A Multidisciplinary Approach to Solving Global Development Challenges in the Democratic Republic of Congo

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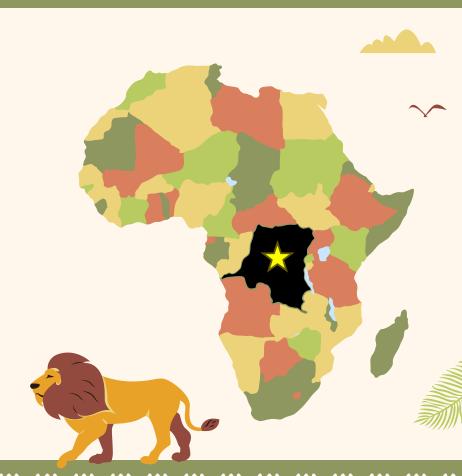


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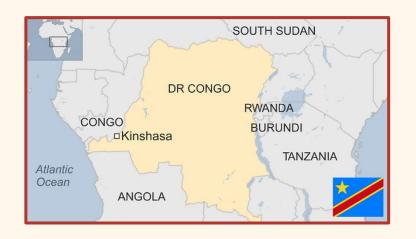
Overview of the Democratic Republic of Congo

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"Feet on the Ground" Improvement of Rural Infrastrastructure and Development







Overview of the State of the DRC

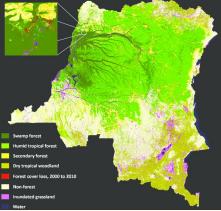




General Background Information

- The capital city of the Democratic Republic of Congo is Kinshasa, which is located in the southwestern part of the country.
- The Congo River is a geographical landmark that creates the border between the Republic of Congo and the DRC.





- The DRC has also been home to thousands of refugees from the Rwandan Genocide since Rwanda is located to the east of the country.
- The Rwandan Genocide has had lasting affects on the DRC, igniting an international war across the southern portion of the African continent, with ongoing conflict in the country between Tutsi and Hutu militias causing an enormous amount of displaced personnel in North Kivu, South Kivu, and Ituri.
- Terrain wise, the DRC is mainly composed of dense, tropical and subtropical forests with mountains lining the South and East portions of the country, making transportation difficult.

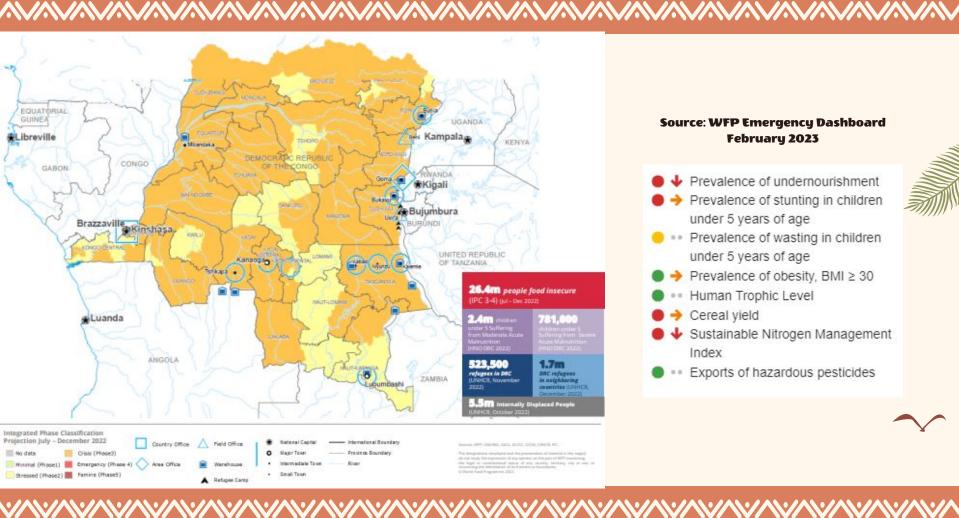


State of Food Security Systems in the DRC

- The FAO has tracked it so that nearly a quarter of the population of the DRC is facing acute food insecurity and malnutrition even though the DRC has potable water sources and arable land to feed their population w/ a surplus for export.
 - "This country should be able to feed its population and export a surplus. We cannot have children going to bed hungry and families skipping meals for an entire day"
 - Peter Musoko, WFP representative in DRC.
- **5.4 million** people are food insecure and need life-saving assistance in the regions of North Kivu, South Kivu, and Ituri.
- According to the Sustainable Development Report, the percentage of undernourished people in the DRC population is only increasing, reaching nearly 40% in 2020.
 - The percentage of the population whose food intake is insufficient to meet dietary energy requirements for a minimum of one year.
- 80 million hectares of arable land unused, with 90 million hectares supporting beef production, yet the DRC only meets 2.3% of their potential beef output.







Source: WFP Emergency Dashboard February 2023

- Prevalence of undernourishment
- Prevalence of stunting in children under 5 years of age
- Prevalence of wasting in children under 5 years of age
- Prevalence of obesity, BMI ≥ 30
- Human Trophic Level
- Cereal yield
- Sustainable Nitrogen Management Index
- Exports of hazardous pesticides











SDG Dashboards and Trends

Click on a goal to view more information.





























































































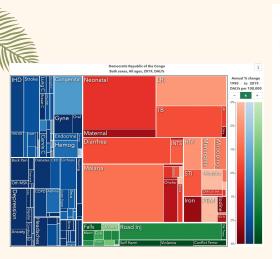






State of Good Health and Well-Being





Indicators

- Maternal mortality rate
- > Neonatal mortality rate
- Mortality rate, under-5
- Incidence of tuberculosis
- ↑ New HIV infections
- Age-standardized death rate due to cardiovascular disease, cancer, diabetes, or chronic respiratory disease in adults aged 30–70 years
- Age-standardized death rate attributable to household air pollution and ambient air pollution
- ▼ Traffic deaths
- Life expectancy at birth
- Adolescent fertility rate
- Births attended by skilled health personnel
- Surviving infants who received 2
 WHO-recommended vaccines
- Universal health coverage (UHC) index of service coverage
- Subjective well-being

- Maternal Mortality Rate (MMR): As of 2020, the MMR in the DRC is **547.40** per 100.000 live births
- Neonatal Mortality Rate (NMR): As of 2020, the NMR in the DRC is 26.48 per 1,000 live births.
- Traffic Deaths: As of 2019, 34.86 per 100,000 deaths are related to traffic accidents.
- Surviving infants who received 2
 WHO-recommended vaccines: As of 2021, only 55 out of 100 infants receive 2
 WHO-recommended vaccines.







02

Challenges Facing Food Security and Good Health/Well-Being

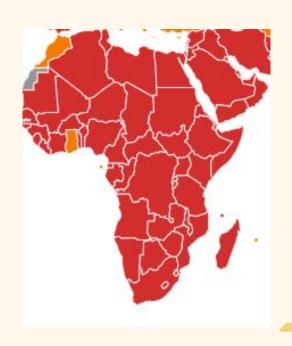




Food Security

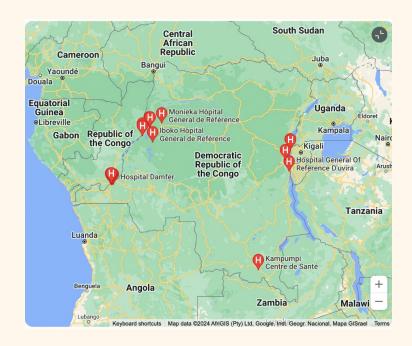
The issues facing food security are multifaceted, but the biggest obstacles tend to be extrinsic to direct food production.

- Transportation
- Interregional conflict
- Economic instability
- High population density in east DRC
- Unsustainable agricultural practices
- COVID-19



Good Health and Well-Being

According to the map on the right, there are very few hospitals in rural areas of the DRC since most hospitals are located in Kinshasa, the capital of the DRC. Although there are several hospitals in Kinshasa, a majority of the population does not live here, rather in rural areas on the Eastern side of the country. Since a majority of the population cannot access hospitals or clinics, this is one of the main factors are to why the DRC is currently not acheiveing SDG #3.









03

"Feet on the Ground" Improvement of Rural Infrastrastructure and Development







Important Considerations



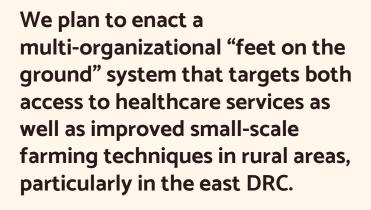
- When devising a plan, it was important to consider every facet of the problems facing the DRC in improving health and food security.
 - Location of affected people
 - Topography of the DRC
 - Demography of the DRC (religions, ethnicities etc)
 - Current proposed solutions
 - Improved transportation
 - Conflict Resolution
 - Financial Aid

Most organizations targeting health are focusing on their efforts in urban areas (Kinshasa) and temporary refugee camps, neglecting rural areas in the east, refugee settlements, and sustainable practices.

Most organizations targeting food security are focusing on rural development and improvement of agricultural practices, seeing relative success, but unfortunately face obstacles in funding.



An Overview of Our Plan



- Through the use of development goal-specific organizations such as the FAO, WFP, PIH and Doctors without Borders, we will target SDGs #2 and #3 on an individual basis.
- We will also use interdevelopmental organizations that will assist in funding our goals and improving other SDGs.



NGOs and International Organizations



Good Health and Well-Being

- Partners in Health (PIH)
- Doctors Without Borders
- Water Mission

Funding

- Bill and Melinda Gates Foundation
- The World Bank
- African Development Bank

Food Security & Zero Hunger

- Food and Agriculture Organization (FAO)
- World Food Programme (WFO)





Expected Outcomes and Evidence for Success

Sustainable Development Goal #2: Zero Hunger

- Rural development practices and improvement of sustainable subsistence agriculture will not only improve food output for self reliance, but it's been found that increasing rural development allows for more non-farming jobs that, if utilized by farmers, can improve income and food security (FAO).
- Other countries of similar food insecurity levels (Bolivia) found that improved agricultural efficiency correlated with improved local food security. (Salazar et al., 2016)
- Improved rural infrastructure was correlated with improved food production and food security in a country of similar geography/SDG standing, Tanzania (Nyange, 2020)

Sustainable Development Goal #3: Good Health and Wellbeing

 In 1998, Partners in Health entered into Peru to help with severe cases of MDR-TB. As soon as PIH started working on the ground in Peru, they were able to help with other health concerns such as maternal mortality rate and neonatal rate as well. This is what the indicators of SDG #3 look like for Peru now.

 Maternal mortality rate Neonatal mortality rate Mortality rate, under-5 Maternal mortality rate Incidence of tuberculosis New HIV infections Age-standardized death rate due to cardiovascular disease, cancer Score stagnating or increasing at less than 50% of required rate diabetes, or chronic respiratory disease in adults aged 30-70 years Age-standardized death rate attributable to household air pollution and ambient air pollution Traffic deaths A Life expectancy at birth Adolescent fertility rate A Births attended by skilled health Surviving infants who received 2 WHO-recommended vaccines index of service coverage ---- Long-Term Objective

Subjective well-being



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