
TEMPLATE FOR SUBMISSIONS

29.05.2023 – 23.06.2023

<https://www.fao.org/fsnforum/call-submissions/agrifood-system-technologies-and-innovations-climate-action>

CALL FOR SUBMISSIONS:

Case studies of agrifood system technologies and innovations for climate action: Call for proposals for the FAO Science and Innovation Forum 2023

Template for submissions (maximum 2000 words in total)

In the context of the upcoming FAO Science and Innovation Forum 2023, the FAO Chief Scientist Office invites you to share illustrative country level case studies of agrifood system technologies and innovations for climate action.

Please use this submission template to share your experience. You can upload the completed submission form [online](#), or, alternatively, send it to fsn-moderator@fao.org.

The Call for Submissions is open until 23 June 2023.

Global Forum on Food Security and Nutrition

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Template for submissions

Proponent (name/institution)

Prof Muhammad Subhan Qureshi, President Dairy Science Park, Peshawar, Pakistan

Title for the case study presented

Developing livestock technoparks as a good governance model for utilizing livestock resources in the developing countries.

Country location

Balochistan, Pakistan

Context and background

In continuation to national consultancy for FAO-UN, the International Trade Centre - WTO/UN provided me an opportunity as National Consultant, to contribute in reducing the hardships faced by the people of Balochistan, getting benefits from the natural resources available in the form of sheep, camels, goats, poultry, and cattle. ITC is focusing on internationalization of micro, small, and medium enterprises in selected districts of Balochistan under the EU-funded "Growth for Rural Advancement and Sustainable Progress" project. Four universities and public sector organizations (PSOs) each and Balochistan Chamber of Commerce and Industries (BCCI) were consulted to participate in the process and contribute their regulatory, academic, financial, natural and human resources for transformation of livestock resources into an entrepreneurial network through a triple helix good governance model

of academia-industry-government nexus. The consultative process led to recommendation to establish Livestock Technopark Quetta comprising two Centers of Excellence (CE) at universities and nine Livestock Entrepreneurship Development Centers (LEDC) at PSOs. University graduates would be facilitated to establish startups utilizing demonstrated-feasible models. CEs would provide academic and LEDCs would provide land, animals, value addition, services and marketing support for such models. An Endowment Fund (EF) would support the network through an uninterrupted funding and recovery. We expect generation of decent employment and exportable food and biotech surpluses from successful implementation of this program.

Key problem(s) addressed

1. Lack of service delivery to the private farm
2. Lack of rational breeding services
3. Low-quality high-cost farm inputs
4. Ungainly loans
5. Price capping of milk and meat
6. Lack of value addition and market access for farm products
7. Lack of coordination among relevant public and private sector organizations
8. Lack of farmers access to processing factories, academic research and public regulatory services
9. Unexplored genetic potential of livestock for disease resistance and food production

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Technological or innovative solutions employed

1. Shifting policy focus from Farming to Entrepreneurship
2. Creating Enabling Environment/Entrepreneurship Development
3. Rationalization of Price Capping of products production on the basis of production cost and quality
4. Farmers' and Processors' Empowerment
5. Integrating Sustainable Development Goals
6. Establishing Endowment Fund
7. Establishing Functional Units (FUs) at PSOs
8. Livestock Entrepreneurship Development Centres (LEDC)
9. Centre of Excellence for Genetics of Animal Production and Health (CEGAPH)
10. Centre of Excellence for Biology and Entrepreneurship of Livestock (CEBEL)
11. SMEs Support Cells
12. Introducing Good Governance Model - Departmental to Integrated Approach - AIGN
13. Establishing Livestock Technopark Quetta (LTQ)

Key outcomes and measurable impacts achieved

The following public Sector Development Organizations agreed on participating in the program members Board of Governors for establishing their relevant Functional Units (FUs):

1. Vice Chancellor, Balochistan University
2. Secretary, Livestock and Dairy Development Balochistan
3. Secretary, Forest Balochistan
4. Secretary, Local Government Balochistan
5. Secretary, Industries Balochistan
6. Secretary, Women Development Balochistan
7. Director General, Animal Health LDD
8. Dean, Life Sciences, Balochistan University
9. Dean, Veterinary and Animals Sciences, LUAWMS
10. Dean Life Sciences BUITEMS
11. Dean, Life Sciences, SBKWU
12. President QCCI *Commercial livestock farmers, dairy/meat processors, stakeholders coops
13. Director CASVAB, University of Balochistan

Key actors and stakeholders involved in the development and implementation (please also describe to what extent a multi-stakeholder and participatory approach has been adopted)

The key actors have been listed under Key outcomes in the preceding box. The four universities agreed to provide their land, laboratory setup and academic research programs for establishing centres of excellence and LEDCs, targeting at development of entrepreneurship models. The Departments of Forest, Local Government, Industries and Women Development agreed on providing regulatory support, state land and other relevant assets for the purpose of propagating the entrepreneurship models. The farmers, processors and marketing partners participated in the consultative process through visits and discussions facilitated by BCCI. They welcomed the proposal and agreed to participate.

Challenges encountered (any types of trade-offs, and how these were managed) and/or efficiencies gained (e.g. win-win situations)

Presently, the livestock based value chain (LBVC) is provided services officially and mainly, by the Director General Animal Health, LDD with a handsome current and development budget. It appears that the farmers are served by the regular staff stationed at Civil Veterinary Hospitals and Dispensaries, Livestock Farms, Semen Production Units, livestock, dairy and poultry farms, etc. Management of the LBVC by Directorate General Animal Health may be supplemented with inputs from PSOs through an autonomous LTQ with legislative, regulatory, financial and administrative powers, to boost entrepreneurship development, regulating and facilitating all the FUs at PSOs. An endowment fund (EF) may replace the repeated funding to remove the financial burden on the government treasury.

Some of the senior officers of LDD were not comfortable with participation of fellow government departments, the universities and the QCCI in the development process. However, without participation of such organisations, the dream of transformation of livestock resources into a network of entrepreneurship models could not be materialised.

Factors for success

The provincial government of Balochistan has to consider the proposal at the higher levels of the Planning and Development Department for integrating fellow government departments, the universities and the QCCI in the interest of the people of the province hit by poverty.

Lessons learned (both positive and negative) and whether these could be applicable in other contexts with similar characteristics

Like other developing countries, lack of good governance is the key factor impeding the development process in Pakistan. The public sector organisations need to get transformed from regulators to facilitators, through reforms in their mandates and rules of business. Academia needs to be engaged meaningfully in the issues faced by the stakeholders under field conditions. This will enable delivery of the desired services to the end users without any interruption. The integrated model of Livestock Technopark would engage the stakeholders to achieve the goals. The model developed for establishing Livestock Technopark Quetta may be modified for other regions/countries, to accommodate the issues faced by stakeholders.

Contact information for further inquiries

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Links and additional materials

<https://dairysciencepark.org/gg/>

FAO KP Livestock Action Plan on Good Governance through Livestock Technopark Peshawar – 2019. FAO-UN
(https://sustainabledevelopment.un.org/content/documents/commitments/7202_9671_commitment_Qureshi%20MS%20-%20Action%20Plan%20IIId.pdf)

Baluchistan Livestock Breeding Policy 2022 – M Subhan Qureshi – ITC-UN
(<https://assets.fsnforum.fao.org/public/contributions/2023/ITC-UN-Version-Qureshi-MS-ITC-Draft-Policy-Revised.pdf>)