

# The need for Forensic Science Regulation to enhance quality assurance, the Zambian Case

By Innocent Makasa

Forensic science has gained popularity in resolving crime and humanitarian catastrophes. On a daily basis country, globally, are using some form of forensic science to resolve crime, and the reports of such cases are all over social media. The forensic industry has revolutionized the way crimes are detected and investigated, and its importance cannot be over-emphasized.

Forensic scholars and researchers have continued to publicize the important role forensic science plays in the criminal justice system and in the environmental and wildlife protection.

Despite the advancements made in forensic science over the years, there is a downside, with isolated but telling reports of misapplication of science resulting in the miscarriage of justice.

**1. The Innocence Project**, associated 45% of the wrongful convictions in the cases they investigated to misapplication of forensic science in form of; Unreliable or invalid forensic discipline, Insufficient validation of a method, Misleading testimony, Human error/Mistake, Misconduct.

It is my considered view that the reported misapplication of forensic science is nothing but the tip of the iceberg. Mostly because the majority of forensic laboratories conceal the acts, or have no capacity and systems to detect these acts. This sad scenario will persist if forensic laboratories are left to self-regulate and/or operating without national entities with statutory powers to enforce forensic standards and guidelines.

## Calls for Oversight

A number of scholars have weighed in on the calls for enhancing oversight of forensic science delivery citing widespread reports of a miscarriage of justice due to forensic science misapplication.

In their article titled **2. "Science serving justice: opportunities for enhancing integrity in forensic science in Africa"** published in 2021, Antonel Olckers and Zoë Hammatt clearly outlined the existing pragmatic reality of forensic practice in Africa. Among the many issues highlighted included the need for "Regulation, certification, accreditation, and oversight"

Recommendation nine (9) in 2009, a report by the National Academy of Sciences in the United States of America, titled **3. "Strengthening Forensic Science in the United States: A Path Forward"**, encouraged the National Institute of Forensic Science to explore means of enforcing the codes of ethics, while recommendation eight (8) encouraged Laboratories to undertake quality procedures designed to identify mistakes, fraud, and bias among other.

In 2020 an Indian report titled **4. "Perspective plan for Indian Forensics"** was presented to the Government of India in which recommendation five (5) was on the need to establish an oversight statutory body, called Forensic Council of India (FOCI).

I strongly recommend that policymakers in Africa find time to read the reports referenced in this article especially the one done by Antonel Olckers and Zoë Hammatt as it speaks to the specific needs of Africa.



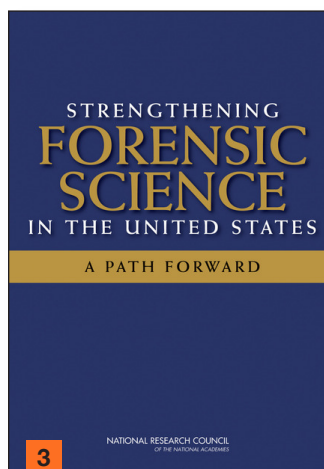
The Innocence Project

<https://innocenceproject.org/?causes=misapplication-forensic-science>



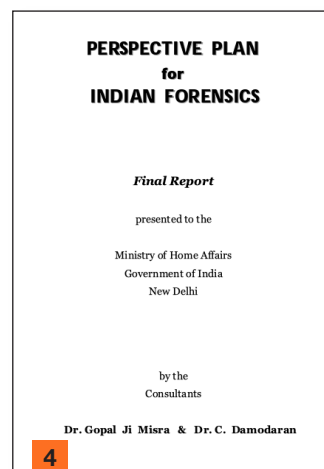
Science serving justice

<https://www.tandfonline.com/doi/full/10.1080/20961790.2021.1989794>



Strengthening Forensic Science in the United States

<https://www.ojp.gov/pdffiles1/nij/grants/228091.pdf>



Perspective plan for Indian Forensics

[https://www.mha.gov.in/sites/default/files/2022-09/IFS%282010%29-FinalRpt\\_0%5B1%5D.pdf](https://www.mha.gov.in/sites/default/files/2022-09/IFS%282010%29-FinalRpt_0%5B1%5D.pdf)

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## Is the Zambian case a miss or hit?

### Too soon to call!

When developing its legal framework for forensic practice, Zambia considered areas of weakness and provided for the establishment of the National Forensic Authority, the regulator of forensic science and forensic pathology practice in the country with statutory powers to enforce standards and guidelines on forensic facilities in the country. It is envisioned that the regulator will use its statutory powers to ensure forensic facilities (Public and Private) in Zambia adhere to the set minimum quality standards and guidelines. This, to the best knowledge of the author, is the first-ever regulator of forensic science in Africa and second in the world after the UK's forensic regulator with statutory powers to enforce standards and guidelines. In Zambia, we would rather not offer the service than offer a faulty or substandard service, especially those that impact the lives of individuals, families, and societies.

Zambia's National Forensic Act No.2 of 2020 established the regulator of forensic practice, established an independent medicolegal death investigator, and established a department mandated to offer forensic science and biometric services independent of Law Enforcement and Investigative Agencies. ([https://www.parliament.gov.zm/sites/default/files/documents/acts/The%20National%20Forensic%20Act%20No.%202%20of%202020\\_0.pdf](https://www.parliament.gov.zm/sites/default/files/documents/acts/The%20National%20Forensic%20Act%20No.%202%20of%202020_0.pdf)).

### Is Regulation the golden bullet?

Regulation is not a golden bullet against the intentional or inadvertent misapplication of forensic science, however, it is one of the many ways to ensure quality and objectivity in forensic science delivery. Forensic facilities should ensure other equally important mechanisms are in place for regulation or oversight to achieve the intended results. Systems such as Quality assurance, Self-regulations, and establishment of the expert evidence admissibility criteria are some of the things that can complement regulations or oversight mechanisms.

### What are the Benefits of regulation?

- Misapplication problems will be detected faster
- Improves Self-regulation to avoid regulator sanctions
- Enhances validation of methods and techniques
- Standardizes methods and techniques

In conclusion:

- We must endeavor to develop forensic policies that enhance quality assurance in forensic practice.
- It is the duty of each forensic provider to guard against the misuse of forensic science.
- At all times, including when the Regulator is in place, we MUST;
  - o self-regulate, and
  - o Adhere to quality measures in our practice.



### Innocent Makasa

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#### About

Mr. Innocent Makasa is a well-qualified Forensic Scientist (Criminalist) with a Master of Philosophy in Biomedical Forensic Science. He has over ten years of experience in crime detection and general Police duties. He is a believer in the use of research and emphasizes the need for proper crime scene management for successful crime detection.

He has extensive experience in general crime investigations as well as in the development and management of laboratories, research, and training of staff. With a rare combination of qualifications and experience, Mr. Makasa is an accomplished Criminalist, researcher, and trainer.

Mr. Makasa hopes his research skills will significantly help in the establishment of effective strategies in crime management across Africa. His passion is in having professional, objective, and impartial law enforcement for a peaceful and safer Africa. He believes improving crime detection and preventive measures should be ongoing and in tune with current trends.

He is currently, the Chief Forensic Analyst spearheading the reforms in Forensic analyses in Zambia. Being the Technical Director QA for the National Forensic Science and Biometrics Department, his roles include forensic analysis of evidential material from Law Enforcement Agencies and State institutions in Zambia. He is a well-rounded expert in Human Identification strategies. His achievements include the contributions towards the establishment of the first-ever Forensic Biology Laboratory in Zambia, the enactment of the National Forensic Act, the Establishment of the first-ever Forensic regulator in Zambia, the draft of the forensic regulations and guidelines, sourcing of funds from cooperating partners to procure the first-ever DNA Laboratory equipment for the Forensic Biology Laboratory, and working on the establishment of the forensic background allelic frequency Databases for Zambia in respect of Autosomal-, Y-, and X- STRs.

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