

**Production and
Employment Also Matter:
the Comprehensive
African Agricultural
Development Programme
versus Malthus in Africa**

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Facts: farm backgrounds & output

SSA farm value added/ha (and /worker) ↓ (1961-2002 SSA FVA/ha ↓18%; S Asia ↑18%).

Diverse, fragile soil-water in SSA *and* Asia.

BUT (2002) Irrigated area NPK fert use

(% cropland) (kg/ha of cropland)

SSA 3.7(ex SA/Mgscr/Sdn 0.7) 9

China 35 140

S. Asia 40 100

- NPKx3 S Asia 1981-2002, static SSA.
- Ag research: falling SSA (and donors 'crowd out' domestic); rising Asia. This, plus crop-mix, irrig, → less SSA spread, impact of better seeds.
- % farm o/p growth due to area expansion: Asia, almost none; SSA, most, exhausting soil.
- PPP \$/day pov 1981-2001 SSA 42→46%, E Asia 58%→16%, S Asia 52%→31%.
- 75% \$1/day PPP poor are rural (S Asia 70%); 68% have ag main income source (S Asia 60%).
- Typically 3-5% SSA govt exp & inv is ag, incl. irrigation, research (Asia 1960-90, 20-25%); CAADP pledges rise to 10% minimum.

Price bias vs ag no longer worse than Asia, but urban transport/access/pub exp bias far worse.

Facts: demography, dependency, absorption

Asia: child mort ↓ from 50s, fert from 60s, CBR from 1970s. *DepR*↑, slowing devel, 1950-65; stable 1965-75; then ↓↓. Bloom-Williamson; Kelley-Schmidt; Eastwood-Lipton.

Bangladesh **IMR**: 200 (1950-5), 104 (1985-90), 59 (2000-05); projected 23 (2025-30), 13 (2045-50). **TFR** 6.7-6.8 1950-65, ↓↓ to 3.25 by 2000-2005 (projected 1.94 2045-50). **CBR** stable 1950/5 (46.6)-1960/5 (47.3), ↓ to 1975-80 (41.1), then ↓↓ to 27.6 by 2000-5 (proj 18.5 2025-30, 14.1 2045-50).

Bangladesh precedent: continued

So DepR rose from 70 (1950) to 90 (1965, 70,75), because IMR↓↓ but CBR↓. Then, as CBR↓↓ and earlier-born kids reached working age, DepR ↓ to 64 (1975-2005). Projection: ↓ to 49 by 2030 (then ageing shuts 'window').

Farm plg & women's opps → ..DepR↓; projecn credible. Past irrign, ag research → labour income up, cheaper food for poor; pov↓ from 1975-80 → lab-intsve export growth. Credible that Bangladesh can absorb extra L, svgs productively, so demog bonus → growth, pov↓.

Facts: African popn, dependency, absorption

80% SSA popn (not W, Cent) show clear fert↓; CMR-TFR-CBR-DepR sequence as in Asia. BUT higher base-TFR; later (c. 1980); slower/ halting; & *with fewer benefits: little absorption, at rising real wages/returns, of growing shares of workers/saver, as in Asia's Green Revolution.*

Favourable case, depends on pro-transition policy, age absorption: Kenya: IMR 134 (1950-5) → 67 (1985-90); then trendless to 2000-5 (68), yet projected fall: 43 in 2025-30, 27 in 2045-50. **TFR** rose from 7.5 (1950-5) to 8 (1970-5), then fell to 5.0 (1995) but stagnated to 2005; renewed fall projected to 3.22 (2025-30) , 2.39 (2045-50). **CBR** crawled down: 51.4 (1950-55) to 45 (1985-90); fell to 37.5 (1995-2000), but then stabilised (38.8 in 2000-05); projected to renew fall, to 27 in 2025-30, 20 in 2035-50. So **DepR** first rose: 78 (1950), 111-112 (1975, 1980, 1985), then fell to 84 (2005); projected 63 2030, ?52 2050. Big *potential* bonus, **if** IMR ↓ → TFR → CBR → DepR resumes, & **if** family planning, female-ed growth: but policy-dependent.

SSA demographic bonus: where?

Transition advanced: S Africa, Botswana; Kenya, Zimbabwe? (HIV-AIDS? No). But UN projecns *assume* steady TFR falls even if none so far.

Nigeria: **IMR** 184 in 1950-5, ↓20/decade to 127 (1980-5), then *slowed to 7/decade to 100, 2005*. **TFR** 6.8-6.9 1950-90, ↓to 5.9 2000-5. **CBR** stable c. 48, 1950-90; only ↓to 42, 2000-5.

DepR 81 (1950), 94-6 (1985-90-95), 90 (2005). **Yet projected CBR**↓ at 6/decade underpins

DepR projected ↓32% 2005-30 (from 90 to 62).

CBR→**DepR** projs hopeful; feasible?

If so, oil v. ag to employ extra 15-65s→pov↓?

Ethiopia: **IMR** 200-100 1950-5/2000-5 slowing. **TFR**, **CBR** crawled ↓ to 1985-90; some speedup since. **DepR** (89 (1950), 92-5 (1975-2000), 90 (2005)); projections *assume 6/decade CBR*↓ as workforce↑: DepR 67 (2030); **26%**↓**2005-30**), 52 (2050; **43%**↓**2005-50**).

Using bonus v. poverty: like Kenya, one of SSA's better ag support systems but water (& policy) problems to raise ag-based employment.

DemR Congo: **IMR** 167-117, 1950-75; static to 2005. **TFR** 6 (1950-5) ↑to 6.7, stable 1980-2005. **CBR** stable c 48, 1950-2005. So **DepR** 90 (1950) to 98-102 (1985-2015). Yet UN model assumes IMRs, CBRs crash, so DepR projection 102 (2005), 88 (2030) (↓14%), 62 (2050): pure wishful thinking. Even if OK, how to turn bonus into poverty reduction?

Generally:

1. TFR↓→DepR↓ trsn started in 80% SSA pop.
2. Self-moving in only a few cases. Esp. elsewhere, needs policy on demand, *supply* (children).
3. ‘Asian’ bonus from trsn - faster growth, pov reduction - needs productive *absorption* of L, S.
4. Smallholder-led growth only plausible way.
5. Are there ‘policy-proof’ paths for Ethiopia, Nigeria, even Dem R Congo?

Help to cut child mortality, improve female ed and job access (cf. Bihar, UP vs Kerala, S India), *and support family plang* will be crucial to sustain, speed, or achieve demog transn in SSA.

SSA demog from transint to bonus: CAADP?

1. CAADP (2002) first, and AU-based, commitment to match aid with domestic support for ag development. (Formerly, crowding out.) 4 'pillars' and regional/watershed approach good.
2. But progress slow: CAADP overstretched; many meetings, few appraised projects; first 'nat compact' (Rwanda) 2007!; long collapse of ag aid unreversed; little direct funds (some USAID)
3. Gates-Annan initiative? Key role of seed & water technology. The transgenics debate & EU.

4. Institutional issues: Asian green revolution shows capacity of transformed smallholder technology to steamroller weak institutions and cut poverty, *provided poor have land access*.
5. ‘A tide in the affairs of men’ (and women farmers) in SSA? Post-AU/Gleneagles dilemma: SSA govts *and* donors seek ways *beyond* (not against) welfarism, to production-led poverty reduction. Everywhere this has come from employment income led by smallholder ag, since 1950 supported by demog transition, raising wages, cheapening food, and initiating dependency-ratio transition.