



Wealth & Adjusted Macroeconomic Indicators (2006/2021)

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Outline

- Introduction
- Comprehensive Wealth Framework
- The Changing Wealth of Nations (CWON) Methodology
- Results & Findings
- Sustainability Concerns
- Policy Implications & Recommendations
- Next Steps & Conclusion



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Introduction - Moving 'Beyond GDP'

- **GDP** measures annual production. **GDP** is sustainable only if the asset base is not shrinking.
- **National Income** shows how much income is generated.
- **Wealth** measures the underlying assets that generate income.
- **Changes in wealth per capita** measure how the asset base changes.
- Standard economic indicators are adjusted for depreciation of produced capital; **needs to be adjusted also for depletion of natural capital** to give a fuller picture of economic development.

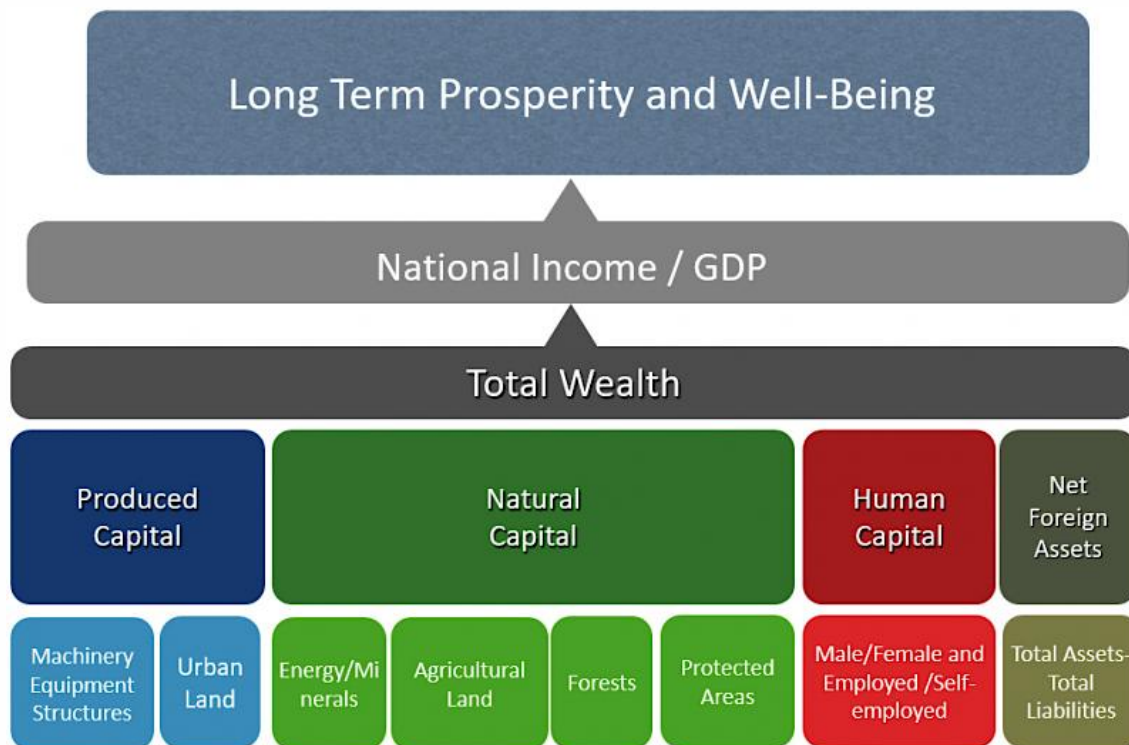


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Comprehensive Wealth Framework



Total wealth as guide to economic development prospects

Adjusted Net Savings/Investment (ANS) as indicator of how those prospects are changing (i.e., is development sustainable?)

Adjusted Net National Income (ANNI) as guide to what can be sustainably consumed given above



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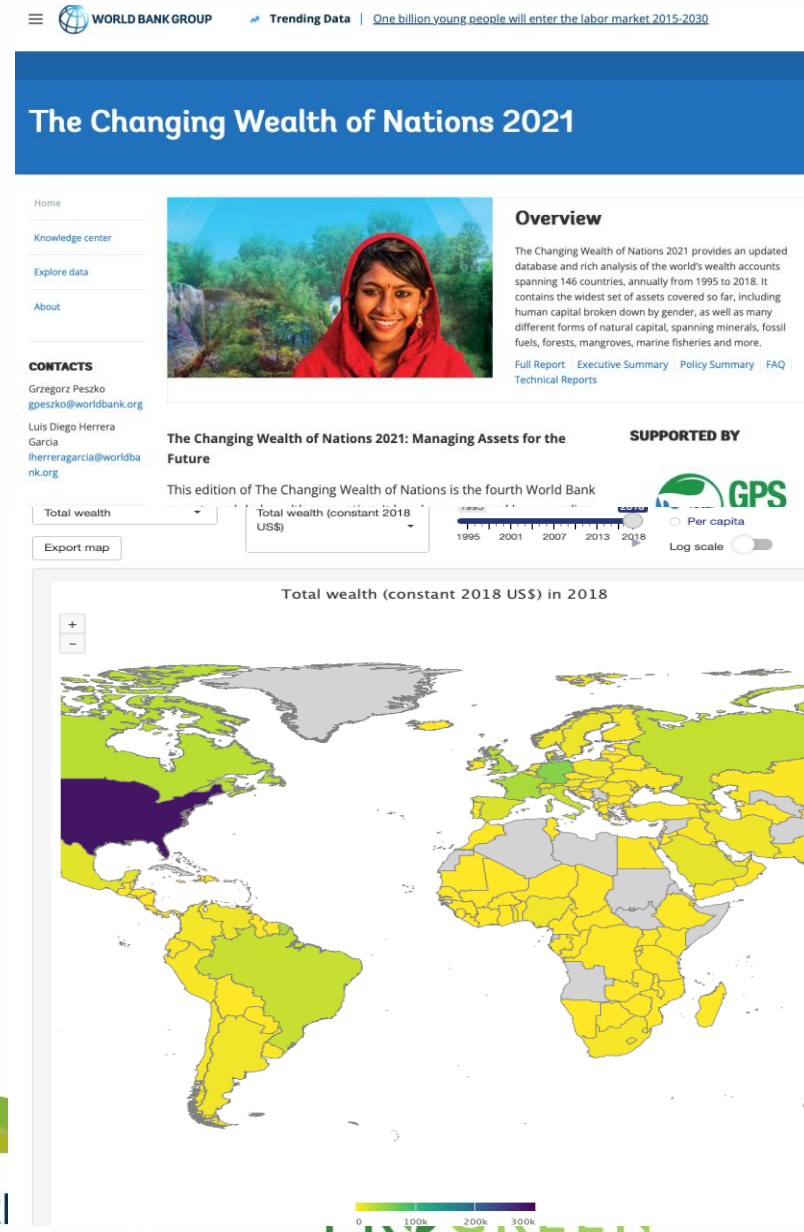


Estimating Sustainable Income & Wealth for Ghana

- The Ghana NCA programme used the methodology of the **World Bank Changing Wealth of Nations** programme to estimate adjusted macro-economic indicators.
- In the absence of full Natural Capital Accounts, this provides a preliminary adjustment for depletion of natural capital and pollution damages.
- The current adjustment is partial, including only part of the impacts on natural capital and from pollution.



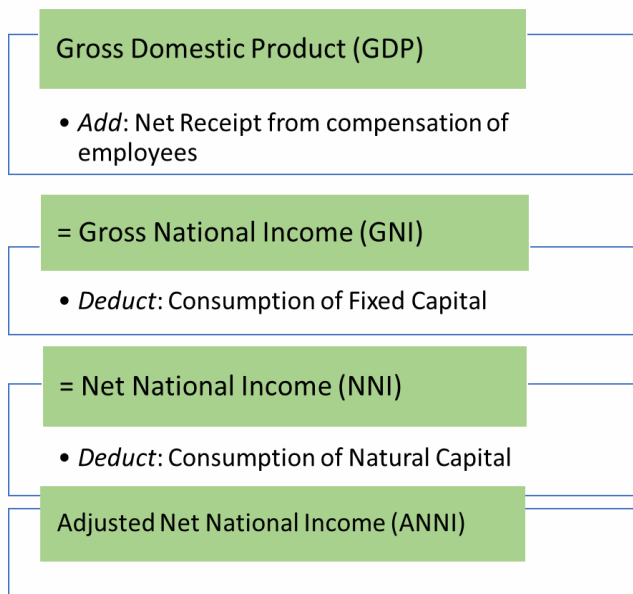
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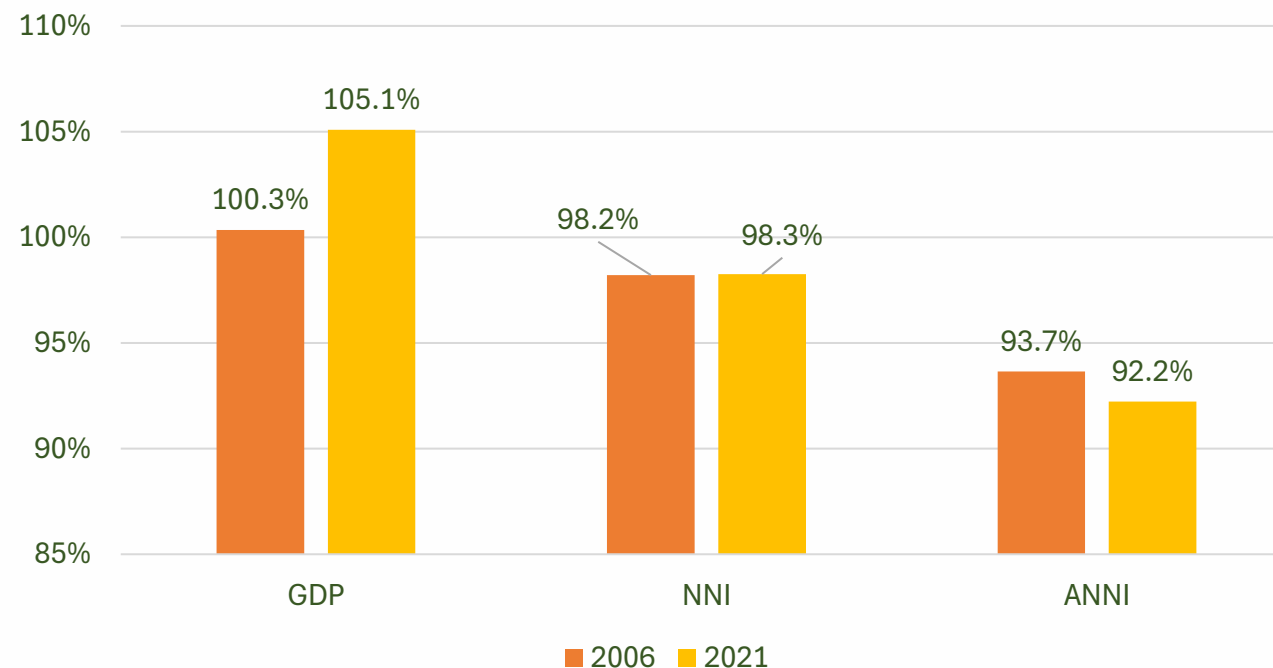
Adjusted Net National Income

- Adjusting National Income for Natural Capital Depletion

Calculation of Adjusted Net National Income



GDP, NNI and ANNI as % of GNI, 2006 & 2021



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Adjustment for Natural Capital Depletion

- The Adjustment for Depletion of Natural Capital is still work in progress.
- **Data unavailability & scarcity:** Building on limited and preliminary data.
- **Limitations:** Only includes part of the impacts on natural capital, and only on some of the natural capital stocks

Data Included

- Forest (Timber products)
- Fisheries
- Crops
- Energy
- Minerals
- Air quality (two pollutants)

Data Not Included (Non-exhaustive list)

- Forest (Non-timber products)
- Soil
- Wetlands
- Water supply
- Ecosystem services, e.g. Soil & sediment retention, Water flow and quality regulation, Climate regulation, Pollination, Recreational services, etc.



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Investments & Economic Growth

- To grow an economy, investments are needed.
- Savings and investment in capital is measured by the Gross National Savings indicator.

Gross National Savings

- Deduct: Consumption of Fixed Capital

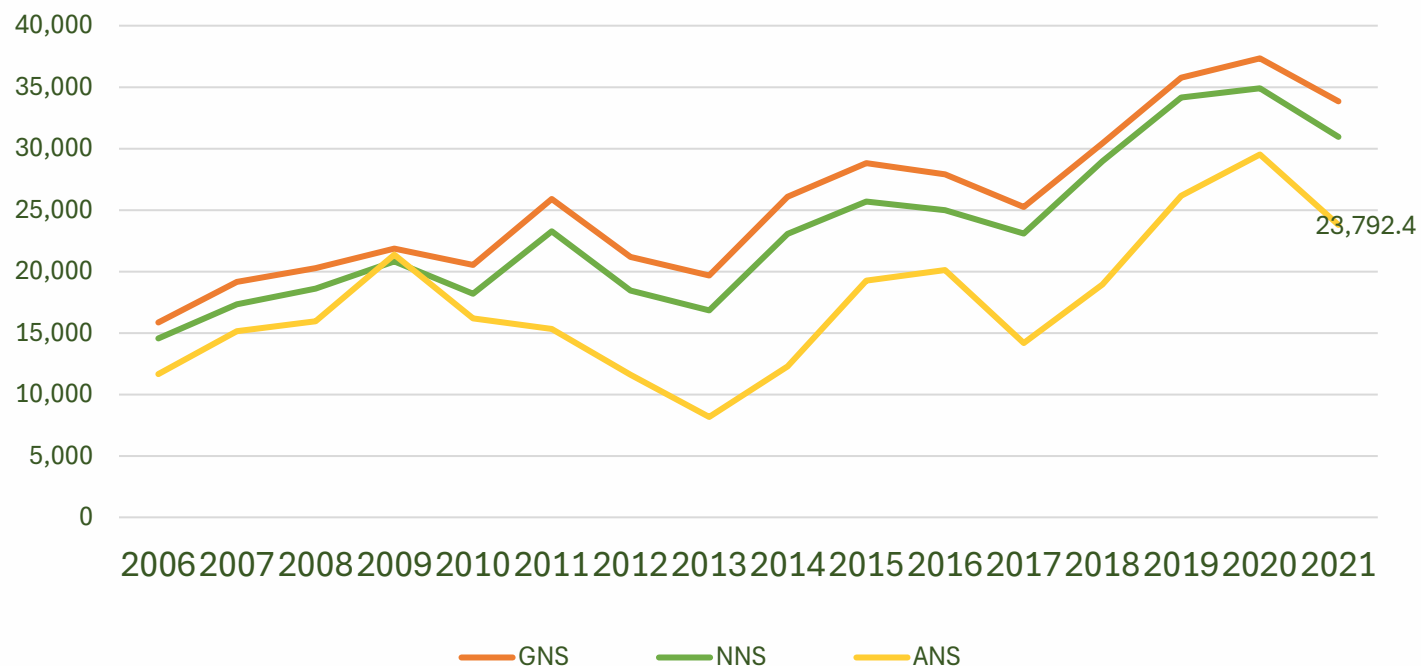
= Net National Savings

- Add: Expenditure on Education (Investment in human capital)
- Deduct: Natural Resources Depletion (minerals, energy, forests, etc.)
- Deduct: Pollution Damage

= Adjusted Net Savings

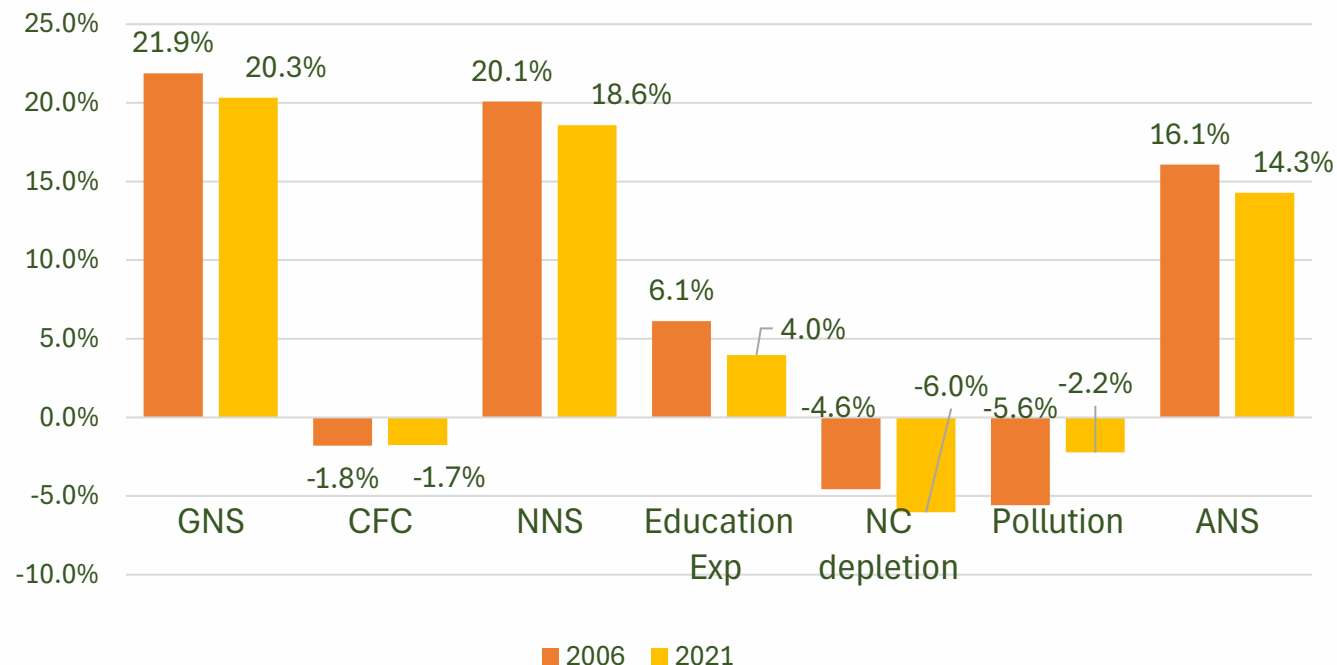
- Monitoring changes in Wealth each year

Trend in GNS, NNS and ANS 2006-2021; million 2013 GHC



Gross Savings, Adjusted Net Savings (ANS) & Gross National Income (GNI)

- Over the last 15 years, both Gross Savings and ANS have decreased relative to GNI.
- Even with the limited coverage of the preliminary estimates, natural capital depletion has increased from 4.6 to 6 % of GNI.
- Though education expenditure is higher in 2021 than 2006, it has not increased at the same rate as income (a decrease from 6 to 4 % of GNI)
- Pollution damages from CO₂ and PM_{2.5} are increasing in absolute terms. Related to GNI, the damage in monetary terms has decreased.



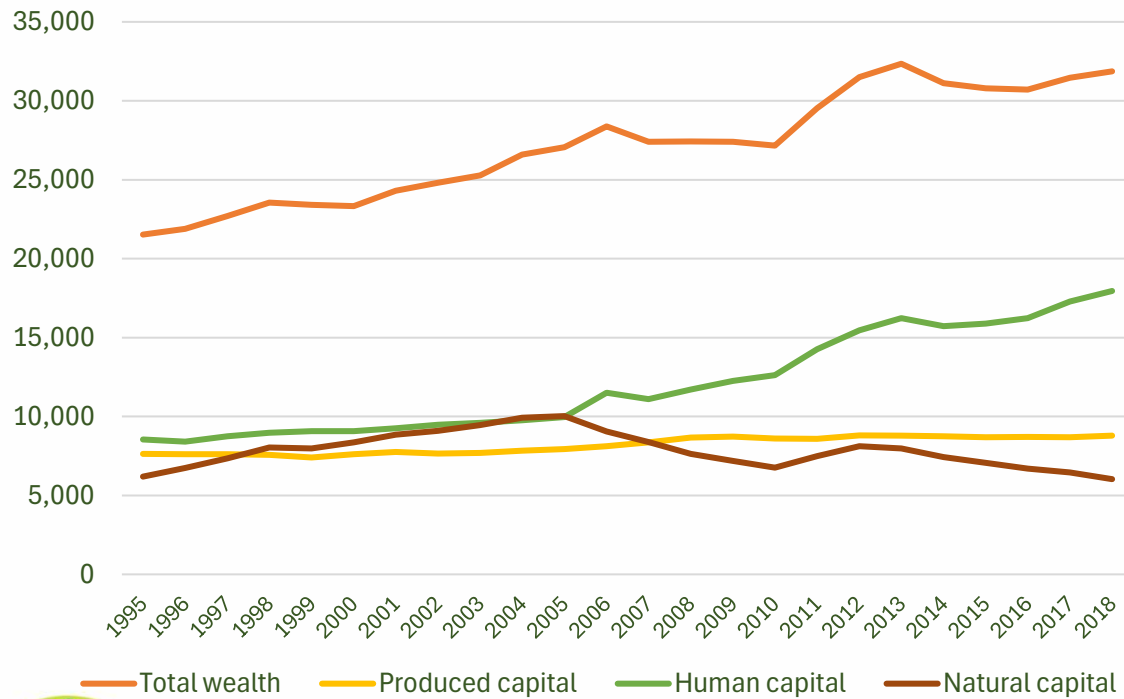
GNS, NNS & ANS in 2006 & 2021 as % of GNI



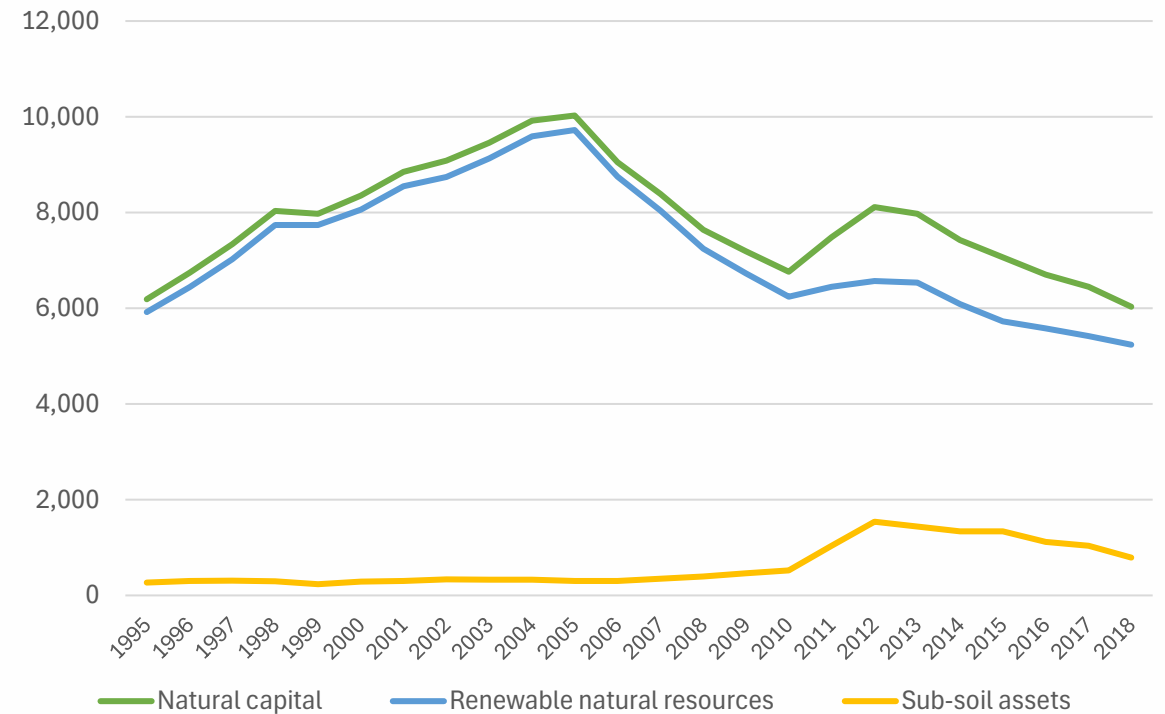
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Estimating Ghana's Total Per Capita Wealth With Global Data

Trend in per capita wealth in constant 2018 US\$



Trend in per capita natural capital in constant 2018 US\$



Comparison with Neighbouring Countries

- In 2018, Ghana's total wealth per capita was higher than in Côte d'Ivoire and Nigeria but below the Sub-Saharan Africa average.

Trend in per capita wealth (1995-2018; million constant 2018 US\$)



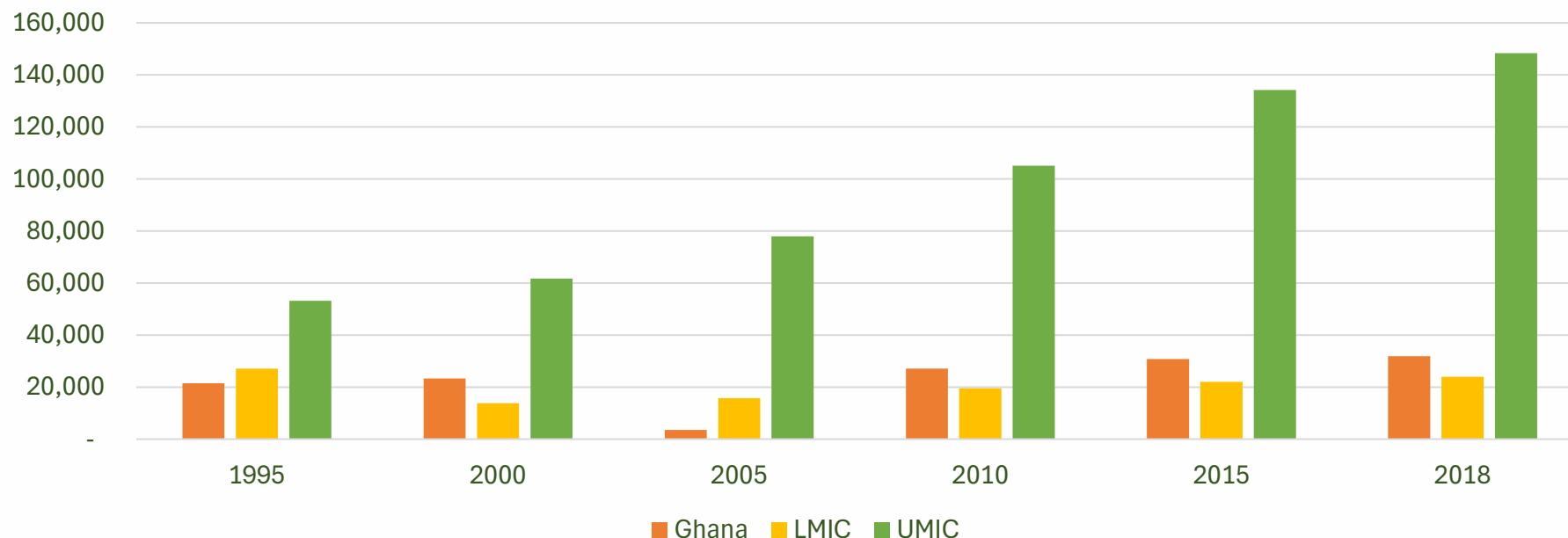
— Ghana — Cote d'Ivoire — Nigeria — Sub-Saharan Africa



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Comparison with Income Groups

- Ghana now has a higher per capita wealth than the average for Lower Middle-Income Countries, but the gap with the Upper Middle-Income Countries is large and growing



Trends in per capita wealth for Ghana and by income group (1995-2018; million constant 2018 US\$)



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Sustainability Concerns

Growing Gap

- There is a growing gap between GNI and ANNI and between GNS and ANS.
- This shows the decrease in natural capital and decrease of investment in education relative to income, even as the estimates are only partial

01

Decline in Natural Capital

- The decline of natural capital is mainly due to depletion of subsoil assets and depletion, degradation of forest and agricultural land

02

Decreasing Natural Capital Per Capita

- Renewable natural capital is decreasing per capita.
- This implies that the products and services provided by natural capital could grow scarcer over time as population grows.

03



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Policy Implications & Recommendations

- The estimates need to be interpreted with care, as they are only partial and built on limited natural capital data.
- To make the estimates useful, it will be vital to invest in building data systems for natural capital.
- Even with the partial estimates, it is clear that per capita renewable capital is decreasing, indicating that Ghana needs to prioritise conservation and the restoration of natural capital, especially the renewable resources: cropland and forests.



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Policy Implications & Recommendations

- As Ghana is a mineral-rich country, it is vital to manage the mineral revenues carefully for future use by re-investing in other types of capital (human, produced, natural and financial capital).
- This needs to be closely monitored by government, e.g., by regularly compiling Adjusted Net Savings (ANS).
- Ghana is still well below the average of Upper-Middle Income Countries (UMIC) for both wealth, ANS and ANNI. To reach UMIC status, there is the need to increase investments in produced, natural and human capital.



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Next Steps & Conclusion

- Three technical documents; policy brief, manual/guidelines and the main technical report are finalized.
- Working Groups (TWG & SWG) led by the Ministry of Finance (MoF) to decide on the frequency (annual or biennial) of compilation
- Strengthen existing institutional mechanisms for data management particularly on natural capital such the Cost of Environmental Degradation (COED), etc.
- Constitute a dedicated desk/team within the MoF who will work with other MDAs to regularly compile Wealth & AMEI to better inform policy and decisions.



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Thank you for your Attention!



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