

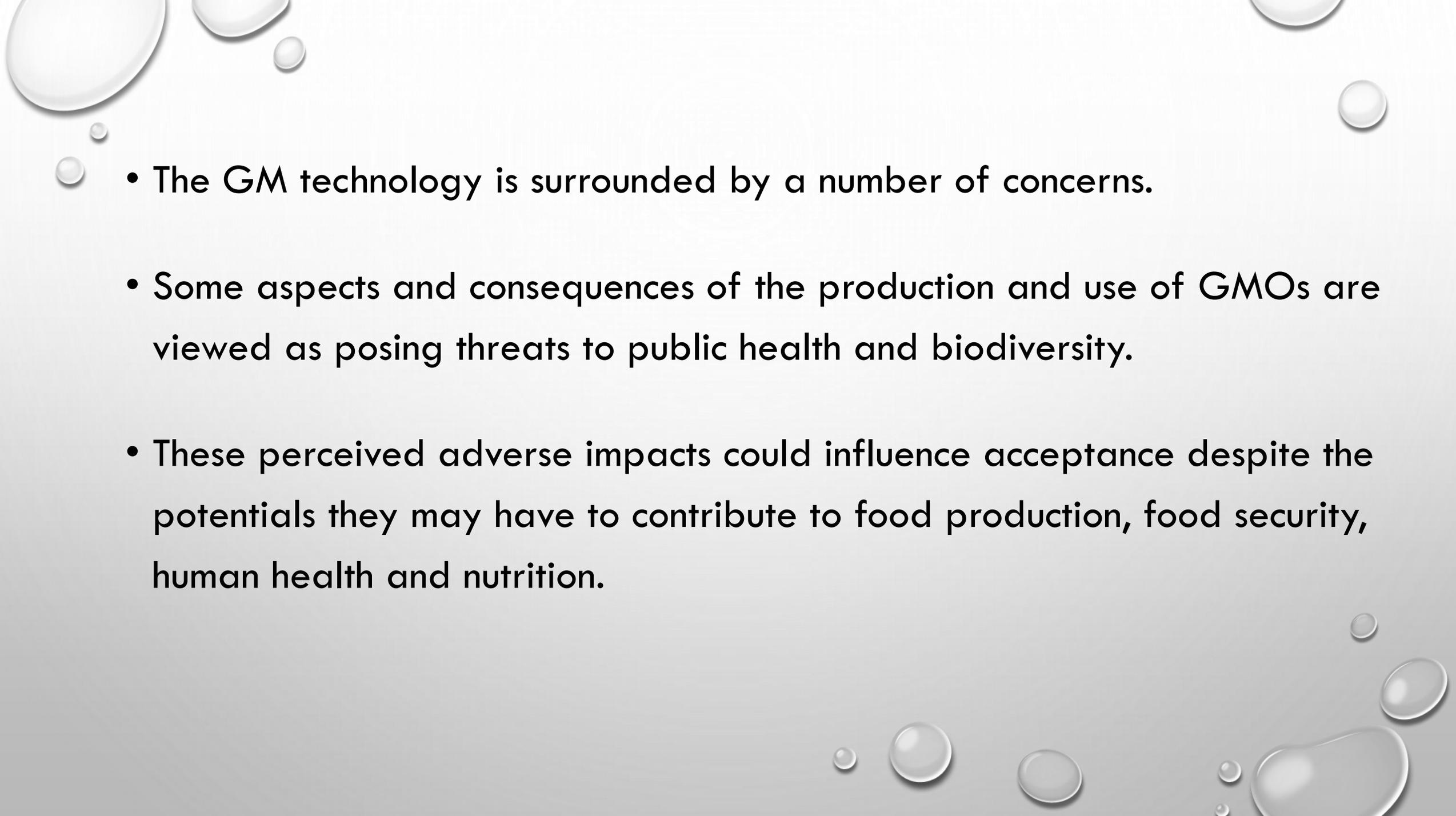
The background of the slide is a light gray gradient, decorated with numerous realistic water droplets of various sizes. The droplets are rendered with soft shadows and highlights, giving them a three-dimensional appearance. They are scattered across the slide, with a higher concentration in the upper and lower right areas.

GENETICALLY MODIFIED ORGANISMS (GMOs) IN NIGREIA: FACTS AND FICTION

STAKEHOLDERS ROUND TABLE
TUESDAY 15 NOVEMBER, 2016

AREAS OF CONCERN REGARDING GMOs

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- The GM technology is surrounded by a number of concerns.
 - Some aspects and consequences of the production and use of GMOs are viewed as posing threats to public health and biodiversity.
 - These perceived adverse impacts could influence acceptance despite the potentials they may have to contribute to food production, food security, human health and nutrition.



Areas of Concern

Food and feed safety

- Human and animal health
- Environmental safety

FOOD AND FEED SAFETY

- Allergenicity
- Toxicity
- Horizontal gene transfer, particularly of antibiotic-resistant genes

ENVIRONMENTAL SAFETY

- On non-target organisms (bees and butterflies)
- Gene flow transfer of genetic material from one organism to another e.g. pollen leading to invasion of weeds
- Effect on the ecosystem. Scientific proof needed to substantiate claims.



- Other concerns about GMOs which also attend most technological innovations in a society. These are risks not caused by the technology itself.

- Socio-economic

- Ethical

- Political

- Cultural



REGULATORY CONTROL ON GMOS AND PRODUCTS

- National Biosafety Management Agency Act, 2015
- Application of Biotechnology in Nigeria
- Prevent any adverse effects on human health, animals, plants and environment.
- *GMOs* safe to grow, safe for the environment and safe to eat?

NIGERIAN ACADEMY OF SCIENCE (NAS) RECOMMENDATIONS

Regulations enforced to minimize risks and maximize benefits. Claim of safety must be scientifically valid

- Every *GMO* to undergo thorough testing and mandatory review. Rigorous long term monitoring may be required
- Governments should rely on scientific research for setting standards. Nutritional standards harmonized with Codex standards

NAS RECOMMENDATIONS CONTD.

- Strict guidelines to check and control inflow of GM foods and feeds, even genetic materials for research purposes
- Research capacities must be strengthened. Government to invest in research and put in place relevant structures geared towards development of country specific products
- Outcome of research on GMOs must influence government policies that protect human and animal health and natural resources