Special Address at the Inaugural Session

CREATING EGYPT DAIRY SCIENCE PARK IMBIBING THE MODEL OF DSP PAKISTAN

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Phase I - The Genesis - A Vision Takes Shape

- Interaction with Dr Ilyas
- The Purpose of LIfe

Phase II - Building the Dairy Science Park Model

- DSP I - 2011 Peshawar; DSP II - 2013 Peshawar; DSP III - 2015 Peshawar
- DSP IV - 2017 Konya
- DSP V - 2019 Quetta; DSP VI - 2023 Bahawalpur
- Int Solar Expo and Conference I - 2024 Peshawar
- One Health Conference I-2023; II 2024 and; III 2025, AWKUM Mardan

Phase III - From Dialogue to Impact

- II.1) BRM I - 2015 Amsterdam; BRM II - 2016 Dubai; BRM III - 2016 Bangkok; BRM IV - 2017 Phuket; BRM V - 2017 Colombo; BRM VI - 2017 Konya; BRM VII - 2018 Amman; BRM VIII - 2019 Dubai
- Legal Status, Mission and Vision
- II.2) Entrepreneurship Development
- III.3) Policy Interventions

Phase IV - Global Expansion and the Egypt Opportunity

- MoU with Konya Technopark
- Livestock Technopark Peshawar - FAO-UN National Consultancy
- Livestock Technopark Quetta - ITC-UN National Consultancy
- National Eco-Security System Pakistan - NESS ISN Beijing
- Dairy Science Park Cairo - ASRT Cairo - ARC Giza

Phase I: The Genesis - A Vision that takes Shape

- Two vsits of Prof M S Qureshi to Egypt
- Interaction with Dr Ilyas
- Deliberated the ideation of Dairy Science Park
- An enabling platform to bring all the stakeholders together addressing issues and find sustainable solutions by optimizing resource use.
- Shared experience under Chief Minister's Livestock Dev Plan in KP, Pakistan and Agri-Science Park in India
- The Purpose of LIfe

2010,; 6th Int Conf Eg Soc Exp Biol, Minoufiya Univ,

2010: Int Workshop Indust Biotech, Cairo

Phase II - Building the Dairy Science Park Model

DSP I - 2011 Peshawar

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

DSP-II - 2013 Peshawar

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DSP III - 2015 Peshawar

DSP-IV - 2017 Konya

DSP V - 2019 Quetta

عارف علوی بلوچستان کی پہلی لائیو اسٹاک ایکسپو 2019 کا افتتاح کررہے ہیں، گورنر بلوچستان امان اللہ خان یٹیمن زئی، وزیراعلیٰ بلوچستان جام کمال خان چیف سیکریٹری کیپٹن (ر) فضیل اصغر، کمانڈر سدرن کمانڈ لیفٹیننٹ جنرل وسیم اشرف صوبائی وزراء و دیگر بھی موجود ہیں 18-11-2019

DSP-VI - 2023 Bahawalpur

Int’l Solar Expo I - 2024 Peshawar

OHC III - 2025 Mardan

Phase III - From Dialogue to Impact

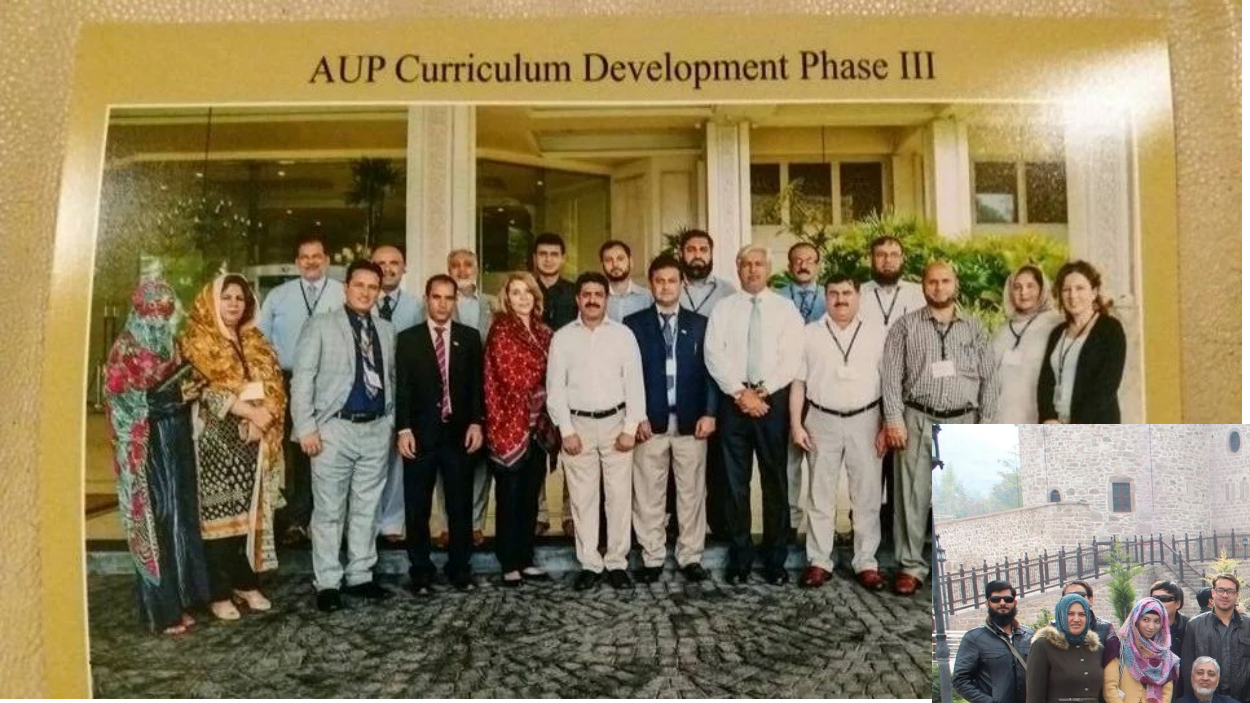
III-1. Biorisk Management

BRM I - 2015 Amsterdam

BRM II - 2016 Dubai

BRM III - 2016 Bangkok

BRM IV - 2017 Phuket



BRM V - 2017 Colombo

BRM VI - 2017 Konya

BRM VII - 2018 Amman

BRM VIII - 2019 Dubai

Legal Status, Mission and Vision

Legal Status

Dairy Science Park has been registered with Government of Khyber Pakhtunkhwa, Pakistan under Societies' Registration Act XXI of 1860.

Mission

Institutionalization of converting indigenous resources into prosperity through innovation, entrepreneurship, and good governance

Vision

Collaborates with local, regional, and international stakeholders to transform indigenous livestock and renewable resources into sustainable economic opportunities based upon the DSP's Triple Helix Model of Good Governance of Academia-Industry Government Nexus.

III.2 Entrepreneurship Development

Peri-urban Dairy Farm Investigated through PhD Studies and Outreach Services

Reshaping Academic Approaches

Slaughter Houses explored for innovation under Development Funds

Meat Production Models explored

University Feed Mill
Functionalized under PPP

Dairy Technology Unit utilized for training entrepreneurs

Peshawar Meat introduced as an Entrepreneurship Model

Microcredit Facilitation explored for Solar Energy startups

Silage introduced for calf fattening and dairy farming

Indigenous poultry breeds investigated for commercial traits

Ducks were investigated for meat and eggs production

Worm Meal was developed as a feed protein source for poultry and livestock

Stress affects food animals performance in the subtropics (PhD/MS Thesis Research)

- HF and crossbred cows showed more favorable response to vitamin E supplementation in respect of expression of stress and reproductive markers (Khan et al, 2016).
- Heat stress increased blood cortisol and protein, and reduced milk yield in dairy cows irrespective of the genetic makeup (Ihsanullah et al, 2017).
- Vitamin E and Se supplementation improved the physiological, hormonal and antioxidant status in Damani and Balkhi sheep (Khan et al, 2017).
- Supplementation of diets with betaine improved broiler feed intake, weight gain, FCR and increased immunity under heat stress condition (Chand et al, 2017).
- Better BCS and increased lactation stage had significant impact on milk yield, stress reduction and restoration of postpartum ovarian activity in buffaloes (Saqib el al, 2022).
- Caprine GDF9 gene could be used as a candidate for litter size, milk production and body measurement traits in Damani goats through marker-assisted selection (Ullah et al, 2022).

Farmers' Sausages certified for QC as a Regulatory Support

Dairy Farmers supported against price capping of milk and meat

Mr Kamran Khan, a Beacon of Hope

1. Mr Khan represents a new generation of entrepreneurs who effectively bridge the gap between academia and industry.
2. His efforts have not only ensured the economic stability of his family but has demonstrated replicable entrepreneurship models in dairy production, processing, marketing, fancy birds and quails breeding.

III.3 Policy Interventions

Pak-Turkey-Afghanistan Business Forum activated

MoU signed with Halal Research Council

Livestock Minister GoKP briefed on technology incubation

Livestock Business Facilitation Desk established 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

Higher Education Commission Engaged

1. Strengthened academia–industry linkages and promote sustainable development.
2. DSP signed MoU with KMU, UAP and HEC for collaboration in Biorisk Management (BRM) and Entrepreneurship Development

Governor Balochistan briefed on DSP Balochistan Chapter

Livestock Policy for KP Finalized

Dairy Science Park Board approved

by GoKP as a Good Governance Model of Academia Industry Government Nexus

MoU signed between Konya Teknokent and DSP for technical cooperation

Livestock Technopark Peshawar proposed under FAO-UN National Consultancy

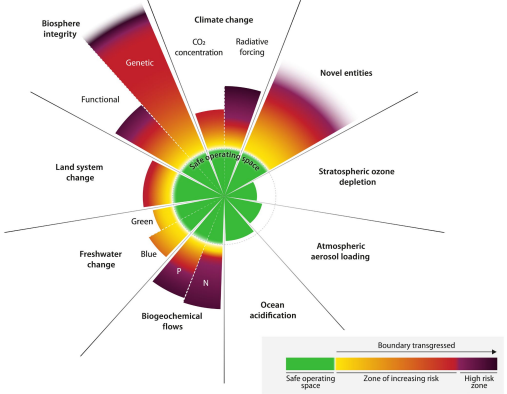
IV. Global Expansion and the Egypt Opportunity

Livestock Technopark Quetta proposed under ITC-UN Consultancy

Components:

1. Policy Shift
2. Herd Health Program (HHP)
3. Breeding Services
4. PP Rebreeding and Feeding Plan (PRFP)
5. Development of Livestock Farms
6. Feeds Entrepreneurship Models
7. Sheep, Goats and Poultry Entrepreneurship Models
8. LEDCs
9. Engagement of PSOs
10. Good Governance
11. Livestock Technopark Quetta
12. PSO Support
13. SMEs Support Cells
14. Centres of Excellence (2)
15. Entrepreneurship Network

Six of the nine planetary boundaries are transgressed up to 2023



NESS-Pak Initiative:

i) Environment Security;

ii) Biological Diversity;

iii) Food Security;

iv) Public Health Security

v) Livelihood Security

National Eco-Security System (NESS) Pakistan established under the auspices of NESS-ISN Beijing

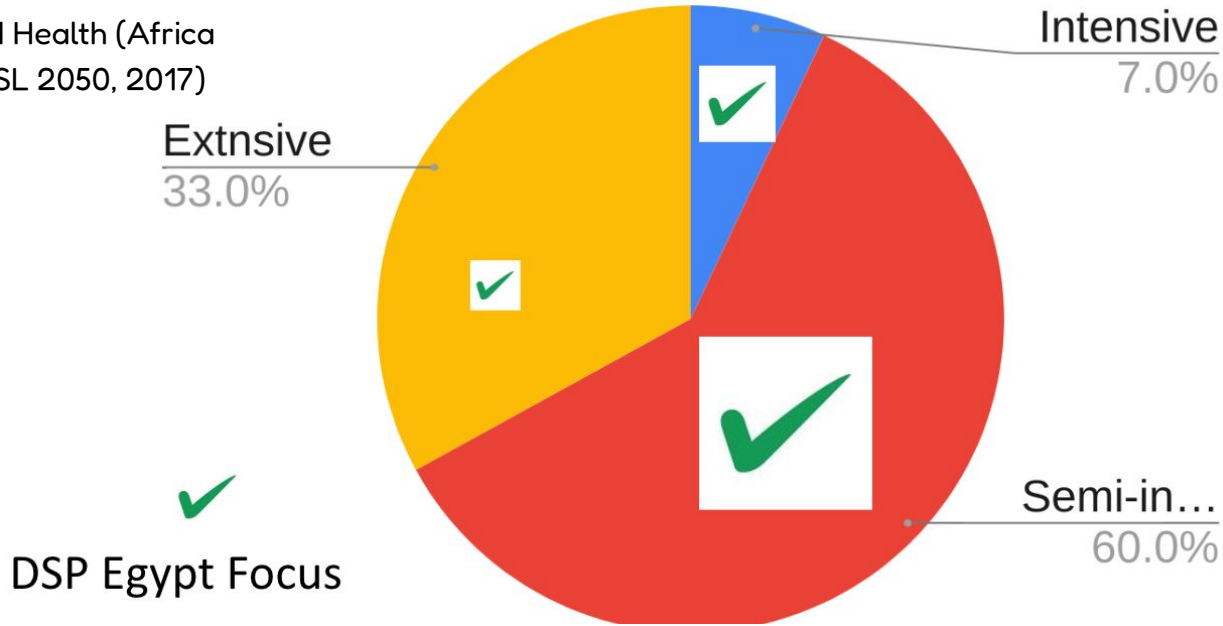
From Vision to Partnership

Dairy Science Park Pakistan
shares its experience.
Egypt shapes its own future.

Together, we build
a resilient livestock sector through
innovation, entrepreneurship, and
good governance.

Bovine Production Systems in Egypt

Ministries: Agric, Env and Health (Africa Sustainable Livestock, ASL 2050, 2017)



- Intensive Bovine Production System 7%; 10-2000s heads, 14,390 farms registered; 84,000 t meat and 5 m tonnes milk/yr.
- Semi-intensive bovine production system 60%; 10-50 heads; disorganised; Improved local breeds dominate.
- The extensive bovine production system, 33%, low inputs and low outputs; herd size 1 and 10; milk production self-consumed.

The ASL 2050, 2017 Consultancy Conclusion:

- Support multi-sectoral and multidisciplinary dialogue among stakeholders to appreciate the following dimensions of livestock: i) The production ii) Public health iii) Environment
- Formulation of coherent and effective sector's policies and investments.

USDA-FAS 2021 Report on Livestock and Products Annual

- Nov 2019 - Feb 2020, Egypt imported 4,700 head of US HF cattle.
- Feed cost higher (45 to 60 EGP), water scarcity, beef prod priority

Animal production complex in Yousuf El-Siddiq city in Fayoum

- National Service Products Organization has planned integrated projects for: i) establishment of breeding farms; ii) dairy farms; iii)

Veterinary Education Scenario

- Thirteen universities are imparting education in animal health and production; need to be integrated with the industry and government policies and to develop/replicate entrepreneurship models.

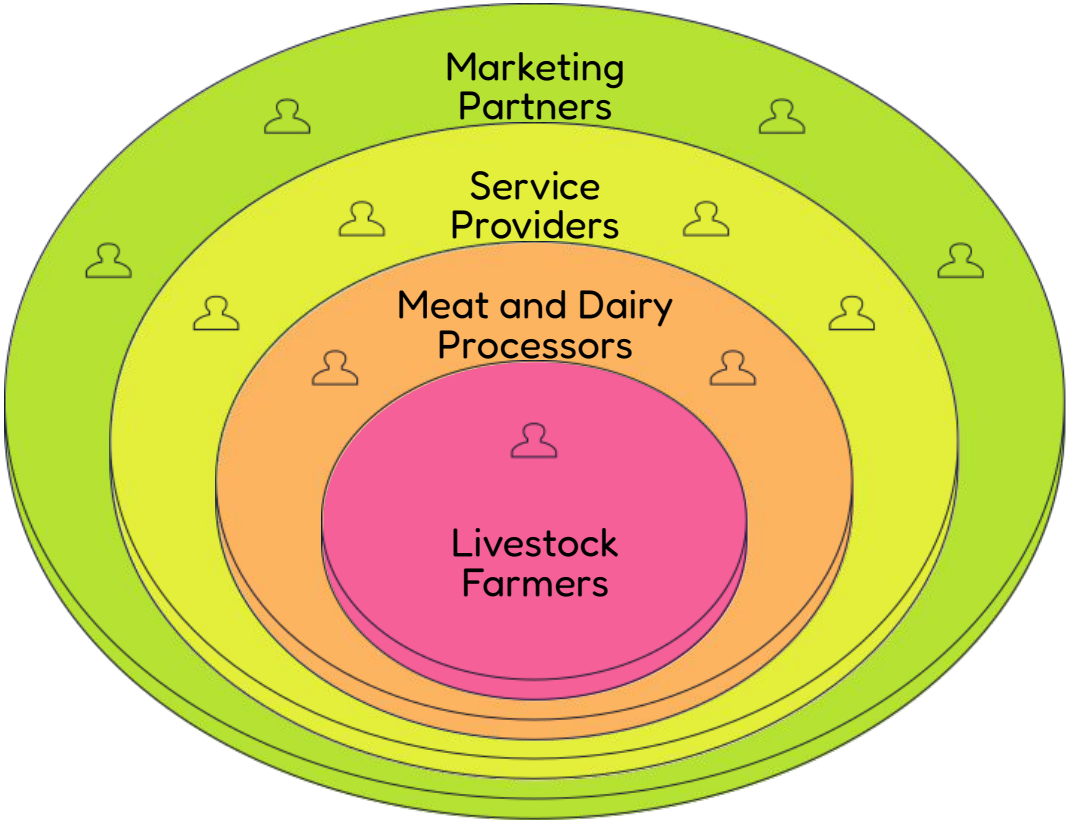
Livestock Entrepreneurship Development Scenario

- The Egyptian Cabinet-IDSC issued Policy Perspective, The Egyptian SME's Force Field Analysis 2020 in June 2021; They must focus on supply chain assessment and risk management.

Proposed Dairy Science Park (DSP) Egypt

- Establish DSP Egypt as a Livestock Entrepreneurship Ecosystem based on the DSP Good Governance Model of the Academia–Industry–Government Nexus. The initiative will provide an enabling platform connecting relevant stakeholders.

Livestock Entrepreneurship Ecosystem



Livestock Farmers

Cattle, buffaloes, sheep, goats, others

Meat and Dairy Processors

Abattoirs, milk processing plants, cheese, yogurt, meat packaging)

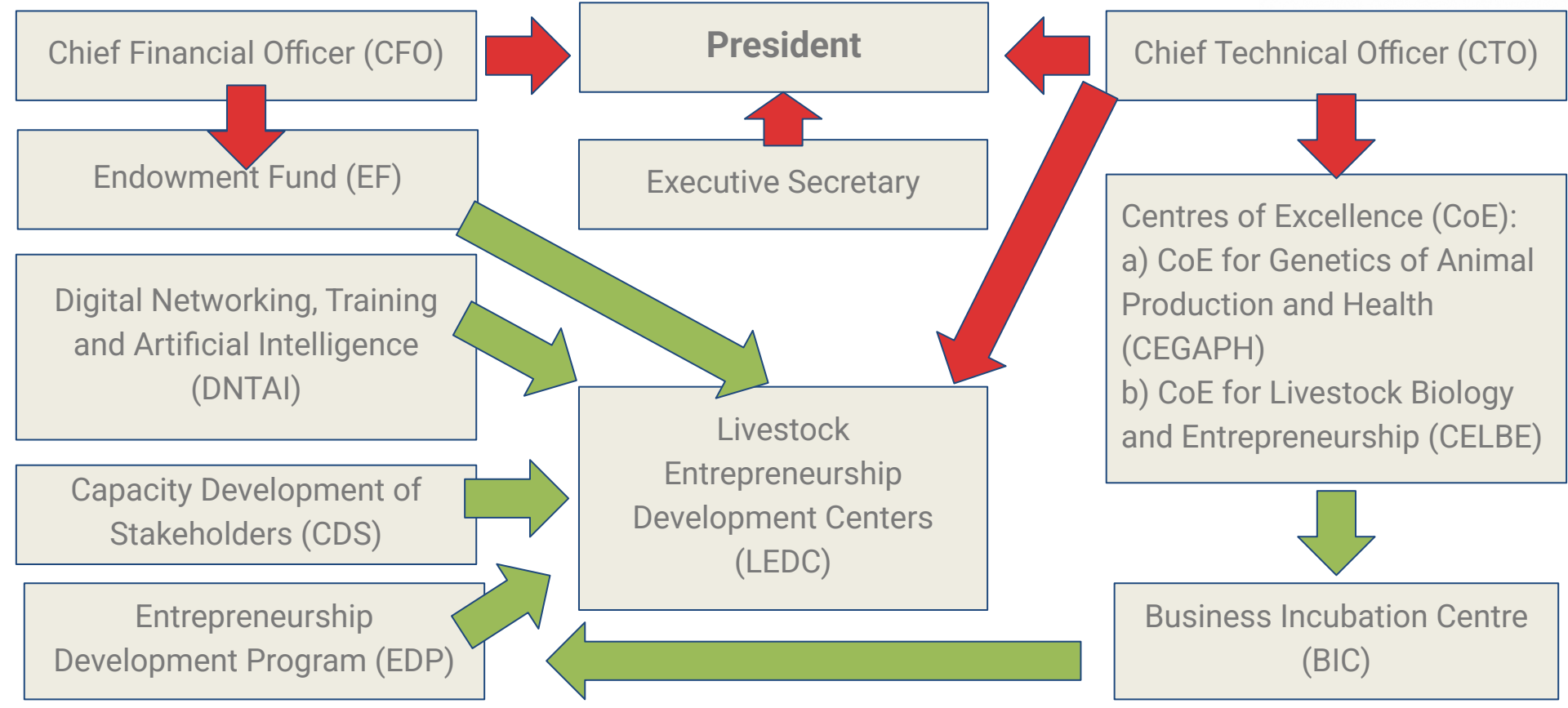
Service Providers

Research Centers/Labs, Universities, breeding & AI, financial institutions, extension services, Vveterinary services, renewable energy, ICT and digital advisory)

Marketing Partners

Inputs suppliers exporters, supermarkets, restaurants, e-commerce platforms, logistics and cold chain

Organogram Dairy Science Park Egypt (DSPE)



Food security through halal meat and dairy products

Food safety and Halal standards

Youth and women entrepreneurship through business incubation

Climate-smart livestock production

Impact of Dairy Science Park Egypt

Renewable energy and Eco-Security

Contribution to Egypt Vision 2030 through sustainable economic growth.

International research, innovation, and technology partnerships

Import substitution through local production

DAIRY SCIENCE PARK
EGYPT
DSP

Thank You






Halal Food & Biotech Exports

Entrepreneurship Network

Government Bodies

Industry, Civil Society

DAIRY SCIENCE PARK

Livestock Technopark, an autonomous regulatory, legislative and financing authority

Academia – Business Incubation

2 ZERO HUNGER
3 GOOD HEALTH
5 GENDER EQUALITY
7 AFFORDABLE ENERGY
8 DECENT JOBS AND ECONOMIC GROWTH
16 PEACE AND JUSTICE