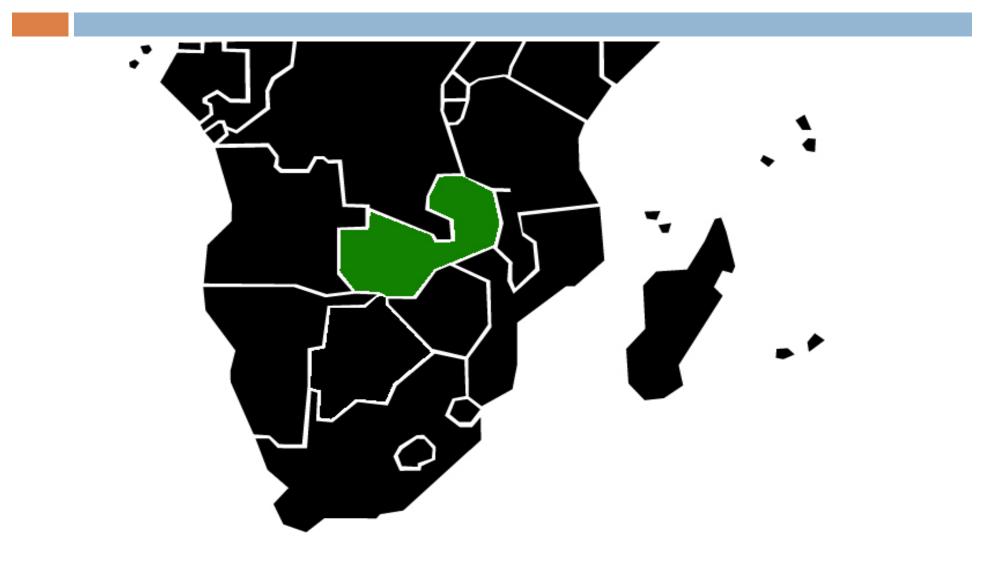
CHALLENGES AND OPPORTUNITIES FACING LANDLOCKED COUNTRIES

Zambia

Outline of Presentation

- Introduction
- The study country Zambia
- Zambia current participation in regional and global value chains
 - Copper mining value chain
 - Participation in copper global value chain
- Constraints to landlocked developing countries' participation in regional and global commodity value chains
- Opportunities for LLDCs' participation in regional and global commodity value chains

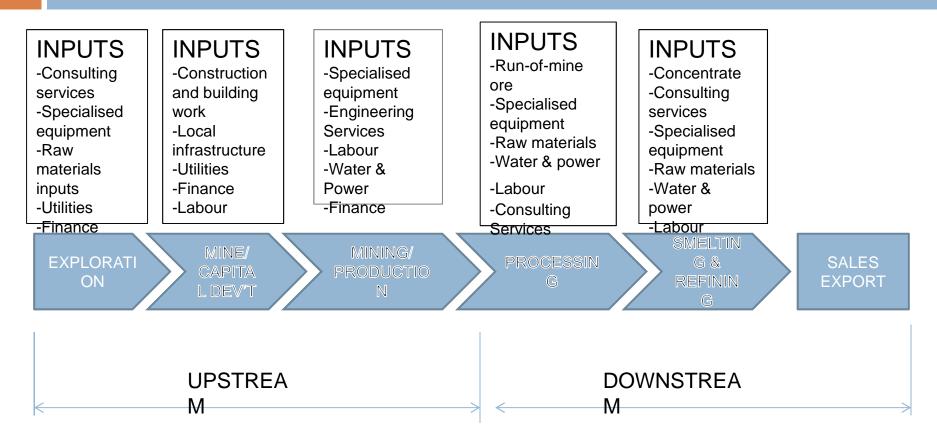
Location Map - Zambia



Zambia's current participation in GVCs

- Produces copper Zambia is Africa's largest producer of copper and cobalt and world's 7th largest copper producer and the 3rd largest producer of cobalt (in 2010)
- Zambia is home to Africa's largest known reserves of copper accounting for 6% of the world's copper reserves
- Existing mines hold resources estimated at 2.8 billion tonnes of copper ores of varying quality
- Privatisation attracted investors from China, India and South Africa changing the trend of investments from the traditional north and increasing South-South investment
- Copperbelt was the home of copper mining but new mines have started in North Western Province Kansashi & Lumwana
- Also mines and exports manganese ore, nickel, lead and coal; gold & silver
- Produces gemstones amethyst, beryl, emeralds and tourmaline

The Generic Mining Value Chain



The Generic Mining Value Chain

Note:

- This value chain represents a typical developing country situation where sales are mainly exports
- Other value chain activity stages continue beyond the country borders i.e. Semi-fabrication and the production of final products – one company is currently producing semi-fabricates
- Inputs at the various value chain activities can be local and imported
- Zambia's strength was in the supply of manufactured inputs into the copper mining industry
- This was reversed by liberalisation brief case suppliers

Determinants of increased participation

- Skills and institutions affect development of capabilities and capacities for local participation
- Nature of ownership affects the willingness to engage local suppliers or sourcing locally i.e. State v private, national v. Foreign suppliers
- Infrastructure is a major driver affecting local suppliers' ability to deliver goods and requirements to mines far away from settlements and industry and even travel/commuting by staff
- The development of outsourcing by commodity lead-firms to reduce own involvement in non-core business activities, to meet local content requirements or as CSR
- A strong manufacturing sector stimulates mineral processing that spills into fabrication because it demands and supplies

- Upstream: supply of mining support services, critical inputs such as chemicals, equipment, and spare parts and maintenance services
- Supply of goods & services required in mine development
- More scope at the mine development or mine construction stage uses inputs from the local economy – cement,
- Currently Zambian mining uses 68% of electricity generated – scope for increasing electricity generation contributing to the economy – Kafue Gorge to 750 MW by 2018 & increase to 4203 MW over a 6 year period
- □ Knowledge services legal and financial services,

- Use of local inputs stimulates agriculture, manufacturing and services sectors
- Technology required provides for development of research and innovation systems
- Local production and supply of inputs equipment and machinery – require a functioning manufacturing
- □ Generation and supply of electricity replace imports
- Services inputs and infrastructure are important investment to offer mines and ensure connection to outside international markets
- Skills, logistics and competition determine what Zambia can do with its copper
- Basic beneficiation is designed to reduce the weight low value-to-weight ratio gives in-country processing locational advantage due to transport costs per unit

Downstream:

- Opportunities are limited
- Manufacturing invariably takes place closer to markets; Zambia can manufacture copper products under a common regional market without barriers to intraregional trade – Zambia to work with TFTA to bring down barriers
- Aim to produce copper products at internationally competitive prices
- Requires efficient transport systems otherwise competitiveness can be compromised
- Manufacturing development is both necessary and an opportunity for increasing copper processing

- Requiring investment in communities increases capture
- Responsibility for social services & infrastructure
- Partnership with government to develop skills and human development
- Investing in linkage programmes with local and small and medium enterprise suppliers to mining companies to develop best-fit & optimal alignment

Challenges

- Infrastructure deficiencies limit access to markets through higher transport costs – Dar, Durban, Beira and Lobito (590 km)
- High cost of infrastructure improvement line to Lobito expected to cost \$990 million
- Transport costs add 40% to cost of product
- Getting the RECs to develop a regional market under which copper manufacturing could make economic sense and getting countries in the region to give up cheap copper imports to support Zambian copper
- Inadequate electricity generating capacity to cover industrial and domestic requirements
- Exclusion of the small and medium mining sector
- Lack of institutions to manage policy implementation

Challenges (cont'd)

- Casualisation of previous permanent employment positions left permanent employment accounting for only 50 per cent of all mining jobs
- For the 4 mining companies ICMM shows domestic labour flat just around 20,000 p.a.; contract labour rose from about 20,000 in 2009 to about 37,000 in 2013 (Copperbelt 16,800 direct ? 23,800 contractors), 15,600
- World Bank (2012) estimated total employment, including direct, indirect and induced, at more than 300,000 in 2010; implying an employment multiplier of more than five
- Lack of consultation with the community, local authorities, relevant line ministries of Government, and other stakeholders in CSR
- Lumwana Development Trust Fund is good model guided by the core principle of community members solving community problems using community resources – including skills and local firms
- Fragile competitive position of older Copperbelt mines which are high-cost & low-productivity by world standards
- Shortage of basic local human resources, technological expertise to establish mining and innovation firms

Mining employment

Type of Employment	Copperbelt	North- Western	Total
Direct employment, mining companies	16,800	3,500	20,300
Direct employment, contractors	23,800	12,100	35,900
Indirect employment, service providers	1,200	2,000	3,200
Indirect employment, goods providers	6,200	-	4,200
Indirect employment, social spending	6,500	3,100	9,600
Induced employment	53,000	21,500	74,500
Total	105,500	42,200	147,700
Of which indirect and induced	64,900	26,600	91,500
Implied multiplier	2.60	2.71	2.63

Recommendations

- Policy required to foster linkages and mining develops backward, forward or upstream, downstream and sidestream linkages
- Work with neighbours and within RECs to develop infrastructure and reduce costs of transport & electricity
- Devise ways to develop infrastructure including engaging private firms under options of public-private partnerships (PPPs) or build-own-operate-transfer (BOOT) projects
- Improve management of transit transport and dealing with spatial barriers and deepen regional integration to reduction border controls
- Identify sectors and VC segments that exhibit potential, design and pursue policies that develop and help to expand mining and related industries' participation in specific regional and global value chains

Recommendations

- Build a more substantial and diversified industrial base for Zambia, using the catalytic force of the large mining investments
- Develop regulatory environment for improved local content of goods supplied to mines including private investment in suppliers to enhance their competitiveness and capabilities to add value
- Support/facilitate the development of the manufacturing sector to increase opportunities for beneficiation of copper
- Establish funds and programmes to support empowerment of players and train artisanal and small scale miners; make access to funds conditional on training in management and technical skills to upgrade production
- Tailor skills training and human capital development initiatives to enter and upgrade within industries and this actual development should be a collaborative effort between government, training institutes, universities and the mining sector based on identified needs

Recommendations

- Strengthen & disseminate information about technology and innovation capacities for mining to pursue and make full use of relevant research & developments
- Ensure that the government extracts a larger share of the resource rents related to mining activities carried out in Zambia
- Arrange for mining companies to contribute to development of affected communities and ensure participation of stakeholders & prioritise their access to business opportunities along mining value chain
- Drive diversification from single mining commodity as well as out of mining into manufacturing through beneficiation

The End

Thank You for listening

Questions and comments

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