The South African Constitution states that every South African has the right to sufficient safe and nutritious food. To provide enough food for our people, we have to use our natural resources responsibly. If we don't, we could lose many of our plants and animals species.

Who can help us secure our food through responsible use of our animal and plant heritage?

The Biosafety Regulator!

Meet Julian Jaftha,
Senior Manager:
Genetic Resources Management
of the Department of Agriculture
BSc (Biological Sciences)
BSc Hons (Microbiology)
MSc (Virology),
PhD (Microbiology)

…the worst thing that can go wrong:
"Non-compliance to conditions set in a permit could have a serious effect. It is our job to monitor compliance."
…the most common misconception about the job:
"Some see my job as simply stating "Yes" and "No" for genetically modification (and that we mostly say "Yes".)

What does Julian do?

Julian ensures that the gene pools of our animals and our plants are conserved and used in such a way that our food supply is secured, now and in the future. To do this, laws have to be made to protect the genes of those plants and animals from which we get our food. For instance, regulations exist which determine what genetic material (e.g. seeds) can be imported and exported. Julian's team also studies the indigenous seeds farmers are using in rural areas and the characteristics these seeds have, for example a hybrid of a plant species that has adapted over many years to grow in very dry conditions. They store some of these seeds in the national genebank to make sure that the useful characteristics that these seeds "carry", are not lost.

Julian and his team also make sure that modern scientific advancements, such as scientists' ability to change the genetic make-up of a plant, do not influence the safety of our food for animals and humans and are not harmful to the environment. As part of this regulation process, Julian works with independent experts and other government departments to decide whether they will issue a permit for field trials or to import a GMO crop. Scientists do not need permits for research in laboratories.

What do you need to be a biosafety regulator?

Characteristics: Sound linguistic capabilities have to back up your aptitude for science as you will draft laws and formulate conditions of permits; sound communications skills and assertive qualities
Important school subjects: Biology, Mathematics, Physical Science
Qualifications: BTech – Biotechnology; BSc – Natural Sciences/Biological and Life Sciences/Biotechnology/Microbiology/Molecular and Cell Biology or similar Post-graduate degree and research experience in the relevant scientific fields would be advantageous

Where can I get a job as a biosafety regulator?

Government, consultants

Related careers:
It is crucial to have a scientific background and therefore a microbiologist or biotechnologist could progress to a career as regulator, which is not a career entry point.

PUBLIC UNDERSTANDING OF BIOTECHNOLOGY