Themes for the conference

1- Sustainable Agricultural Practices for Arid and Semi-arid Regions

1. Crop production technology,
2. water-saving techniques,
3. Improved water efficiency,
4. development of drought-tolerant varieties,
5. Techniques for the reduction of evapotranspiration
6. Enhancing water management strategies in Qosh Tepa for improved agricultural productivity.

2. Climate Change and Climate Smart Agricultural Practices

1. Conservation agriculture,
2. rainwater harvesting,
3. watershed management,
4. raised bed cultivation,
5. Water-saving irrigation techniques
6. Assessing the impact of climate change on crop yields.

3. Promoting resilient farming systems for climate resilience and food security.

1. Innovative approaches to water management in agriculture.
2. Qosh Tepa Canal: Transforming water management in Northern Afghanistan.
3. Water-efficient irrigation techniques,
4. Crop diversification for water management,
5. Integrated water resource management
6. Rainwater harvesting for agriculture,
7. Water reuse and recycling: Maximizing water utilization in farming.
8. Technology innovations in water management: Precision irrigation and monitoring.
9. Policy frameworks for sustainable water management: Enabling effective governance.

4. Agricultural biotechnology and genetic engineering for crop improvement in Afghanistan

1. Enhancing crop productivity and resilience through biotechnology in Qosh Tepa.
2. Trait modification: Genetically enhancing crop resilience and productivity in Afghanistan.
3. Disease resistance: Developing genetically engineered crops for improved pathogen resistance.
4. Drought tolerance: Genetic strategies to enhance crop resilience to water scarcity in Afghanistan.
5. Nutritional enhancements: Utilizing genetic engineering for more nutritious crops in Afghanistan.
6. Environmental sustainability: Assessing the ecological impact of genetic engineering in Afghan agriculture.

5. The Governance of Agriculture, and Enabling Policy Environment

1. Strengthening governance structures and policies for effective agricultural management in Qosh Tepa.
2. Policy formulation: Designing effective agricultural governance policies in Afghanistan.

3. Stakeholder engagement: Ensuring inclusive participation and collaboration for agricultural development.
4. Regulatory frameworks: Establishing laws and regulations to support sustainable agriculture in Afghanistan.
5. Capacity building: Strengthening knowledge and skills for effective agricultural governance.
6. Environmental sustainability: Promoting sustainable practices in agriculture and water management

6. Potentials for crop diversification in different regions of Afghanistan to support "One Village One Product"

1. Identifying diverse crop potentials in Qosh Tepa for the "One Village One Product" initiative.
2. Regional potentials: Identifying crop diversification opportunities in different Afghan regions.
3. Promoting value chains and market access for unique local products.
4. Enhancing agricultural research and development for crop diversification.
5. Empowering farmers through training and knowledge sharing.
6. Policy support for sustainable and inclusive agricultural diversification.

7. Managing natural resources: forest restoration, rangeland, and biodiversity conservation

1. Forest restoration: Enhancing biodiversity through sustainable forest management practices.
2. Rangeland management: Balancing livestock grazing and ecological conservation in Afghanistan.
3. Biodiversity conservation: Protecting and preserving unique flora and fauna species.
4. Water management: Ensuring efficient use of water resources for agriculture and ecosystems.
5. Socio-economic impacts: Assessing the benefits of natural resource management on local communities.
6. Qosh Tepa Canal: Sustainable Agriculture: "Canal's role in fostering sustainable agricultural practices.

8. Soil conservation and integrated soil fertility management

1. Sustainable irrigation: Efficient water management and irrigation techniques for maximizing crop productivity.
2. Watershed management: Protecting and conserving watersheds to maintain soil health and fertility.
3. Nutrient management: Strategies for optimizing nutrient use and promoting balanced soil fertility.
4. Soil erosion control: Implementing measures to prevent soil erosion and sedimentation.
5. Integrated soil fertility management: Implementing practices to maintain and enhance soil fertility for sustainable agriculture in the Qosh Tepa region

9- Value Chain of Agricultural Products

1. Improved techniques for crop harvesting, sorting, grading, packaging, storage, and processing including drying and dehydration, canning, freezing, pickling, juice preparation, jam, jelly, and other products, food quality control, HACCP, GAP, GMP
2. Strengthening market linkages for sustainable agricultural product distribution.
3. Emphasizing quality assurance and standards in agricultural value chains.
4. Fostering innovation and technology integration in agricultural product value chains.
5. Enhancing access to markets and improving value chains for agricultural products in Qosh Tepa.
6. Trade and Marketing of Agricultural commodities

10- Impact of trade policies on Afghan agricultural commodity markets.

1. Strategies for promoting the export of Afghan agricultural products.
2. Opportunities and challenges in the Afghan agricultural food system.
3. Value chain analysis of high-value crops in Afghanistan.
4. Processing opportunities for high-value agricultural crops in Afghanistan.
5. Impact of trade agreements on trade patterns and competitiveness of Afghan agricultural products.
6. Challenges of agricultural marketing in Afghanistan, with a focus on Qosh Tepa canal region.

11- Agricultural Extension, Social and Economic Context of Farmers' Livelihoods

1. Agricultural extension strategies for sustainable livelihoods and knowledge transfer.
2. Lessons learned from Agriculture Extension projects which collaborated with the Ministry of Agriculture Irrigation and Livestock (MAIL) in Afghanistan such as UNFAO, NHLP, Root of Peace, CBARD, etc.
3. Socio-economic factors affecting farmers' livelihoods in Afghanistan.
4. Role of agricultural cooperatives in enhancing farmers' income and welfare.
5. Impact of climate change on farmers' livelihoods and adaptive strategies.
6. Enhancing farmers' access to markets and value-addition opportunities.
7. Promoting inclusive agricultural development and economic growth in the Qosh Tepa region.

12- Innovative and low-cost solutions for post-harvest losses

1. Studies on the effects of packaging, storage, and processing on post-harvest losses, post-harvest pests, and diseases management, shelf life extension techniques, low-cost processing techniques, low-cost storage techniques, postharvest treatments
2. Technology-driven approaches for post-harvest loss reduction.
3. Sustainable storage and preservation techniques for improved food security.
4. Value-added processing and market linkages for post-harvest management.
5. Community-based initiatives for minimization of post-harvest losses.
6. Adoption of improved storage and packaging techniques in Qosh Tepa.
7. Strengthening local capacity for post-harvest management in Qosh Tepa.

13- Innovations in animal husbandry to support agricultural self-sufficiency

1. Improved livestock breeding and genetics for enhanced productivity.
2. Sustainable feed and nutrition management for healthy livestock production.
3. Adaptive and climate-resilient animal husbandry practices for increased resilience.

4. Value chain development and market linkages for livestock products.
5. Sustainable and efficient animal management in Qosh Tepa.

14- Animal Products Management for Sustainable Self-Sufficiency

1. Enhancing milk production and dairy processing for self-sufficiency.
2. Promoting sustainable poultry farming and egg production systems.
3. Improving meat quality and processing techniques for self-sufficiency.
4. Enhancing value-added products from animal by-products for sustainability.
5. Developing sustainable and efficient animal production systems in Qosh Tepa

15- Sustainable plant diseases and pest management practices

1. Integrated pest management approaches for sustainable crop protection.
2. Enhancing biological control methods for plant disease management.
3. Utilizing eco-friendly and sustainable practices in pest management.
4. Developing resilient crop varieties to combat plant diseases and pests.
5. Implementing sustainable and effective plant disease management strategies in Qosh Tepa.

16- Food and nutrition-sensitive agricultural

1. Enhancing biodiversity for nutritious and diverse food production systems.
2. Promoting sustainable agricultural practices for improved food security.
3. Strengthening value chains for nutritious and accessible food distribution.
4. Innovations in food technology for sustainable and nutritious food production.
5. Ensuring food safety through improved agricultural practices and regulations.
6. Enhancing biodiversity for resilient and nutritious food systems in Qosh Tepa.