

# Automation and Inequality – Directions of change for the world of work in the Global South

Andrew Norton, IIED

Bonn

May 2018

iied

Andy Norton  
23 November 2017



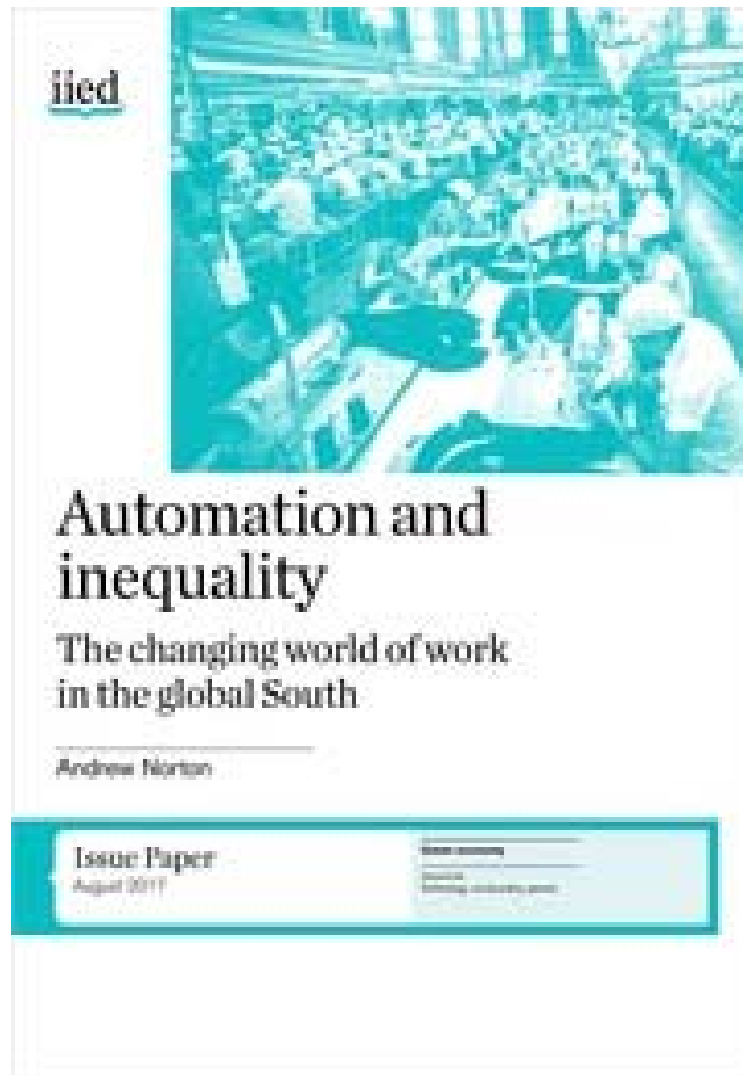
# Will cover...

- Where current observable trends might lead without transformative intervention
- The political and policy levers which might shift outcomes

iiied

Andrew Norton  
23 November 2017





Based on survey of literature, focus on Global South

# What's happening now?

- Disruption to the world of work on global scale
- Erosion of jobs in manufacturing even where output growing (e.g. China lost 15% between 1995 & 2002)
- Increasing impacts on agricultural prod and supply chains
- Accelerating impacts on services and retail.



# Inequality - caveats



In **rich countries** where automation is kicking in now not so much seeing the ‘end of work’ as more lousy jobs. (Taylor Review UK)

## Measures of inequality:

- Much confusion (global/national, wealth/income)
- Many miss/understate the top end.



# Negative pathways?

Causal pathways that might increase inequality:

1. End of manufacturing route to rapid growth/'convergence' (Rodrik, 'premature deindustrialization', reshoring etc.)
2. Increasing returns to capital vs labour
3. Raising incomes of top-end workers
4. Transforming rural societies (supercharged agribiz land alienation? Local workforce?) →
5. Increasing worker insecurity/isolation/disempowerment
6. Eroded solidarity in rich countries *undermining support for aid, trade, immigration?*

# Positive pathways?

E.g.s for poorer countries:

- Energy access (smart grids etc.)
- ICTs (weather, remittances etc.)
- Enhanced smallholder production (micro technologies)
- Globalised markets for services (on-demand internet platforms)



# None of this is inevitable

Outcomes will depend on policy responses & political/social culture.

e.g.

- Acemoglu and Restrepo 2017 found 'large and negative effects' of robots on employment and wages in **US** between 1990 & 2007
- Dauth et al 2017 found no aggregate job loss & no displacement of incumbents in **Germany** (1994-2010)– though did find wage effects. Explain difference through traditions of unions/work councils...





# Policy alternatives for LDCs- other paths to prosperity?

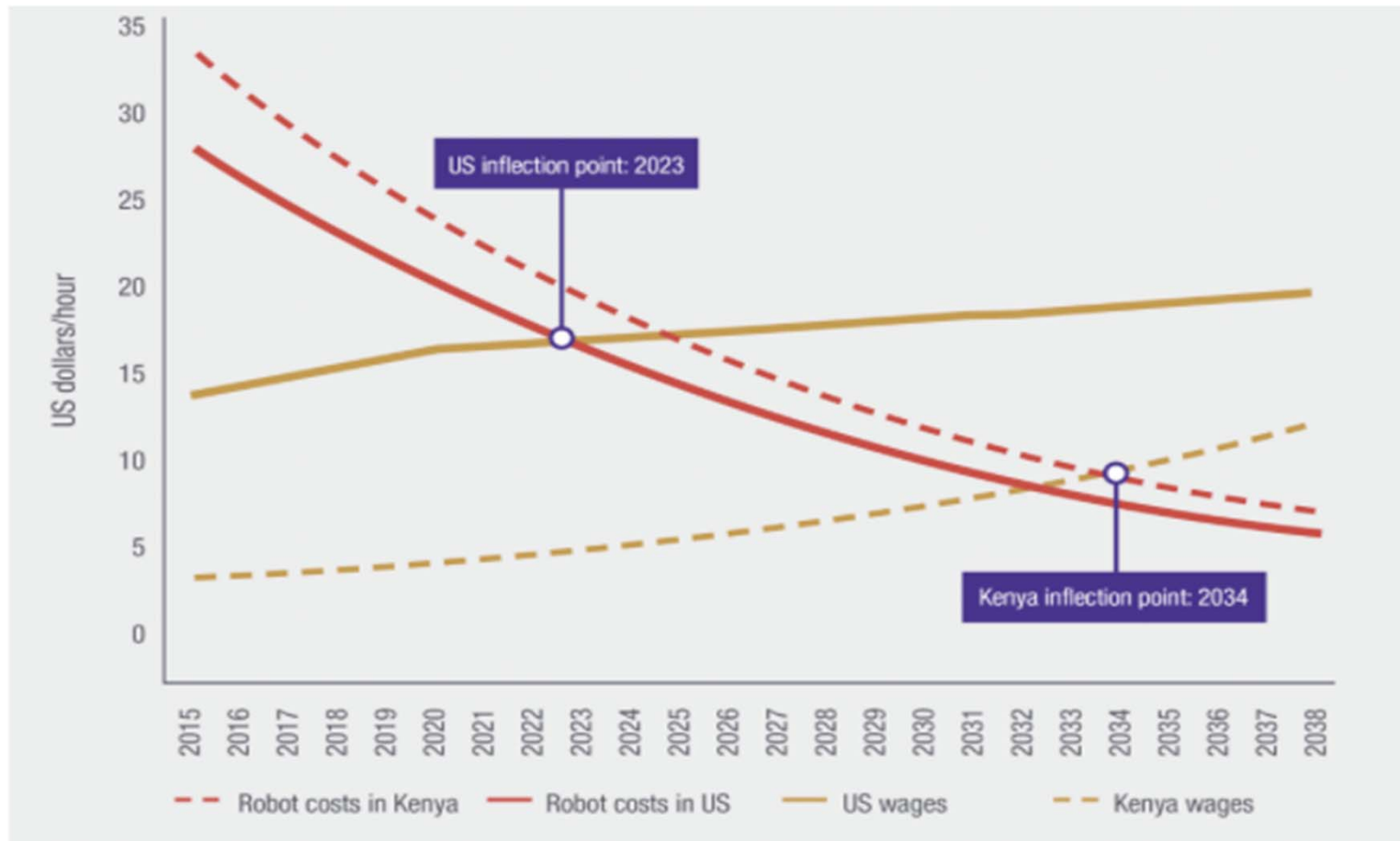


1. 'Get there while you can'
2. 'Build on what you have'
3. Build digital infrastructure and skills



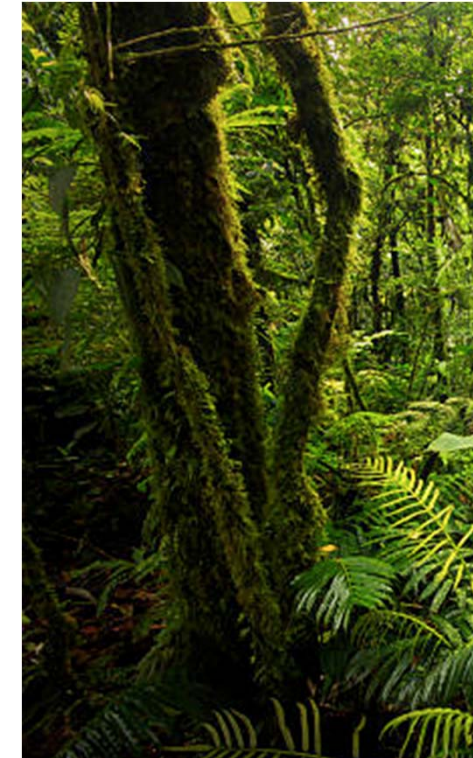
# 1. 'Get there while you can'

Furniture manufacture in Kenya (ODI, Banga & te Velde)



## 2. Build on what you have?

- Make the most of natural capital (e.g. Costa Rica, regeneration economy/ changing sources of mineral wealth)
- Dynamic ‘unregulated micro-entrepreneurialism’ (aka ‘the informal sector’) *huge role in diffusion of ICTs in Africa...*
- Services will be key - but will be a harder pathway to growth than manufacturing – *raising productivity means economy-wide investment in skills and institutions....*



# 3. Digital infrastructure & skills

- Globalisation of services:
  - Global platform economy
  - ‘Servicification’ of manufacturing
  - Pros and cons
- Tech leap frogging - energy, agriculture, communications.
- But – ‘digitalisation’ in MICs increases labour productivity much more than in LICs (estimate double internet penetration - 11%+ vs 3.3%)



# Addressing inequality 1.

## – ‘Pre-distribution’

- Active & far-sighted education policy
  - top end skills
  - everyday digital skills
  - cognitive/social skills for a changing world
- Firming up local land and natural resource rights – empowering & enabling people to engage with changing markets and increasingly automated agribiz



# Inequality 2 – distribution within the labour market

- Enabling land managers to get payments for ecosystem services
- Boosting/empowering smallholders (tech innovation, integrating in VCs)
- Labour on public works that boost natural capital/resilience
- Strengthening digital access all the way down the chain (gender)



# Inequality 3 - *Redistribution* & *social transfers*

iiied

Andrew Norton  
23 November 2017

*UBI not the only way to go.*

- Key feature is not penalising work & giving people a floor to enable life transitions.
- Plenty of models at scale from countries where the 'precariat' is nothing new e.g. Brazil, Bolsa Familia – 18 mn hhs
- But Eubanks' *Automating Inequality* (algorithms let loose on social policy) makes a strong case for UBI!

# The tax question

Most policy solutions imply tax & spend – challenges to taxation in the digital age:

- Tech giants are *hard* – delocalized business models...
- Crypto-currencies (user anonymity)
- Rising self employment (gig economy)
- Globalised on-demand platforms

**Responses:** Pigovian taxes, land & property taxes







# The politics of change

In a changing world:

- What will happen to labour unions and collective action?
- Changing citizenship and the politics of distribution as alternative?
- Political disruption from dismantling of communities of work – continued shift to nativism/nationalism?
- Direct effects (digital platforms & targeted political advertising)



# Automation and inequality – policy and political challenges in the Global South



- Ensuring strong labour and social standards in the global platform economy
- Supporting smallholder/communal land rights and production as rural transformation gathers pace
- In poorer countries – ensuring that the state can get the revenues it will need to support training and social protection
- Finding inclusive pathways to prosperity for LICs as the manufacturing pathway declines
- Ensuring gender equity in access to digital communications and platforms.