





# To the discovery of the **Caterpillar**, a key actor in ecosystems

Gilbert KABANDA KURHENGA launches UNIKIN reforestation project NSC strengthens the capacities of RCSARP/Luputa researchers

Plastic bottles and health risks: a hidden danger in our walls?

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information for submission

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**BULLETIN February 2025** 

# <u>Editorial</u>

# Peace, an imperative for a common future



Professor Pius MPIANA TSHIMANKINDA NSC President

eace, that simple yet far-reachng word, is undoubtedly one of the most sought-after concepts by mankind over the centuries. Yet, although the idea of peace is universally shared, access to it remains a complex quest, often hampered by the conflicts, injustice and inequalities that still mark too many regions of the world. Peace is not simply the absence of war. It is a state of serenity and harmony between individuals, communities and nations. It is based on respect for fundamental rights, social justice and the recognition of differences. Peace, the true foundation of progress, enables everyone to live in dignity, to express their thoughts freely, and to participate in the economic, political and cultural life of their country.

History and current events show us that peace can never be taken for granted. Armed conflicts continue to ravage entire regions, leaving behind irreparable material and human destruction. Added to this are the daily violence, discrimination, social injustice and economic inequality that undermine the stability of many societies. Peace is not simply the absence of war, but also the presence of conditions that enable everyone to lead a serene, fulfilled and equitable life.

If peace is to be sought at a global level, it must also begin at an individual level. Every gesture, every word, every decision can be an act of peace. Cultivating respect, listening and empathy in our daily interactions is an essential step towards building a more harmonious society. Peace begins with simple but powerful actions: accepting others in their differences, seeking peaceful solutions to conflicts, and promoting dialogue instead of confrontation.

On a global scale, international institutions such as the UN play a crucial role in conflict management, but the real strength of peace lies in the commitment of every nation and every individual. It is our collective responsibility to promote values of solidarity, equality and a culture of respect for human rights within society. However, we must not forget that peace cannot be sustainable without justice. True peace requires societies where social and economic injustice is combated, where human rights are protected, and where peoples can govern themselves freely. Post-conflict reconciliation, the righting of wrongs, and the building of a culture of non-violence are essential elements of peace.

In short, peace is not a distant ideal, but a concrete and achievable goal if we act collectively. It requires constant commitment at all levels, whether local, national or international. In this interconnected world, peace must become a common good, a shared objective so that everyone can live in security, dignity and freedom. Far from being a utopia, peace is the sine qua non of our common future.

Peace is a daily choice. Let's choose it.

## Activities of the Minister of SRT

#### **Gilbert KABANDA KURHENGA launches UNIKIN reforestation project**

he Minister of Scientific Research and Technological Innovation, Gilbert KABANDA KURHENGA, planted a royal palm tree on the Monseigneur Luc Gillon monument at the University of Kinshasa (UNIKIN) on Saturday, February 15, 2025. This building was constructed in 2018 to honor the memory of the first Rector of Lovanium University.





On this occasion, Minister Gilbert KABANDA KURHEN-GA indicated that this palm tree should grow to give a beautiful landscape, embellish this monument, contribute to the reforestation of the university site and fight against global warming.

For his part, the Rector of the University of Kinshasa, Professor Jean Jacques KAYEMBE, recalled that the tree is the very symbol of growth and cohesion. He added that the plant was literally and figuratively a breath of fresh air for the University of Kinshasa at this particular moment in its history. He congratulated the Minister, in his capacity as President of the Lovanium alumni, for having organized this activity in 2025, a year in which UNIKIN is determined to reunite its alumni so that everyone can give back to their "Mother" what they have received from her.

MSRTI communication unit



## Gilbert KABANDA and Louis WATUM present intellectual property titles to Congolese inventors

n January 23, 2025 in Kinshasa, the Minister of Scientific Research and Technological Innovation, Gilbert KABANDA, and his colleague Louis WATUM, Minister of Industry and Development of Small and Medium-sized Enterprises, presented 37 young Congolese with industrial property titles. These young people have distinguished themselves in their professional fields through technological innovations that meet the vital needs of the population.

The ceremony took place at the Ministry of Industry and Development of Small and Medium-sized Enterprises. Minister Louis WATUM pointed out that this ingenuity makes it possible to meet the vital needs of the population by creating jobs and, above all, wealth. He reminded the audience that industrial property rights are a set of rights linked to the protection of innovation and creation in the field of industry. This mainly includes patents, which protect technological innovations for a period of 20 years.

Minister Louis WATUM pointed out that neoclassical economic theory had attributed growth in production to an increase in the factors of production, namely capital and labor. For his part, Minister Gilbert KABANDA KURHENGA indicated that today's ceremony was aimed at promoting inclusive and sustainable industrialization through scientific research and technological innovation based on the real development needs of our country in the most diverse fields. He thanked His Excellency the President of the Republic, Head of State, Félix TSHISEKEDI TSHILOMBO, for his invaluable support in making Scientific Research and



Technological Innovation an instrument of introversion and diversification of the National Economy, and of strengthening the productive capacity of our economy.

"We have reflected on the problems facing the DRC and come up with appropriate solutions. I believe that by highlighting our innovations, purchasing power will increase and enable the DRC to achieve technological sovereignty. This merit can only encourage and delight us to pursue our research and believe in a better future for the DRC", declared Daniel WA MUKINA, representative of Congolese inventors.

Communication Unit of the Minister of SRTI

Dr. Gilbert KABANDA KURHENGA, Minister of SRTI

#### Speech by His Excellency the Minister of Scientific Research and Technological Innovation Dr. Gilbert KABANDA on the occasion of the award of patents to inventors and innovators of the Conclave

**C** To you, Excellency Louis KABAMBA WATUM and dear colleague, I express my gratitude for the frank collaboration and symbiosis between our two Ministries, a complicit duo at the service of the Republic. Thanks to your involvement, patents are now issued to Congolese inventors and innovators free of charge and with complete peace of mind. This act will forever remain indelibly engraved in the annals of our country's industrial history. Through you, I would like to thank the entire staff of the General Secretariat for Industry for their invaluable technical assistance. Dear patentees, it is for you that we are all here today. I would therefore like to address you, to tell you how happy I am to be living this moment.

Brief indeed, but full of meaning. Your enthusiasm, your strength to create and invent are today rewarded by a patent, which is above all, a public recognition of your talent. A patent is an official document granted by the State to one or more persons for an invention or innovation. The patent allows its beneficiary to exclude third parties from commercial use of the patented invention. In exchange for this right, the author must disclose his invention or innovation.

In this way, anyone interested can learn about the essence, functioning and workings of the new creation, transform it and improve it in turn. In this way, knowledge is enriched, and creative activity and competition are stimulated in this field of invention. Dear patentees, you should also know that a patent provides protection for the period during which the invention is covered by the patent, more precisely 20 years from now, during which time no one can use, sell or produce it without your consent. For 20 years, you are the sole and absolute master.

So I encourage you to use it, and enjoy all the rights attached to it, because after 20 years, it automatically falls into the public domain. My colleague, the Minister of Industry, and I will always be available to accompany you on this new road. Exploit your patents to the full and make the most of them, because the worker deserves to be paid. You could become millionaires, as the President of the Republic wishes.

For latecomers, an additional list has been signed by the Director of the Scientific Research and Technological Innovation Cabinet and will be forwarded to the Industry Department for the granting of patents. In conclusion, I would like to express the wish that, at the start of this new year, your professional development and your continued inventiveness will contribute to the advent of a better Congo to which we all aspire, a Congo which, in our national anthem, we want to be "more beautiful than before". Vive les inventeurs et Innovateurs congolais Vive la République Démocratique du Congo Happy New Year!

Thank you very much.

## **USC**Activities

#### NSC strengthens the capacities of RCSARP/Luputa researchers

ily photo Pr. D. Tshibangu (Trainer), Coges members and RCSA the training certificates received

he National Scientific Council (CSN) organized training modules for researchers at the Research Center for the Selection and Adaptation of Ruminants and Pigs (RCSARP/Luputa) from February 08 to 09, 2025 in Luputa.

The opening ceremony began at 10:15 a.m. with the playing of the national anthem, followed by a prayer and a minute's silence in memory of Mr. Tshibaka, Dr. Godefroid Tshibanda and Lukanda Munina, all of whom served RCSARP/Luputa. Two speakers led the training session: Professor Damien Tshibangu, Cooperation Advisor at NSC, and RCSARP/Luputa General Director Dr Gabriel Cyrille TSHIAMALA KABEYA.

Dr Gabriel Cyrille TSHIAMALA KABEYA introduced the Center and stressed the importance of this training, recalling that a first session had already taken place in 2016, focusing on office automation and delivered by teachers from INPP/Mbuji-Mayi.

After the General Manager's speech, it was the turn of the day's speaker and trainer, Professor Damien TSHIBANGU, to present the content of the modules. The two-day training program comprised 12 modules, including: general aspects of scientific research, writing scientific articles, bibliography, responsible management of research data, slide presentation (PPT), scientific marketing and researcher visibility, writing projects and mobilizing research funds, as well as valorization of research results and entrepreneurship (business plan). On the first day, the speaker told participants that the policy of scientific research is to encourage researchers to carry out their research in different fields, in order to enlighten the world with know-how and bring researchers up to the level of technological innovation. As scientific research is a noble profession like the judiciary and others, it plays a very crucial role in the writing of articles, the drafting of research projects and so on.

In his general remarks on scientific research, he highlighted a number of training objectives, including :

- Mastering the ABCs of research;
- Understand the role of research;
- Follow a university didactic pedagogy program;
- Master the rules of scientific writing (project, research article);
- Understand the basics of scientific reputation and bibliometrics;
- Understand how to seek funding for research.

He also alluded to the three bodies of the NSC: the plenary gathering the Heads of Research Institutions, the Presidency and the Permanent Secretariat.

In his address, the speaker of the day spoke about the commitment of a researcher within a Research Institution, outlining the prerequisites for being hired as a researcher, while emphasizing that this constitutes a noble profession reserved for superior minds who spend their time in research. He went further to give the etymological definition of a researcher: "he who seeks with care, with authority is therefore necessary", he added. With the day's activities interrupted by a coffee break, the trainer then presented the qualities and professions of a researcher, as well as the role of the latter in the running of a Research Institution. He also covered the writing of scientific articles, anti-plagiarism management using Mendeley software, the responsible management of research data, tips for producing an effective PowerPoint presentation, and strategies to help researchers increase their scientific reputation and visibility. Finally, he presented a model for scientific writing, sources of funding available to researchers, and a list explaining the concepts and abbreviations used in the field.

On the second day, the speaker recapitulated the material presented on the first day, adding new dimensions from the remaining modules. After the trainer's lecture and interaction on the remaining modules, there was also a question-and-answer session. The second day's training began at 9:30 a.m. and ended at 11:55 a.m. with closing remarks by the General Manager of CRSARP/Luputa, followed by a prayer and the playing of the national anthem. Before closing the seminar, each participant received a training certificate.

#### MBALA KABUYA RCSARP/Luputa and Christian MAZONO/NSC



## Echoes of Research Institutions

### A scientific conference on sickle cell disease at RIHS

esearch Institute in Health Science(RIHS) to organize a scientific conference on sickle cell disease in March 2025 in Kinshasa.

The announcement was made by members of the RIHS Management Committee. During this scientific event, several themes will be presented by researchers.

Every June 19, the RIHS organizes scientific conferences to discuss this pandemic, which is wreaking havoc in households around the world. The organization invites researchers, specialists, doctors, patient associations, traditional practitioners, inventors, etc. to present concrete solutions for combating this disease, while shedding essential light on the challenges ahead.

Through these scientific conferences, the RIHS is constantly raising public awareness of the harmful consequences of the union between people (AS with a dominant S) who may have sickle cell children, and this institution benefits from carrying out medical tests that can determine a person's genome.

These conferences also provide an opportunity to gain a better understanding of sickle cell disease, scientific advances in medicine and solutions to improve the quality of life of these patients. Broadly speaking, sickle cell disease is a non-contagious genetic mutation that alters the shape of the red blood cell, causing breathing and brain problems. It is particularly common in populations of sub-Saharan African origin, the West Indies, India, the Middle East and the Mediterranean basin, especially Greece and Italy. This 1st genetic disease present in the DRC is predominant in the following provinces: 2 Kasaï, Bandundu, Central Kongo. To this day, this disease remains largely unknown to many people.

This sickle-cell anemia is due to the mutation of an amino acid in the beta chain of hemoglobin (replacement of an amino acid: glutamic acid by valine at position 6 on chromosome 11). It presents a variety of manifestations, grouped in order of three: vaso-occlusive crises, hemolytic anemia and infections. These chronic manifestations are associated with delayed height and weight, and nutritional deficits. The discovery of this anemia was made in 1904 by James Herrik, a Chicago physician, when he examined a 20-year-old black student hospitalized for cough and fever.

The Centre de Médecine Mixte et d'Anémie SS, abbreviated CMMASS, is a department of the RIHS Scientific Department. This RIHS department, recently rehabilitated to international standards thanks to the support of the Fondation Denise Nyakeru Tshisekedi,



Mars 2

FDNT in acronym, specializes in the treatment of sickle cell disease (SS Anemia). This hospital center, located in the Kalamu commune of Kinshasa, has set itself the objectives of researching sickle-cell anemia, diagnosing the disease, preventing it, and raising awareness among the population of Kinshasa in particular, and the DRCongo in general, of the need for early screening to prevent the disease.

#### MAZONO Christian/CSN



#### The importance of mathematics for society

athematics plays an essential role in our daily lives, our understanding of the world and the development of society. It is often perceived as abstract, but in reality it is everywhere, influencing many aspects of our lives. Some reasons why mathematics is so important.

## An important tool for understanding and solving problems

Mathematics enables us to analyze, model and solve complex problems in a variety of fields. It provides some of the tools to formulate hypotheses, test theories and draw logical conclusions. From managing personal finances to solving scientific problems, mathematics is essential for obtaining concrete, effective solutions.

#### Key to scientific and technological advances

Mathematics underpins many scientific and technological advances. Fields such as physics, biology, engineering and even economics cannot function without a solid understanding of mathematical concepts (designing software, understanding the laws of the universe, or developing innovative technologies such as artificial intelligence).

#### Applications in everyday life

Even outside science and technology, mathematics influences our everyday lives:

- Financial management: calculating a budget, evaluating investments, understanding loans and interest.
- Measurements and conversions: when cooking, tinkering or planning a trip, we often use mathematical concepts to convert units, measure distances or quantities.
- Statistics: interpreting polls, election

results or data analysis in the media requires mathematical skills, particularly in probability and statistical analysis.

#### Developing critical and logical thinking

Studying mathematics helps develop skills in logical reasoning, abstraction, problem-solving and analysis. These skills are transferable to many other areas of life, including decision-making, project management and conflict resolution.

#### The foundations of informed decision-making

Mathematics, particularly statistics and probability, helps us to make informed decisions by enabling us to understand risks, trends and probabilities. Whether assessing the risks of a disease, analyzing economic data or understanding the effects of an investment, mathematics provides us with a framework for making decisions based on facts rather than intuition.

#### Helping us to understand the natural world

Mathematics is a universal language that enables us to describe and understand natural phenomena. Whether modeling weather phenomena, understanding the growth of animal populations or describing the structure of the universe, mathematics offers powerful tools for explaining reality. It is also essential for understanding complex phenomena such as climate dynamics or the evolution of species.

#### Central role in the global economy

Mathematics is omnipresent in the world of economics. It is used to model markets, forecast economic trends, calculate financial risks and optimize resources. Economists use mathematics to analyze complex variables, such as economic growth, inflation rates or consumption patterns

#### Innovation and space exploration

Space exploration, such as sending satellites into orbit or planning missions to Mars, requires advanced mathematical calculations. The laws of physics and trajectory calculations rely on complex mathematics to ensure that spacecraft arrive at their destination without error.

Finally, mathematics is not just an academic field reserved for researchers and science students. It is a fundamental tool for understanding the world, solving problems and making informed decisions. It lies at the heart of technology, economics and science, as well as our everyday lives. Their importance extends beyond the school: they are the driving force behind our collective and personal progress.

#### STIB Editorial Office

#### Risk management and its applications in the DRC. The current situation in Eastern DRC

The Democratic Republic of Congo, our beloved country, faces a number of risks. In a project or program, a risk is defined as an uncertainty which, once realized, could have a negative impact on the project or program. There are three main areas of risk: project scope, schedule and cost. Before we talk about the country, let's not forget that the country exists and is progressing because of the thousands of projects that exist.

Some are private projects, others are mixed or state projects. Before talking about risks, we need to identify them, assess them and then estimate the probability of occurrence. One of the risks that a country must always fear, apart from natural disasters, is war. In his time, M'ze KABILA created the Strategic Reserve, a service attached to the Presidency of the Republic.

Unfortunately, this brilliant idea was not well understood at operational level. It

should be part of the contingency plan to either mitigate or transfer risk. At one point, this department had become a producer of maize and manioc. In fact, by way of example, it should be saying, if there's a war in the DRC and the power goes out, as was the case with the Rwandan aggression in Central Kongo and now in North Kivu, what can be done to mitigate this risk? No one has ever thought in these terms.

The war in the East is not the last, and we need to think about it in depth to ensure that what is happening in North Kivu today does not happen again. An informed man is worth two. A war is a project, and as such, it is bound by what we call the triple constraints of project scope, cost and timetable. War in these days has implications in several fields, hence the importance of including the managerial aspect in the management of a war. I prefer to say war management. Without good management, there's a risk that the objectives set will not be achieved, and that the war will be more costly and longer than expected.

There are two good ways of identifying risks: SWOT analysis and document analysis. Please bear with me, dear readers, as I can't go into detail here, given the type of publication.

In conclusion, management in general and risk management in particular must be taught everywhere, and especially in our war schools. Without management, I fear that instead of creating events, we will suffer them. It's important to remember that some great inventions have been made in times of crisis.

> Christophe BANKIMY LESSAY, PhD and Researcher/CGI

#### To the discovery of the caterpillar: a key actor in ecosystems

The caterpillar, often perceived as a simple stage in the life cycle of butterflies and moths, plays a fundamental role in ecosystems. Although sometimes overlooked or misunderstood, their presence is crucial to maintaining ecological balance. Here are just a few aspects of the caterpillar's importance in nature



#### Role in the food chain

Caterpillars are an important food source for many animals, including birds, small mammals, predatory insects and other predators. They provide a protein-rich food source for these animals, particularly during the breeding season, when food demand is high. By their presence in the food chain, caterpillars help to maintain the balance of populations of other species. Although caterpillars themselves are not direct pollinators, their presence in plants (which they consume) influences ecological interactions around these plants. Some caterpillar species are specific to particular host plants, which can help maintain plant diversity in ecosystems. Once they have become adults (butterflies or moths), these insects can play a direct role in pollination, contributing to plant reproduction.

Regulating plant populations



LCaterpillars play a role in balancing plant populations. By feeding on leaves and other plant parts, they regulate the growth of plants, particularly woody and herbaceous plants. This can prevent the dominance of certain plant species and promote biodiversity by preventing certain plant species and promote biodiversity by preventing certain plants from taking up too much space in an ecosystem.

#### Contribution to decomposition

Some caterpillars specialize in breaking down dead plant matter. By eating dead leaves, bark and plant debris, they contribute to the ecosystem's nutrient recycling process. Their activity contributes to the decomposition of organic matter, enriching the soil with nutrients.

Studying biodiversity and the environment

Caterpillars are also used in scientific studies to measure the health of ecosystems. They are sensitive to environmental changes, such as pollution or loss of biodiversity. As a result, they serve as indicators of habitat quality and local biodiversity.

Role in agriculture

Although some caterpillar species are considered crop pests, others play a role in soil fertilization through their degradation of organic matter. In addition, the study of caterpillars enables farmers to better understand ecological interactions and manage crops more sustainably.

#### In conclusion

Although caterpillars may sometimes seem harmful or unattractive, they are in fact essential to ecosystems on many levels. Their role in the food chain, in regulating plant populations, in pollination, and in recycling nutrients is essential to maintaining ecological balance. By preserving caterpillars and their habitats, we ensure the health and resilience of the ecosystems around us.

STIB Editorial Office

#### Accumulation of micropollutants in fish from the Kasai River: risks for human health

study carried out in November 2024 by Dr Henry Manza of the Kinshasa School of Public Health revealed a worrying contamination of the most commonly consumed fish species in the Kasai River. The study focused on three specific sites (Kutumuke, Dima-Lumbu and Bendela), located around 22 km from Bandundu, in the Democratic Republic of Congo.

Between June and November 2024, Dr. Henry Manza, under the coordination of the University of Kinshasa's School of Public Health and in collaboration with a team from Forel's Department of Environmental and Aquatic Sciences at the University of Geneva's Faculty of Science in Switzerland, collected fish samples from three strategic points in the Kasai River, near Bandundu. Laboratory analysis quantified the presence of mercury, cadmium, zinc, lead and other heavy metals in fish tissue.

Mercury was analyzed using atomic absorption spectrophotometry (AAS), while the concentration of other inorganic mi-



cropollutants (Cr, Co, Ni, Zn, Se, Ag, Cd and Pb) in fish muscle tissue was determined using inductively coupled plasma mass spectrometry (ICP-MS). The study revealed a significant accumulation of toxic substances in the muscle tissue of three fish species widely consumed in the region: Marcusensis angolensis, Distichodus fasciolatus and Synodontis contigus.

According to the sediment data, the high concentrations of heavy metals are linked

Some species of fish in the Kasai River



Marcusenius angolensis

to the accidental pollution of the Tshikapa and Kasaï rivers in late July 2021 when a dam burst at the Catoca mine in Angola.

Maximum inorganic micropollutant concentrations (mg /kg dry weight) of Hg (1.43),



Cd (0.65), Zn (71.49) and Pb (0.79) were detected in the muscle tissue of M. Angolensis, S. contigus and D. fasciolatus respectively. Concentrations of Hg, Cd, Zn and Pb in the fish samples exceeded the regulations set by the Food and Agriculture Organization



of the United Nations and the World Health Organization for human consumption. When ingested by humans, these heavy metals can cause serious health problems, including neurological disorders, kidney disease and cancer.

#### NATIONAL SCIENTIFIC COUNCIL

It is vital to set up a rigorous monitoring system for water and fish quality in the Kasai River. To achieve this, sampling areas need to be expanded and a greater number of species studied, in order to obtain a comprehensive assessment of contamination.

At the same time, we need to strengthen local laboratory capacities or, failing that, collaborate with better-equipped laboratories to carry out the necessary analyses.

In terms of management, a number of measures are required: Consider temporary or permanent fishing restrictions in the worst-affected areas.

Promote sustainable fishing practices. Significantly improve industrial and domestic wastewater treatment, and why



not take action to restore the rights of families affected by the environmental and ecological tragedy of 2021.

In addition, it is essential to carry out epidemiological studies to assess the longterm impact on the health of the population, and to carry out further research to identify the precise sources of pollution. By implementing these actions, we will help to protect both public health and the environment..

> Jean-Luc BALOGIJE SELENGE / MDRC/BUNIA



#### Plastic bottles and health risks: a hidden danger within our walls?

he use of plastic bottles containing bisphenol A (PBA) as structural elements in walls is raising concerns about potentially harmful off-gassing. While the practice may seem environmentally friendly, it carries significant health and safety risks.

Underestimated toxic emissions

Plastic bottles exposed to heat, UV light or chemical degradation release a variety of dangerous compounds:

• Bisphenol A (PBA): This endocrine disruptor can cause hormonal disorders, reproductive problems and increase the risk of hormone-dependent cancers.

• Volatile organic compounds (VOCs): These substances can cause irritation, allergies, respiratory disorders and increased long-term cancer risks. • Phthalates: Also endocrine disruptors, they are linked to negative effects on reproduction and chronic health.

• Toxic gases in the event of fire: When burning, plastic releases carbon monoxide, carbon dioxide, hydrogen chloride and hydrogen cyanide, potentially lethal gases.

• Microplastiques : Avec le temps, les bouteMicroplastics: Over time, bottles degrade, releasing microparticles that can be inhaled and harm respiratory health.

Solutions to reduce risks.

In the face of these dangers, several measures need to be considered:

• Fire protection: Use fireproof materials to limit the risk of combustion.

• Effective ventilation: Promote good air circulation to reduce the concentration of harmful gases.

• Protective coatings: Apply airtight barriers to minimize the release of toxic substances.

#### Rethinking the Ecological Alternative

While the use of plastics in construction is motivated by environmental concerns, it must not be at the expense of public health. Safer alternatives, such as the use of BPA-free plastics or biosourced materials, must be explored to combine ecology and safety..

#### NGOMA /CBRNEC

## At the time of Innovation

# BHAYO Patrick presents "MASAPO", an initiative to preserve traditional tales through cartoons

ASAPO is a cartoon adaptation of Congolese fairy tales, initiated and produced in the DRC by Congolese innovator Patrick BHAYO of the Permanent Secretariat of the National Scientific Council. An animated series of 15 tales per season will be published each year. The program is a tool for teaching, discovery and the transmission of values.

The MASAPO project proposes an ambitious approach: a mission to safeguard the tales and, by extension, the culture of the DRC. The first step is to collect these tales from the current generation of living storytellers. Secondly, to adapt them into animated cartoons, so as to promote them through all possible channels (television, radio, social networks), both nationally and internationally, and to perpetuate them for future generations.

AWith MASAPO, the world will discover for the first time the wisdom of Congolese tales through an animated series produced by the Congolese themselves, using their talents and know-how. A real first.

Masapo will solve a number of problems, including the following:

Illustrations from the pilot episode: Etoo the hare and Eyia the crocodile

MASAPO CONTE CONGOLAIS

e lièvre)

(LE CROCODILE)

- The threat of the disappearance of our tales: adapted as a cartoon, these tales will spread and become immortalized for the benefit of the Congolese people, the world and future generations;
- *Ignorance of our tales*: our tales will be broadcast on our national and international channels, promoting our traditional values. We'll have a mass educational program on our ancestral values;
- The non-existence of animated film production in the DRC: this project will give a boost to the Congolese film industry;
- *LUnemployment and lack of expertise in the field of animation* : this project will create around twenty jobs at startup, but will create many more over the years, as it will attract several productions once the studio is well established.

What's more, a training program will be set up in parallel with the animation studio's various productions.

#### Why this Project

Faced with the evolution of technology, globalization and the development advocated by all, society is changing at breakneck speed. Soon, villages (the last bastions of storytelling tradition) will be electrified and connected

to the Internet (some already are). Villagers will spend more of their time in front of the TV watching their favorite series or glued to their smart phones chatting on Whatsapp or posting and commenting on photos on Facebook than gathering around the fire in the moonlight to listen

to the village griot pass on the Wisdom of our ancestors. The country is losing more and more of its tales and all the wisdom they contain.



What's more, the world is undergoing a violent acculturation through foreign media and social networks, leading people to a loss of cultural identity and traditional values, and we in the DRC are helplessly undergoing it! Despite the great cultural wealth of the country, with its more than 400 ethnic groups, no cultural education program is offered to the young people who represent the future. This is the problem that prompted Congolese Patrick BHAYO to initiate the Masapo project.

It's worth noting that MASAPO was one of the 50 prize-winners to score at least 75% at the Scientific Genius Forum (SGF). This innovation, which aims to safeguard the country's cultural values, requires substantial financial support to ensure its materialization.

MAZONO Christian and Alfred/NSC



# Sleeping sickness: the DRC goes from 6,000 cases in 2012 to 340 cases in 2024.

e National Program for the Control of Human African Trypanosomiasis (NPCHAT) and the DRC Ministry of Health celebrated the seventh National Day for the Control of Human African Trypanosomiasis (HAT), better known as sleeping sickness, on February 06, 2025 in Kinshasa.

The aim of the celebration is to raise public awareness of this deadly disease, especially with a view to mobilizing appropriate action to achieve its elimination.

Bijou PEKWA, Deputy Director of the Cabinet of the Minister of Health, Hygiene and Social Welfare, who opened the event, spoke of the significant progress made by the DRC in the fight against this endemic disease. She revealed that the country has gone from 6,000 cases in 2012 to 340 cases in 2024.

Rachel Bronzan, representative of the Bill and Melinda Gates Foundation in the DRC, reaffirmed her organization's support for government actions aimed at eliminating this disease by 2030.

For his part, the Director of the Drugs

for Neglected Diseases Initiative (DNDI) stressed that his organization is currently developing a new single-dose oral treatment called "Acoziborole", which will pave the way for the elimination of sleeping sickness. He called on the local and international communities to join forces to put an end to this neglected disease.

Following the ceremony, a scientific day was organized, focusing on the current state of HAT worldwide. Dr. Priotto Gerardo of the World Health Organization (WHO), who led the session, reported progress in the fight against HAT, with a 97% reduction in cases worldwide. With regard to interrupting the transmission of sleeping sickness, Dr. Raquel of the Antwerp Institute of Tropical Medicine (ITM) outlined the various strategies for combating HAT, namely: case detection and treatment, and vector control.

In the Democratic Republic of Congo (DRC), 24 provinces are currently considered endemic, with the exception of North and South Kivu. The most affected coordinations remain those of Kwilu, Kwango and Maï-Ndombe. Representatives of the Belgian and Swiss Embassies in the DRC, the Director of the National Coordination for Community System Strengthening (NCCS), the Representative of the National Institute for Biomedical Research (NIBR), the Director General of the National Institute for Public Health (NIPH), the Representative of the Program for Appropriate Technology in Health (PATH), and other technical and financial partners in the health sector took part in the event.

The theme of this year's National Day for the Control of Human African Trypanosomiasis, or sleeping sickness, celebrated each year on January 30, is "Unite, Innovate, Act and Eliminate".

MAZONO Christian/NSC and Actualité cd

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Objective: To carry out research in the field of mathematics teaching with a view to	NSRC (Natural Sciences Research Center /Lwiro)		
improving quality. Address: 84, Av. des Ambassadeurs C/ Gombe; E-mail: mabelamatendorostin@gmail. com; Tel: 0815031877	Objective: To carry out, promote and coordinate research in the fields of science, tech- nology and industry throughout the DRC.		
GRC (Geophysical Research Center)	Address: LWIKO LWIKO , TEKKITOKY OF KABAKE/SUD KIVU; E-mail: robert.kasisi@umon- treal.com; Tel: 0996806699.		
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.	MDRC (Multidisciplinary Development Research Center /Bunia)		
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AIPS (African Institute of Prospective Studies)	Address:BUNIA/ITURI; E-mail: Kermwathomas@gmail.com; Tel: 0997717070		
Objective: To carry out forward-looking studies in order to propose solutions to crises and problems linked to the evolution of African societies. Address: Av. Cardinal Malula, C/ Lemba; E-mail: mgrtarcibangu@yahoo.fr; Tel: 0996658741	HRC (Hydrobiology Research Center in Uvira) Objective: To program, coordinate and monitor research activities in hydrobiology, lim- nology and hydrology.		
MDRC (Multidisciplinary Development Research Center/Matadi)	hydrobiology, limnology and fisheries in all ecosystems. Address: 115, AV, du Congo, O/Kimanga, C/Kalundu, LIVIRA / SLID, KIVLI: E-mail: bida-		
Objective: To carry out operational research in central Congo in the field of applied linguistics of African cultures and applied sciences	kamuhoza@gmail.com; Tel: 0997716307.		
Address :Hotel de la porte Matadi; E-mail: Mwanzanicolas5@gmail.com; lei:081503/949 NCPIR (National Committee for the Protection of ionizing Radia- tion)	CBRNEC (Chemical, Biological, Radiological and Nuclear Excellence Center) Objective: To contribute to the mitigation of chemical, biological, radiological		
Objective: - Regulatory authority for protection against the dangers of ionizing radia- tion in the DRC management of radioactive sources of radioactive materials such as	and nuclear risks. Address: 106, Blvd du 30 Juin, C/Gombe; E-mail: Odette.kabena@gmail.com; Tel: 0816904370		
uranium. Address: 4675, Av. Colonel Ebeya, Immeuble Quitus 2ème niveau; Email: Flory1963@	GVO (Goma Volcanological Observatory)		
gmail.com;Tel: 0816684665 AFC (French Atomic Energy Commission)	Objective: Prevention of volcanic risks by monitoring volcanoes and Lake Kivu. Kivu; Management of natural risks; scientific research.		
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	Address:142, Avenue Du Rond Point ; Quartier Les Volcans ; Commune de Goma ; Ville Goma; North-Kivu; E-mail: mavotulu@gmail.com; Tel: 0998584734		
research. Address: UNIKIN building; E-mail: Steve.muanza.kamunga@gmail.com; Tel: 0808643348	WERC (Water and Environment Research Center) Objective: To serve as a training and research center focusing on water and environ-		
CGI (Congo Geographic Institute) Objective: Production of the base map of the DRC at a scale of 1/50,000 and its derivatives. Address: 106, Blvd du 30 Juin, C/Gombe; E-mail: Fidele.balibuno@unikin.ac.cd; Tel:	<i>internal 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 informa- tion on the impact of climate change in the DRC. Promote education and the right to the environment.		
GMRC (Geologic and Mining Research Center)	Address: 44, Comité Urbain C/ GOMBE; E-mail: ngelipatience@gmail.com; Tel: 0818105625.		
Objective: To carry out studies and analyses to improve knowledge of the soil and subsoil of the national territory. Address: 44, Av. de la démocratie, C/ Gombe; E-mail: rolandkakule@gmail.com; Tel: 0851506161	RCSARP (Research Center for the Selection and Adaptation of Ruminants and Pigs) Objective: To carry out studies and research in the field of ruminant and pig breeding		
NIASR (National Institute for Agronomic Study and Re- search)	Address: 45, Av. Lumumba, Q/de la gare, LUPUTA/ KASAI-ORIENTAL; E-mail: tshamalaga- briel@gmail.com; Tel: 0851817370		
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Address: 13, Av. des Cliniques, BP :2037 KINSHASA , C/Gombe; E-mail: domikankonde@ yahoo.fr; Tel: 0818248620	Objective: To carry out studies and research in the field of oral health. Address: 13, 10ème Rue, Industriel Quarter, C/Limete; E-mail: Cnrsbd.rdc.@gmail.com;		
RCALC (Research Center into African Language and Culture)	Tel: 0822244152; 0811835159; 0840922982		
Objective: To coordinate and carry out all research projects concerning African lan- guages and cultures. Address: 53 C. Av. Makiso, blvd du 30 iuin Kisangani/Tshopo Tel: 0851934320	Objective: Promotion and dissemination of science, technology,arts and letters.		
AFRC (Agro-Food Research Centre/Lubumbashi)	supportion inventive initiatives. Address: Sciences Faculty/ UNIKIN local 28; E-mail: jjmuyembet@gmail.com; Tel: 0813330242		
Objective: To identify processes for processing and preserving basic local agricultural products.	MIPRC (Matadi Interdisciplinary Pedagogical Research Center)		
ro in injurve the quality of infipulted of locally produced localstifts by applying approved standards and quality control. Help the technological development of the existing agro-industry by providing them with technical assistance wherever possible. Address: 1, Av. Président ILEO, Q/CRAA, C/Lubumbash; E-mail: Julesnkulu@gmail.com; Tel.0997131002	Objective:Information science. Address: The buildings of the Matadi Higher Pedagogical Institute; Tel: 0896501462		



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