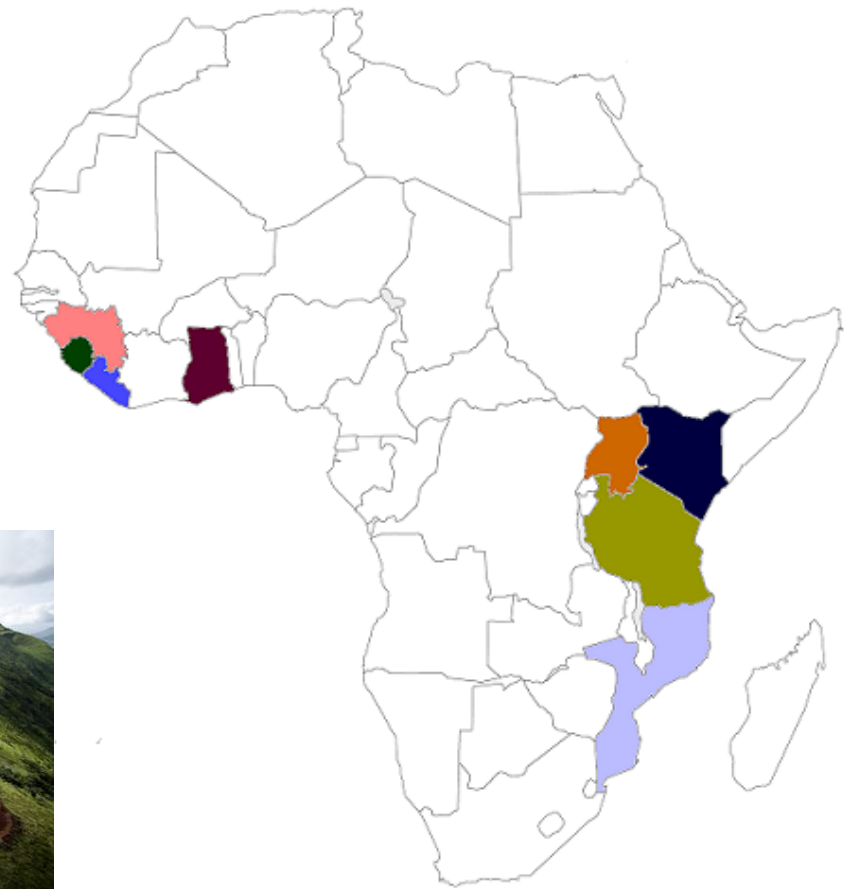# Preparing for the boom
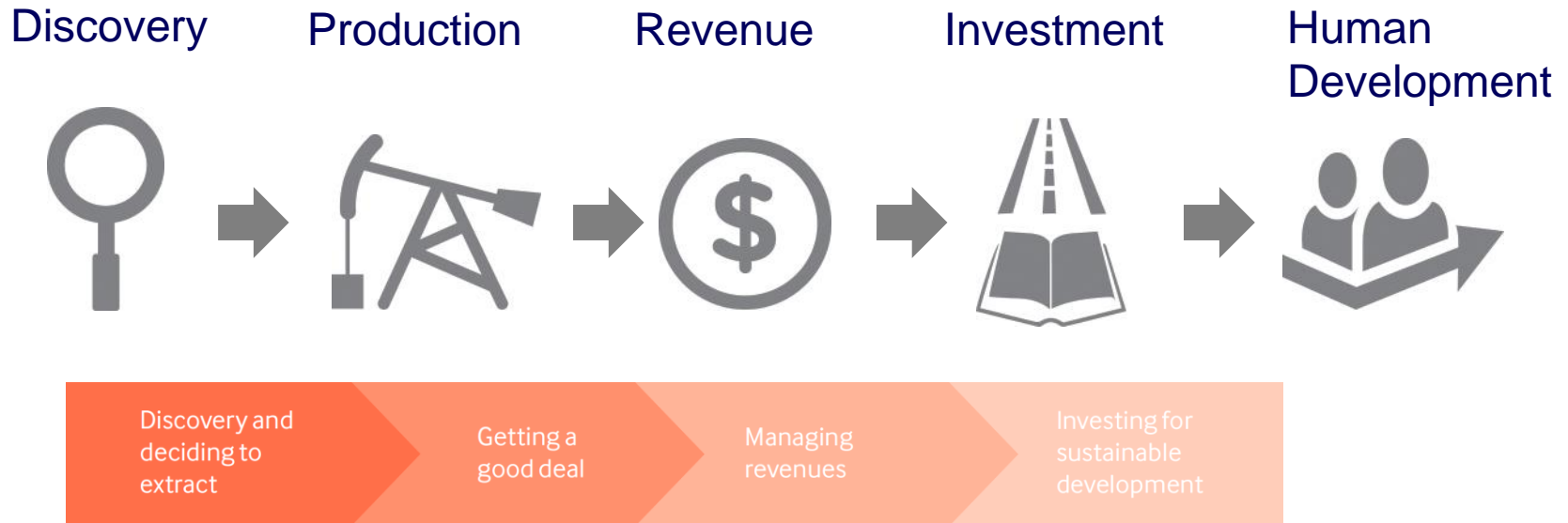
How much? When?

Mark Henstridge

June, 2014

Outline

- Work in progress
  - Baseline
  - Project assumptions
  - Mapping to BoP & fiscal
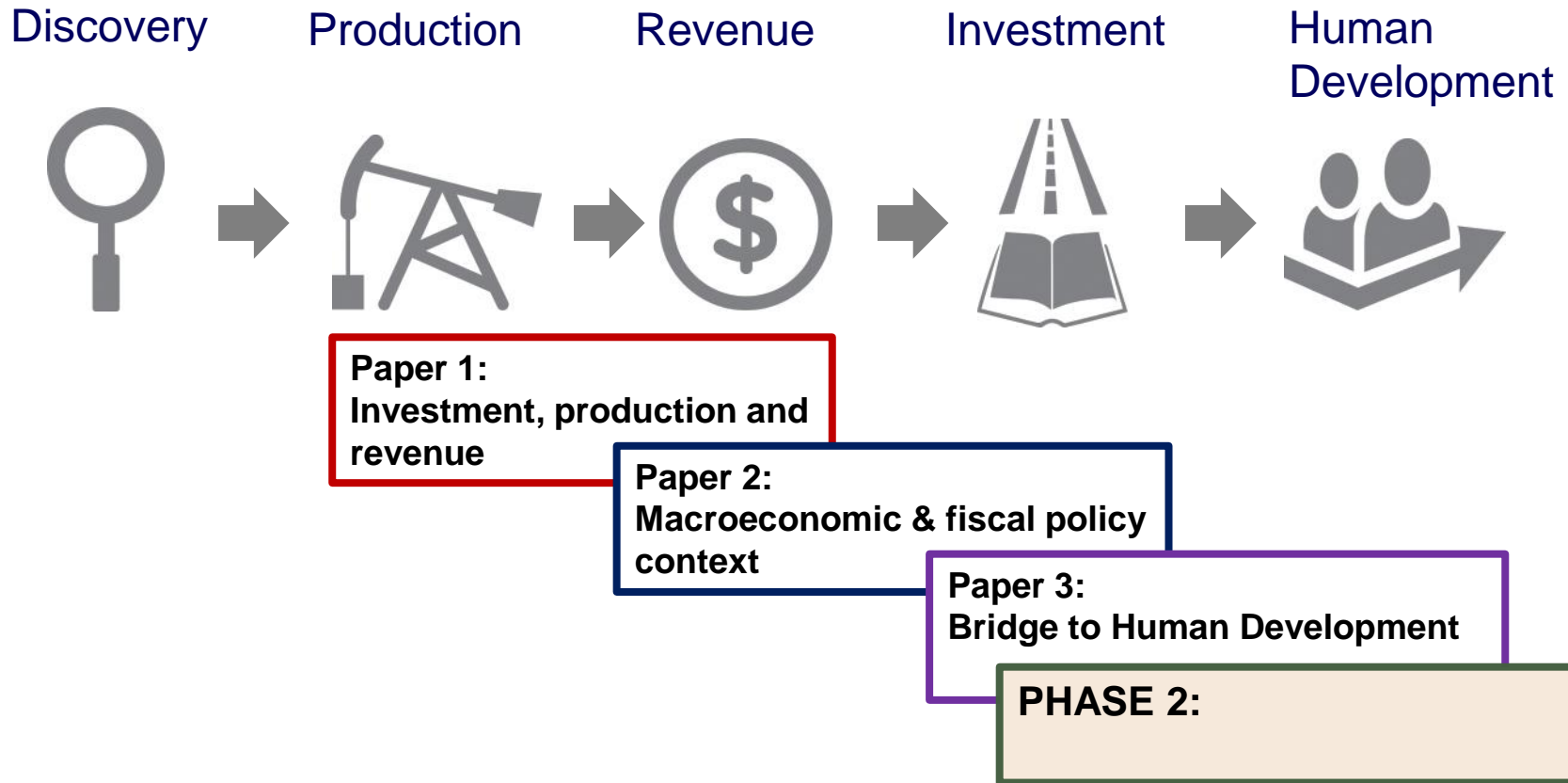- Immediate policy issues

Context: asset transformation

Discovery Production Revenue Investment Human Development

| Discovery and deciding to extract | Getting a good deal | Managing revenues | Investing for sustainable development |

Context: asset transformation

Discovery → Production → Revenue → Investment → Human Development

**Paper 1:
Investment, production and revenue**

**Paper 2:
Macroeconomic & fiscal policy context**

**Paper 3:
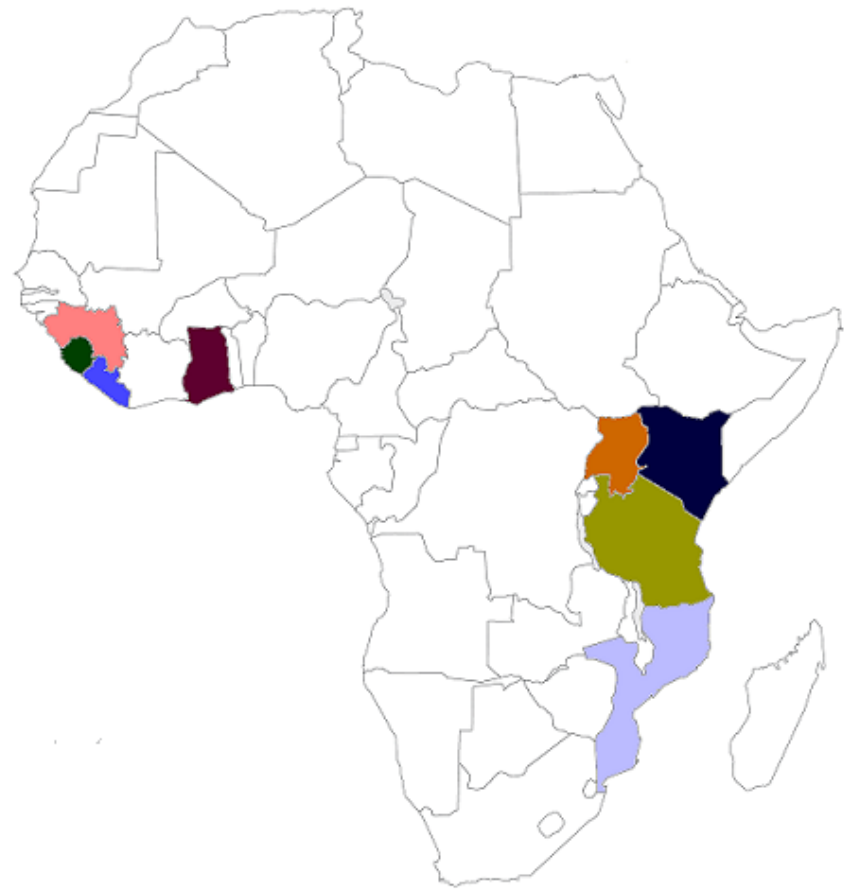Bridge to Human Development**

PHASE 2:

Illustration: how much? when?

Assumptions & projections:

- FDI & capital investment
- Production & export
- Operating costs & procurement
- Contract terms
- Revenue streams
  - Royalties
  - Fees & rentals
  - Production shares
  - Corporation tax
  - PAYE & sales- or value-added tax

Illustrative framework

Approach to projections:

1. Project finances
2. Economic baseline
3. Map project on to balance of payments and fiscal position – keeping monetary consistency.
4. Identify scale and timing of changes in 'resource envelope'
5. Identify short-term policy issues
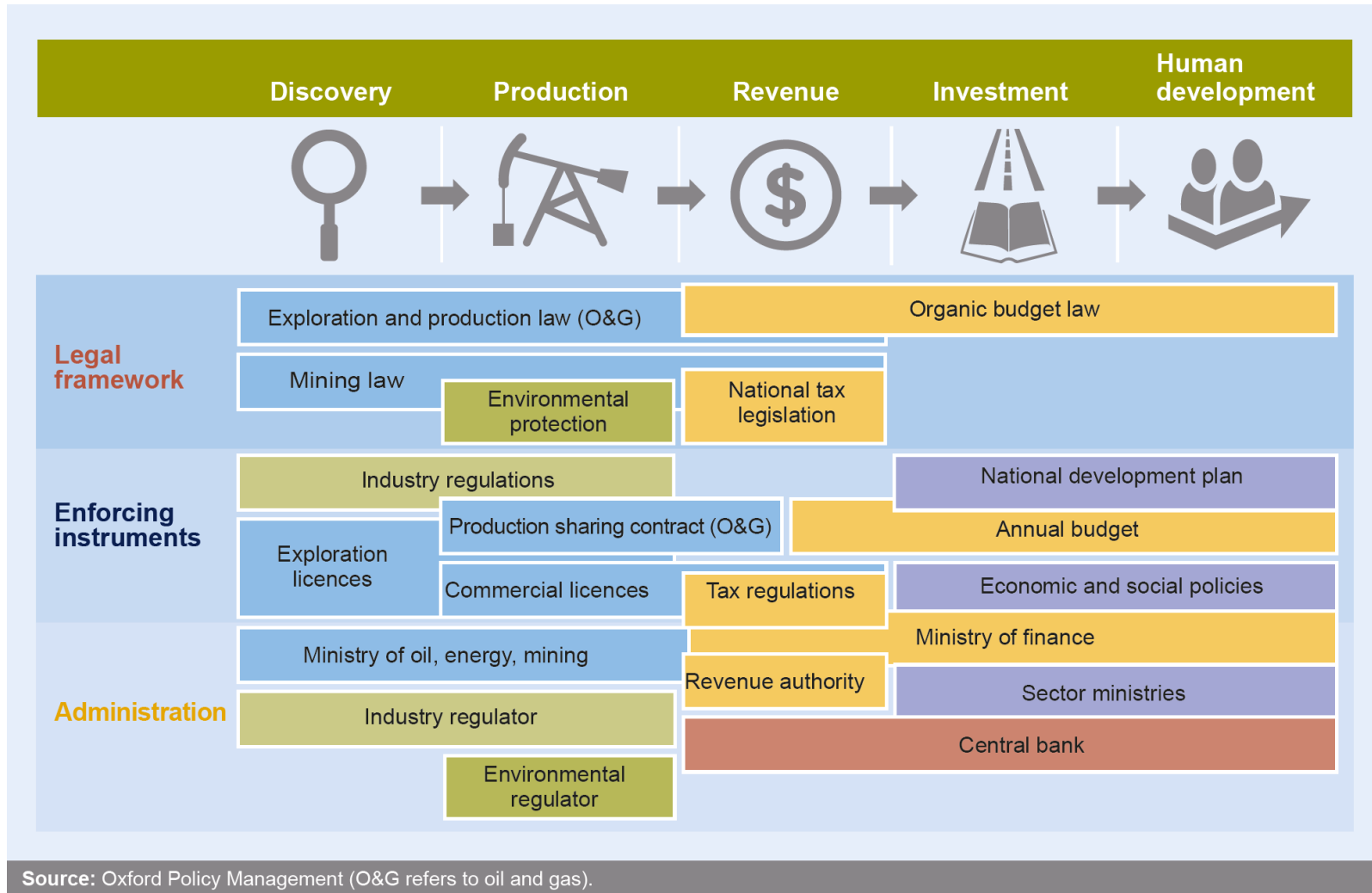6. Frame spending and other policy trade-offs for a stronger human development outcome

Consistency in a financial programme:

– Changes in the balance of payments change foreign reserves (ΔR)

– Changes in the public finances change domestic debt – subject to spending choices (ΔNDA)

– Each has monetary (ΔM) implications:

$$\Delta M \equiv \Delta R + \Delta NDA$$

Complexity: the 'authorising environment'

	Discovery	Production	Revenue	Investment	Human development

Legal framework
- Exploration and production law (O&G)
- Organic budget law
- Mining law
- Environmental protection
- National tax legislation

Enforcing instruments
- Industry regulations
- National development plan
- Production sharing contract (O&G)
- Annual budget
- Exploration licences
- Commercial licences
- Tax regulations
- Economic and social policies

Administration
- Ministry of oil, energy, mining
- Ministry of finance
- Revenue authority
- Industry regulator
- Sector ministries
- Central bank
- Environmental regulator

Spending alternatives

Impact per US$ 1 revenue

	Consumption			Investment			Balance sheet	
	Resource revenue	Private consumption	Government consumption	Private capital stock	Public capital stock	Foreign assets	Private assets	Government assets
Tax cut or cash transfer	1	c	0	1-c	0	0	1-c	0
Public spending	1	0	g	0	1-g	0	0	1-g
Domestic lending/debt	1	z	0	γ(1-z)	0	(1-γ)(1-z)	-z	1
Foreign assets/SWF	1	0	0	0	0	1	0	1
Accounting identity	R -	C_p -	C_g $\equiv$	I_p +	I_g +	I_f $\equiv$	A_p +	A_g

Note: c = share of consumption from tax cut
g = share of consumption in government spending
z = share of consumption in private response to government debt reduction/leding
C = consumption, I = Investment, A = Change in assets
Subscripts: p – private; g – government, f - foreign

Source: Collier, van der Ploeg, Spence and Venables (2009) 'Managing resource revenues in developing economies', OxCarre Research Paper 15, Oxford; IMF Staff Papers, 2010, 57, 1, 84-118, Washington, D.C.

Jobs: spatial distribution

Population distribution in Africa
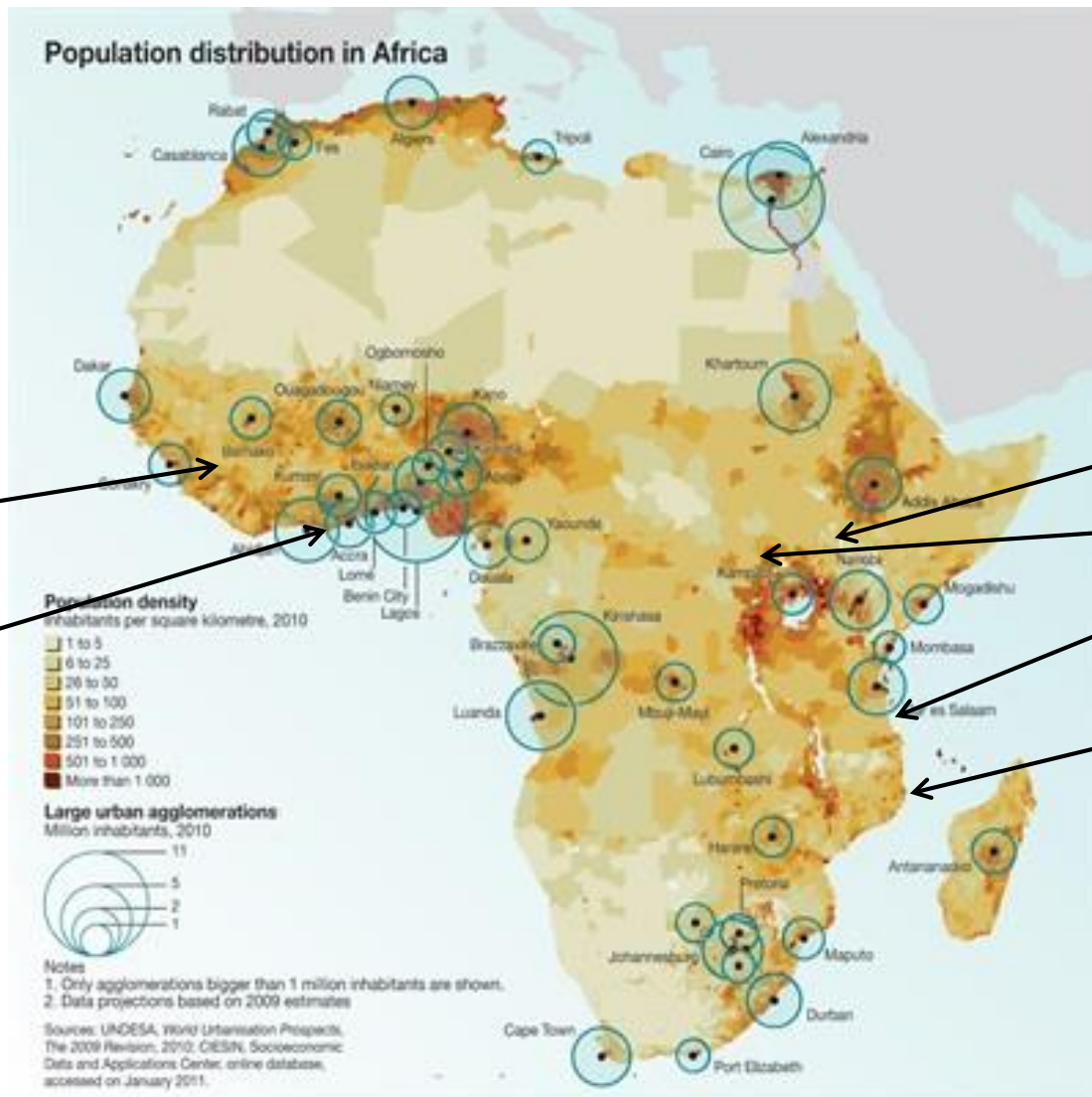
Simandou

Takoradi

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Hoima

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