



**President Félix-Antoine
Tshisekedi inaugurates the
University of Kananga**

**Marie-Thérèse SOMBO participates in the
inauguration of UNIKAN**

**Le Président du CSN
organise une réunion d'évaluation
avec le personnel du SP/CSN**



CONTENTS

Edito.....	P3
Activities of the President of the Republic	
• President Felix Tshisekedi Inaugurates the University of Kananga.....	P4
Activities of the Minister of ESURSI	
• Marie-Thérèse Sombo Participates in the Inauguration of UNIKAN.....	P5
• Marie-Thérèse Sombo Reorganizes the Higher Education Sector.....	P5-6
NSC Activities	
• The NSC Organizes its 59th Ordinary Session in Kinshasa.....	P6-7
• The President of the NSC Organizes an Evaluation Meeting with the SP/NSC Staff.....	P7
Echos of Research Institution	
• The GSR/ESU Organizes a Training Workshop on the Creation and Management of a Scientific Journal.....	P8
• RCMD-Bunia: More than 52 Researchers Trained in Scientific Research Assisted by Generative AI.....	P10 P8-9
• Researchers RCALC training on digital data collection tools.....	P9
Reflections of our researchers	
• Scientific publication: Socio-economic study of family poultry farming in Mwene Ditu.....	P10-11
• Researcher Héritier TSHIAMA: In Luputa, goat's milk is becoming a key resource in the rural world.....	P11-12
• Sickle cell disease in the DRC: When pain and stigma hinder lives, the urgent need to integrate traditional medicine becomes clear.....	P12-14
Read for you	
• Daniel Bumba mobilizes 3,000 agents to combat traffic congestion in Kinshasa.....	P15
Public Sector Research Centers and Institutes in the DRC.....	P15

Editorial Board of the Sciences and Technological Innovations Bulletin (STIB)

Publication Director :

Christian MAZONO MPIA (NSC)

Editor in chief :

José MUSANGANA (HSRS)

General Secretary :

Jacques ASUKA MOTUNDU (NSC)

Editorial Secretary :

Jeanpi KALOMBO KANYINDA (NCRS)

Deputy Editorial Secretary :

Nathalie NKANGA (CGI)

Central Editor :

Dany LUYINDULA (NSC)

Jean-Luc BALOGIJE SELENGE (RCMD/BUNIA)

Eli MANUANA/GRC

Alain MBUYI MPOYI (WERC)

Nicole LUBUYA KANDA (GMRC)

Marcel MUENGULA

MAMYI (NIASR)

NDILU MALU (ATSRC)

LOTIME ANDANDA (CRLCA)

Freddy MADUKU MANZOMBA (NDRC/GEMENA)

Yves LUHEMBWE (AFRC/LUBUMBASHI)

Théodore LUMU MBINGE (AIPS)

Paulin MANDUNGU (VAC)

MBONZI NKWEDI (HSRC/BANDUNDU)

Marketing and Advertising :

Mélanie MWAMINI ZUHULA (CEA)

Patrick NSILULU MIFUNDU (NSC)

Design and Computer Graphics :

Patrick BHAYO (NSC)

Liévin MULUMBA KAPULU (MERC)

Josaphat MENAVUVU (NSC)

MPELO KANI. STEVENS (NSC)

Camera :

Jean Louis MBANDA (NCRS)

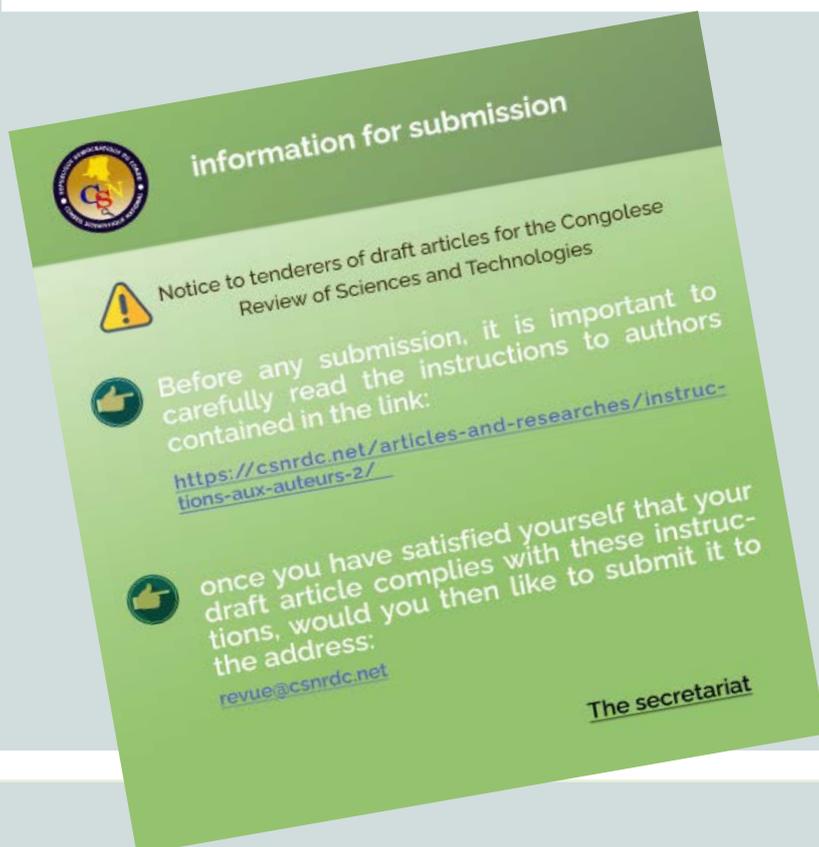
Johnny MINGANU (NSC)

Translator :

Roger MBOMA KWENGE (NSC)

Distribution

Baby MONKIA (NSC)



information for submission

 Notice to tenderers of draft articles for the Congolese Review of Sciences and Technologies

 Before any submission, it is important to carefully read the instructions to authors contained in the link:
<https://csnrdc.net/articles-and-researches/instructions-aux-auteurs-2/>

 once you have satisfied yourself that your draft article complies with these instructions, would you then like to submit it to the address:
revue@csnrdc.net

The secretariat

Building excellence

Excellence is often perceived as a static result, a figure at the bottom of a balance sheet or a trophy on a shelf. It is sometimes reduced to a simple performance standard or a summit that one eventually climbs. However, when viewed through the prism of commitment, we understand that it is not a destination, but a state of mind; a demanding path that we travel every day.

It is precisely with this in mind that 2026 began with the fulfillment of promises of modernity for the educational and scientific landscape of the Democratic Republic of Congo. Indeed, it marks the beginning of an era in which "building excellence" is becoming a true national project of renewal. As such, the inauguration of the new buildings at the University of Kananga (UNIKAN) by His Excellency Félix-Antoine TSHISEKEDI THSILOMBO, President of the Republic and Head of State, is the cornerstone of this ambition. This powerful gesture is not limited to the delivery of bricks and mortar; on the contrary, it symbolizes the rebuilding of a contract of trust between the nation and its studious youth. By endowing Greater Kasai with such a jewel, the Head of State reaffirms that the country's emergence depends, above all, on quality education.

Furthermore, building excellence is a process that relies on a determination that must be instilled in every layer of our organization. This movement finds its natural extension in the administrative

rigor promoted by the Minister of ESURSI, Professor Marie-Thérèse Sombo Safi Mukuna. Thus, the definitive transition to the LMD system, marked by the imminent closure of the DES/DEA cycle, is a clear signal of our desire to raise our doctoral training standards to global requirements. At the crossroads between academic regularization and disruptive innovation, the Congolese scientific community is undergoing its own transformation to turn discipline into a virtuous habit.

This habit is not merely theoretical; it is embodied in concrete responses to human tragedies. A moving account of sickle cell disease reminds us that behind every statistic there is a life that hopes. That is why the advances in therapeutic solutions presented in this issue of the Science and Technological Innovation Bulletin are a real ray of hope. They prove that Congolese excellence lies in this intelligent alliance between our ancestral knowledge and modern clinical validation. In short, this is where science becomes the foundation of our sovereignty.

At the same time, the global technological wave cannot be ignored, especially as 2026 is shaping up to be "the year of choice" for artificial intelligence. Building excellence in this field means accelerating our digital deployment while securing our cyberspace to avoid irreversible exclusion. In this regard, our researchers, already well-versed in generative AI tools, demonstrate that the collective intelligence of our youth is the



Professor Pius MPIANA TSHIMANKINDA
NSC President,

most powerful driver of our resilience.

Finally, whether it is managing health crises at borders or improving urban traffic flow in Kinshasa, science and innovation are now the only bulwarks against improvisation. In reading this 49th issue, readers will discover a National Scientific Council that is more determined than ever to be the catalyst for this progress.

Ultimately, excellence is not a summit to be reached, but the rigor with which each step is climbed. It is built through constant individual effort, but also and above all through collective intelligence born of the constructive confrontation of ideas. Building excellence is a never-ending journey and our signature on time. It is a commitment to never treat progress as a given, but as a work to be perfected every day. Through this issue, our readers are invited to cultivate that elegance of spirit that transforms every task into a work of art and every doubt into a driver of progress. It is by sealing this collective commitment today that the solidity of our common future will be guaranteed.



Activities of the President of the Republic

President Félix-Antoine Tshisekedi inaugurates the University of Kananga

The President of the Republic, His Excellency Félix-Antoine TSHISEKEDI TSHILOMBO, officially inaugurated the University of Kananga (UNIKAN), the largest public institution of higher education and university in the province of Kasai-Central, on January 27, 2026.

This infrastructure, which meets international standards, has a capacity of approximately 3,500 students and includes two administrative buildings with 72 offices and meeting rooms. It has 16 lecture halls, each with a capacity of 200, and three residential blocks for students with a capacity of 200, as well as two large libraries, fourteen research laboratories, a large computer room, and a restaurant. The University of Kananga offers a diverse range of courses divided into seven departments and three schools specializing in key sectors such as economics and management, computer science, agricultural sciences, the environment, public health, medicine, and law. This architectural gem has been designed to provide a comprehensive living



environment that promotes academic excellence, innovation, and student development. It is a “masterpiece” that goes beyond the academic aspect, as it plans to supply the university campus with electricity using a 330 KVA photovoltaic field and to open up the province. The development of this masterpiece embodies the President of the Republic’s commitment to providing each province with modern university infrastructure and

offering young people study conditions that match their ambitions.

Communication Unit of the Presidency of the Republic and Christian MAZONO/NSC



Activities of the Minister of ESURSI

Marie-Thérèse SOMBO participates in the inauguration of UNIKAN

The Minister of Higher Education, Universities, Scientific Research, and Innovation (ESURSI), Marie-Thérèse SOMBO, participated in the inauguration of the University of Kananga (UNIKAN) by the President of the Democratic Republic of Congo, Félix TSHISEKEDI, on January 27, 2026.

During the inauguration ceremony, ESURSI Minister Marie-Thérèse SOMBO stated that by inaugurating UNIKAN, His Excellency the President of the Republic, Félix-Antoine TSHISEKEDI TSHILOMBO, had restored the dignity of a province that has always been a breeding ground for the country's leaders. He had transformed nostalgia for a glorious past into confidence in a bright future.

"Your Excellency, you are the true founder of our education system. Your vision is not limited to Kinshasa; it is a breath of fresh air that is sweeping through our 26 provinces. This UNIKAN campus is the result of a political will that refuses to see our youth wither away in makeshift buildings," he insisted.

It should be noted that several people accompanied the Minister of ESURSI during this major event, including members of her cabinet, the Secretaries General of ESU and RSI, the President of CSN, the Rector of UNIKIN, etc.

Communications Unit of the Minister of ESURSI and Christian MAZONO/NSC

Marie-Thérèse SOMBO is reorganizing the ESU sector



HE the Minister of ESURSI, Madame Marie-Thérèse SOMBO

The Minister of Higher Education, Universities, Scientific Research, and Innovation (ESURSI) Marie-Thérèse SOMBO has informed all public and private higher education and university institutions (ESU) as well as the national academic community of the provisions relating to the defense of theses for the *Diplôme d'Études Approfondies (DES/DEA)* and the procedures for enrolling in doctoral programs, in accordance with circular note no. 002/ MINESURSI/CAB.MIN/SASM/MMK/2026.

In this circular note, the Minister reiterated that the DES/DEA cycle of the old system has been replaced by the doctoral cycle. However, an exceptional transition period has been granted to allow students who were already enrolled in the old system to complete their academic studies.

The head of ESURSI emphasized that students enrolled in DES/DEA programs are authorized, on an exceptional basis, to defend their theses no later than July 31, 2026, the date on which the DES/DEA system will be permanently closed.

She stressed that this exemption does

not constitute a reopening of the DES/DEA cycle, nor does it recognize the DES/DEA as a terminal degree.

No DES/DEA thesis defenses will be accepted after July 31, 2026.

The Minister went on to note that students who defended their theses before this date will continue their academic studies at doctoral schools, in accordance with the regulations in force.

"Those who have not defended their theses by this deadline will also be redirected to doctoral schools, in accordance with the terms set out in Ministerial Decree No. 134," she said.

How to register for a doctoral thesis

In the same vein, Minister Marie-Thérèse noted that holders of DES/DEA or equivalent degrees who have already defended their

theses are authorized to enroll in a doctoral program no later than March 31, 2026.

"For students who have not yet defended their thesis, enrollment in a doctoral program is conditional on the successful defense of the thesis by the end of February 2026 at the latest. After the defense, enrollment in a doctoral program for the 2025-2026 academic year is immediate," she specified.

Before concluding, she revealed that no thesis enrollment under the old framework will be authorized after March 31, 2026. After this date, only the provisions of the new doctoral school regulations will apply.

Professor Marie-Thérèse SOMBO called on doctoral schools from the PADEM system and the Master's cycle to only enroll students in doctoral programs in strict compliance with the conditions set out in Ministerial Decree No. 134.

Finally, the Minister urged all academic authorities, both at the central and decentralized levels, to ensure the wide dissemination of this circular and to ensure its strict application, with the aim of guaranteeing national harmonization of reforms relating to doctoral training in the Democratic Republic of Congo.

*Communications Unit of the Minister and
Christian MAZONO/NSC*



Some NSC members during the 49th Ordinary Session of the NSC

NSC Activities

The NSC is holding its 59th Ordinary Session in 2025

The National Scientific Council (NSC) held its 59th ordinary session on Friday, December 22, 2025, in the "Maître José MPANDA KABANGU" conference room of the Center for Research in the Human Sciences (RCHS), located at 33 Comité Urbain Street in the Gombe district of Kinshasa.

Ten (10) items were included on the agenda for this session, including the President's statement, the adoption of the minutes of the 58th ordinary

session of the NSC on September 24, 2025, the summary of decisions and recommendations of the ordinary session of the NSC on September 24, 2025, the functioning of Research Institutions during the intersessional period from September to December 2025, the report of the committees created by the NSC the calendar of scientific days at research institutions, collaboration and research areas at research institutions, scientific activities at research institutions, the review of appointments and promotions of staff

and managers at research centers and institutes, and miscellaneous items.

Before the opening of the session, the President reminded members that participation in the CS's regular sessions is mandatory and must be done in person or online. He strongly encouraged members to participate regularly in this activity. He then reminded them of the procedure to be followed for the smooth running of this regular session, which consisted of the following:

- Members who wish to speak



Some NSC members during the 49th Ordinary Session of the NSC

may only do so after requesting and obtaining permission from the Chair of the Council, who has sole control over the debate.

- Only items included in the adopted agenda will be considered.
- Any items not included in the adopted agenda may be dealt with under "Any Other Business."
- The representative of the liaison office does not have the right to speak.

The session was closed with a few points raised in the miscellaneous section. The NSC President urged participants to report any problems that arise during the intersessional period.

As a reminder, the NSC organizes four regular sessions per year to discuss issues related to the operation of research centers and institutes.

Christian MAZONO/NSC

The NSC President is organizing an evaluation meeting with the SP/NSC staff

The President of the National Scientific Council (CSN), Professor MPIANA TSHIMANKINDA Pius, organized a meeting to evaluate the work with the staff of the Permanent Secretariat of the National Scientific Council (SP/NSC) on January 22, 2026, in Kinshasa.

With a view to conducting the 2025 assessment, the NSC President brought together the Permanent Secretary, the Administrative and Financial Director of the SP/ NSC, the Division Heads, the Office Heads, and a number of staff members for this highly commendable exercise.

The meeting began with New Year's greetings for 2026, and the agenda included the following items: communication from the President, 2025 review, 2026 outlook for the NSC, and miscellaneous items.



Family photo around the NSC President.

In closing, the head of the CSN urged managers and staff to innovate in order to improve the quality of their work. At the end of the meeting, several recommendations were made by the participants.

BELESI Consort/NSC

The GSR/ESU is organizing a training workshop on the creation and management of a scientific journal

The General Secretariat for Research at the University of Kinshasa, in collaboration with the African Community of Scientific Journal Managers, will organize a training workshop on the creation and management of a scientific journal on January 30, 2026, in the BAKANDEJA room at the University of Kinshasa.

This workshop aims to strengthen researchers' capacities in the creation, management, and sustainability of scientific journals that comply with international academic publishing standards. Members can participate remotely (Zoom) via the following link: <https://us06web.zoom.us/j/83216885620?pwd=6XS6Mwr2blrrpKQNAwNQc7L6ZN76Av.1>, Meeting ID: 832 1688 5620, Passcode: 618543.

Christian MAZONO/NSC

ATELIER DE FORMATION SUR LA CRÉATION ET LA GESTION D'UN JOURNAL SCIENTIFIQUE

Le Secrétariat Général chargé de la Recherche de l'Université de Kinshasa organise l'Atelier de formation sur la création et la gestion d'un journal scientifique.

30 Janvier 2026
Heure: 9H00 à 13H
UNIKIN
Salle BAKANDEJA,
FACULTÉ DE DROIT

BUT
Renforcer les capacités des chercheurs de l'Université de Kinshasa pour la création, la gestion et la pérennisation de journaux scientifiques crédibles, alignés sur les normes internationales de publication académique

THÉMATIQUES :

- Création d'un Journal scientifique :
- Etapes clés et principe
- Spécificités et défis des revues scientifiques africaines.
- Normes internationales et critères d'indexation
- Introduction à Crossref et à ses services pour les universités ; la valeur des DOI et la gestion des relations scientifiques à l'Université de Kinshasa.

Richard RISASI
Président de l'Association des Chercheurs et Enseignants de Kinshasa (ACEK)

Johansen Chanda
Crossref Community Engagement Manager

RCMD-Bunia: More than 52 researchers trained in generative AI-assisted scientific research

The Multidisciplinary Research Center for Development in Bunia (RCMD-Bunia) organized a training workshop on the use of generative artificial intelligence in scientific research at the Pastoral School of Catechesis in Bunia from December 8 to 9, 2025.

This workshop brought together 52 participants from the city's academic and professional communities. Under the theme of "Online Scientific Research Assisted by Artificial Intelligence," the session aimed to equip researchers, teachers, students, and professionals with advanced digital tools to improve the quality and rigor of their work.

Practical training

Over two days, participants were

introduced to :

- Online documentary research supported by modern platforms;
- The use of generative AI for scientific writing and data analysis;
- Methods for verifying sources and combating plagiarism;
- Optimization of scientific work using new digital tools.

The discussions highlighted the rapid evolution of the technological landscape and the importance for academic circles in Bunia to adapt to international standards of knowledge production.

An international expert at the helm of the training program

The workshop was led by Ferdinand Djayerombe Vaweka, an independent researcher and international consultant based in Canada, renowned for his expertise in generative artificial intelligence.

He demonstrated, with concrete examples, how these technologies can transform scientific research: automation of repetitive tasks, improvement of editorial quality, assistance in structuring scientific articles, rapid database exploration, and intelligent reference management.

According to him, "artificial intelligence is not a substitute for researchers, but an amplifier of their capabilities, a lever to accelerate the production of reliable and competitive knowledge."



Keen interest from the academic community

Participants praised the relevance of the topic and expressed their satisfaction with the quality of the training they received. Many encouraged the RCMD-

Bunia to organize more workshops of this kind in order to support the advancement of science in the city and, ultimately, throughout the province.

The training ended with a group photo. The official presentation of certificates

will take place in the coming days, after an individual test to validate the acquisition of skills.

A reaffirmed commitment from RCMD-Bunia

Through this initiative, RCMD-Bunia confirms its commitment to stimulating scientific innovation and promoting a modern research environment based on knowledge sharing and the strategic use of emerging technologies.

Omer PALUKU MATINA/RCMD/Bunia

RCALC researchers are being trained on digital data collection tools.



Researchers from the Center for Research in African Languages and Cultures (RCALC) participated in an intensive training course on digital data collection using the KobotoolBox and KoboCollect tools on December 2, 2025, in Kisangani.

Entitled "Training on digital data

collection methods: from KobotoolBox to KoboCollect," this training course was led by Professor Justin Kyle Koy, a specialist in sociology, scientific research methodology, and statistics.

The aim is to strengthen the capacities of RCALC researchers in modern, reliable, and efficient field data collection, using tools adapted to African realities.

According to Professor Koy, this training is essential in the current context.

Unit of communication of RCALC

Scientific publication: Socio-economic study of family poultry farming in Mwene Ditu



Researcher *Héritier TSHIAMA* from the Center for Research on Selection and Adaptation of Ruminants and Swine (CRSARP/Luputa) and his research team published a research article entitled: *"Socio-economic study of family poultry farming in Mwene Ditu"* in the *MADOSE journal of Mwene-Ditu*.

According to researchers at RCSARP/Luputa, family poultry farming accounts for approximately 94% of total poultry farming in Nigeria and represents around 4% of the total estimated value of animal resources in the country. In DR Congo, a survey was conducted in South Kivu on a sample of 450 adult local chickens, which were measured in order to characterize poultry in the extensive free-range system and those in the extensive closed system.

They estimate that in developing countries such as DR Congo, approximately 20% of the protein consumed by the population comes from poultry, eggs, and meat. Family poultry farming accounts for 70% of poultry production in most low-income, food-deficit countries.

In sub-Saharan Africa, 85% of households raise poultry, 70% of which is owned by women.

They go on to define the term "poultry farming" as the rearing of birds and poultry. Ornamental poultry farming refers to birds raised for their appearance



(beauty) or song, while farm or industrial poultry farming refers to birds raised for meat, eggs, or fat production.

Poultry production involves chickens, guinea fowl, turkeys, quails, ducks, geese, pigeons, etc. Family poultry farming refers to small-scale poultry production carried out by households, using family labor and locally available feed. These are "small flocks" raised by families for food security, income, and gainful employment for women and children.

Family poultry farming differs from commercial or industrial poultry farming, which is medium to large-scale and produces large quantities of poultry. The term poultry refers to all domestic birds that produce eggs, meat, manure, and feathers that can be sold by poultry farmers. Rural poultry is a flock of less than 100 birds of improved or unimproved breeds, raised in extensive

or intensive farming systems.

Poultry farming can be organized in an extensive free-range (roaming), extensive closed (barnyard), or intensive (commercial or industrial, in large buildings) system.

The poultry profession includes several types of poultry farmers.

- **Breeders:** these are farmers who work to improve pure grandparental lines according to economic objectives;
- **Multipliers:** they crossbreed parental stock to produce hatching eggs;
- **Hatchery operators:** using artificial incubation, these breeders produce chicks from hatching eggs selected or multiplied.
- **Broiler breeders:** these are the breeders who receive day-old chicks (supplied by hatchery operators) and raise them until they

are ready for slaughter or market.

- Pullet farmers: these are poultry farmers who raise young females from one day old to 18 to 20 weeks old;
- Laying hen farmers: these farmers raise poultry for egg production from 20 weeks old to around 70 weeks old.

The socio-economic benefits of livestock farming

The authors acknowledge that family livestock farming contributes to household livelihoods in economic, social, cultural, and even religious terms. This type of farming has the advantage of making good use of local resources and requires few inputs.

The work is unpaid and is carried out by family members. Family poultry farming can also be combined with almost any type of smallholder activity. A poultry program adapted to local conditions will satisfy its customers. Rural poultry production contributes to the sustainability of food security in many developing countries by generating

income for poor farmers, especially women.

In developing countries, poultry farming is the lowest investment available to rural households. It generates regular income and a source of cash through sales.

The authors conclude that chicken farming is widely practiced in most families in the Democratic Republic of Congo in general and in Mwene-Ditu in particular. The statistics in their study are based on a random sample of 96 households that raise chickens in Mwene-Ditu. Very few households raise both two breeds of chickens (12.5%) or improved breeds (8.3%). It therefore appears that this farming activity is of socio-economic importance in meeting family needs such as rent, medical care, school fees, and food rations. Raising chickens means raising your income.

It should be noted that Mwene-Ditu is an urban-rural area whose inhabitants work in a variety of professions in fields such as administration, education, health, state and private enterprises, commerce, agriculture, the police, the Armed Forces of the Democratic Republic of Congo

(FARDC), etc. In order to supplement their low income and cope with the cost of living, most Ditois engage in this additional activity of family poultry farming, however small it may be.

RCSARP/Luputa researchers Dr. Willy

*MBANGU MUKINI,
Héritier TSHIAMA MULAJI et*

Dieudonné KAZADI KABAMBA

Researcher Héritier TSHIAMA: In Luputa, goat's milk is a key resource in the rural world

Luputa, in the province of Lomami in the center of the Democratic Republic of Congo, lives to the rhythm of a modest but promising agricultural activity: goat farming. Although the region does not appear on the map of the country's major economic hubs, it can nevertheless boast a neglected but strategic resource: goat's milk. In a region where supply chains remain precarious and food diversification is still weak, this dairy production represents much more than just a commodity; it is an essential and very economical source of nutrition.

Goat milk, a local product with many benefits

Goat milk is valued for its nutritional qualities. Easier to digest than cow milk, it is rich in calcium, short-chain fatty acids, and vitamins A and D. In Luputa, where children often suffer from chronic malnutrition, this nutritional richness is not just an asset, but a necessity.

Several rural health zones, supported by local and international NGOs, recommend regular consumption of goat milk for pregnant women and young children.

In addition to its health benefits, goat milk also offers real economic opportunities. Many families, living off subsistence farming, integrate goat farming into their agro-pastoral system, sometimes on a small or large scale. A goat can produce up to 2 liters of milk per day during the lactation period, which can provide some households with additional income by selling the surplus at local markets.

A largely unprofessional sector

Goat farming in Luputa is still focused on survival. The sector has no formal institutional support, so farmers have set up informal cooperatives where mutual aid is paramount. Animal feed supply, access to rudimentary veterinary care, and goat reproduction management are handled in a traditional

manner, but with surprising efficiency.

"Goat farming allows us to pay for our children's schooling, other important household expenses, and other projects," says Vincent Manyonga, a farmer.

Women play a central role in this dynamic. Responsible for milking and often for marketing, they are key players in a rural economy that is often invisible in national statistics. Some are even beginning to transform milk into artisanal cheeses, which are still less commonly consumed locally.

Challenges for a developing industry

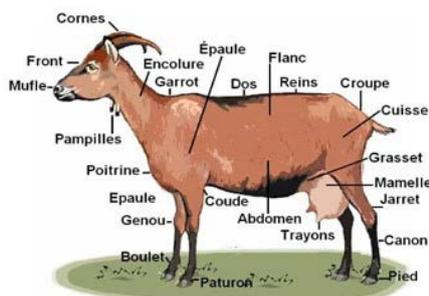
Despite its potential, goat milk production in Luputa remains hampered by several structural obstacles. The lack of technical training, the absence of storage infrastructure (refrigeration, hygiene), and difficult access to regional markets limit prospects for expansion. Added to this is climate instability,

which affects the availability of fodder, reducing the animals' milk productivity.

The support of local authorities, which is currently limited, could however change the situation. Structuring the sector through veterinary training programs, the introduction of more efficient dairy breeds, and logistical support would enable it to reach a threshold of sustainable profitability. Several rural development actors are also calling for the integration of this sector into provincial food security policies.

An unsuspected wealth

In an economy dominated by the informal sector and local initiatives, goat's milk in Luputa embodies a form of rural resilience. Discreet but regular, artisanal but indispensable, it illustrates how modest, well-managed



support will enable it to reach a larger scale. But already, in the hills of Luputa, the goat has become a silent symbol of survival and hope.

Héritier TSHIAMA Research /RCSARP/Luputa

resources can bring about significant change.

This local product, still far from reaching its full potential, is undoubtedly one of the forgotten pillars of family farming in Lomami. Only time will tell whether the necessary investment and

Sickle cell disease in the DRC: when pain and stigmatization hold back lives, the urgency of integrating traditional medicine becomes clear.

During the third edition of Rhetor, a platform offering training in public speaking, oratory, and eloquence, held from October 29 to 31, 2025, a young participant made a profound impression with his moving testimony. Mechack Kanku Sombamania, 21, a twin and sickle cell carrier, revealed the hidden side of a genetic disease that is often ignored but devastates lives and entire families in the Democratic Republic of Congo (DRC).

"My brother and I share the same blood, but also the same reality: living with sickle cell disease, one of the deadliest genetic diseases in Africa." This heartfelt cry highlights a daily struggle marked by physical suffering and severe social isolation. Born into a family of ten children, Mechack recounts with pain that five of them had sickle cell disease, and three died before they could even taste life. The disease not only took lives, it fractured the family unit, even causing their parents to divorce.

"Growing up with sickle cell disease means growing up with fear: fear of a crisis, fear of the hospital, fear of not waking up tomorrow." This testimony reveals how the disease undermines not only health, but also personal fulfillment and dreams for the future. Mechack, who aspired to become a doctor, sees this dream shattered by the constraints of his fragile health, which involves frequent hospital stays and interruptions to his studies.

Beyond the physical pain, the testimony highlights an even more glaring reality: access

to care. "Here, pain has a price. Every crisis becomes a bill, every transfusion a discussion, every breath a negotiation. We are not treated, we are calculated." Between exorbitant costs, unavailable or inaccessible medications, and a lack of guaranteed coverage, sickle cell patients are often left to fend for themselves, exacerbated by social stigma. They are sometimes nicknamed "kufa lobi," meaning "those who will die tomorrow," as if their fate were already sealed.

The imperative to act in the face of a silent health emergency

Mechack's words echo those of thousands of other silent voices across the country. Behind every sickle cell patient lies an entire devastated family, an overwhelmed healthcare system, and an often indifferent society. The figures are alarming: the DRC is one of the countries with the heaviest burden of sickle cell disease, with infant mortality rates that remain unacceptable in the 21st century. Every day that passes without concrete action, lives are lost amid indifference.

The urgency is clear; it must be addressed. Healthcare professionals reading these lines are well aware of the pathophysiological mechanisms of this disease. But what about our collective response to this silent tragedy? There is a striking contrast between our advanced scientific knowledge and the lack of accessible solutions for those who need them most. The tragedy of sickle cell disease in the DRC does not lie in the lack of medical

knowledge, but in the yawning gap between that knowledge and its application in the field. Every vaso-occlusive crisis that goes untreated, every transfusion that is postponed due to lack of resources, every delayed diagnosis represents a collective failure of our system, a breach in our commitment to the most vulnerable.

Traditional medicine: an untapped resource for patients

It is in this context that initiatives such as the recently organized workshop on the integration of traditional medicine into the CMMAS take on their full importance. Faced with modern medicine that is often costly and inaccessible, this innovative approach could broaden treatment options, reduce costs, and improve patients' quality of life. The resolutions adopted at these meetings must be implemented, because every day lost means lives compromised.

Traditional Congolese medicine holds considerable therapeutic potential, the result of centuries of observation and empirical practice. Numerous studies conducted by Congolese and African researchers reveal that certain local medicinal plants possess anti-inflammatory, analgesic, and even potentially anti-falciformant properties that could complement the conventional therapeutic arsenal. Beyond the placebo effect often cited to discredit these approaches, biologically plausible mechanisms of action are beginning to be elucidated.

The thoughtful integration of this ancestral knowledge into our contemporary medical practice represents not only a therapeutic opportunity but also a model of health sovereignty. By valuing local resources and indigenous knowledge, we create the conditions for care that is more accessible, culturally accepted, and potentially more effective. This approach is not a step backward, but a step forward toward a truly holistic medicine that recognizes the diversity of therapeutic approaches.

Several pilot studies conducted in other regions of Africa demonstrate the feasibility and benefits of such integration. In Ghana and Nigeria, standardized protocols incorporating certain traditional preparations have shown encouraging results in managing pain crises and improving the quality of life for patients with sickle cell disease. These initiatives have not only reduced the costs of care but also decreased the frequency of hospitalizations and improved treatment adherence.

The urgent need for a global societal response

Mechack's testimony appeals to us beyond just the therapeutic aspect. It invites us to profoundly rethink our societal approach to sickle cell disease. The stigma that patients suffer is additional violence, an invisible pain but just as devastating as vaso-occlusive crises. How can we accept that in 2025, young people will still be described as "kufa lobi" because of a genetic disease for which they are in no way responsible?

This stigmatization is not just gratuitous cruelty, it has tangible consequences on access to care, education, employment and ultimately on hope and quality of life. Deconstructing these prejudices requires concerted action involving the media, educational institutions, community and religious leaders. The paradigm shift must take place at all levels, from classrooms to medical lecture halls, from rural clinics to ministries.

It is imperative that public authorities take stock of the emergency. Although we now have effective protocols to prevent acute and chronic complications of sickle cell disease, their implementation remains largely theoretical for the majority of patients. The inclusion of sickle cell disease in priority national programs, the allocation of specific resources, the training of healthcare personnel and the establishment of dedicated care channels are measures that can no longer wait. International organizations and development partners also have a crucial role to play. By supporting local research, facilitating technology transfers and supporting the strengthening of national capacities, they can significantly contribute

to transforming the landscape of sickle cell disease management in the DRC.

A call for immediate and coordinated action

Mechack's testimony is a vibrant appeal to the scientific community, political decision-makers and civil society: it is urgent to act with humanity, to create bridges between ancestral knowledge and medical innovations, and above all, to break the chains of stigmatization to allow patients to live with dignity, with hope and dignity. We can no longer be content with theoretical discussions and meaningless resolutions.

The time has come for concrete action, for unfailing commitment and for the mobilization of all the vital forces of the nation. Every day of delay translates into avoidable suffering, wasted potential, and lives cut short. Sickle cell disease is not inevitable, it is a challenge that we can and must take on collectively. As a scientific and medical community, the DRC has a moral responsibility to transform knowledge into actions, resolutions into tangible achievements. This involves thinking outside the box, daring therapeutic and organizational innovation, and building bridges between different systems of care and knowledge. The integration of traditional medicine represents a promising path, not as an alternative to conventional medicine, but as its natural, culturally anchored and economically viable complement.

Patients like Mechack and his brother are not asking for charity, they are asking for justice, dignity and recognition. They remind us that behind scientific publications, statistics and health policies are human beings who suffer, hope and struggle daily. Our response to their call will define not only the future of sickle cell disease care in the DRC, but also our collective capacity to build a truly inclusive, equitable and humane health system.

Behind the numbers and statistics, there are lives, families torn apart, dreams suspended. So that sickle cell disease is no longer an obstacle to personal development, nor a social condemnation, it is crucial to support, promote and realize these innovative initiatives. The time for promises is over, the time for action has come. Every minute counts, every initiative can save lives. Our collective conscience no longer allows us to inaction in the face of this avoidable suffering. Let us act now, together, so that the "kufa lobi" become the "those who will live today and tomorrow", a transformation that is in our hands, between our decisions, between our priorities.

Innovative solutions emerge: hope through local research

At the heart of this fight against sickle cell

anemia, a glimmer of hope is emerging from the laboratories of the University of Kinshasa. An interdisciplinary team led by Professor Pius MPIANA TSHIMANKINDA has developed two major innovations that could revolutionize the management of this disease: Drepanoalpha® and DrepaThé.

These advances represent much more than simple therapeutic solutions, they embody the possibility of a paradigm shift in our approach to sickle cell disease. Drepanoalpha®, an innovative plant-based nutraceutical, represents a significant advance in the treatment of sickle cell disease. This innovation, the result of years of careful research, perfectly embodies the symbiosis between traditional medicine and modern science. It offers an accessible and culturally adapted response to the needs of sickle cell patients. In a context where every day of suffering counts, where each vaso-occlusive crisis represents a vital risk, the emergence of such local solutions takes on an absolute urgency.

DrepaThé, for its part, is a therapeutic herbal tea, developed according to rigorous protocols, used in the treatment of sickle cell anemia and other forms of anemia, which perfectly illustrates how local research can transform traditional knowledge into standardized and scientifically validated therapeutic solutions. For the thousands of patients who fight chronic anemia every day, this innovation represents tangible hope for improving their quality of life.

These developments are part of the broader vision of Research for Sustainable Development (RESUD), whose holistic approach transcends simple scientific research. Based in Local B38 of the Faculty of Science and Technology at UNIKIN, this organization embodies the excellence of Congolese research put to the service of the most vulnerable. Its mission, which aims to "promote science to satisfy the essential needs of man while preserving nature for future generations", takes on particular resonance in the context of sickle cell disease.

The potential impact of these innovations cannot be underestimated. For families like Mechack's, who daily juggle the exorbitant costs of conventional treatments and the need to survive, these local solutions represent a concrete glimmer of hope. They demonstrate that it is possible to develop effective, accessible and culturally adapted treatments, without compromising scientific rigor.

These advances also highlight the urgent need to support and scale up local research. Every day of delay in rolling out these solutions represents missed opportunities

to alleviate suffering, prevent complications and save lives. Policy-makers, health institutions and development partners must seize this opportunity to invest in these promising innovations. The validation and roll-out of these treatments could radically transform the landscape of sickle cell disease care in the DRC. Beyond their direct therapeutic impact, they represent a model of sustainable development in healthcare: local, accessible, environmentally responsible and economically viable solutions. They demonstrate that the DRC possesses not only the natural resources, but also the scientific expertise needed to address its health challenges.

Time is running out. Whilst the Congolese debate, patients like Mechack and his brother continue to suffer, families are being drained financially and emotionally, and promising lives are being cut short. These innovations represent a concrete opportunity to take action, to turn hope into reality, and to make the difference between life and death for

thousands of patients.

Plamédie NTELA NSONA Assistant/UNIKIN

Read for you

Daniel Bumba mobilizes 3000 agents to combat traffic congestion in Kinshasa

The Governor of the city-province of Kinshasa, Daniel Bumba, mobilized three thousand agents on Monday, January 26, 2026, including those from the Congolese National Police (PNC), the urban transport division, the special environmental protection brigade, and the impoundment and control services.

These officers are deployed at 60 intersections and key roads in the capital to combat traffic congestion and protect road users.

Their mission is to enforce the law and regulations, improve traffic flow, and protect road users. 'From now on, respecting the highway code is no longer optional, but mandatory,' the provincial authority stated.

Mandatory Checks

Since January 26, 2026, systematic checks of driver's licenses, vehicle inspections, road tax stickers, transport permits, insurance, and compliance with public transport fare schedules have been carried out. Violators have been subject to fines, vehicle immobilization, and impoundment.

Heavy Goods Vehicle Traffic Regulations

According to the Mayor of Kinshasa, trucks weighing 20 tons or more, as well as delivery vehicles, are subject to regulated traffic hours:



from 10 p.m. to 5 a.m. on Mondays, Tuesdays, and Wednesdays. Traffic is unrestricted on other days, but only from 10 p.m. to 5 a.m. for access to the city center.

Unauthorized parking on public roads is strictly prohibited. Motorcycle taxis and informal markets are also prohibited.

Motorcycle taxis and tricycles remain prohibited on National Highway No. 1 during the same hours, as do informal markets along the main roads.

These measures aim to protect the public, not to punish them. 'Traffic discipline saves lives, saves time, and helps Kinshasa progress,' concluded Daniel Bumba, calling for collective success through civic responsibility.

Radio Okapi et Christian MAZONO/NSC

PUBLIC-SECTOR RESEARCH CENTERS AND INSTITUTES IN THE D.R. CONGO

<p>RIHS (Research Institute in Health Science) <i>Objective: To improve the state of health of the population through research in the following fields: pharmaceutical, medical, anthropological, psychological or socio-cultural.</i> Address: 9, Av. Lukusa C/Gombe; E-mail: dnyembo@gmail.com; Tel: 0824580211</p>	<p>SSRC (Social Science Research Center / Bandunduville) <i>Objective: to carry out practical scientific research into major socio-economic and cultural issues.</i> To promote sustainable aquatic development. Address: 29, Av. de la mission, Q/Salongo, C/Basoko. BANDUNDUVILLE, BP. 223; E-mail: akuzituka@gmail.com; Tel: 0815898971</p>
<p>ATSR (Applied and Technologic Sciences Research Center) <i>Objectif: Mettre au point des matériaux, des appareils, des méthodes ou procédés</i> <i>Objective: To develop materials, equipment, methods or processes with a view to finding solutions to the population's urgent problems in various fields: housing, rural development and the modernization of the society.</i> Address: 106, Blvd du 30 Juin, C/Gombe; E-mail: Jeannoel.mputu@gmail.com; Tel: 0821138261</p>	<p>FERC (Forest Ecology Research Center /Mabali) <i>Objective: Scientific research on plants, aquatic species and animal species.</i> Address: D.S/MBANDAKA D.S/MBANDAKA/PROVINCE OF ECUADOR; E-mail: bosomboependi2@gmail.com; Tel: 0825241704</p>
<p>RCHS (Research Center in Human Sciences) <i>Objective: To ensure the human development of the Congolese people through the study of its social, economic and political dimensions with a view to identifying the factors that have a positive or negative influence on its development.</i> Address: 33, Av. Comité urbain C/ Gombe; E-mail: mingashang@yahoo.fr; Tel: 0819377821</p>	<p>NDRC (Nutritional Diseases Research Center/Gemena) <i>Objective: Research into diseases linked to malnutrition, such as related diseases by isolating certain molecules, such as SYZYSIUM GUINESIE to combat amoebic yeasts and diarrhea in South Ubangi.</i> Address: Mobutu n° 220/A. GEMENA/ SOUTH UBANGI PROVINCE; E-mail: cherusangi@yahoo.fr; 0992416091</p>
<p>RCMT (Research Center in Mathematics Teaching) <i>Objective: To carry out research in the field of mathematics teaching with a view to improving quality.</i> Address: 84, Av. des Ambassadeurs C/ Gombe; E-mail: mabelamatendorostin@gmail.com; Tel: 0815031877</p>	<p>NSRC (Natural Sciences Research Center /Lwiro) <i>Objective: To carry out, promote and coordinate research in the fields of science, technology and industry throughout the DRC.</i> Address: LWIRO LWIRO , TERRITORY OF KABARE/SUD KIVU; E-mail: robert.kasisi@umontreal.com; Tel: 0996806699.</p>
<p>GRC (Geophysical Research Center) <i>Objective: To provide the country with a national geophysical observation network, for the global study of the internal behavior of the earth in the DRC.</i> Address: 44, Av. de la démocratie, C/ Gombe(within GMRC); E-mail:tondozi@gmail.com; Tel: 0854426228</p>	<p>MDRC (Multidisciplinary Development Research Center /Bunia) <i>Objective: To carry out operational research in the north-east of the DRC in the fields of applied linguistics, African cultures and applied sciences.</i> Study of nature, fauna, flora and protection of endangered species. Address: BUNIA/ITURI; E-mail: Kermwathomas@gmail.com; Tel: 0997717070</p>
<p>AIPS (African Institute of Prospective Studies) <i>Objective: To carry out forward-looking studies in order to propose solutions to crises and problems linked to the evolution of African societies.</i> Address: Av. Cardinal Malula, C/ Lemba; E-mail: mgrtarcbangu@yahoo.fr; Tel: 0996658741</p>	<p>HRC (Hydrobiology Research Center in Uvira) <i>Objective: To program, coordinate and monitor research activities in hydrobiology, limnology and hydrology.</i> hydrobiology, limnology and fisheries in all ecosystems. Address: 115, Av. du Congo, Q/Kimanga, C/Kalundu, UVIRA / SUD KIVU; E-mail: bida-kamuloza@gmail.com; Tel: 0997716307</p>
<p>MDRC (Multidisciplinary Development Research Center/Matadi) <i>Objective: To carry out operational research in central Congo in the field of applied linguistics of African cultures and applied sciences</i> Address: Hôtel de la porte Matadi; E-mail: Mwanzanicolas5@gmail.com; Tel: 0815037949</p>	<p>CBRNEC (Chemical, Biological, Radiological and Nuclear Excellence Center) <i>Objective: To contribute to the mitigation of chemical, biological, radiological and nuclear risks.</i> Address: 106, Blvd du 30 Juin, C/Gombe; E-mail: coe.cbrn.rdc@gmail.com; Tel: 0817742543</p>
<p>NCPIR (National Committee for the Protection of ionizing Radiation) <i>Objective: - Regulatory authority for protection against the dangers of ionizing radiation in the DRC management of radioactive sources of radioactive materials such as uranium.</i> Address: 4675, Av. Colonel Ebeya, Immeuble Quitus 2ème niveau; Email: Flory1963@gmail.com; Tel: 0816684665</p>	<p>GVO (Goma Volcanological Observatory) <i>Objective: Prevention of volcanic risks by monitoring volcanoes and Lake Kivu.</i> Kivu; Management of natural risks; scientific research. Address: 142, Avenue Du Rond Point ; Quartier Les Volcans ; Commune de Goma ; Ville Goma; North-Kivu; E-mail: mavotulu@gmail.com; Tel: 0998584734</p>
<p>AEC (French Atomic Energy Commission) <i>Objective: To carry out, promote and coordinate scientific and technical research in various fields of science and industry, concerning the use of atomic energy and space research.</i> Address: UNIKIN building; E-mail: Steve.muanza.kamunga@gmail.com; Tel: 0808643248</p>	<p>WERC (Water and Environment Research Center) <i>Objective: To serve as a training and research center focusing on water and environmental management.</i> To propose solutions to problems that could arise around water. Create a national network of Congolese scientists and researchers to analyze and disseminate information on the impact of climate change in the DRC. Promote education and the right to the environment. Address: 44, Comité Urbain C/ GOMBE; E-mail: ngelpatience@gmail.com; Tel: 0818105625</p>
<p>CGI (Congo Geographic Institute) <i>Objective: Production of the base map of the DRC at a scale of 1/50,000 and its derivatives.</i> Address: 106, Blvd du 30 Juin, C/Gombe; E-mail: Fidele.balibuno@unikin.ac.cd; Tel: 0974449240</p>	<p>RCSARP (Research Center for the Selection and Adaptation of Ruminants and Pigs) <i>Objective: To carry out studies and research in the field of ruminant and pig breeding</i> Address: 45, Av. Lumumba, Q/de la gare, LUPUTA/ KASAI-ORIENTAL; E-mail: tshamalagabriel@gmail.com; Tel: 0851817370</p>
<p>GMRC (Geologic and Mining Research Center) <i>Objective: To carry out studies and analyses to improve knowledge of the soil and subsoil of the national territory.</i> Address: 44, Av. de la démocratie, C/ Gombe; E-mail: rolandkakule@gmail.com; Tel: 0851506161</p>	<p>NCRS (National Center for Remote Sensing) <i>Objective: Research in remote sensing.</i> Address: PLACE ROYAL IMMEUBLE PLACE ROYAL IMMEUBLE KASAI; E-mail: davidngindub@gmail.com; Tel: 0815103502</p> <p>NCROS (National Center for Research in Oral Science) <i>Objective: To carry out studies and research in the field of oral health.</i> Address: 13, 10ème Rue, Industriel Quarter, C/Limete; E-mail: Cnrsrd.rdc@gmail.com; Tel: 0822244152; 0811835159; 0840922982</p>
<p>NIASR (National Institute for Agronomic Study and Research) <i>Objective: To promote the development of agriculture in the Congo. To maintain varieties, multi-local trials, and its farmers, management and conservation of germplasm. Set up a program to monitor and evaluate research activities. To disseminate new varieties. Give the emerging technical department its reason for being, with a view to producing basic and pre-basic seed. Resume publication of the agricultural magazine to disseminate research results.</i> Address: 13, Av. des Cliniques, BP :2037 KINSHASA, C/Gombe; E-mail: domikankonde@yahoo.fr; Tel: 0818248620</p>	<p>CAS (Congoese Academy of Sciences) <i>Objective: Promotion and dissemination of science, technology, arts and letters. Support for inventive initiatives.</i> Address: Sciences Faculty/ UNIKIN local 28; E-mail: jjmuyembet@gmail.com; Tel: 0813330242</p>
<p>RCALC (Research Center into African Language and Culture) <i>Objective: To coordinate and carry out all research projects concerning African languages and cultures.</i> Address: 53 C, Av. Makiso, blvd du 30 juin, Kisangani/ Tshopo. Tel: 0851934320</p>	<p>MIPRC (Matadi Interdisciplinary Pedagogical Research Center) <i>Objective:--Information science.</i> Address: The buildings of the Matadi Higher Pedagogical Institute; Tel: 0896501462</p>
<p>AFRC (Agro-Food Research Centre/Lubumbashi) <i>Objective: To identify processes for processing and preserving basic local agricultural products. To improve the quality of imported or locally produced foodstuffs by applying approved standards and quality control. Help the technological development of the existing agro-industry by providing them with technical assistance wherever possible.</i> Address: 1, Av. Président LLEO, Q/CRAA, C/Lubumbashi; E-mail: Julesnkulu@gmail.com; Tel: 0997131002</p>	

CONGOLESE REVIEW OF SCIENCES AND TECHNOLOGIES

Published by the National Scientific
Council, Ministry of Scientific Research
and Technological Innovation
Democratic Republic of Congo

ISSN (Online): 2959-202X ISSN Print) :2960-2629 DOI: 10.59228/rcst

www.csnrdc.net

Our review is indexed in the following platforms::



Subscription conditions

Ordinary : 15\$
Support : 30\$
Honor : 50\$

The National Scientific Council (NSC) is the sole supervisory and decision-making body for all research centers and institutes in the DR Congo

In accordance with article 24 of Ordinance-Law n°82-040 of 5 November 1982 on the organization of scientific and technical research, the National Scientific Council is responsible for:

1. to deliberate on the guidelines and priorities of the scientific and technological research plans and programs to be carried out in the country ;
2. to deliberate on the allocation of resources from the State budget to scientific and technological activities;
3. supervising the financial management of research centers and institutes
4. approving the budgets of the Research Institutes and Centers and submitting them to the Minister for Scientific Research for approval
5. approving the organic regulations of the Research Institutes and Centers;
6. proposing to the Minister for Scientific Research the appointment and promotion of scientific and administrative personnel.

For advertisements and partnerships contact us

Printed on Jan 30th 2026



Boulevard du 30 juin, Place Royal, Immeuble Kasai, 2nd Floor, Left Wing, Gombe Township



Site Web : www.csnrdc.net



Email: contact@csnrdc.net



N°Tél: +243 81 87 96 646; +243 89 85 32 086