

INTERNATIONAL GRASSLAND & RANGELAND CONGRESS KENYA 2020

Joint XXIV International Grassland & XI Rangeland Congress 2020

October 24-30,2020, KICC, Nairobi Kenya

Sustainable Use of Grassland/Rangeland Resources for Improved Livelihoods

Organized by: Ministry of Agriculture , Livestock, Fisheries and Irrigation Animal Production Society Kenya agricultural and livestock Research organization

2020kenya-igc-irc.rangelandcongress.org

INVITATION

he Organizing Committee of XXIV International Grassland and XI Rangeland Congress, on behalf of the Ministry of Agriculture, Livestock, Fisheries and Irrigation, the Animal Production Society of Kenya and Kenya Agricultural and Livestock Research Organization, cordially invites you to participate in the XXIV –IGC and XI-IRC joint Congress from October 24 to 30, 2020 at KICC, Nairobi Kenya.

The hosting of the first-ever joint congress in Africa is significant, as this region offers diverse and unique tropical savannah ecosystems, which are home to some of the most economically important grasses in the world and mesmerizing wildlife. This momentous event will highlight high tech (including ICT) technologies and enable the scientific community to deliberate on various advances made in the field of grassland and rangeland science and management.

Kenya has many exciting grassland and rangeland features, a competitive business environment, vibrant International Scientific Community and offers world class tourist destinations.

The Organizing Committee has spared no effort to ensure that the joint IGC-IRC congress will be an occasion for the delegates to create sustainable interactive scientific linkages and enjoy the cultural diversity and lasting warm hospitality of the Kenyan people.

We look forward to welcoming you to the Kenya 2020 joint Congress in Nairobi.

HOST



Agriculture continues to be a vital sector of the economy in of the Kenyan rural economy and the largest provider of selfemployment.

eries and Irrigation (MALFI) has five State departments namely, Crop development,

Livestock, Fisheries, Irrigation and Agricultural Research. The State Department of Livestock is responsible for grassland and rangeland development in Kenya. The Ministry recently organized the All Africa Conference on Animal Agriculture.



The Animal Production Society of Kenya (APSK) is a professional organization whose membership is drawn from government

non-government organizations and the pri- technologies in the country. KALRO has a vast vate sector. The objectives of the society are and experienced scientific establishment that the provision provision of a common forum has participated in the organization of many to exchange ideas, dissemination and adop-i scientific conferences including KALRO biennial tion of animal production research findings conferences and international conferences such and technologies, support to members in as all Africa conference on Animal Agriculture. self-development in their professional disci-

plines, establishment and strengthening of regional and global linkages with relevant Kenya. It is currently the mainstay institutions, contribute to the development of animal production related policies, contribute to the animal production disciplines, undertake research and consultancies in animal The Ministry of Agriculture, Livestock, Fish- production and advocate for and provide professional advice on the development of the livestock industry. The APSK is a member of All Africa Conference on Animal Agriculture, and holds annual scientific symposiums and exhibitions.



KALRO is a corporate body created under the Kenya Agricultural and Livestock Research Act of 2013 with the mandate to promote, streamline, coordinate and regulate all aspects of research in agriculture

and livestock development, and also promote ministries, research institutions, universities, the application of the research findings and

VENUE

The congress will be held at the Kenyatta International Convention Centre, in the City Centre of Nairobi, Kenya. The Centre has a long history of hosting international conferences and summits. The convention has adequate space for all the activities of the congress.

The inaugural Ceremony will be held at the Tsavo ballroom, October 26, 2020. The scientific programme will take place in 5-6 concurrent sessions, from October 26-30.



Photo of Kenyatta International Convetion Centre, in the City Centre of Nairobi-Kenya

CRITICAL DATES

Thematic Panel Session Papers

Online submission starts: **1st September, 2018**

Online submission closes: **1st October 2019** Contributed Oral Papers/Posters

Online submission starts:

1st September 2018

Online submission ends:

15th November 2019

NOTE:

Review process will be continuous and Authors will be informed of the status of their submission one year before the congress, but the process closes by 15th March 2020.

INFORMATION ABOUT THE HOST COUNTRY

enya is a country in East Africa, bordering the Indian Ocean in the south east. Neighboring countries are Ethiopia, Somalia, South Sudan, Tanzania, and Uganda. The largest and most populous city and the national capital of Kenya is Nairobi. The second largest city and the country's chief port is Mombasa.

Kenya's landscape varies from low plains near its coast at the Indian Ocean, to a fertile plateau in the western sub-humid highlands. The country's interior is

dominated by the central highlands with the country's highest point Mount Kenya at 5,199 m.

The highlands are bisected by the Great Rift Valley, a large natural depression that runs through Kenya with a north to south orientation with fertile volcanic soils and contrasting physical features. The rest of the country is classified as tropical savanna grasslands/ rangelands.



Nairobi is the capital city of Kenya with a cosmopolitan population of over 3.2 million people. It is the only capital city in the world that has a national park. The park, located in natural tropical savanna grasslands is endowed with a rich variety of wildlife, making the city a unique tourist destination.



The city got its name from a Maasai phrase 'Enkare Nyorobi' meaning 'the place of cool waters'. Nairobi is the most populated city in East Africa and the fourth largest city in Africa. Starting off as a simple rail depot along the railway line connecting Mombasa and Uganda in 1899, today Nairobi is a hub for business and culture. It is also a home for many international organizations for research and development including the United Nations Environmental Program, UN Habitat, ILRI, WAC, CIAT, ICIPE, CIMMYT, along with International companies

Official languages	English, Swahili Democratic				
Government					
President	Uhuru Kenyatta 580,367 sq. km 45,925,301				
Total area					
Population (Est. 2015)					
Per Capita	1,246 USD				
Currency	Kenyan Shilling				
Time zone	East African Time(UTC+03.00)				

MAIN THEME

thematic areas of grassland and rangeland RANGELAND/GRASSLAND research and development with a balance be- • Wildlife management, conservation and tween the people/social/policy and the more traditional topics. The themes are

- 1. Grassland/Rangeland Ecology
- 2. Forage production and utilization
- Livestock production systems
- 4. Wildlife, tourism and multi-facets of rangelands/grasslands
- 5. Drought management and climate change
- 6. Pastoralism, social, gender and policy issues
- 7. Capacity building, Institutions and Innovations for Sustainable Development in Rangelands and Grasslands

The congress will cover 28 sessions each dealing with a particular aspect of grassland/ rangelands as listed below. Each session will be preceeded by a plenary session where a key note speaker will address thematic issues

Each theme and respective Sub-themes as listed

GRASSLAND / RANGELAND ECOLOGY

- Ecological site description and ecosystem classification
- Soil and watershed management, water supply, quality and riparian health
- Shrub encroachment, fire ecology, invasive species and pest management
- Monitoring of rangeland and grassland resources
- Sustainable Rangeland/grassland management and improvement

FORAGE PRODUCTION AND UTILIZATION

- Genetic resources, forage development and management
- Grazing management practices and animal nutrition
- Challenges for sustainability of intensive high rainfall grasslands, sown pastures and turf
- Seed science and production systems

LIVESTOCK PRODUCTION SYSTEMS

- Intensive production systems (including small-holder dairy systems in tropics and subtropics)
- Extensive production systems (including) ranching, nomadism, and dairying)
- Integrated systems (Agro-silvopastoral systems and crop-livestock interactions)

The Congress will be organised under seven- WILDLIFE, TOURISM AND MULTI-FACETS OF

- tourism
- Privately owned or leased rangeland systems
- Biodiversity and ecosystem services of rangelands/grasslands
- Status, and trends in rangelands/grass lands and options in the future
- Competing Interests in rangelands : mining, fracking, ground water exploitation

DROUGHT **CLIMATE** MANAGEMENT AND **CHANGE IN RANGELANDS/GRASSLANDS**

- Drought management for sustainable productivity
- Carbon sequestration
- GHG emissions from rangeland/grassland livestock systems
- Impacts on biodiversity, livestock and graz ing systems
- Early warning systems and modelling future climate change in Arid and Semi-Arid Lands

PASTORALISM, SOCIAL, GENDER AND POLICY **ISSUES**

- Cultural heritage and indigenous people's use of rangelands/grasslands (Indigenous Technical Knowledge)
- Governance, land rights and changes to pastoral systems
- Social justice, gender and equity issues in rangelands/grasslands.
- Livelihood diversification opportunities for pastoralists (crops, hand crafts, fishing, bee keeping, bio-fuels, silk, herbs, spices, wild fruit etc.).
- Marketing infrastructure and systems in rangelands/grasslands
- Policy issues for rangelands/grasslands development
- Political instability and extremism: its impact on rangelands/grasslands management

CAPACITY, INSTITUTIONS AND INNOVATIONS FOR SUSTAINABLE DEVELOPMENT IN **RANGELANDS/GRASSLANDS**

- Emerging/trending issues in rangeland/ grassland science and education
- Extension and technology-transfer
- Green energy and Information Communication Technologies applications
- Rangelands/grasslands and the Sustainable Development Goals (SDGs)
- Participatory approaches and innovations in the management of rangelands/grasslands

PROGRAMME OUTLINE

The Scientific sessions will cover diverse and balanced aspects of grasslands and rangelands. A wide range of experts with vast research experience on grasslands will concretize recommendations on the uses of grassland and rangeland resources to meet the increasing competing demands for livestock, wildlife and commercial/industrial use in a tech world under a changing climate.

Brief programme outline:

18-23 Oct.	24th Oct.	25th Oct.	Period	26th Oct.	27th Oct.	28th Oct.	29th Oct.	30th Oct.	Oct. 31st- Nov.7th
Pre-Congress Tours	Arrival	Optional Workshops	Morning	Opening sessions IRC and IGC Business meeting	Plenary session (presentation + discussion)	Mid- Congress tours	Plenary sessions (presentation + discussion)	Sessions for Indigenous Pastoralists & International Year of Rangelands and Pastoralists	Post-Congress tours
	Optional Workshops	Optional Workshops	Morning	Keynote Speaker 1	Concurrent Session	Mid-Congress tours	Concurrent Session	Summary Paper Grasslands	
	Optional Workshops	Optional Workshops	Morning	Keynote Speaker 2	Concurrent Session	Mid-Congress tours	Concurrent Session	Summary Paper rangelands	
	Optional Workshops	Optional Workshops	Afternoon	Concurrent Session	Concurrent Session	Mid-Congress tours	Concurrent Session	Closing Sessions	
	Optional Workshops	Optional Workshops	Afternoon	Concurrent Session	Posters	Mid-Congress tours	Posters		
			Evening	Welcome Cocktail		Kenyan Cultural Night			

CONGRESS TRAVEL AND TOURS

PRE-CONGRESS TOURS

The Pre-congress tours will cover Mount Kenya Region, particularly the arid areas, where there is the integration of wildlife and livestock production and the associated pasture/range management is well

developed. Some of the conservancies in this zone are home to the endangered black/white rhino. This system of production has resulted in an increase in the wildlife numbers without compromising livestock production. The Destinations will include:

a) Ol Pejeta ranch

This ranch has perfected the integration of wildlife and livestock production and is home to a number of rhinos and larger herds of elephants among other animals. This ranch is also procuring animals from the pastoralists and finishing them on better managed pasture for niche beef markets. The ranch is also famous for the improved Boran breed of cattle. www.olpejetaconservancy.org

b) Illingwesi community ranch

This is community ranch that is employing improved range management techniques including holistic pasture management. The improved pasture/range management practices include reseeding and rehabilitating degraded areas. The pastoralists produce yearlings that are then moved to the improved pasture area for finishing and marketing. This has increased the income the pastoral households receive for their livestock. This ranch is being used to test some of the management practices that will lead to ending drought emergencies in the greater horn of Africa. www.nrt-kenya.org/il-ngwesi

c) Mpala Research Facility

The research facility work resonates around resource use and conservation in the rangelands. The scientists' at the facility will present or facilitate discussions on rangeland vegetation and animals' species dynamics, wildlife and vegetation diversity and efforts towards restoration of degradation.

The facility also offers morning and evening game drives. Apart from the Rhino, wild animals such as Lions, Elephant. Giraffe and Buffalo are likely to be present. The conservancy also is host to ancient caves with historic wall writings. www.mpala.org

MID-CONGRESS TOURS

The mid-congress tours are designed to give the delegates an overview of the grasslands/ rangelands in Kenya and also meet and interact with the people who depend on the grasslands/rangelands for their livelihoods.



The mid-congress tour will cover three regions:

REGION 1: NAIVASHA/NAKURU AREAS

This route will take delegates through the scenic Great Rift Valley view points and a number of Rift Valley lakes. Some of the potential areas of visit include:

a) Kenya Agricultural and Livestock Research Centre (KALRO) – Dairy Research Institute

Areas of interest include research-development linkages with small scale farmers; Sahiwal livestock breeding program; indigenous chicken breeding program; and tour to the laboratory facilities

b) Commercial beef/dairy ranching and wildlife conservancy

Delegates will visit a large commercial beef/ dairy farm and a wildlife conservancy where beef animals are managed together with wildlife.

c) Largescale commercial dairy farm and pasture/fodder research in the Nakuru region

This farm is a source of improved dairy geneticsformany smallholder dairy farms in Kenya and improved pastures based on Rhodes Grass.

d) KALRO pasture research and smallholder dairy production

The participants with scientists undertaking research on Bracharia grass and its support to smallholder dairy farms and will visit smallholder dairy farm supplying improved genetic material to farmers; research work on range grasses and seed production systems.

CONGRESS TRAVEL AND TOURS

e) Extensive livestock-wheat growing transition zone

The delegates will visit and have discussions with some of the pastoral households that are transitioning into commercial farming – mainly wheat.

f) Visit KALRO Lanet Research Centre

Delegates will interact with scientists on pasture fodder research work and the improvement and utilization of the Boran breed for beef production.

REGION 2: MACHAKOS, KIBOKO, KANGUNDO, MAKUENI REGION

This region will take the participants across the expansive Acacia Savanna of Athi plans (South West of Nairobi) and observe the threat to the grassland/ rangeland and livestock production occasioned by real estate development.

The tours will include

a) Alternative range/grassland production

The group will visit a Maasai pastoralist to appreciate range management under traditional systems and ventures into alternative livelihoods like Ostrich farming and agro-tourism.

b) Kekenyoike pasture production and slaughter house (green production)

The group will visit a Maasai clan that has integrated pasture production, beef production and marketing. The group runs a slaughter house which uses green energy and are now packing and retailing biogas from the slaughter waste.

- c) Largescale commercial beef (cow/suckler), group ranches/smallholder dairy
- (agropastoral system and alternative range/ grassland production.

In this semi-arid area the management of natural grassland to produce meat and milk will be demonstrated.

This group will also visit a group ranch so that they can contrast the pasture management between a private commercial and community managed rangelands.

d) KALRO pasture research and smallholder dairy production

The participants will interact with scientists undertaking research on Bracharia grass and its support to smallholder dairy farms; visit smallholder dairy farm supplying improved genetic material to farmers; research work on range grasses and seed production systems.

REGION 3: CENTRAL KENYA (RESEARCH AND SMALLHOLDER DAIRY SYSTEMS)

Kenya has one of the most developed smallholder dairy systems in the world. There are about 1 million smallholder dairy farmers in Kenya. In the central part of the country the zero-grazing production system is

practiced. The dairy farmers depend on fodder crops (Napier grass) and crop residues. This system is well supported by research both by the National Agricultural Research System (NARS) and the

International Research Centres (IRCs).

a) Bio-science Eastern and Central Africa (BeCA-ILRI hub)

The BeCA-ILRI hub supports biotechnology work and provides the state of the art facilities for scientists in the region. The group will visit the Bracharia grass research work going on in the BeCA-ILRI hub. The delegates will visit a smallholder dairy farmer with Napier grass as the main fodder crop. www.hub.africabiosciences.org

b) Smallholder dairy farmers including integration

A dairy cooperative will be visited to see their integration of fodder production, milk production and marketing. The delegates will visit smallholder farmers who are members of the dairy cooperative; and households in commercial fodder production.

CONGRESS TRAVEL AND TOURS

POST CONGRESS



Elands in Tsavo National Park

A number of post-congress tours will be available at cost. This will include tours to the many Kenya national parks and game reserves, cultural villages and attractive natural sceneries sites (Amboseli, Tsavo, Nairobi, Mt. Kenya); Uganda (Queen Elizabeth and Murchison Falls National parks), Tanzania (Serengeti and Ngorongoro). The complete details on these tours will be available soon in the conference registration packet.



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KENYA 2020

Sustainable Use of Grassland/Rangeland Resources for Improved Livelihoods

NUMBER



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