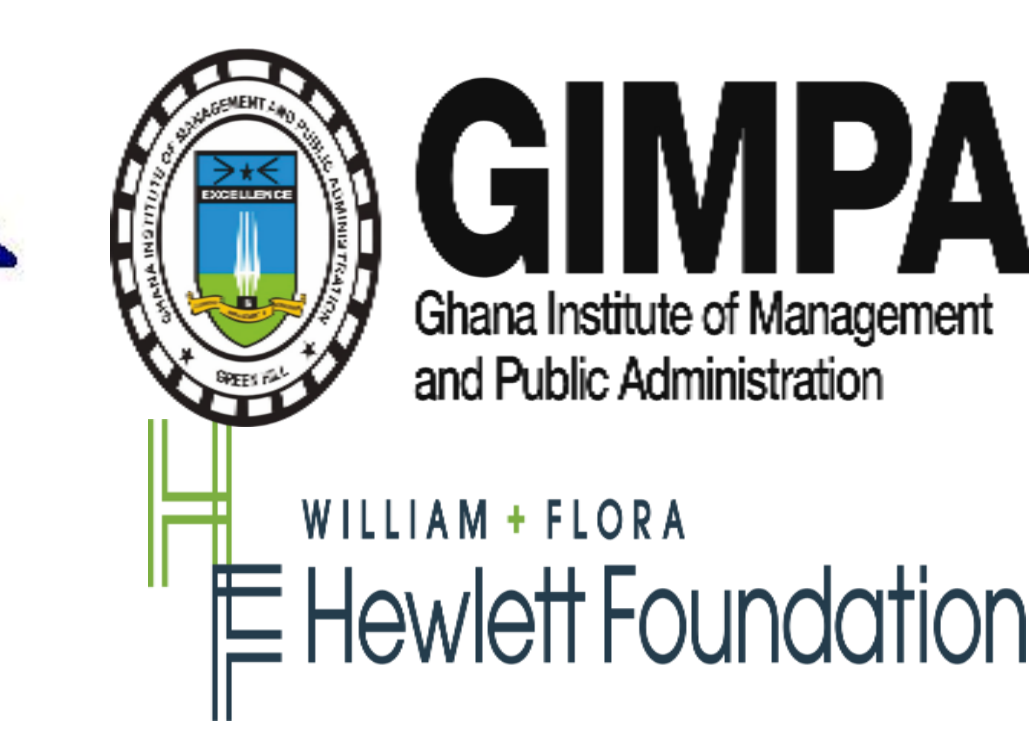


# Impact Assessment of Waste-to-Resource Management for Circular Economy and Green Growth Development in Nigeria and Ghana



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## Introduction and Objective

Poor waste management results in environmental and socioeconomic problems in Nigeria and Ghana. Attempts at managing waste through burning can lead to climate change while landfill leachate reduces soil and ground water quality. Hence, the need to look for better alternative. This research looks at the current challenges in the waste management system in Nigeria and Ghana, as well as proposes a more contemporary system that will move the two Anglophone Countries towards attaining a circular economy. Environmental Kuznets Curve hypothesis provided theoretical framework.



## Results

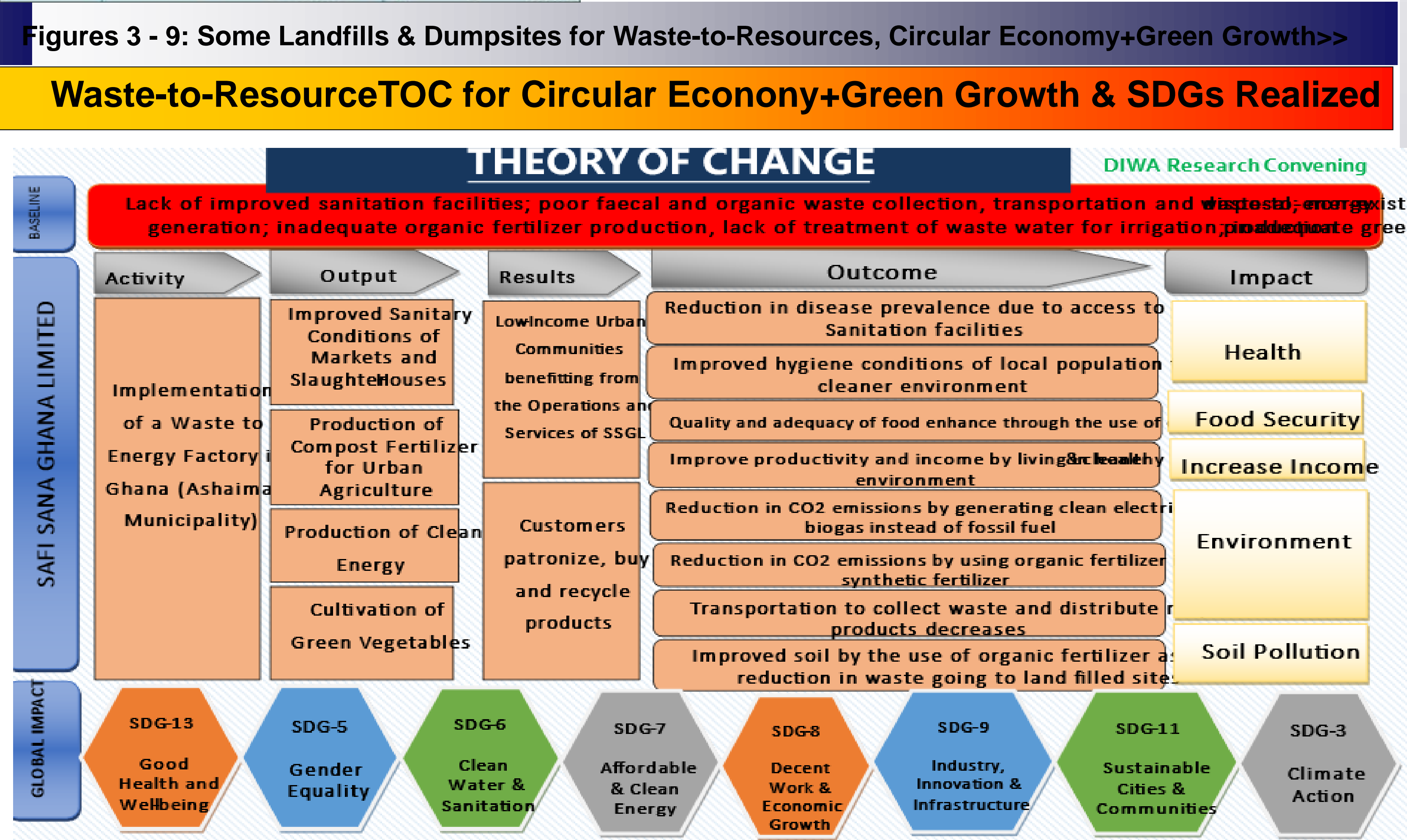
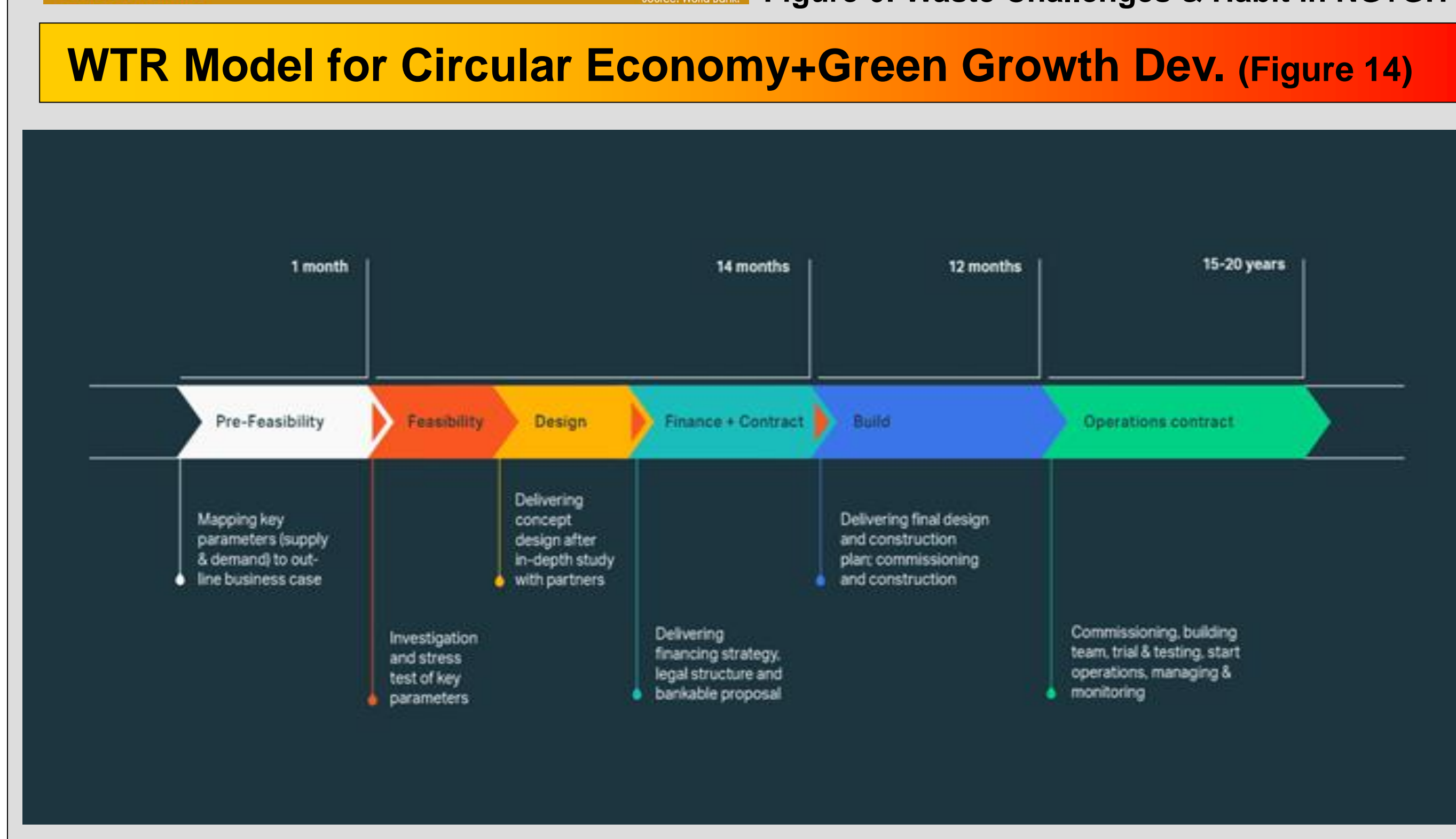
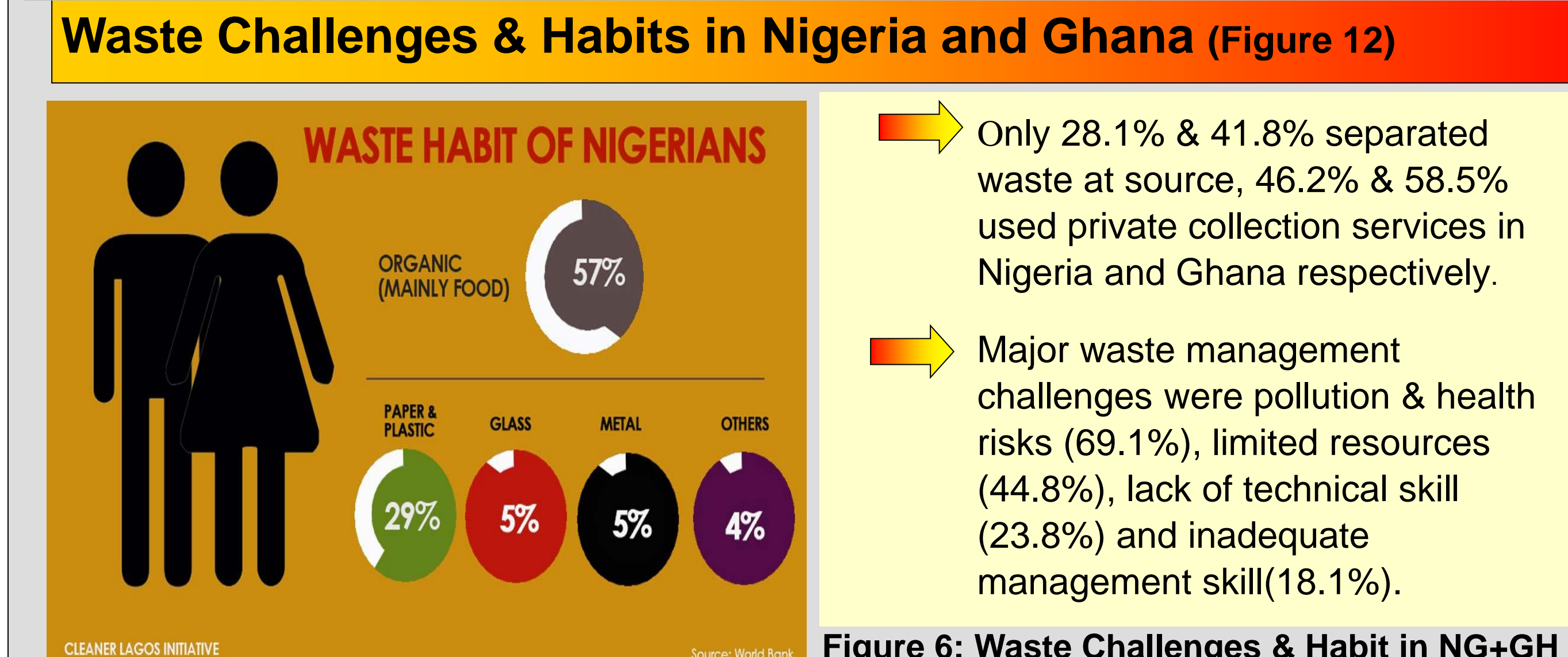
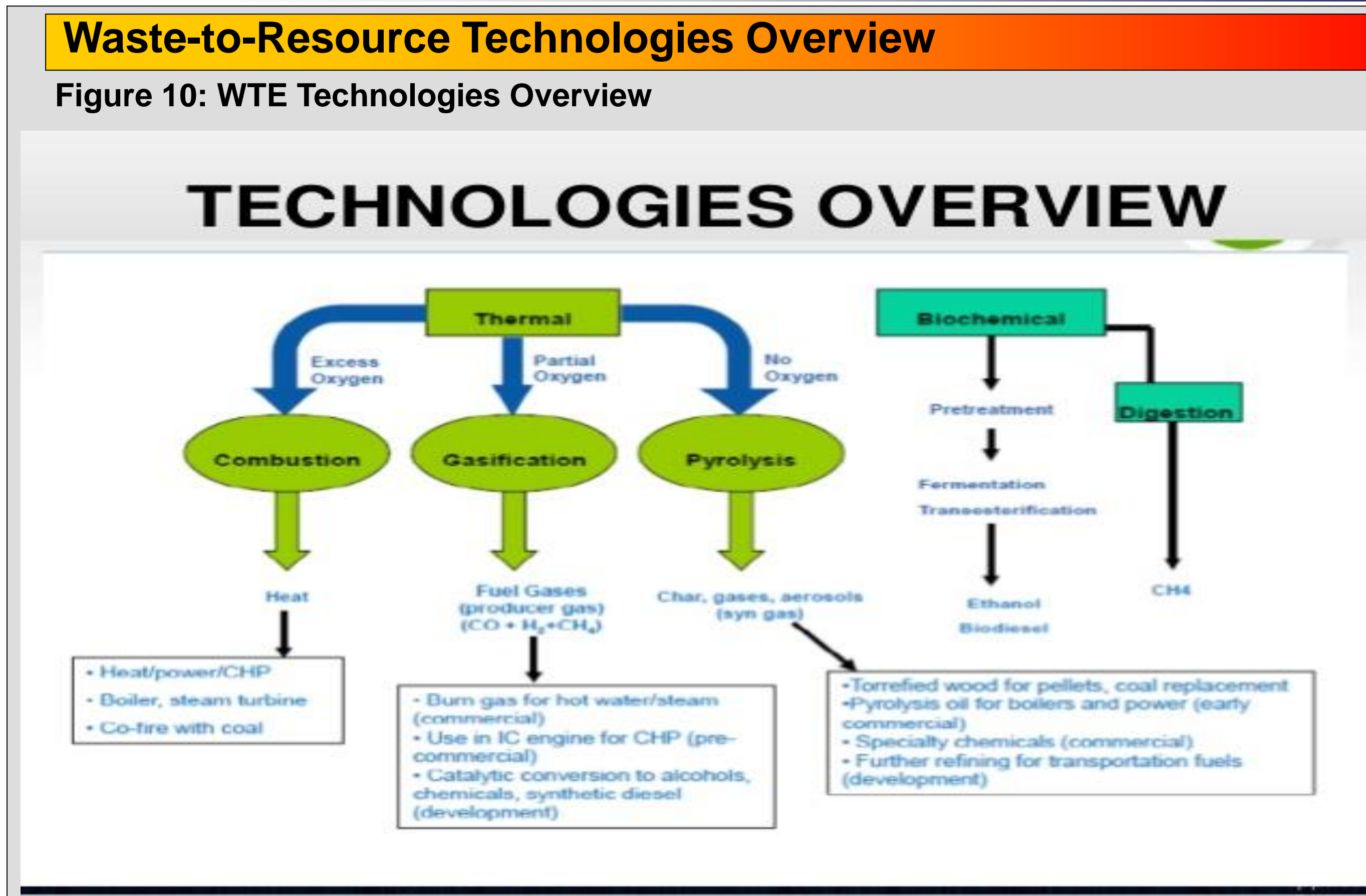


Figure 11: WTR Theory of Change & Sustainable Development Goals Realized

Source: Figures 1 - 20 : DIWA-Safisana Partners / Own Computation; IITA Nigeria; Internet



## Materials and Methods

EKC, Energy STAT, Socioeconomic Survey, Sampling & Analyses:

- Environmental Kuznets Curve (EKC) hypothesis provided theoretical framework.
- Purposive sampling of major landfills in Nigeria and Ghana with their waste generation patterns using structured questionnaires (250) on spatial-variation, challenges and prospect of waste management practices were done.
- The results were validated at expert workshop for key officials within the waste management industry.
- Data were analysed using descriptive and inferential statistics.



Figure 20: Map of Africa indicating the European Colonial Masters

## Conclusions

- A theory of change (TOC) was established to capture the activity, outputs, results, outcomes, impact and the sustainable development goals realised.
- With the implementation of waste-to-resource (WTR) projects in Nigeria and Ghana, some of the outputs are; production of clean energy, improved sanitary conditions of markets and slaughter-houses, production of compost fertilizer for urban agriculture, and cultivation of green vegetables.
- Both Countries are now benefitting from the operations and services of the Pioneers, customers also patronize, buy and recycle products. The impact cut across clean environment, health, food security, increased income and 8 Sustainable Development Goals (SDGs) realization.
- The government has a role in creating an enabling environment and stimulating demand to sustainably transits from current linear to circular economy (CE) for green growth (GG) development in the West African Countries.