

Rwanda

Archetype **Reform climbers**

GDP / person **\$1k**

Population **15M**

10-yr trend **6.9%**

Gradual **8.9%** · #72

Fast **7.7%** · #90

WHERE RWANDA STARTS

Rwanda enters the AGI era as a reform climber: a lower-income country that has grown steadily from a low base while its institutions improve. The scores show why. Catch-up headroom is 5 out of 5, the top score any country holds, though even leaders must keep moving under AGI. Climate resilience is 4.1 and cyber resilience 3.3, both strong for the region. Rwanda has built a reputation for clean government and simple business rules, digitized public services through Irembo, and let Zipline fly medical-supply drones nationwide. What is missing is the physical and digital base. Compute and energy access scores 1.1, and language inclusion 1.1, because Kinyarwanda is thinly represented in AI systems. At about \$1,124 GDP per person, capital is scarce. Ten-year trend growth of 6.9% a year is already high, and the reform record behind it is real.

THE THREE PATHS

These are simulations, not forecasts. The Modest path is the baseline; the two AGI scenarios fork from it. Under the **Modest** scenario, AI stays a normal technology. Rwanda would lift to 7.1% growth a year, ranking 3rd of 157, because a skeptic's world rewards catch-up momentum, which Rwanda leads. That rate doubles the economy in about ten years. Under **Gradual** takeoff, growth would climb over two decades and reach 8.9% a year once AGI matures around 2045, ranking 72nd. The long runway rewards Rwanda's momentum and gives its builders time to adjust. That rate doubles the economy in about eight years. Under **Fast** takeoff, growth would reach 7.7% a year from the early 2030s, a doubling in roughly nine years, but the rank would slip to 90th. A fast world puts more weight on the compute, capital and geopolitical standing Rwanda does not yet hold, so momentum counts for less. Regulation and politics could slow or redirect any path. How Rwandans and their government respond to transformative AI is a variable the model holds constant.

HOW YOU WOULD KNOW WHICH WORLD YOU ARE IN

The scenarios look almost the same until about 2030. Watch leading indicators, not GDP, and watch them live. Three global signals matter most. First, whether the METR task-horizon curve keeps doubling every four to five months through 2027–28; METR publishes it at metr.org. Second, whether frontier-lab revenue and capital spending keep compounding; Epoch AI tracks both at epoch.ai. Third, whether growth in the ten to twenty most-ready economies — the United States and China above all — breaks above trend in the early 2030s. Double-digit growth there within a couple of years of 2030 would signal a fast world. A point or two above trend by the mid-2030s would signal a gradual one. A fade back to trend

would signal a modest one. Rwanda's own signals would arrive earlier than the growth data: data-center or hosting commitments landing at Kigali Innovation City, financial close on new power generation, adoption rates on Irembo and mobile money, and whether Zipline-style automation spreads into new sectors.

IF GROWTH GOES EXPLOSIVE

Explosive is relative. At 8.9% growth a year under gradual takeoff, Rwanda would fall far behind the frontier, where the United States would compound at nearly 20%. But it would run ahead of its region, whose median is 5.7% in that world, and ahead of its own strong record. The economy would double in about eight years, so a child born today would enter a labor market four times larger by her mid-teens. Rwanda's young, fast-growing workforce is its asset, and rising labor demand and wages would ease the pressure to leave for work abroad. There is a way this leaves Rwanda worse off, and it is worth naming. Rwanda would build its digital economy on compute it rents rather than owns. Data centers and models financed and controlled from abroad can be throttled or repriced by decisions made elsewhere. A small state with little chip-supplying weight also becomes a rule-taker inside another power's technology regime. The hedge is to move from renting capacity toward owning it, and to lock in trusted-partner access before terms harden. Even then, the pace-setter would shift to the state, testing how fast RURA, the Rwanda Development Board, the courts and district offices can permit, adjudicate and count.

WHAT RWANDA CAN DO NOW

Three levers follow from the scores, and the safe ones come first. The first is AI diffusion, at 2.1. Digital skills, deployment-friendly rules and digital government carry real weight even in the skeptic's world, so building on Irembo and training the workforce is a no-regret move that pays off whether or not AGI arrives. The second is geopolitical positioning, at 2. Keeping access to capital markets and trusted-partner technology frameworks, and avoiding sanctions exposure, protects Rwanda under every scenario, so it too is a no-regret step a cautious government can take today. The third lever is the bet. Compute and energy access, at 1.1, barely moves growth if AI stays ordinary, but under a fast takeoff it becomes Rwanda's single biggest lever. Closing it means fast-tracking new generation and offering power-and-land packages to anchor data-center investment. A \$1,124-per-person economy cannot fund that alone, so it needs co-investment and partner finance. Rwanda can adapt a regional model: Senegal built a national data center at Diamniadio to bring government data home. To see how moving these scores changes Rwanda's path under each scenario, open the atlas's [policy editor](#).

The three levers — and which pay off regardless

AI diffusion capacity

score 2.1 / 5 · weight 24 under skeptic → 13 under fast takeoff

Counts under the Modest scenario too (24→13). Closing this gap pays off whether or not AGI arrives.

No-regret

Compute & energy access

score 1.1 / 5 · weight 8 under skeptic → 24 under fast takeoff

Weight climbs from 8 to 24 as takeoff nears. It barely moves growth if AI stays ordinary — the lever that needs a view on the takeoff.

AGI bet

Trusted chip & tech access

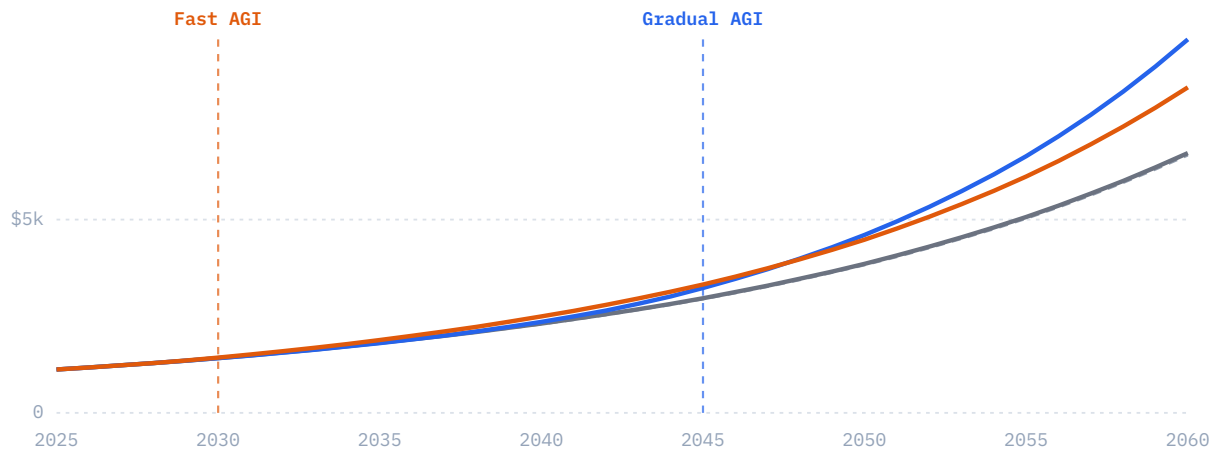
score 2 / 5 · weight 8 under skeptic → 12 under fast takeoff

Weight climbs from 8 to 12 as takeoff nears. It barely moves growth if AI stays ordinary — the lever that needs a view on the takeoff.

AGI bet

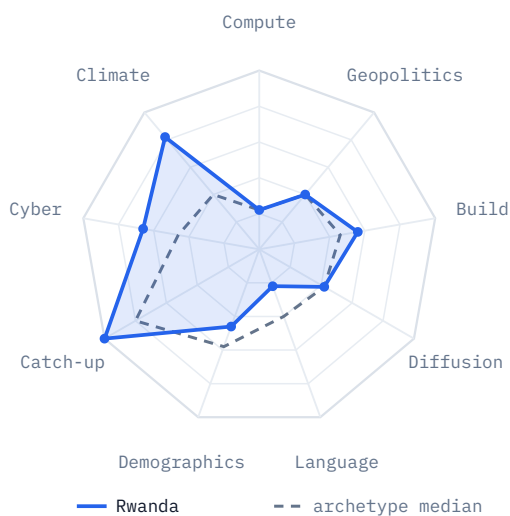
The no-regret levers pay off in every scenario, so a cautious government can act on them today. The AGI bets become decisive only if takeoff is real.

GDP per person to 2060, by scenario



Linear scale; solid lines are the three scenarios, dashed grey the no-AI baseline. Growth ramps from 2027 to each scenario's rate at its AGI year (Fast ~2030, Gradual ~2045), then holds. Timing and divergence are the point, not end levels; steep paths exit the top of the capped axis.

The nine factors



Solid: Rwanda. Dashed: the median of its archetype. Scores are relative to the other 156 countries (3 ≈ global median, 5 = leading today).

Outcomes under each scenario

SCENARIO	GROWTH / YR	WORLD RANK	INDEX	DOUBLING
Modest	7.1%	3 / 157	55.1	10.1 yrs
Gradual	8.9%	72 / 157	51.9	8.1 yrs
Fast	7.7%	90 / 157	45.9	9.3 yrs

Post-AGI growth rate, rank among 157 countries, AGI Growth Index (0–100, scenario-weighted), and the implied economy doubling time. The Modest path is the baseline the AGI scenarios fork from.

THE THREE SCENARIOS

Modest the Acemoglu view

AI as a normal productivity tool

Intelligence was never the binding constraint on growth, so AI delivers real but ordinary gains. Each country gets a one-time boost of a couple of percent of GDP, phased in through 2035; growth then returns to trend. The mainstream-economics view.

≤0.66% TFP over a decade — a one-time gain

Rwanda: 7.1% growth a year · #3 of 157

Gradual Erdil & Besiroglu, base case

Broad automation, on a long timeline

Broad automation of remote work arrives around 2045, with gains building slowly from the late 2020s. Growth then reaches up to ~20% a year for the best-positioned countries — ten times today's frontier trend. A slow arrival gives countries time to adapt, so the gains are wide but uneven.

up to ~20%/yr after 2045 — 10× the frontier trend

Rwanda: 8.9% growth a year · #72 of 157

Fast Erdil & Besiroglu, fast takeoff

Fast takeoff — today's infrastructure decides

Transformation lands around 2030, before countries can adjust. Whoever already owns compute, capital and the ability to build wins; the gap between countries widens dramatically — and some are left growing slower than they would have without AGI.

up to ~40%/yr from 2030

Rwanda: 7.7% growth a year · #90 of 157

Factor scores — and where policy bites



♦ marks this country's highest-leverage policy targets: the weakest factors carrying the most weight under the AGI scenarios. The atlas's interactive policy editor (agigrowth.org/#editor) simulates how raising any score changes growth under each scenario.

Archetype: Reform climbers

Actually climbing: sustained growth from a low base, with improving institutions.

Wins: The gradual world, where two decades of adjustment time reward momentum.

Watch: The climb runs through the very labor-intensive rungs automation removes.

Dominican Republic **10.6%** · #47

Senegal **9.6%** · #60

Kyrgyzstan **9%** · #70

Laos **8.2%** · #81

Georgia **8%** · #84

Côte d'Ivoire **7.6%** · #87

Djibouti **7.6%** · #88

Kosovo **7.4%** · #91

Ghana **7.4%** · #92

Benin **7.2%** · #97

The regional picture — The framework's hardest conclusion.

Sub-Saharan Africa scores lowest of any region, and it is the only one that does better under a slow takeoff than a fast one — speed rewards the compute, capital and geopolitical assets it lacks most. The physical gap is stark: roughly 600 million people without electricity and under 1% of global data-center capacity, set against the world's fastest-growing workforce — Nigeria alone adds more than Germany's entire population by 2045 in the projections used here. Forty countries are not one story. South Africa and Kenya lead with real digital economies; Senegal, Ghana and Côte d'Ivoire absorb selectively; Nigeria and Ethiopia carry the demographic weight and the dividend trap — the young workforce that was the region's asset is the input AI substitutes for. Nine states, from the Sahel juntas to DR Congo and Zimbabwe, sit in the high-risk tier, where state capacity binds before technology does. The mobile-money precedent shows leapfrogging is possible; the compute data shows it has not yet happened at any scale that matters. Given AGI on any timeline, closing the power, connectivity and device gap is the single highest-leverage move on this map — and the twenty-year window before full automation is the time in which it is still cheap to do.

Method, in brief

Each country is scored 1–5 on nine factors from public data (World Bank, Epoch AI, ITU, IMF and national sources). A scenario-weighted average forms the AGI Growth Index (0–100), which maps to a post-AGI growth rate inside ceilings derived from Erdil & Besiroglu (2023): ~20% growth a year for the best-positioned country under Gradual takeoff (AGI ~2045), ~40% under Fast (AGI ~2030); growth ramps convexly from 2027. The scenario sets the growth rates on offer; the index only decides where each country sits within them. The Modest scenario is the skeptics' baseline — a small uplift on each country's own ten-year trend. These are simulations for structured thinking, not forecasts; no probabilities are attached to any scenario.

Watch the global signals live: the METR task-horizon curve at metr.org/time-horizons · frontier-lab revenue at epoch.ai/ai-companies · AI-chip spending at epoch.ai/ai-chip-sales.

Explore further: full methodology agigrowth.org/#methodology · map & rankings agigrowth.org/#explore · country profiles agigrowth.org/#countries · policy editor agigrowth.org/#editor