



## EDITORIAL

### **Hopes high as deterrence of environmental related crimes gets a special Police unit**

The recent launch of the Environmental Police Protection Unit (EPPU) marks yet another milestone in the quest to warranty effective protection of our country's environment.

The highly laudable initiative given the emerging trend of such offences worldwide, could undoubtedly add value to existing conservation efforts and successes that Rwanda realized in the past years, while at the same time paving the way for a threat-free environment sector in the future.

Launched on June 11th by the Rwanda National Police, the EPPU is going to be operational countrywide having liaison officers at every district. It will have powers to arrest, summon and investigate all kinds of environmental related crimes.

The establishment of the particular Unit has been timely. It has come at a time when environmental related crimes are often less known and reported as compared to other crimes yet they impose a security and safety threat to both national and global development.

The Rwanda National Police has always been playing a major role in the conservation drive with input mainly covering legal enforcement, environmental awareness and education campaigns among others.

The EPPU launch therefore marks yet another step forward towards taking Rwanda's environment protection further, since the Unit's main concern is to ensure that environment is not tempered with or compromised in any way.

It will, alongside enforcing different legal instruments, protect environment in all its aspects. Its activities also include spontaneous checks at porous borders, periodical joint operation with park managers in national parks and trainings provision on a series of environmental conservation modules.

Generally, the establishment of the Environmental Police Protection Unit is an assurance that our environmental wealth is in the safe hands and has what it takes to prosper while at the same time providing livelihood services to the current and future generations whose survival dearly depend it.

But, as we laud the Rwanda National Police for the good initiative, let's all play our part by taking maximum environmental conservation measures. Let's all put Environment protection central to our minds while at the same time sticking to provisions of existing environmental laws nationally and internationally, and conventions ratified in this regard.

With all these in place, we can expect a world that is free of poaching; illegal pollution and disposal of hazardous waste, and illegal trade in chemicals among other actions that fall in the category of environmental crimes.

What we are sure of is that only individual and cross-sectoral willingness coupled with palpable preservation actions can help us achieve this even before the Police come in.

Enjoy reading our Newsletter issue 27

**Dr. Rose MUKANKOMEJE**

**Director General, Rwanda Environment  
Management Authority (REMA)**



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# Deforestation, wastes and improper agriculture could cause soil contamination, Experts warn

By Peter Muyombano

**T**he public has been warned against practices namely improper agro-chemical use, deforestation and improper waste management, among others; for they could contribute to soil contamination with adverse effects on environment.

Even though the soil contamination concern is not alarmingly severe in Rwanda, environmental experts say that there are potential risks, and could have effect in the event that caution is not duly exercised across different sectors.



*Deforestation and improper mining could cause soil contamination*

Referred to as the occurrence of pollutants in soil above a certain level thus causing deterioration or loss of one or more soil functions, soil contamination is due to causes that derives mainly from agriculture, deforestation, wastes and urbanization; according to Samson Twiringire, the Chemicals and Pollution Officer at Rwanda Environment Management Authority (REMA).

The phenomenon, he said, can be as a result of the soil itself or instigated by persistent pollutants or chemicals that lead to the alteration of the soil texture.

Other causes include improper use agro-chemicals some of them falling in the category of pollutants that last long and are hard to decompose.

“You can find a farmer using a lot of fertilizer beyond the quantity

needed by crops, and hence the unabsorbed fertilizer contaminates the soil. Also some agro-chemicals like DDT are harmful in their nature, some of them hardly decompose, they end up going deep down in the aquifers which could lead to water contamination as well,” Twiringire said.

Equally, deforestation on either small or large scale exposes the soil to the risk of erosion which





*Improperly managed waste is said to release chemical into the soil hence contamination*

damages the soil by washing some of the inherent nutrients.

Beyond deforestation and improper use of agro-chemicals comes improper waste management. The latter is said to cause the release of concentrated liquid with chemicals that penetrate the soil. "They end up in eventual soil contamination," says Twiringire, adding that industrial solid and liquid waste, in this case, are the most soil contaminating.

Urbanization, too, features among the causes which, in Twiringire's view, some people seem to ignore. "Less planned the urban expansion is, the more the soil contaminations because erecting a house, building a road and other infrastructures requires digging the soil, which changes its nature," he indicated. Unlike soil contaminants in agriculture, industries particularly

release the top soil contaminating category of substances categorized in Persistent Organic Pollutants (POPs), which last long in the soil and water.

According to Ndizeye Eliezer, Coordinator of the REMA's Project on the Eradication of Persistent Organic Pollutants (POPs) in Rwanda, POPs include primarily chemicals and fluids known as PCBs that are used in transformers and other electric utensils, and can last for over 30 years with intact composition which contaminates a number of things including the soil.

"These persistent pollutants are very dangerous because they hardly decompose and are threats to human lives, soil and water," Ndizeye pointed out.

Even though for the Ministry of Agriculture and Animal Resources

(MINAGRI) cases of soil contamination are not frequent; it, however, warns that risks are very much likely if sectors whose activities are potentially linked to soil contamination are not cautious.

Dr. Charles Murekezi, the Fertilizer Program Coordinator said that importation and use of chemical fertilizers is closely controlled with special attention paid to rice plantations in marshlands.

"Still if our methods are not properly applied, it can contaminate the soil, so we exercise due care, or else decontamination is applied," he said.

Soil decontamination involves reforestation, use of organic nutrients and green farming, among other methods; according to experts.



# Revised NBSAP: Rooting out causes of biodiversity loss made a priority

By Johnson Kanamugire

**S**ubsequent to focused consultations and exchange of views with different stakeholders, the awaited fifth National Biodiversity Strategy and Action Plan (NBSAP) was early this year approved to guide the preservation of Rwanda's biodiversity wealth.

The revised NBSAP is part of the country's ongoing efforts to ensure that various components of the biodiversity wealth are utilized in a sustainable manner to attain socio-economic development and better livelihood of the citizens.



REPUBLIC OF RWANDA



REVISED AND UPDATED NBSAP



April, 2014





The new strategy, which is a fifth of its kind since 2003, equally reflects an up-to-date framework for conservation, sustainable use and equitable sharing of benefits from biodiversity use and ecosystems services of the country, as is a requirement to all parties to the Convention on Biological Diversity (CBD), a treaty to which Rwanda is signatory.

Financially supported by the Global Environment Facility (GEF) through the United Nations Environment Program (UNEP), the revised NBSAP is a product of broad consultations and discussions among stakeholders directly or indirectly involved in biodiversity management and conservation activities namely; the public and private sector, civil society and local communities both at central and devolved levels.

It sets out lined-up priorities for conservation, targets and strategic actions as agreed upon after a thorough scrutiny of previous NBSAPs, which informed present challenges and gaps to be addressed.

Rwanda has for the past years realized great successes with regard to addressing the pressures on national biodiversity, and there are numerous ongoing efforts in this regard.

However, there are still gaps and challenges namely inefficiency in coordination of the NBSAP implementation activities; lack of frequent monitoring and assessment for efficiency; lack of link with other international instruments for complementarities, and

conflicting priorities depending on institutional mandates, among others.

This is what explains why the current NBSAP has put forward the need for partnership, awareness building, ownership and shared responsibility among concerned institutions and stakeholders for its implementation.

Should the revised NBSAP get effectively implemented, it is expected to address issues to do with root causes of biodiversity loss which, in the Rwandan context, range from natural processes to anthropogenic actions.

According to a recent research, the country's biodiversity is increasingly threatened and degraded by, among others, encroachment, over-harvesting of resources through poaching, deforestation, as well as increasing socio-economic activities such as mining, urban development, etc.

Additionally, land tenure and poor management of natural resources coupled with focus on increasing production at the expense of natural resources conservation are among key issues that lead to intensive biodiversity loss.

According to Rwanda Environment Management Authority (REMA), the revised NBSAP also provides modalities for improving the biodiversity policy and legal framework, and could as well serve as a reference for the development and updating of biodiversity strategies and actions implemented in different sectors.

It broadly spells out a range of five objectives and 19 national targets

that aim to halt biodiversity loss and increase the economic benefits associated with the biological resources utilization and ecosystems services.

In objectives feature namely to improve environmental stability for natural ecosystems and their biodiversity; to restore degraded ecosystems and maintain equilibrium among biological communities; to establish an appropriate framework for access to genetic resources and equitable sharing of benefits arising from biodiversity use and ecosystems services, and finally to improve the policy, legal and institutional framework for a better management and conservation of national biodiversity.

The above objectives along with the targets were projected in a way that makes the revised NBSAP a reflection of the country's vision for biodiversity and the broad strategic mechanisms that Rwanda will take to fulfill the objectives of the Convention, while the action plan comprises the concrete actions to be taken to achieve the strategy.

Nevertheless, for Rwanda to achieve full and effective implementation of this strategy, according to REMA, Government agencies, academic institutions, Non-Governmental Organizations and communities-based organizations which have a mandate relating to biodiversity conservation ought to take responsibilities for activities that fall within their mandate.



# SOLAR ENERGY: A Green energy alternative that saves on bills

By Deo Munyaneza

**I**n Rwanda's situation where wood is still a reliable domestic energy source for the majority of residents despite adverse health and environmental effects, solar energy use could be the cheaper, clean and sustainable alternative.

Current solar power users attest that they have slashed energy bills as compared to what it used to be with conventional electricity (hydropower).



*Solar energy is credited for being cheaper, clean and sustainable*

Annonciata Mukagasana, a mother of four and user of solar power in Nyarugunga Sector, Kicukiro District says she can now save Frw5 000 off the monthly energy bill she used to pay previously.

“My monthly expenditure on power since I started using solar panels has never gone beyond Frw5 000 while I used to pay Frw10 000,” proudly confirmed Mukagasana who also encourages other families to

emulate her choice.

Besides, solar power affordability enabled job creation for technicians, hair saloons businesses, among other entrepreneurs while at the same time lighting rural households not connected to the national grid.

Nkuriye, 60 years old and father of seven in Jenda Sector, Nyabihu District, Western province, says that he waited until 2010 to own a small solar panel in his house.

He witnesses that his children extraordinarily performed in their studies after he installed solar power light that enabled them to regularly revise their lessons at night.

“Now children can study in the evening and I can watch TV from my home,” he said adding that thanks to solar powered lights his children did well in class.

However, a number of people still use “outdated” energy alternatives namely candles,





*Renewable energy alternatives are expected to deliver about 28% of the predictable 70% household electricity connectivity by 2017.*

kerosene, among others for energy amid limited hydropower availability due to lack or insufficient power supplies facing different parts of the country.

Experts warn that such old energy alternatives constitute side effects to the health of the users and the environment in general. “Kerosene’s smoke have high levels of black carbon that may damage lung function thus accelerating respiratory problems and possible cancer and brain risks,” said Remy Norbert Duhuze, Director of Environmental Regulations and Pollution Control at Rwanda Environment Management Authority (REMA).

According to Duhuze, choosing solar power could be an off grid

solution to address all these effects since the alternative is clean and cheaper.

Duhuze shares this observation with Francois d’Assise Nezerwa, owner of Dassy Enterprise, a local dealer in solar-powered products.

Nezerwa says that for a number of households and small businesses in Rwanda, solar power lighting has brought positive changes to their living conditions socially and economically.

“Sunlight is almost always available in Rwanda throughout the whole year. If only we could take advantage of it to gradually reduce dependence on expensive hydropower,” he explained.

Scientists localize Rwanda closer to the equator with pretty much

sun lights availability at all times.

This localization could have enabled Rwandans to wind up hydropower shortage problems by developing solar energy, but lack of awareness of the renewable energy alternatives and technology is still a challenge that halts massive use of solar powered lights.

Statistics from Rwanda Energy Group (REG) indicate that, to date, the solar energy accounts for less than 1% while off grid solutions such as solar power and other renewable energy are expected to deliver about 28% of the predictable 70% household electricity connectivity by 2017.



# WED 2015: Call for action as humanity needs exceed planetary capacity

By Johnson Kanamugire

**I**ssues to do with the rapidly world's growing population, increasing need of resources, coupled with the production of more wastes than the Earth can handle could put humanity into a deplorable ecological deficit; if nothing is done to consume with care and responsibly manage the planet's natural resources.

Threats namely food scarcities, large scale and prolonged poverty, diseases, biodiversity loss, waste accumulation and climate change; among others, are linked to environmental degradation and the worst are yet to come, predicts researchers.



*Rehabilitation activities going on the previously-endangered Gishwati and Mukura Forest Reserves to soon be upgraded to a National Park.*

Given the apparent magnitude of the issue, this year's World Environment Day (WED) has directed much emphasis and attention to raising the alarm to all humanity by especially calling for efforts and action to save the planet's critically depleting ecosystems before it reaches an irreversible trend.

The just ended June 5th day, also celebrated countrywide under the theme, "Seven Billion Dreams. One Planet. Consume with Care", has been a reminder that humanity

is at an ever increasing rate that the consumption of natural resources is critically higher than what the planet can sustainably provide.

According to the United Nations, if current consumption and production patterns remain unchanged and the global population grows to its expected figure of 9.6 billion, three planets will be needed to sustain humanity's ways of living and consumption by 2050.

Researchers, however, predict that the impact could worsen

particularly in developing countries.

According to Dr. Rose Mukankomeje, the Director General of Rwanda Environment Management Authority (REMA), Rwanda like other world nations cannot detach itself from the concern since impacts know no borders, and every individual's actions and decisions, however small they could be, have implications.

This explains why the nationwide series of awareness campaigns



*Dr. Rose Mukankomeje, the Director General of Rwanda Environment Management Authority (REMA) addressing the public at the June 5th celebrated World Environmental Day.*

and other environmental actions conducted in line with this year's WED celebration focused critically on the need to promote resource efficiency and cleaner production to improve sectors' productivity and competitiveness, while at the same time enhancing environmental performance.

"Let's promote resource efficiency and sustainable production and consumption by doing more and better with less resources, reduce our footprint and adopt a more sustainable lifestyle," remarked Dr. Rose Mukankomeje, REMA's Director General at the launch of the Landscape Approach to Forest Restoration and Conservation (LAFREC); a project that aims at rehabilitating the previously-endangered Gishwati and Mukura Forest Reserves.

The two forests that were nearly facing complete depletion – from their initial size of 250,000ha reducing to 28,000ha in the 1980s

-- due mainly to human activities, could soon be upgraded to a National Park if the pending bill in Parliament is passed into a law.

Gishwati-Mukura reserve will, therefore, become Rwanda's additional major tourism attraction hosting countless flora and fauna species.

According to REMA, on top of the call for promoting resource efficiency and sustainable production and consumption, this year's WED theme is meant to request everyone to evaluate his or her consumption habits and take maximum environmental conservation measures.

Initially, the world should be a place where people have the opportunity to live satisfying their needs within the means of one planet; getting space for houses, roads, cropland, forests, and fishing grounds, space for absorbing wastes and many others.

Nevertheless, the earth's ability to supply these ecological services has limits. Currently, many countries are running ecological deficits, if you try to compare the state of natural world with the human demand and impact upon it as well as ability to regenerate.

Every nation's consumption of footprint varies in harmony with existing environment management and protection policies in place.

REMA hence calls both individuals and institutions to put ecological limits central to mind and find new ways to live within the Earth's bound, by changing attitudes and evaluating consumption habits.

Otherwise, disregarding environmental issues could jeopardize the attainment of the country's key development goals and compromise the future.



# Concerted efforts could fully end banned polythene bags' use - REMA

By Deo Munyaneza

**T**otal elimination of banned polythene bags' use could be reached as institutions join hands in a new drive that is expected to curb illegal import, sale and use of the material blamed for threatening citizens' health and environment.

Rwanda Environment Management Authority (REMA), Rwanda National Police (RNP), Rwanda Revenue Authority (Customs services) and Rwanda Bureau of Standards have joined efforts in a mutual cooperation that seeks to completely eradicate the use of polythene bags.



*Permanent inspection among vendors and stores is expected to take the lead in a drive towards total eradication of plastic bags use.*

Dr. Rose Mukankomeje, REMA's Director General said that through partnership with institutions and associations whose duties include controlling the use of plastic bags, different strategies namely but not limited to enforcement of the law, permanent inspection among vendors and stores and focused public awareness will lead to intended results.

The stand was reached after realizing that some people are trying to smuggle and trade in the banned polythene bags.

"We have increased inspections on all entry points of the country and inside to crackdown on such traders who are trying to sneak polythene bags into the country through porous borders. However, all these efforts may be fruitless

if the public don't support this initiative by reporting anyone suspected to be dealing in banned polythene bags," observed Dr Mukankomeje.

According to the Rwanda National Police, several suspects were arrested in connection with illegally importing banned plastic packages, thanks to individuals who timely reported such



*Environmental studies reveal that polythene bags are the ecosystem's common enemy.*

acts via community policing entities, reserve force and security guards.

Last year, for instance, a vehicle loaded over 10,400 cartons of banned plastic bags, among other illegally imported goods was intercepted sneaking into the country through a porous border in the eastern part of Rwanda.

Commenting on the act, Supt. Modeste Mbabazi, the Central region Police Spokesperson insists that anyone selling or using unauthorized plastic bags will be punished as provided by the law.

“Everyone must know that the use or sale of plastic bags is illegal in Rwanda because of their negative impacts on our environment and punishable in accordance with the law prohibiting the manufacture, importation, use and sale of polythene bags in the country,” Supt. Mbabazi said urging

Rwandans to fight against any other unlawful business.

Prominent environmental research revealed that polythene bags are the ecosystem's common enemy. Plastic bags pollute water sources and cause widespread deaths among both wild and domestic animals which accidentally ingest them.

In addition, plastics get scattered on agricultural land, hindering agricultural production, as the non-biodegradable materials lay down the soil, preventing water penetration into the soil and preventing plants to grow.

Sometimes, plastic wastes are also burnt and release toxic pollutants into the air, causing air pollution. In addition, due to the lightweight nature of plastic bags, they are easily blown, hence resulting in dirtiness.

Rwanda, in 2008, passed the law regulating the use, sale and production of polythene

bags with punitive provisions; whereby commercial companies or any person found in possession of prohibited polythene bags without authorization in their stores, manufacturing or using them, shall, as per article seven, be punished by an imprisonment of six to twelve months and a fine of Rwf100, 000 to Rwf500, 000 or one of the two penalties.

Furthermore, any unauthorized person who sells polythene bags is also punished by a fine ranging from Rwf10, 000 Rwf300, 000.

Any unauthorized person who uses polythene bags is also punished by a fine ranging from Rwf5, 000 to Rwf100, 000 and his/her bags shall be confiscated. And, in case of recidivism, the penalty is doubled.

Polythene bags' smugglers, who are for the bigger part small scale vendors, attest that they are aware of dangers associated with the use of the banned polythene bags.

However, they opt for smuggling the banned bags as, according to them, environmental -friendly packaging materials are not see through, some of them expensive and not able to carry some commodities such as oil foodstuff, meat; among others.



## Improper drug storage by owners of closed drug shops poses health and environmental concerns

By Peter Muyombano

**D**rugs from drug shops that were recently closed in a bid to enforce the law No 47/2012 of 14/01/2013 relating to the regulation and inspection of food and pharmaceutical products, are reportedly improperly stored and disposed of; thus causing health and environmental concerns.

*This is after the Ministry of Health started implementing this law whose provisions require that a pharmacist or pharmacy owner only be a holder of a bachelor's Degree in pharmacy.*



*Nurses-run drug shops countrywide were closed down*

Consequently, all nurses-run drug shops countrywide were closed down.

According to Joseph Kabatende, the in-charge of pharmacies at the Ministry of Health, the Ministry decided not to extend their expired three-year

temporary permit saying that there was no need of drug shops but pharmacies and health posts instead, a proposal most drug sellers said they were not ready for.

“They’ve told us to close our drug shops and bring the drugs

to health posts,” said Catherine Ingabire, a former drug store owner in Nyanza district.

About 300 drug shops countrywide were closed. As a result, nurses who still had stores full of drugs at the time of closure chose to take them home as they





*Drugs from drug shops that were recently closed are reportedly improperly stored*

wait for potential buyers.

Modeste Kayitana who chairs the committee member in the association of nurses owning drug shops in Rwanda confirmed the fact, saying many could not afford paying the rent for drug storage after their businesses were shut.

The practice, therefore, raises numerous health and environmental dangers according to experts.

“Drugs which are not properly handled or well-disposed off can end up endangering the lives of not only people, but soil and water,” noted Samson Twiringire, the Chemicals and Pollution Officer at Rwanda Environment Management Authority (REMA).

“It is a serious problem because first, those drugs are in a place they shouldn’t be. There are different people at home who can

be affected. [...] almost all drugs have a tag indicting that they should be kept far from children, and you know that human beings are at the center of the environment,” Twiringire added.

According to the Ministry of Health, drug store owners in question may have misunderstood information about the way forward.

The spokesperson of Rwanda’s Ministry of Health Nathan Mugume explained, “There are instructions that were given about handling those drugs.

The concerned should approach health officers in sectors or districts so that they help them distribute those drugs, but they are not allowed to sell or store them at home”.

According to REMA’s Chemicals and Pollution Officer, Samson

Twiringire, there should be a way that pharmacies could sell those drugs before they expire, and if some get expired, then incinerators should be used to dispose them off.

Urgent actions is needed, he said, because the more these drugs stay in homes when neither the Ministry of Health nor any other institution knows where/how they are stored or even their quantity; the more dangers they cause.

“There are potential risks that expired drugs can be sold to patients illegally or the owner can fail to dispose them as provided. There could be lot repercussions,” observes Twiringire who also adds that if those drugs containing chemicals decay in the soil, they could cause soil contamination.



*WED 2015 was celebrated through series of environmental conservation activities across the country under the National Environment Week, culminating in the launch, on June 5th, of Landscape Approach to Forest Restoration and Conservation (LAFREC) project that is aimed at rehabilitation of Gishwati and Mukura Forests.*



## WED 2015 CELEBRATION



*The Environmental Police Protection Unit (EPPU) launch on June 11th at the Rwanda National Police headquarters in Kacyiru, Kigali. The event was attended by Dr. Vincent Biruta, the Minister of Natural Resources; Dr. Rose Mukankomeje, the Director General of Rwanda Environment Management Authority (REMA); Lamin M. Manneh, the One UN Resident Coordinator and the Inspector General of Police (IGP) Emmanuel K. Gasana.*

