



## **Toxics-Free Sustainable Development Goals (TF-SDGs)**

### **COVID-19 Impacts on Chemicals and Wastes**

**Front Commun pour la Protection de l'Environnement et des  
Espaces Protégés (FCPEEP), DR Congo**

#### **Executive Summary**

## **1-Some major points related to the COVID-19 pandemic in DRC in general and in South Kivu province in particular**

The resilient management of health crises in fragile states such as the DRC is always marked by several shortcomings due to the ineffectiveness of state institutions in the adoption of resilient strategies and/or policies. The various health crises that the DRC has experienced over the last decade with the outbreak of several epidemics such as cholera, Ebola virus disease (EVD), polio and measles, have had negative social, environmental, economic, and health impacts.

The COVID-19 pandemic, which was declared in China in 2019, quickly spread to the rest of the world; DRC as a whole and its eastern province (South Kivu) has experienced direct and indirect consequences of this health crisis.

As a matter of fact, the means used as a global and national response to prevent the spread of the pandemic has also been shown to be a source of great health and environmental concern. It is with the aim of identifying and diagnosing the negative impacts of measures adopted to fight COVID-19 that FCPEEP, with the support of the international NGO coalition "IPEN," carried out several activities. These activities consisted of reviewing the documentation related to the issue, describing and briefly commenting on the COVID-19 pandemic in South Kivu province, analyzing the impacts of the pandemic on the proliferation of chemicals and waste, designing public awareness materials to alert the general public of the hidden potential hazards from chemicals extensively used during the Coronavirus health crisis, and sharing the results of this study and providing some concrete recommendations to local authorities and other relevant stakeholders in order to minimize the adverse effects of the measures put in place to fight against COVID-19.

## **2- The consequences of the pandemic on the proliferation of chemicals and hazardous waste in the province**

The COVID-19 pandemic, which was declared in DRC on March 10, 2020, led to a series of shocks and caused a wide range of visible adverse consequences on human health and the environment throughout the whole country and in the province of South-Kivu in particular.

In the fight against the spread of the Covid-19 pandemic in South Kivu province, a set of barrier/social distancing measures were put in place at the provincial level. Additionally,

health care solutions based on the use of a wide range of chemicals (chemical disinfectants, hand sanitizers) and personal protection equipment were introduced. The chemical additives contained in hydro-alcoholic gels (hand disinfectant solutions) that are largely used in the country are mostly composed of more than 80% ethanol (mentioned on the label). Yet, [the International Agency for Research on Cancer classifies ethanol as a Group 1 human carcinogen](#).

Furthermore, an increase in take away food (due to restaurants being closed to indoor diners) caused a proliferation of take-away packaging and, more specifically, single-use plastics, which have negative impacts on human health and the environment. Plastic packaging (as well as cans, tins, etc.) may contain [bisphenol A](#), a proven endocrine disruptor, which has harmful effects on reproductive health. According to a recent study released by the international NGO network IPEN titled “[Plastic’s toxic additives and the circular economy](#),” plastic packaging is likely to contain several toxic additives (cadmium, lead, microbeads, polycyclic aromatic hydrocarbons, phthalates and Persistent Organic Pollutants (POPs) such as flame retardants and perfluorinated chemicals).

Due to their unsound and uncontrolled management, non-biodegradable waste (medical waste, plastic waste resulting from catering services, and protection equipment such as face masks or mufflers, gloves, safety foot wears and disposable medical camisoles) became rampant in the city of Bukavu and its surroundings during the pandemic to the point of significantly creating a new category of hazardous waste.

This situation fully illustrates the correlation between the COVID-19 pandemic and the spread of chemicals and waste, which has become an issue of concern in South Kivu province. Chemicals that are not approved by the accredited bodies, used face masks, plastic bottles containing hand sanitizers, dishes, cans, spoons, forks and other single-use plastic containers dumped by restaurant owners (the ban on gatherings in public places compelled restaurant owners and others in the food service industry to abundantly demand single-use plastic packaging) have become the main waste generated in the city. In the absence of an appropriate policy put in place by the provincial and central authorities to address this issue, the rivers, lakes, streets, and water pipeline systems have henceforth become the major dumpsites for this new category of waste. More alarming is the fact that due to the characteristics of these wastes (hospital waste, non-biodegradable waste containing toxic

substances), the city of Bukavu in particular and the entire province in general are inevitably heading towards a future health crisis due to the aftermath harmful effects of COVID-19.

This current study carried out by FCPEEP, a local NGO, with support from IPEN's Francophone Africa Hub, on the link between the current pandemic and toxic and hazardous waste pollution, led to the following findings:

**The COVID-19 pandemic has led to an emerging hazardous waste stream falling within the scope of the Basel Convention in DR Congo in general and in South Kivu province in particular.**

While it is true that we did not succeed in collecting reliable statistics from the relevant authorities related to the quantity and quality of inputs used in dealing with the pandemic, our investigations in the field have led to the following estimates: more than three million face masks, tons of liters of hand sanitizers in single-use plastic containers, thousands of medical plastic gloves, thousands of safety foot wears and camisoles were brought into the province to fight against the pandemic. This estimate was made possible via mini surveys among restaurateurs about the use of single-use plastics, as well as a few sellers of face masks and gels. It should be noted that with the advent of the COVID-19 pandemic, there has been an exponential growth in traders of face masks, gels and other barrier measures, which were virtually non-existent before the onset of the health crisis. In addition, another factor that counted in the estimate of the quantity of masks and gels in circulation is the total population of the province, as the use of face masks and gels has been made mandatory by the authorities. Thus, the masks being individual, for a provincial population estimated at 3,500,000 inhabitants, the average of single-use or washable masks used would be between 2.5 million and 3 million.

All of this anti-COVID equipment that continues to enter the province ends up - after only a few days or even hours of use - in landfills and marine ecosystems, or being burned in the open, to name just a few concerns.

### **3- Activities carried out**

To carry out this project, four activities were planned and carried out. These included:

**\*Documentation review on the COVID-19 pandemic in South Kivu province**

We met with provincial authorities in charge of health and distributors of protection kits and other means to limit the spread of the health crisis. At the same time, we read many press articles and magazines dedicated to this issue.

### **\*Design and sharing of awareness-raising documents**

In order to illustrate concretely how the environmental and sanitary threat derived from the COVID-19 sanitary crisis materialized, some communication materials were designed and disseminated through social networks, but also through the mailing lists to which our NGO is affiliated. These materials were made based on field photos, which clearly highlight the problem of COVID-19-related waste in a province where very little effort is devoted to the sound management of hazardous waste (hospital waste, plastic waste, face masks ...).

See some of the awareness-raising materials in the annexes.

### **\*Sharing of results and recommendations**

To address this emerging health concern, our organization le Front Commun pour la Protection de l'Environnement et des Espaces protégés (FCPEEP) organized a media event (press conference) at the end of the activities conducted in order to share the main findings of the field survey with the relevant provincial authorities, but also the media and other civil society organizations. The option of sharing results during a physical meeting was favored over an online meeting in response to the request of local authorities to meet face to face and exchange with the public. It should also be mentioned that the quality of the internet connection during the last few months has been a serious obstacle for any virtual meeting in the regional capital Bukavu.

Members of the provincial government who took part in this work expressed their gratitude to the NGO FCPEEP and its partners for this alert. The Mayor's representative invited the populations to continue to protect themselves from COVID-19 while remaining vigilant to the negative consequences of anti-Covid measures. "It is urgent that we reduce the pandemic in our region without creating other health problems among the populations," concluded the Mayor.

**Some recommendations for the different target stakeholders were also formulated.**

The objective was to promote the sound management of hazardous wastes and sensitize on the importance of restricting the flow of chemicals within the COVID-19 response in order to also protect human health and the environment and avoid future diseases. Clearly, the recommendations are:

**To government authorities (provincial and central):**

- Provide technical and financial support to Civil Society Organizations (CSOs) for better awareness-raising and training of the population on the use of chemicals and sound management of hazardous waste derived from the COVID-19 pandemic in particular;
- Promote transparent management policies aimed at reducing the spread of COVID-19, i.e. the quantity of bottles of hand sanitizers, protective gloves, face masks... must be known in order to optimize their collection after use by the accredited structures;
- The provincial government, in collaboration with the central government, should provide customs border services that intervene in the chain of control with the necessary materials and means that can enable them to identify all illegal products. (Disinfection gels mainly, but also medicines made illegally and artisanally in neighboring countries (Burundi, Tanzania ...) or even in the DRC and sold freely in local markets to populations.)

**To the community-based organizations, media and CSOs:**

- Community radio stations should assist the population by training and informing the public in order to reduce the health and environmental risks related to the inappropriate use of chemicals and anti-COVID-19 protection equipment;
- All civil society organizations should accompany the urban-rural communities towards the sound management of waste in order to guarantee a good living environment for present and future generations;
- IPEN, development agencies and other international partners should continue to support and further accompany community based organization (CBOs) and NGOs to work towards fully achieving the Sustainable Development Goals (SDGs).

#### **4- Selected References**

##### **A. Books and Articles**

- BIGABA, E., «*Sud-Kivu : La ville de Bukavu enregistré ses deux premiers cas de Coronavirus*» [archive], sur *actualite.cd*, 10 avril 2020 et sur *jambordc.info*, 30 mars 2020.
- MUDINGA, E., POLEPOLE, P., OMEGA, T., et KAFUNGA, O. (2020). *(De) masqué : ruse, résilience et résistance - la controverse d'une mesure COVID-19*. Angaza Institute, Covid-19 Séries.
- *Plan Opérationnel COVID-19 Sud-Kivu et Maniema, Avril-Juillet 2020*.
- Présidence de la RDC. Secrétariat technique Covid-19, *Plan de préparation et de riposte contre l'épidémie au Covid-19 en République Démocratique du Congo*, Kinshasa, 2020.
- *Rapport de la Conférence Internationale sur la gestion des produits chimiques, Troisième session Nairobi, 17-21 septembre 2012*.
- *RDC, impacts sanitaires et socioéconomiques de la COVID – 19, analyse prospective et orientations de la riposte multisectorielle*, Kinshasa, Mai 2020
- Situation Épidémiologique en RDC », sur *stopcoronavirusrdc.inf*
- [www.congovirtuel.com › page\\_province\\_sud\\_kivu](http://www.congovirtuel.com/page_province_sud_kivu), [visited on November 24, 2020]

## **B. Oral sources (interviews)**

- Josué ARUNA SEFU, Coordinator of the South Kivu Environmental Civil Society, interview held in Bukavu on November 20, 2020
- Interview conducted at City-Market/Bukavu on November 20, 2020