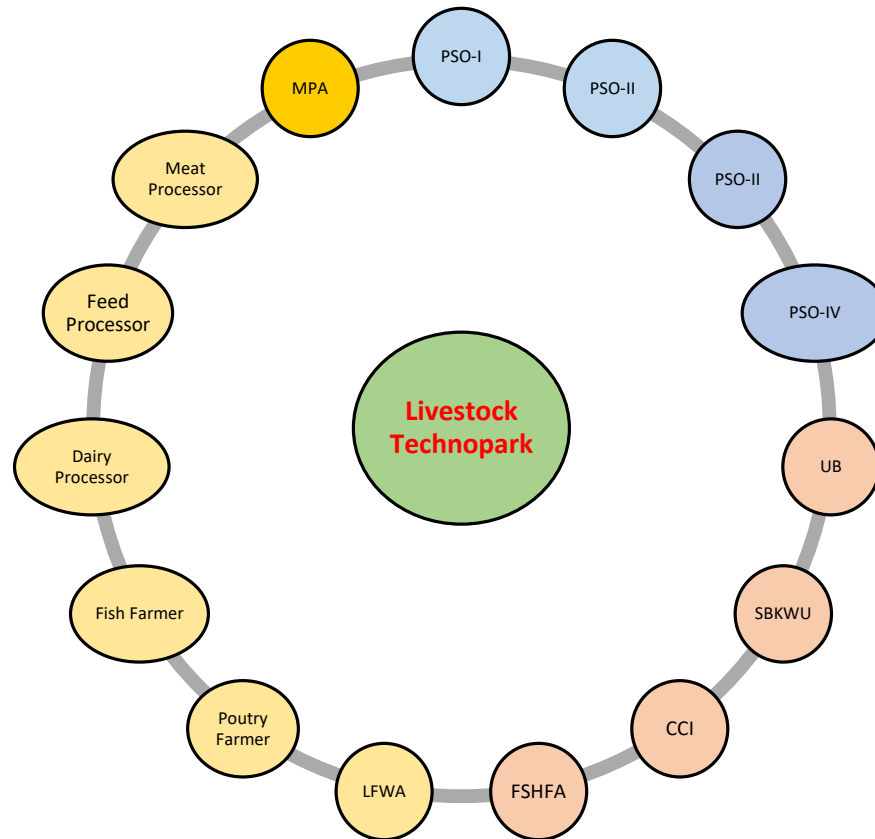


Guiding principal

On-campus development of entrepreneurship models; supported by Govt Depts and industry/civil society for building the entrepreneurship network; leading to Halal food export.

Livestock Technopark

Members of Managing Board



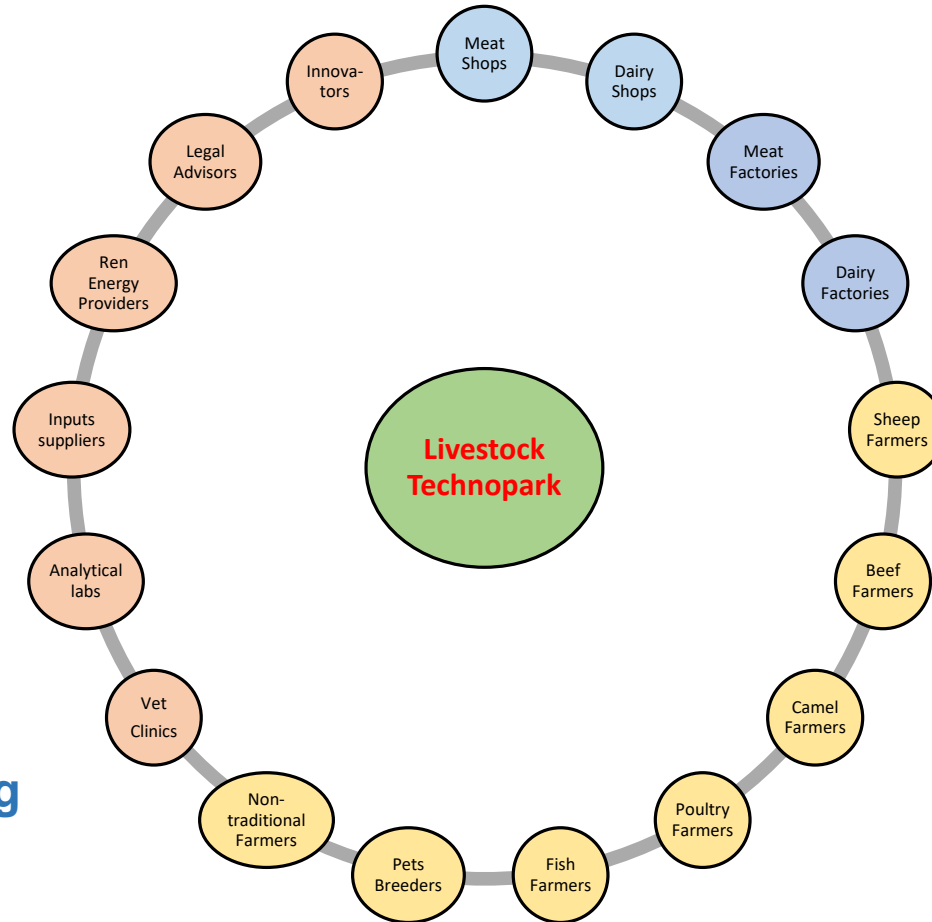
Members Government: 4; Autonomous: 4

Private: 6; Member Provincial Assembly KP: 1;

Members Total: 15 Chairman: To be elected by members for 2-years tenure

Livestock Technopark

Entrepreneurship Network



Processing/Marketing
Farming
Services

Business Incubation

- The only remedy for entrepreneurship development on modern lines
- Compatibility with the market demands, consumers' preference and acceptability of the community and cultures
- Attempts of University of Agriculture Peshawar, to develop such models through university industry interaction as business incubation models
- Postgraduate thesis research redesigned to meet expectations of the industry and civil society
- Training the postgraduate scholar as a scientist as well a potential entrepreneur.
- The present farming system comprises of small scale subsistence activities in the rural areas, or
- Opportunity cost-based traditional family farming, inherited from forefathers, in the peri-urban areas
- Farmers mostly illiterate with no awareness about their own health, animal health or impact of their farm products on public health

Business Incubation (contd)

- Quails introduced in the region through various non-government organizations
- Master and PhD thesis produced on various issues of quails' fertility, hatchability, growth and stress management
- Poultry Science Department UAP successfully came up with several entrepreneurship models under a revolving fund
- Several studies were conducted to investigate the feed conversion ratio, supplementation of antioxidants, growth pattern, breeding efficiency and effects of aflatoxins on economic parameters and other aspects
- Effect of organic acids on the performance of Japanese quails found that net return was significantly
- AI showed good results in Japanese quails in term of least fertility related problem as compared to natural mating
- Analysis of the data generated on quails at the Department showed that a rolling fund of Rs. 400,000 generated Rs.42,000 per month

Market-oriented Production Strategy

- Essential assets are available with the farmers in the form of sheep, goats, camels, cattle, buffaloes, camels, poultry, etc
- Farmers have got the basic skills in farming and management of health, breeding and feeding of animals.
- Need to convert these valuable assets into viable entrepreneurship models
- The proposed LT would facilitate Academia-Industry interactions
- Develop feasible entrepreneurship models through Academia-industry Linkages
- Introduce good production practices in managing health, decreasing the per head productivity costs, ensuring traceability of animals and products
- Providing disease diagnostic, therapeutic, quality control and laboratory services through public and private partners
- Availability of high quality animals and farm inputs
- Sale of surplus animals and farm products
- Insurance in case of farm losses
- Efforts of the Park would be supplemented by regional bodies

ORIC Offices of universities:

- ORIC offices available at universities
- Human resource base available in the form of highly qualified faculty members and enthusiastic postgraduate students
- Emerging industrial issues and developing entrepreneurship models
- Support by Livestock Business Support Center at universities
- National linkages with academic, development and business organizations
- International Linkages, especially under MoU with the Konya Technopark, Turkey
- Participating local universities
- Applied research connected with industrial issues and entrepreneurship development
- Generating decent employment and exportable surpluses

Livestock Business Support Centers

- LBSCs would be established at various locations by the line departments
- Development grants/Endowment Funds
- Managed by Committees each comprising members from the respective host organization: 2; relevant PSO: 2; industry: 2; district/tehsil council: 1
- Chairman would be elected by the members for a period of two years
- Would work as a satellite remote components of Livestock Technopark
- Will support the farmers in improving their farm productivity, products quality, business viability and forward/backward linkages of the entrepreneurship models
- Entrepreneurs would get registered with the relevant public and civil society organizations and LBSCs
- Will host an Advocacy Forum comprising stakeholders' representatives to accommodate their concerns
- Livestock value chain is generating business models like farming, trade, milk processing and trade, meat processing and trade, service delivery, etc.
- Entrepreneurs would be exempted from all type of taxes for the next 10 years

The impact

- **At the end of the year 2021 LTQ would be able to generate:**
 - direct decent employment models to the tune of 18,000
 - each one earning about Rs. 50,000 per month
 - and employing five more persons each
 - Hygienic, Halal and Organic food would be produced per annum valuing Rs. 5,098 billion
- **A fraction of 10% may be injected into:**
 - Halal Meat and Biotech Export Market
- **Motivated young graduates in veterinary, engineering, medical, business and social sciences would be joining LTQ for:**
 - ❖ their career development
 - ❖ transformation of ideas into actions to serve the society
 - ❖ Quality conscious consumers would be having access to traceable foods
 - ❖ Public and private sector organizations would have access to sufficient operational funds for motivating their staff and serving people
 - ❖ And this would be a Beacon of Hope for the people of the Rggon

Halal Food & Biotech Exports

Entrepreneurship Network

Government Bodies

Industry, Civil Society



Livestock Technopark, an autonomous regulatory, legislative and financing authority

Academia – Business Incubation



Thank you very much