

Agro Veterinary News

Pakistan's First Independent Agro Veterinary Periodical

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▶ Pakistan: NTDs holding nation ...



▶ Ministry plans to overhaul Marghazar ...



Bird Flu triggers worries of another pandemic in Pakistan

badly exposed to the serious threat of bird flu, called avian bird influenza since the migratory birds from Central Asia have transported the virus to neighbouring India to the south of Pakistan in January-February.

Nine Indian states, including Kerala, Rajasthan, Madhya Pradesh, Himachal Pradesh, Haryana, Gujarat and Uttar Pradesh have been reported to be inflicted with bird flu in recent weeks. Two of the states are situated in the proximity of Pakistan's border. Reports said that the unusual deaths of many

ISLAMABAD - Pakistan has been | birds, including wild ones, have started coming from many Indian states during the first week of January, indicating that the virus is being actively transmitted through various bird groups. According to media reports, the Indian authorities have been discovering dead birds as avian influenza sweeps across the country, alarming the people who have already been rattled by a coronavirus. Since late December, thousands of geese, ducks, crows and other birds have been found dead in nine states, from Kerala on India's southern tip to the Himalayan state of Himachal



Pradesh in the north. There are no reported human infections. Officials working to quash the new epidemic have detected two different bird flu strains, H5N1 and

The authorities believe that the virus was carried by birds migrating from Central Asia before spreading among poultry, prompting officials to cull hundreds of thousands of birds in states such as Haryana and Kerala. In Europe, France has been culling 600,000 poultry birds to contain its outbreak of H5N8,

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{Disclaimer}

American citizen hunts rare Astore markhor in Pakistan

AVN Report

GILGIT - An American citizen has hunted the highest-rated Astore markhor, a rare species in Gilgit-Baltistan, after paying \$61,500 as a licence fee during the current hunting trophy



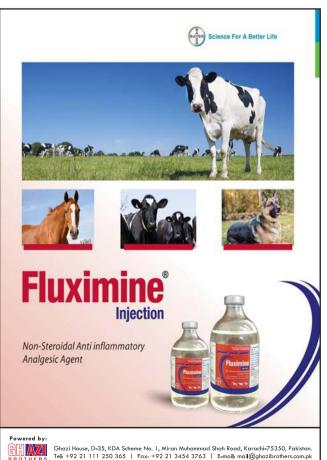
Hudson hunted the markhor near the Dashkin-MushkinTarbuling (DMT) conservation area in Astore, according to the Gilgit-Baltistan wildlife department. The horns of the hunted animal were measured at 41 inches.

For the trophy hunting programme of 2020-21, the Gilgit-Baltistan wildlife, environment and forest department has auctioned only four permits for Astore markhor, 18 for blue sheep and 150 for Himalayan

The trophy hunting programme starts in November and ends in April. Foreign, national and local hunters hunt the trophies in conservation areas of Gilgit-Baltistan after getting licences.

The American hunter, Mr Hudson, paid \$61,500 to obtain the highest-rated Astore markhor's licence.

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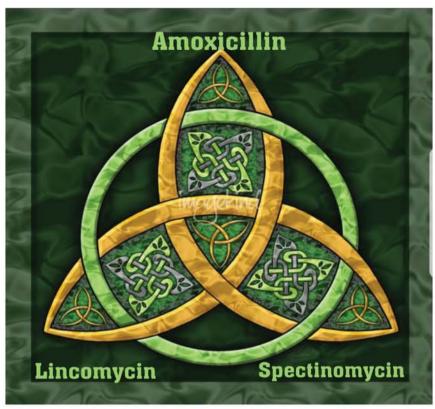
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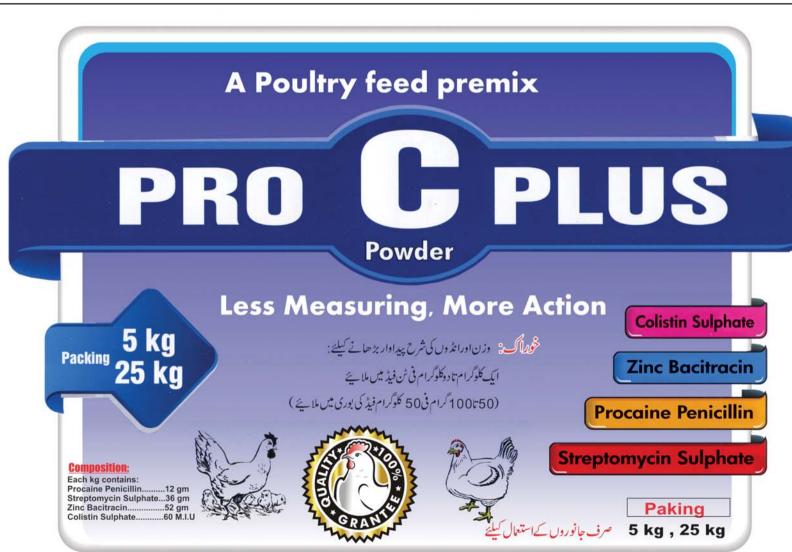




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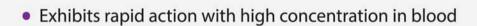




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Govt allocates Rs112.56 mln for fish farming development

ISLAMABAD - Federal government had provided Rs 112.56 million for the project promotion of trout farming in Northern Areas of the country under Prime Minister National Agricultural Emergency

framework for livelihood and job creation for rural people, besides enhancing export earnings from inland aquaculture farming. Meanwhile, Rs38.60 million was also provided with the cage culture cluster development project's

provided Rs135.31.million to promote halal meat production in the country, adding that the industry would enhance meat production in the country as well as to exports. It is worth mentioning here that country earned



Program to promote fish farming in potential areas of the country.

The government had initiated a pilot shrimp framing cluster development program with objectives to promote shrimp aquaculture in inland areas, said an official in the Ministry of National Food Security and Research.

Talking to local media, he said that another aim of the initiative was to develop shrimp value chain, support services and legal

project management units for optimal utilization of natural water resources; he said adding that it would help in upscaling cage culture technology across Pakistan.

The project provided livelihood opportunities and job creation for rural people and increased per capita fish consumption, besides enhancing export earnings from cage aquaculture. He further informed that under the prime minister's initiative for Save the Calf, the government had also

\$166.376 million by exporting about 73,421 million tons of fish and fish preparation during first five months of the current financial year as compared the exports of the corresponding period of last

Fish and fish preparation exports from the country from July to November 2020-21 decreased by 9.72 per cent as fish and fish products were worth \$184.294 million exported during the corresponding period of last year.

China strengthens scientific innovation in livestock, poultry breeding

AVN Report

BEIJING - Chinese scientists have fostered innovation in the protection and utilization of livestock and poultry breeds during the 13th Five-Year Plan period (2016-2020), supporting the country's highquality animal development husbandry industry, the Chinese Academy of Agricultural Sciences (CAAS) said recently. China's meat production reached 76.39 million tonnes, and egg production reached 34.68 million tonnes in 2020, both ranking first globally, said Qin Yuchang, director of the Institute of Animal Science under the CAAS a press conference.

China has promoted independent innovation to ensure its livestock and poultry breeding resources, with the selfsufficiency ratio of key livestock and poultry breeds exceeding 75 per cent, Qin noted. The country has set up 199 national-level breeding farms, conservation areas and gene banks for livestock and poultry

genetic resources It has cultivated more than 100 new livestock and poultry breeds and has established a commercial breeding system.

The CAAS has set up a service platform to preserve and share livestock and poultry germ-plasm resources, including information on 777 livestock and poultry

More than 300 local livestock and poultry breeds have been preserved in frozen semen, embryos and somatic cells, greatly improving the diversity of livestock and poultry germ-plasm resources in China.

CONDOLENCE

With profound grief, we announce the death of Former Federal Minister and Deputy Secretary-General, Pakistan Tehreek-e-Insaf, Dr Muhammad Amjad Chaudhary's mother.

The publisher, editor and the staff of AVN News express their heartfelt condolences on the sad demise and pray that Almighty Allah to give courage and fortitude to the bereaved family and enough courage to bear this irreparable loss. With prayers that she is granted a place in Heaven, Amen.

Livestock dept distributes over 200 subsidized poultry units

AVN Report

RAWALPINDI - The Rawalpindi Livestock department recently distributed over 200 subsidized poultry units under its ongoing project. According to a Livestock department spokesman, the poultry units were distributed under Director Livestock Rawalpindi Division's supervision, Dr Syed Nadeem Badar.

On occasion, Vice Chairman of Union Council 25. Chaudhary Naeem was the chief quest. Additional Director Livestock Rawalpindi District Dr Naveed Seher Zaidi and Deputy Director Dr Sajida were present in the ceremony.

The spokesman informed that five chickens and a cockerel were provided to over 200 citizens

who had submitted applications and their selection was made through computer balloting.



Livestock department employees were also given a basic knowledge of backyard poultry farming and necessary medicines to buy the subsidized poultry units.

Highlighting how these birds could be utilized, he said that people living in suburban areas could daily feed on eggs laid by their chickens while they could also sell them to increase their monthly income.

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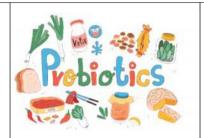




Role of probiotics to control GIT diseases in poultry

by Dr Maria Jamil, Dr Aisha Khatoon, Dr Muhammad Kashif Saleemi Department of Pathology, Faculty of veterinary science, University of Agriculture, Faisalabad







"Probiotics are known as a culture of specific live microbial feed supplement mainly Lactobacillus species that positively affect the host animal through enhancing its intestinal microbial balance."

In the poultry industry, excessive productivity has been accompanied by several effects such as the arrival of several pathogens and microbial resistance, due to the haphazard usage of chemotherapeutic agents. The intestinal microbial balance may disturb due to the lack of healthy diet and dietary changes, which can lead to upset the digestion. To maintain a healthy gut, a well-balanced ration containing adequate nutrients and energy have great significance. Currently, an extensive consideration from nutritionists and veterinarians has been received for the appropriate use of nutrients and probiotics for enhancing the growth of poultry.

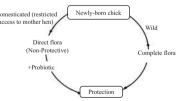
nonpathogenic and nontoxic living organism beneficial to the host health when implanted through the digestive route. Probiotics that have a protective role on the broiler performance, modulation of intestinal microbes, pathogen inhibition, immunomodulation, sensory characteristics of dressed broiler meat, and enhancing microbiological meat quality of broiler include Lactobacillus, Enterococcus, Candida, Aspergillus, Bacillus, Saccharomyces and

Probiotics are the specific

Bifidobacterium. In poultry, probiotics' mode of action is to sustain the normal intestinal microflora through antagonism and competitive exclusion, changing metabolism by enhancing digestive enzyme action and declining bacterial enzyme action and ammonia formation, enhancing feed intake as well as digestion and stimulate the immune system.

The defensive flora found in the gut is very stable; however, it may be influencing through environmental and dietary alteration. Mainly due to antibiotic therapy, excessive hygiene and stress. From mother faeces, chick receives the complete gut flora and subsequently protected against infection in the wild. While commercially reared chicks are hatched in incubators cleaned and do not typically have organisms usually present in the gut of chicken.

There is the consequence of shell microbiological adulteration that can influence the gut microflora appearance. Furthermore, HCL gastric secretion that starts at 18 days of incubation has an excellent effect on microflora selection. Hence, at immediate birth, probiotic supplementation is highly significant and valuable in avian species compared to other animals. Chicken is the primary example of such young animals that lack contact with its mother and other adults, which is probably to get protection from supplementation with microbial preparation considered to reestablish the protective gut microflora.



Recently the species that are used in probiotic species are numerous and diverse. Mainly are intestinal strains such as Lactobacillus casei, L. salivarius, L. acidophilus, L. lactis, L. plantarum, B. lichiniformis, Enterococcus faecium, E. faecalis. Two strains are yoghurt starter organism, i.e. L. bulgaricus, Streptococcus thermophiles. Few probiotics are microscopic fungi, i.e. strains of yeast associating to

Saccharomyces cerevisiae species.

When probiotics consumed by the birds, it distributes several lactic acid bacteria in GIT. These probiotics have presumed to alter the intestinal environment and distribute enzymes and several other protective substances in the gut. Lactobacillus acidophilus supplementation or a mixture of Lactobacillus culture to birds markedly enhanced amylase level after 40 days of feeding. In the intestine, Lactobacilli secrete the enzymes and enhancing the intestinal amylase action. It is also known that probiotics change the intestinal tract's pH and flora to enhance intestinal enzymes and nutrient digestibility. Additionally, probiotics can improve birds' health status by declining the ammonia formation in the intestines.

Probiotic is a generic term that may have a yeast cell wall or bacterial culture or produce microorganisms that can alter the GIT environment and enhance the feed efficiency and health status. By changing the intestinal flora, probiotics improved the growth of nanopathogenic facultative anaerobic and gram-positive bacteria that form lactic acid and H2O2, reduce the growth of intestinal pathogen and improve the nutrient utilization and digestion lead to enhance the feed conversion efficiency. Thus primary outcomes by using probiotics are growth enhancement; mortality decreased and enhancement in feed conversion efficiency. It has been seen that probiotics produce various subsets of immune system cells to stimulate cytokines, which play a vital role in the stimulation and regulation of the immune response. Through several studies, it has been revealed

Continued on Page 16

Workers found asphyxiated at a poultry farm

AVN Report

SHEIKHUPURA - Two workers were allegedly asphyxiated after inhaling carbon monoxide in their sleep after they left charcoal burning inside a room to keep themselves warm at a poultry farm Deputy Wala village on Faisalabad Road recently.



According to initial findings by Manawala police, the deceased workers, Abbas and Amer, were employed at the poultry farm and would sleep there in a room.

Recently, they burned charcoal inside their room to avoid severe coal and went to sleep. Later on, when other workers came to the farm, they found Abbas and Amer lying unconscious in their beds.

They were rushed to hospital where doctors pronounced them dead. Their bodies were sent to Chichawatni, their native town. Further investigation was underway, the police said.

UVAS, DAAB collabs on **Pak-Denmark Dairy Programme**

AVN Report

LAHORE - The University of Veterinary and Animal Sciences (UVAS) Lahore and Dalum Academy of Agricultural Business Denmark (DAAB) jointly arranged an online collaborative meeting on



Pakistan/Denmark Dairy Knowledge Exchange Programme here recently at City Campus Lahore.

Stakeholders/Representatives from public and private sector including Livestock & Dairy Development (L&DD) Department Punjab, Pakistan Dairy Association and Dairy Cattle Farmer Association participated in this meeting. Earlier Dr Junaid shared the overall picture of the dairy sector

Speaking on occasion, Prof Dr Nasim Ahmad highlighted the role of UVAS for uplifting the country's livestock sector. Additional Secretary Livestock

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 - پولٹری انڈسٹری سے وابستہ افراد کیلیے اپنی مصنوعات کی تشہیر کیلئے بے شار مواقع مثلًا سوینئر ز،ائی پیکس گائیڈ،آئی پیکس کیطوگ، میں اشتہار لگوانے کی سہولت جس کی پبلی کیشن اور تقسیم وسیع سطح پر ہوگی۔
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Pakistan: NTDs holding nation back?

by Sana Shahid, College of Veterinary and Animal Sciences, Jhang Sub-Campus UVAS, Lahore and Mohammad Munawar, KBCMA College of Veterinary and Animal Sciences, Narowal Sub-Campus UVAS, Lahore

eglected Tropical Diseases (NTDs) cover a wide range of diseases, including dengue fever, leishmaniasis, leprosy, bronchitis, rabies, rash, etc. affected health in developing countries, especially among the poor carries a considerable burden with extremely inadequate maintenance services. According to a WHO report, more than one billion infected people worldwide suffer from neglected diseases. The European Parliament has acknowledged that little attention has been paid to neglected diseases in the Millennium Development Goals. NTD puts a considerable burden on healthcare systems and ultimately, the already limited economies of developing countries. The Islamic Republic of Pakistan (Pakistan) is the second-largest Muslim-majority nation (just behind Indonesia), with a population of just under 200 million, the fifth most populous country in the world. Pakistan's population is divided into four provinces and three regions. The most populous area is Punjab, which makes up almost half of the country's population, followed by Sindh, Khyber Pakhtunkhwa (KPK) and Balochistan. The country's three regions include Gilgit-Baltistan, the disputed territory of Azad Jammu and Kashmir and the Islamabad Capital Territory. About 60% of Pakistanis live in rural areas, and 35% of the population is under 15 years of age. Before and after its independence in 1947, Pakistan has experienced high rates of illiteracy, poverty, malnutrition and disease, fueled by political instability and conflict. In this context, neglected tropical diseases (NTDs) are widespread, especially in Pakistan's large rural population and in many large urban and peri-urban areas. A global study of the burden of disease (GBD) 2013 found that Pakistan was among the top 10 countries in terms of the absolute number of NTD cases in 8 out of

fever, leishmaniasis, trachoma and countries. Poor sanitation and leprosy is also prominent.

The major causes of the spread of neglected diseases in developing countries are poor sanitation. lack of awareness programs, inadequate safety measures and limited health facilities. It also occurs due to the leaks in the ponds,

drainage systems cause pools of water, which play a vital role in providing a sustainable environment for various microbial species' growth and ultimately lead to NTD. The issue of neglected tropical diseases is almost eradicated in developed countries. However, the problem of NTD is still emerging in impoverished communities around the

> world and needs serious attention from the world's leading forums. The issue of NTDs needs serious attention at the governmental level as it leads to deaths.

permanent disability and malaise among the poor. The unavailability of clean drinking water also contributes to the spread of various common infectious diseases. However, various international forums have put forward many efforts to provide necessities for maintaining a healthy human life, including proper drainage system, availability of clean drinking water, and especially living in remote areas. Includes primary health unit facility for people with disabilities.

Pakistan has introduced innovations in healthcare delivery. such as school-based mental health programs and communitybased perinatal and neonatal care programs, which have improved the health of Pakistan and the global health community. In the case of vaccines, such delivery methods have been particularly demonstrated, possibly by the dramatic reduction in the number of polio cases in recent years, from 306 in 2014 to just 4 in 2018. With the help of Vaccine Alliance, Gavi, Pakistan is increasing its vaccine coverage targets for major childhood diseases, including diphtheria, pertussis, tetanus, hepatitis B, and other conditions. However, extreme poverty and poverty-related disease remain widespread. According to the Asian Development Bank, approximately 30% of Pakistan's population lived below the poverty line in 2013. The World Bank estimates that the country's population currently stands at 6.1% (approximately 12 million people) at 1.90 a day.

Accordingly, the nation still suffers from high infant and child mortality rates and low maternal health indicators. The Primary Health Unit (BHU)

serves as a primary health care facility to treat patients in the local community. The establishment of BHUs with the necessary facilities and staff benefits remote areas to diagnose and treat various diseases, especially with communication NTDs. In case of severe illness, the patient can be referred to the nearest hospital for better treatment. In our country, the BHU facility has been set up in the Union Council, which provides necessary health facilities to reduce diseases' burden. However, to increase the effectiveness and capacity of the BHU, there is an urgent need to reform several infrastructures at the government level, immensely to benefit communities in remote and impoverished areas.

Furthermore, research institutes in developing countries should play an active role in finding new therapeutic agents to melt various neglected diseases. Overall, the problem of NTD, especially in developing and low-income countries, is to improve public awareness programs, improved sanitation and drainage systems, access to safe drinking water and necessary health facilities.

18 NDT cases Was included on

Overall, ascariasis and other Soil

Transmitted Helminths (STH) and

generally represent the common

NTD. Still, typhoid and paratyphoid

dengue and poisonous animal

contact (snake bites), now

which the data was collected.





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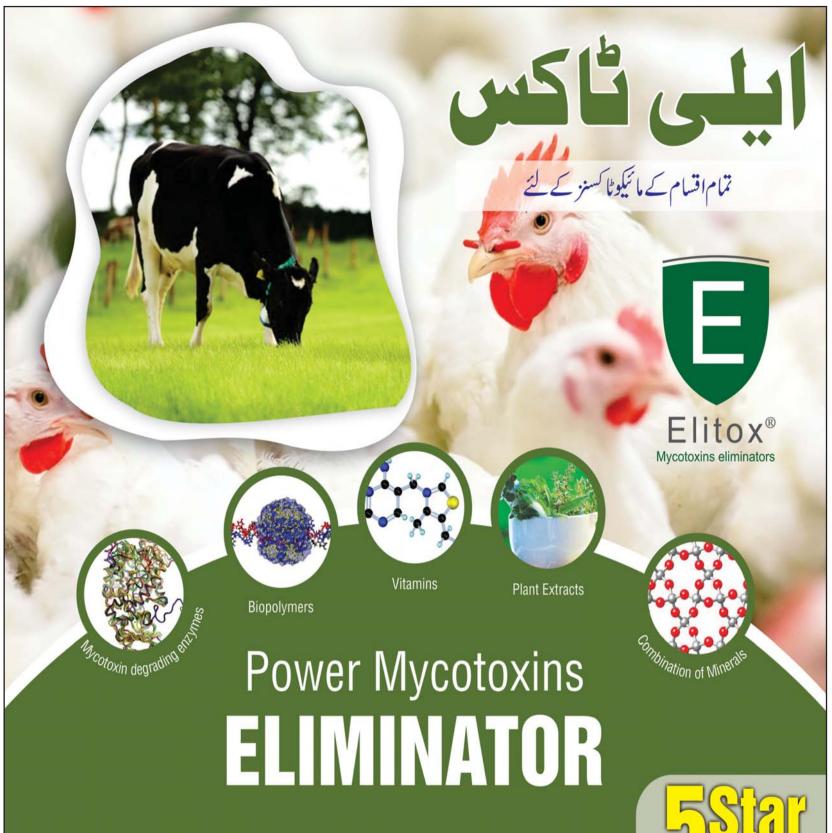


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Use of flavour in Ruminants feed and palatability

Introduction

Palatability generally means the feed 'tastes good,' or the term palatability usually designates those characteristics of a feed that invoke a sensory response in the animal. The palatability of a feed is interchangeable with a preference for the feed. It is determined by the taste, smell, appearance, temperature and texture of the feed. Palatability of the feed is the corollary of the animal's appetite, which is the stimulation to eat aroused by the feed.

Several researchers have examined different ingredients for palatability. Soybeans and molasses improve palatability, soybean meal and corn don't appear to have any effect either way, while canola meal and urea will reduce palatability. Some ingredients, such as fats and bicarbonate, may enhance palatability at low inclusion rates but depress intake at higher inclusion levels. Flavour agents should contribute to a higher feed intake since the cattle have the sensibility to different taste and aromas, it might be reflected in better performance and body development. Scientists interested in feed intake in ruminants have probably paid less attention to the role of senses than to physical or energy control of intake. Animals use smell and sight to detect subtle differences in feeds and select or avoid

Bitter taste reduces palatability and increases CCK release by enter-o-endocrine cells, a hormone that suppresses intake in ruminants. Sweet typically enhances intake and acceptability in large ruminants.

specific feed items.

Taste and smell need to be looked at separately because substances which smell are characterized by a tendency to be highly volatile, whereas substances which taste are non-volatile. The following discussion concentrates on the sense of taste.

The Wide variety of flavours and sweeteners are available in the market, and very few are thermo- stable one.

Dairy feed manufacturers always try to use non-conventional feed staff, but it restricts its use because of taste and flavours problems. Use of different flavours and sweeteners help to get over such issues and also feed get distinct identity.

Species	Number of taste buds		
Chicken	24		
Cat	473		
Dog	1706		
Human	9000		
Pig/Goat	15000		
Calf	25000		

Calves

The intake of solid feed is vital to the calf to transition from a pre-ruminant to a functioning ruminant. An early introduction to starter feed is critical to achieve optimal rumen development and reduce weaning duration and costs. Faithi et al. evaluated the effects of a vanilla flavour



in starter feeds on pre-weaning and postweaning calf performance. The trial showed that calves fed flavoured starter weighed more at the weaning and the end of the experiment.



Moreover, the pre-weaning average daily gains increased significantly (+21%, p<0.03)

Sheep

Lamb has a unique flavour, distinct from other popular red meats. Although flavour underpins lamb's popularity, it can also impede consumer acceptance. Lack of familiarity with sheep meat flavour itself can be a barrier for some consumers, and undesirable feed-induced flavours may also compromise acceptability. Against the backdrop of climate uncertainty and unpredictable rainfall patterns, sheep producers turn to alternatives to traditional grazing pasture systems. Historically, pasture has been the predominant feed system for lamb production in Australia and around the world

For this reason, there has been a focus on "pastoral" flavour in sheep meat. Pastureassociated flavours may be accepted as "normal" by consumers accustomed to meat from pasture-fed sheep; however, these flavours may be unfamiliar to meat produced from grain-fed and other feed systems. Over the past few decades, studies examining the impacts of different feeds on lamb meat quality have yielded variable consumer responses ranging from "no effect" to "unacceptable", illustrating the diverse and sometimes inconsistent impacts of different forages on sheep meat flavour. Despite considerable research, there is no consensus on which volatiles are essential for desirable lamb aroma and how they differ compared to other red meats, for example, beef. In contrast, comparatively little work has focused specifically on the nonvolatile taste components of lamb flavour. Diet also affects the amount of intramuscular fat and its fatty acid composition in the meat, which directly affects meat juiciness and texture and taste and its release during eating. The effect of diet is far from simple, and much still needs to be learned. An integrated approach that encompasses all input variables is required to understand better the feed and related systems' impact on sheep meat flavour. This review brings together recent research findings and proposes novel approaches to gain insights into the relationship

between animal diet, genetics, and sheep meat quality.

Dairy cattle

Flavour play a significant role during the transition period of dairy animals. During this period, the diet needs to be balanced with different anionic and cationic salts to maintain the Dietary Cation Anion Differences (DCAD). Usually, all the salts are bitter in flavour, which may hamper the dry matter intake, leading to occurrences of metabolic disorder and negative energy balance.

Flavours need to be included in instances where due to improper ensiling during silage making, there is a development of heat in the silage bunkers, leading to burnt flavour, thereby significantly affecting the dry matter intake

It is well known that dairy cows are susceptible to changes in diet taste or flavour. Off-odours or bitter tastes could lead to low feed intakes, which will affect milk yields. Recover milk productions takes time and will impact farm performance. Some studies indicate that older ruminants, such as dairy cows, prefer citric tastes and aroma. The addition of flavours to the compound feed or total mixed rations (combined with a sweetener, if necessary) will ensure a homogeneous perception and mask possible changes of raw materials, unpleasant byproducts and bitter tastes of vitamins or minerals in Robotic milking production systems, compound feed is usually offered in the milking box as an 'attractant.' In this case, feed's palatability becomes especially important to enhance the attraction effect and achieve regular voluntary visits of the cows to the milking robots.



Feedlot animals

The first stage of feedlot production systems is highly critical. Newly arrived calves suffer a lot of stress as a result of weaning, transportation, and handling. On top of that, they are introduced to a new source of food (roughage/concentrate). This situation often leads to low feed intake and higher disease incidence. Strategies to increase dry matter intake and nutrients may play an important role in increasing feedlot performance. Improve diet palatability is one of the recommended methods to address the problem. Palatable additives like flavours are a cost-effective option to improve diet palatability.





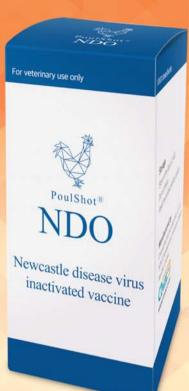






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Ministry plans to overhaul Marghazar Zoo

AVN Report

ISLAMABAD - The Ministry of Climate Change plans to overhaul Marghazar Zoo from a facility having sparse concrete enclosures into a more naturalistic habitat where wild animals can be provided with a healthy environment.



The zoo, which has now been shut down, was established by Capital Development Authority (CDA) in 1978 as a home for indigenous species found in the region on around 25 acres.

However, the zoo's site and its entire parking area are now being transformed into Margalla Wildlife Conservation Centre to be established on 82 acres of land. The transformation will be overseen by Islamabad Wildlife Management Board (IWMB), which falls under the climate

"The PC1s for both the new centre and the Margalla Hills National Park is almost finalized and will be approved by the IWMB. Rs1.8 billion have already been set aside for both the centre and the conservation park that will be built near Pir Sohawa," IWMB Chairperson Rina Saeed Khan told Local media. She said work would commence in the

Continued on Page 19

Bird Flu triggers ...

Continued from front page

with the UK and Belgium also recently uncovering cases. Officials in Japan and South Korea too have reported the cases of bird flu. You never know when it would become a pandemic, said an expert, cautioning to be extremely watchful.

The local and central government in India have increased testing of deceased birds for the presence of bird flu, although scientists said the true extent of the outbreak remained unclear. Some ecologists said the insufficient surveillance of birds, including live birds, made such outbreaks harder to prevent. The coronavirus pandemic underscored the urgency of such work. Human health is closely interconnected with animal health and environmental health. Human health should not be viewed in isolation

India has recorded more than 10 million coronavirus cases, the second-highest in the world, and more than 150,000 deaths. The destruction of habitats such as wetlands exacerbated outbreaks by forcing more birds to concentrate in fewer places. For example, thousands of carcasses have been found around the Pong Dam Lake in the Himalayan foothills, a popular bird-watching spot, including the famous migratory bar-headed goose. India experienced multiple severe

avian flu outbreaks in 2006 and 2008, which led to millions of birds' culling.

The recent scare has hammered India's fast-growing poultry industry. The prices have tumbled as anxious consumers avoided chicken meat and eggs, although the officials have sought to assure the public that cooked poultry is safe. Broiler chicken prices have fallen by almost one third in the western Indian states of Maharashtra and Guiarat, Less than a year ago, producers had to swallow a similar price crash after unfounded rumours that people could catch Covid-19 from chickens, which prompted consumers to shun poultry.

-Courtesy The News International

American citizen ...

Continued from front page

Last month, another American, Joseph Bradford, hunted a Kashmir markhor with 40-inch horns in Chitral's Toshi Shasha conservation area with a bow, making a record as it was the first trophy hunting performed with a bow. He had paid around Rs13.12 million for the permit. According to sources, the local community receives 80 per cent of the income obtained from the permit fee as its share, which is spent on their joint development and selfemployment of jobless youth through the village conservation committees.

The trophy hunting programme began in the 1980s. It is carried out under the Convention on International Trade of **Endangered Species of Wildlife** and is allowed only in the notified areas of Gilgit-Baltistan. Any person found involved in illegal hunting is caught and penalised.

Role of probiotics ...

Continued from page 06

that Lactobacilli produce Th2 cytokines, i.e. IL-4 and IL-10. Thus as the stimulation of Th2 cvtokines, this can lead to the formation of B cells and immunoglobulin isotype switching essential for the development of antibodies (Abs). On other cytokines, i.e. transforming growth factor β the formation of mucosal IgA response is dependent. The transforming growth factor β is significantly stimulating through several strains of Lactobacillus. Probiotics, particularly Lactobacilli in chickens, modify the systemic antibody response to antigen. Additionally, potential probiotics exert positive impacts such as improved nutrition and enhanced immune response in the host. Lastly, under regular storage condition probiotics must be viable and technologically fit for industrial processes, i.e. lyophilized.

UVAS, DAAB ... Continued from page 06

(Planning) Khalid Mahmood Chaudry spoke about the part of the livestock department for the profitability of dairy farming community.

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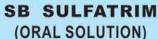
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Grafting of olive trees scheme begins in Bajaur

AVN Report

BAJAUR - The local agriculture department recently launched a scheme to graft thousands of wild olive trees to promote and boost olive production.



Bajaur district agriculture officer

Ziaul Islam Dawar told local media that the scheme had initially been launched in the hilly Barang tehsil and extended to other

The official said a team of experts would graft all the wild olive trees in the tehsil.

Mr Dawar said there were many wild olive trees in hilly and mountains areas of the district. However, he said most of the residents had either no knowledge of economic importance of olive produce or had no source of turning these trees into fruit-bearing ones.

The official said Bajaur was among the few districts of Khyber Pakhtunkhwa having great potential in olive production. Meanwhile, a house caught fire in Sheikh Mano area of Khar tehsil recently, residents and Rescue 1122 officials said. They said family members were going to sleep when the fire

suddenly erupted in the kitchen. After failing to put out the blaze, the family called the Rescue 1122 for help.

A team of firefighters along with a fire tender reached the spot and extinguished the fire. Most of the items in the kitchen were destroyed.

A rescuer said quick response by the firefighters prevented the fire from spreading to other parts of the house.

Ministry plans to ...

Continued from page 16

current month, and architects will be hired to design the new, natural habitats focused on providing wide spaces to wildlife so they can live without stress. "Work will be completed by June 2023," she added. The government decided to overhaul the space after Islamabad High Court (IHC) stepped in to end the cruelty inflicted upon animals at the zoo and issued orders to be shut down in

In July, the climate ministry took charge of the zoo from the Metropolitan Corporation Islamabad

Continuous neglect has caused animals like Kaavan and two Himalayan brown bears to fall mentally and physically sick. All the three animals were eventually taken away by a global welfare organization for animals called Four Paws. While animal lovers appreciated the decision, many were also upset about

losing the elephant and the bears, including the climate ministry as it wanted to retain the bears so they could be shifted to a bear sanctuary it has planned to establish in MHNP. Special Assistant to Prime Minister on Climate Change Malik Amin Aslam said the Islamabad zoo needs major repairs if it is going to last. While the new zoo will not have any elephants. habitats and open enclosures will be made for indigenous animals, including mountain goats, deer, etc. The species sent out from the zoo, except Kaavan and the two brown bears, will be brought back in phases, he said.

According to the Ministry's spokesperson, Mohammad Saleem, "The site will include a wildlife rescue centre for wild animals that have been injured or entrapped by poachers. There will be scientific management of the centre and a veterinary hospital for rehabilitation and recovery of captured and injured wildlife and facilities for research and education." He said the government aims to follow the model of Singapore's Wildlife Rescue Centre for the establishment of the wildlife centre in Pakistan, which will be the first of its kind in the country. The Ministry is still engaging consultants; however, work on the initiative will begin this month and continue until June 2023. Once established, the conservation centre will change the relationship between humans and animals, he

"Above all, the conservation centre would be a place of learning and research, spreading among visitors knowledge of birds and animals found in Pakistan." he added.





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GASTRO-INTESTINAL NEMATODES:

- Trichostrongylus spp
- ✓ Bunostomum spp
- ✓ Oesophagostomum spp



Dictyocaulus viviparus









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علاوہ از س بعض وفاقی محکموں کی جانب سے دی گئی بریفنگ میں گندم کی پیداوار میں مکنه کمی کے خدشہ کے پیش نظروز پراعظم نے بدایت کی ہے کہ ملک میں گندم آٹا قلت کسی صورت نہ ہونے دی جائے اوروفا قی محکیے دركارمقدارمين بروقت گندم اميورث كا انتظام کریں۔وزیراعظم نےملکی ضروریات کی آئندہ غذائی وزرعی صورتحال کے مطابق نولمٹ گندم امپورٹ کرنے کی اصولی منظوری دی ہے۔



صوبوں کو گندم خریداری پر ایک پیج پر لانے کیلئے وفاقی حکومت کی کوششیں تیز

حکومت کے لئے1650 روپے قیمت مقرر ہےلہذا پاسکوکوا جازت دی جائے کہ سندھ میں گندم کی خریداری صوبائی نرخ پر ہوگی، پاسکو حکام نے بیجھی بتایا کہوہ سندھ

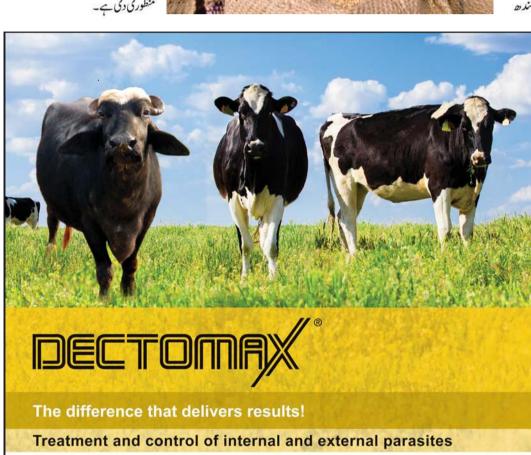
اور پنجاب ہے مجموعی طور پر 14 لا کھٹن گندم خریدیں گے۔ بعض سركاري وحكومتي اركان اس تجویز پرسنجیدگی سےغور کررے ہیں کہ اگر حکومت نے گندم درآ مد ہی کرناہے تو پھر یا سکوکوسندھاور پنجاب ہے گندم خریداری ہے روك كرومال كيصوبا ألى محكمه خوراک کوزیادہ سے زیادہ مقدار میں گندم خریدنے کاموقع دیا جائے اور پاسکو کے ذریعے گندم درآ مدکر کے بلوچیتان اور خیبر پختونخوا کی ضروریات مکمل کر لی

بنجاب ميں اس وقت آٹا دستيالي کی صور تحال''ریڈزون''میں نہیں ہےاور بڑےشہروں میں آٹادستیاب ہے لیکن اسے کمل نارمل حالات قرارنہیں دیاجا سكتام محكمه خوراك پنجاب آئنده دنوں میں آٹاکی بڑھتی طلب سے آگاہ ہے اور وہ کوٹے بڑھانا بھی جا ہتا ہے کیکن اس کیلئے لا زم ہے كهمحكمه خوراك خيبر يختونخواه بهمي ا بنی فلورملز کے یومیہ گندم کوٹہ میں اضافه کرے تا کہ پنجاب ہے آٹا کی بیثاورروانگی میںاضا فیہنہ ہو۔

لا ہور: ملک میں آئندہ گندم خریداری کے حوالے سے صوبوں کوایک پیچ پرلانے کیلئے وفاقی حکومت کی کوششیں تیز ہوگئی ہیں۔ فاقی وزارت نیشنل فو ڈسکیو رٹی کے زیرا نظام بین الصوبائی اجلاس میں آئندہ گندم خریداری بارےاہم گفتگوہوئی ہے۔اجلاس میں وفاقی حکام کےاستفسار پرمحکمہ خوراک سندھ کے حکام نے بتایا کہانہوں نے وزیر اعلی کوسمری ارسال کی ہے کہ گندم کی حتمی قیمت خرید بتائی جائے کہ آیاوہ دو ہزاررویے في من ہوگی يامزيدردوبدل ہوگا۔سندھ کا بینہ کے فیصلہ کے بعدوفاق کوآگاہ کیاجائے محکمہ خوراک خیبر پختونخواکے حکام نے میٹنگ میں کہا کدان کی سالانہ گندم ضرور یات 40سے 46 لا کھٹن جبکہ پیداوار12 تا15 لا کھٹن ہے، پنجاب حکومت انہیں اپنے صوبے سے گندم خرید نے نہیں دیتے۔

اجلاس میں محکمہ خوراک پنجاب کے حکام نے بتايا كهابهي وه گندم خريداري كاحتى مدف نہیں بتاکتے کیونکہانہیں محکمہ زراعت کی جانب سے گندم پیداوار کے دوسر نے تخمینه کا انتظارے تاہم غیرحتی ابتدائی تخمینه 40 تا45لا كھڻن گندم خريدنے كا ہے جبكه گندم کی قیت خرید1650 سے بڑھا کر 1800 رویے فی من مقرر کرنے بارے ہم نے وفاق کولیٹرلکھاہواہے اوران کے فیصلہ کا

یاسکو حکام نے کہا کہاس وقت عجب صورتحال ہے کہ سندھ حکومت قیمت خرید 2 ہزاررویے کا اعلان کر چکی ہے جبکہ پنجاب



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