

**Supplementary Presentation at the Seminar on
the MCTI/JICA Project for Development of an
Industry Strategy in Zambia**

**Industry Strategy for
Engineering Products**

*“The Hub of Manufacturing of
Engineering Products in the Region”*

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Project Background & Period

■ Goal and outputs of the Project

1. Project Purpose: MCTI and ZDA become capable of formulating an industry strategy and action plans.
2. Expected Two (2) Outputs :
 - (1) MCTI and ZDA's capacities for formulation of an industry strategy are enhanced through the drafting of a strategy in the engineering products sector.
 - (2) MCTI and ZDA's capacities for development of action plans are enhanced through formulation of action plans in specific target areas of the engineering products sector.

Project Period : October 2011 – April 2012

Major Points of Project Implementation (1)

1. **Development and strengthening of the mechanism for industry strategy formulation and its implementation**
 - (1) *Activities were jointly implemented* with C/Ps nominated from MCTI and ZDA (a few staff from each organization)
 - (2) Set up *a Working Group for Industry Strategy Formulation for Engineering Products (WG)*, comprised of both the public and private sectors, as a main body for the activities
 - Conducted a series of discussions and workshops
 - *Industry Council for Engineering Products in the future ?*

Major Points of Project Implementation (2)

2. Strengthening of C/Ps' industry strategy development capacity and their ownership

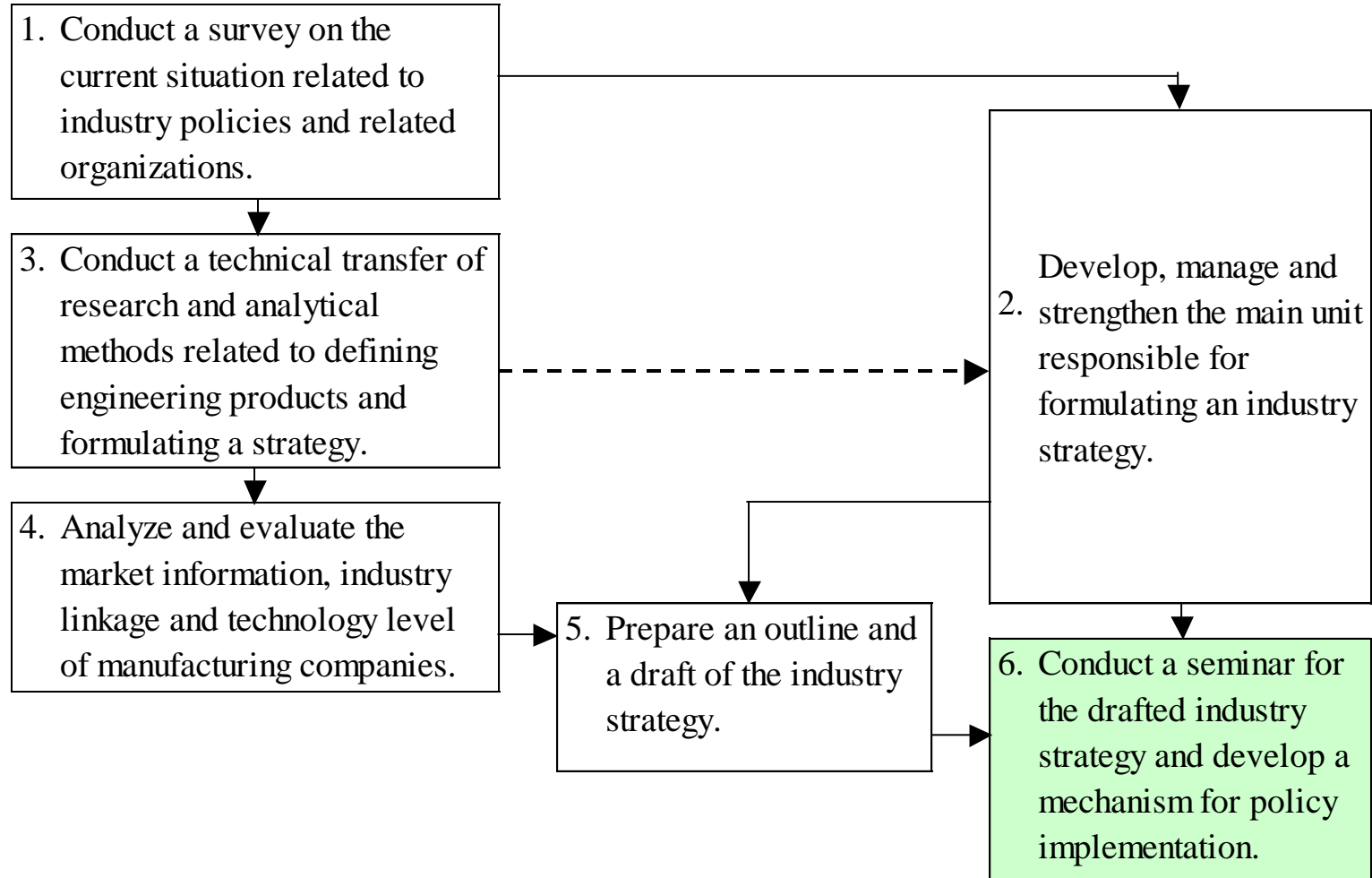
(Capacity Development through Joint Work)

- (1) Participation of MCTI and ZDA's managers and staff in practical activities were facilitated, which promoted their sense of ownership in the Project
- (2) Ensuring sustainability by transferring know-how of industry strategy formulation and providing practical experiences to C/Ps were sought.

Major Points of Project Implementation (3)

3. **Strategy formulation that contributes to strengthening management resources & dynamism of the Zambian manufacturing sector**
 - (1) Analysis and recommendations from the perspectives of strengthening international division of labor, trade promotion (international industrial linkage) and regional cooperation (e.g. SADC and COMESA)
 - (2) Analysis and recommendations covering wide-ranging issues, encompassing technology development, human resource development, trade and investment promotion and MSME promotion in the target sectors

Activities and Implementation Method (Workflow)



Facilitated Public-Private Dialogue

(Implemented Workshops)

(1) Workshop 1 (November 23, 2011): 35 participants

- Presentation 1: “Work Implementation Plan of the Project”
- Presentation 2: “Trends of Copper and Iron/Steel Trade: Prospects of Base Metals for Engineering Products”
- Presentation 3: “Strategy for the Non-ferrous Metals Industry in Japan ”

(2) Workshop 2 (February 7, 2012): 30 participants

- Presentation : “The Core Concepts of Engineering Products Strategy ”

(3) Workshop 3 (February 28, 2012): 29 participants

- Presentation 1: “Industry Strategy Case Studies: Sri Lanka, Japan and Asia”
- Presentation 2: “Lessons from Development of Copper Fabrication Industry ”

Project Team visited 70 companies/organizations.

Industry Strategy for Engineering Products

Target Sectors

Copper Fabrication and Iron/Steel sectors are selected:

- Zambia has rich resources of copper, iron ore and coal, and has huge potential for developing **resourced-based manufacturing**.
- Several steel making and copper fabrication companies have **emerged dynamically in Zambia over the last five years**.
- Zambia is **already an important regional base of manufacturing and supplying copper rod in southern Africa**.
- Zambia **needs quality, cost-effective raw material suppliers in the local manufacturing (supply) chain**, which also benefits secondary manufacturers/assemblers, mainly of MSMEs.
- Developing the target sectors, particularly **Iron/Steel will generate large spill-over effect to all the manufacturing sectors**, which leads effective industrial development.
- **Consumption for basic materials in Zambia and SADC will increase**, particularly in construction sector.

Importance of Copper Fabrication and Iron/Steel (1)

- ❑ Large trade deficit in iron and steel (HS72+HS73)
- ❑ When Self-sufficiency (production) of HS72, 73, 74 increase, other engineering products (HS 84, 85, 87) will also be benefited

(US\$ million)	2006			2010		
	Export	Import	Balance	Export	Import	Balance
Total Exports & Imports of Zambia	3,770	3,074	696	7,200	5,321	1,880
HS26 Ores, slag and ash	422	30	392	524	841	-318
HS72 Iron and Steel	2	100	-98	17	142	-125
HS73 Articles of Iron and Steel	5	99	-95	7	163	-156
HS74 Copper and articles thereof	2,613	8	2,605	5,418	244	5,173
HS84 Machinery, boilers, etc.	60	648	-588	70	866	-796
HS85 Electrical, electronic equipment	40	254	-214	46	248	-202
HS87 Vehicles other than railway, tramway	3	315	-312	17	374	-357

Source: International Trade Center (ITC), 2011

Note: HS is Harmonized Commodity Description and Coding System, a multi-purpose international nomenclature developed by the World Customs Organization (WCO).

Importance of Copper Fabrication and Iron/Steel (2)

- **Large trade deficit in iron and steel (HS72+HS73)**
 - Δ 282 US\$ million in 2010 (**-15% of total trade surplus: US\$ 1.9 billion**)
 - 183 Kt in volume in 2010 (widened from 139 Kt in 2005)
 - All the major steel products record trade deficits
 - **Main import items: (Total import volume of HS 72: 133.6 Kt in 2010)**
 - (1) **Coated Sheets:** 33.8 Kt
 - (2) **Angles, Shapes, Sections:** 20.1 Kt
 - (3) **Hot rolled sheets (and/or coils):** 14.9 Kt
- + Import substitution and export promotion is increasing in Bars & Rods**
- **Export is increasing rapidly, but the total volume is still limited**
 - 35.3 Kt in 2010 (**Export value: US\$ 18.5 million**)
 - May increase more with recently increased capacities in Zambia

Importance of Copper Fabrication and Iron/Steel (3)

- Steel Imports (for construction materials) will surge, if the domestic production (capacity) will not increase.

Steel Trade Development of Zambia

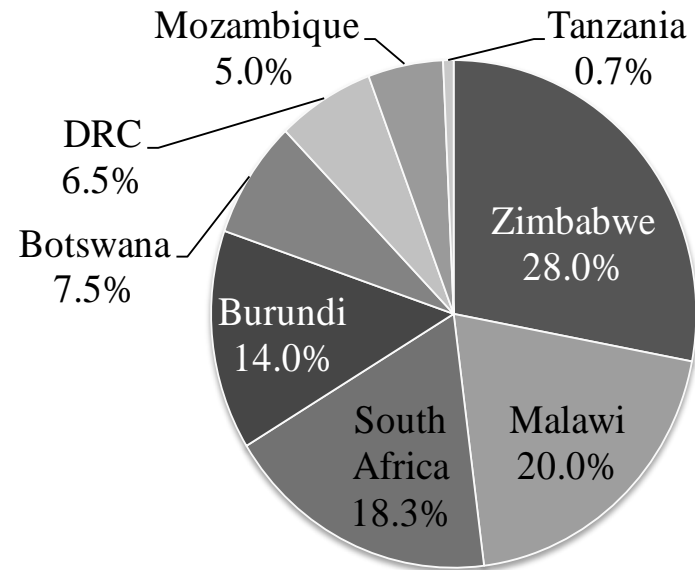
Year	Import				Export				Unit Price (US\$)				Net Export (Export - Import)			
	Volume (1,000 ton)		Value (US\$ mil.)		Volume (1,000 ton)		Value (US\$ mil.)		Import		Export		Volume (1,000 ton)		Value (US\$ mil.)	
	2006	2010	2006	2010	2006	2010	2006	2010	2006	2010	2006	2010	2006	2010	2006	2010
Ferro-alloys,ferrous raw materials and semi-finished steel	1.7	0.9	1.9	1.4	5.6	18.3	1.2	3.9	1,108	1,631	223	213	3.9	17.5	-0.6	2.5
Ferro-alloys	1.7	0.8	1.7	1.1	1.2	2.4	0.9	2.6	1,038	1,303	717	1,088	-0.4	1.6	-0.8	1.5
Steel scrap	0.0	0.0	0.0	0.0	4.3	15.7	0.4	1.0	1,500	120	85	66	4.3	15.7	0.4	1.0
Long steel products	44.6	45.9	38.0	52.8	0.2	14.9	0.2	10.2	851	1,151	930	684	-44.4	-30.9	-37.8	-42.6
Bars & Rods	19.5	20.1	15.5	20.4	0.1	12.5	0.1	8.6	796	1,013	1,000	686	-19.5	-7.7	-15.5	-11.8
Angle, Shapes & Sections	17.6	20.1	16.9	25.5	0.2	2.4	0.1	1.6	960	1,270	767	658	-17.4	-17.6	-16.8	-23.9
Wire	7.6	5.7	5.6	6.9	0.0	0.0	0.0	0.0	741	1,217	2,538	4,111	-7.6	-5.7	-5.6	-6.9
Flat steel products	44.5	56.3	44.2	69.1	0.1	1.1	0.2	0.9	993	1,228	1,433	868	-44.4	-55.2	-44.0	-68.2
Hot-rolled coils & sheets	16.8	14.9	16.1	18.6	0.0	0.0	0.0	0.1	961	1,249	2,000	2,040	-16.8	-14.8	-16.1	-18.5
Cold-rolled coils & sheets	5.6	7.7	7.0	9.4	0.0	0.4	0.0	0.2	1,235	1,225	2,333	565	-5.6	-7.2	-6.9	-9.2
Coated coils & sheets	22.1	33.8	21.1	41.2	0.1	0.6	0.2	0.6	956	1,220	1,348	1,024	-22.0	-33.1	-21.0	-40.5
Tube, Pipes & Others	13.7	23.2	32.5	46.4	0.6	0.4	1.2	1.5	2,381	2,003	1,867	3,372	-13.0	-22.7	-31.3	-44.9
Sheet pile & Rails	1.6	3.5	2.0	4.1	0.4	0.1	1.0	0.1	1,303	1,149	2,301	1,905	-1.1	-3.5	-1.0	-3.9
Tube, Pipes & Fittings	12.1	19.7	30.5	42.4	0.2	0.4	0.2	1.3	2,520	2,156	956	3,670	-11.9	-19.3	-30.3	-41.0
Stainless & Alloy steel products	7.3	7.4	15.9	19.6	0.3	0.5	0.5	1.9	2,190	2,652	1,421	4,174	-6.9	-6.9	-15.4	-17.7
Total Steel Products (HS72)	111.7	133.6	132.5	189.4	6.9	35.3	3.3	18.5	1,185	1,417	477	523	-104.9	-98.4	-129.2	-170.9
Fabricated steel products (HS 73)	27.4	49.1	66.9	116.5	1.3	3.4	3.6	5.7	2,438	2,373	2,874	1,648	-26.2	-45.7	-63.3	-110.9
Structures (rods, angle, plates)	11.9	19.2	28.4	47.0	0.3	0.8	0.4	0.6	2,387	2,444	1,233	802	-11.6	-18.4	-28.1	-46.3
Cloth, grill, netting & fencing	2.0	2.7	2.6	4.5	0.0	0.1	0.0	0.1	1,326	1,651	1,167	1,486	-2.0	-2.7	-2.6	-4.4
Screws, bolts, nuts, etc.	1.9	4.9	8.4	12.2	0.1	0.1	0.4	0.4	4,522	2,469	4,412	5,160	-1.8	-4.9	-8.1	-11.8
Other articles of iron or steel	11.7	22.2	27.4	52.9	0.9	2.5	2.9	4.5	2,347	2,379	3,275	1,820	-10.8	-19.7	-24.5	-48.4
Grand Total (HS 72 + HS 73)	139.2	182.7	199.4	305.9	8.1	38.7	6.9	24.1	1,432	1,674	845	623	-131.0	-144.0	-192.5	-281.8

Importance of Copper Fabrication and Iron/Steel (4)

- A decade ago, there was almost no export of iron/steel products from Zambia; it is still small in scale, but is growing steadily.
- The current export destination is regional markets.
- DRC imports a wide spectrum of iron and steel products from Zambia:
 - Coated sheets (579 tons) out of 620 tons exported in total
 - Wire

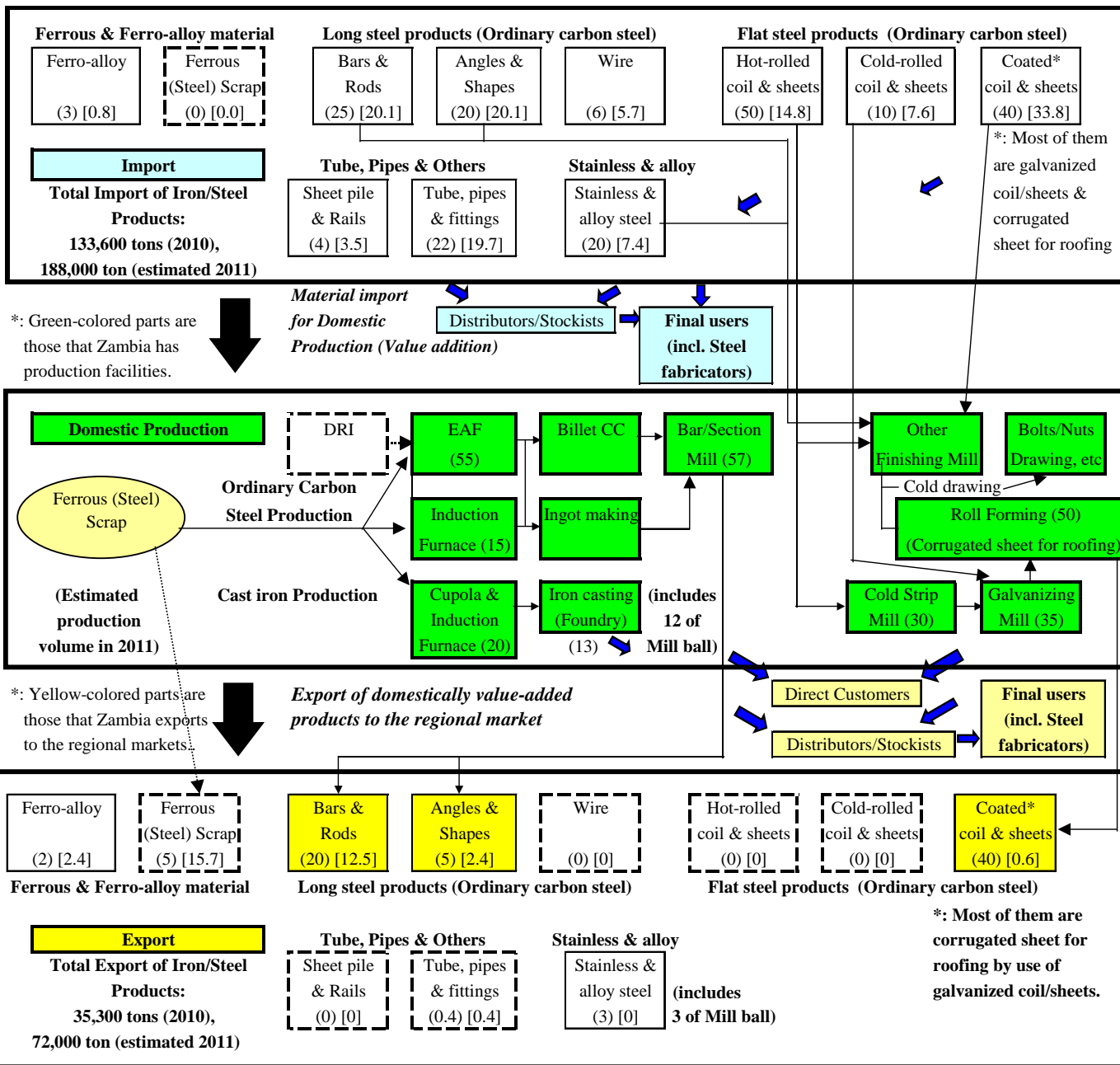
➔ **With its geographical proximity, Zambia is becoming a gateway country to DRC and other SADC nations.**

Export Destinations of Bars and Rods
(HS Code 7214)*: 2010

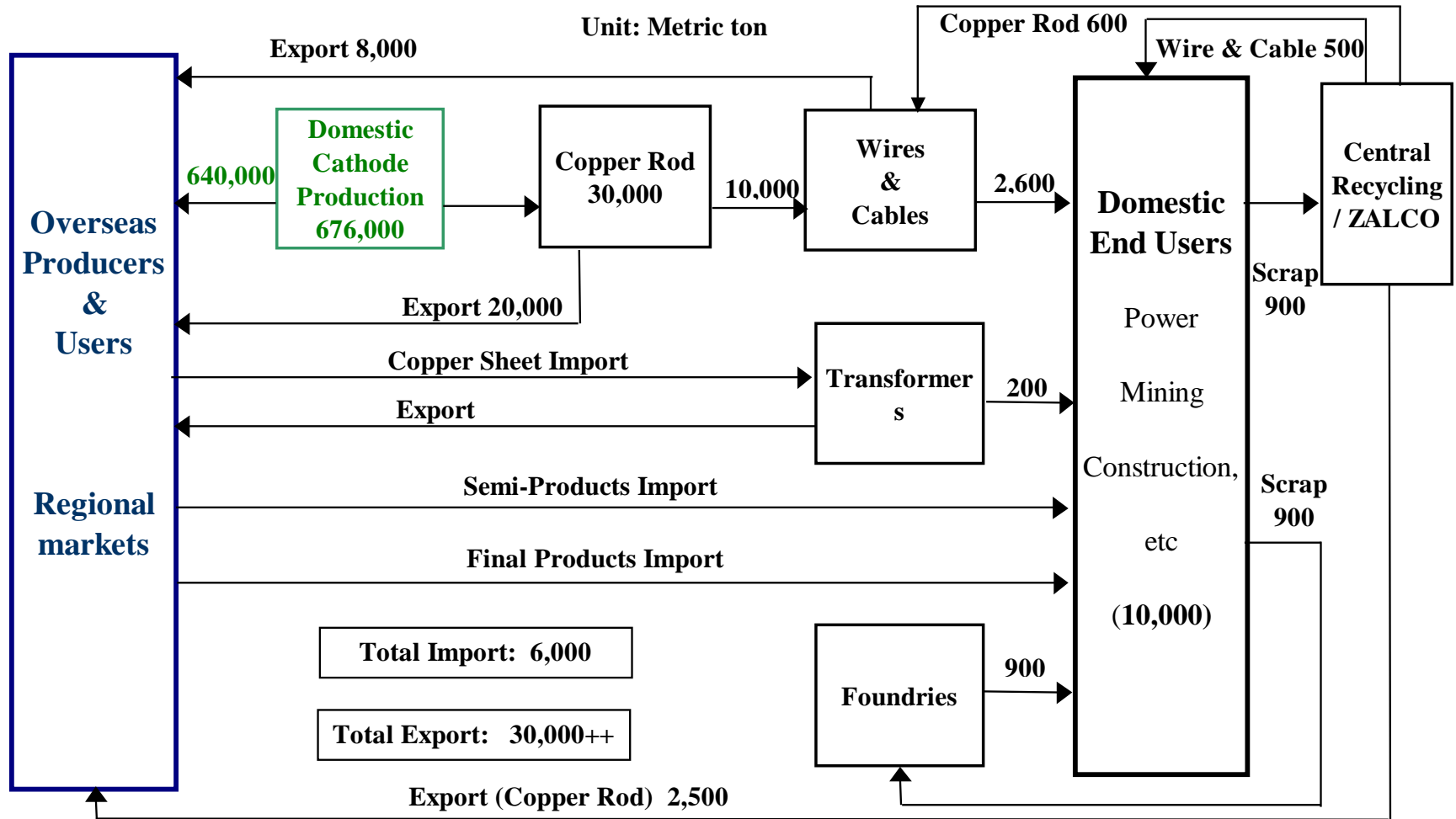


* HS Code 7214 is the top export product for Zambia under HS 72. In 2010 Zambia exported 12.1Kt valued US\$ 8.4 mill., and imported 12.5 Kt valued US\$ 12.9 mill.

•Source: International Trade Centre (ITC) (2011)



Material Flow of Copper Fabrication Sector in Zambia (2011 estimation)



Industry Strategy for Engineering Products

SWOT vs. SA, China & India

(Big exporting countries to Zambia)

Strength	Weakness
<ul style="list-style-type: none"> - Existing leading companies - Endowment of natural resources - High transportation cost* 	<ul style="list-style-type: none"> - Lack of skilled workers - Lack of supporting industries - High manufacturing cost
Opportunity	Threat
<ul style="list-style-type: none"> - Growing domestic market - Growing regional markets 	<ul style="list-style-type: none"> - Aggressive exporting behaviours by companies from large exporting countries - Environmental degradation

*: High transportation cost is usually seen as a “weakness;” however, when the production capacity, particularly of “bulky” products, is established inside the landlocked country, high transportation cost becomes a “strength” against competitors from abroad.

Target is “Regional Market”

(1) Growing Population and GDP

	Population (million)	GDP (US\$ billion)
Zambia	13	17
4 countries total	120	29
DRC	68	13
Malawi	16	5
Mozambique	23	10
Zimbabwe	13	2
6 countries total	184	137
Angola	19	84
Tanzania	45	24
Zambia + 6 countries	197	154

Target is “Regional Market”

(2) Increasing Steel Consumption (Forecast)

	Total consumption			Per capita consumption	
	2011 (1,000t)	2016 (1,000t)	%increase (annual)	2011 (kg/person)	2016 (kg/person)
Zambia	199	302	12.0%	14.7	19.2
4 Neighbors	917	1,154	4.7%	7.7	8.5
6 Neighbors	1,644	2,195	6.0%	8.3	9.6
Total	1,843	2,497	6.3%	9.3	10.9
	Reference (kg/person)		2001	2010	
	Ghana		9.8	20.9	
	Kenya		11.8	20.1	
	South Africa CU		80.4	76.6	
	Africa Total		31.1	41.7	

* **2.5Mt** (2016), **3.3 Mt** (2020), **6.5 Mt** (2030) in the region?

Target is “Regional Market”

(3) Increasing Copper Consumption (Forecast)

Country	Total consumption			Per capita consumption	
	2011 (1,000t)	2016 (1,000t)	%increase (annual)	2011 (kg/person)	2016 (kg/person)
Zambia	10	12	3.7%	0.70	0.80
4 Neighbors	37	43	3.1%	0.20	0.31
DRC	17	20	3.3%	0.25	0.25
Malawi	5	7	7.0%	0.30	0.40
Mozambique	12	13	1.6%	0.50	0.50
Zimbabwe	3	3	0.0%	0.20	0.20
6 Neighbors	85	101	3.5%	0.33	0.47
Tanzania	34	41	3.8%	0.70	0.80
Angola	14	17	4.0%	0.70	0.80
Zambia + 6 Neighbors	95	113	3.5%	0.35	0.49

Industry Strategy for Engineering Products

SWOT vs. Neighboring countries

Strength	Weakness
<ul style="list-style-type: none">- Stable political and economic environment- Existing leading companies and existing production base- No major competitors in the region	<ul style="list-style-type: none">- Landlocked without seaport- High manufacturing cost
Opportunity	Threat
<ul style="list-style-type: none">- Regional base for manufacturing and marketing	<ul style="list-style-type: none">- Policy reforms of neighboring countries for pro-competition and pro-foreign investors

Industry Strategy for Engineering Products

SWOT (Iron/Steel Sector)

Strength	Weakness
<ul style="list-style-type: none"> - Rich deposit of iron ore and coal - High transportation cost for value of steel products 	<ul style="list-style-type: none"> - No recognition of quality products - Limited types of product lines - No metal production of ferro alloy and galvanization (Zinc ingot) - No recognized accrediting agency - Remaining old regime of import duties
Opportunity	Threat
<ul style="list-style-type: none"> - Increasing demand - Big room for import substitution - DRI iron making 	<ul style="list-style-type: none"> - Limited availability of steel scrap - New steel project in Zimbabwe - New DRI iron project in Tanzania

Industry Strategy for Engineering Products

SWOT (Copper Fabrication Sector)

Strength	Weakness
<ul style="list-style-type: none"> - Presence of leading companies: ZAMEFA and El Sewedy - Existing copper rod production facility - Existing copper cathode production base 	<ul style="list-style-type: none"> - Small market to maximize scale of economy - Only copper rod produced, no sheet - No metals production for copper alloy
Opportunity	Threat
<ul style="list-style-type: none"> - Preemptive investment to create entry barrier to neighboring countries 	<ul style="list-style-type: none"> - Construction of copper sheet and tube copper alloy facilities in the neighboring countries - Further penetration of sub-standard products

Industry Strategy for Engineering Products

Action Plan and Implementation Schedule

(Strategy-1 : Create a level playing field)

Actions	Implementation Agency	Year 1				Year 2				Year 3				Year 4				Year 5				
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	
1. Create a level playing field.																						
(i) Introduce SGS type system.																						
1. Help compile petitions from private sector.	MCTI/ZDA	■																				
2. Draft the law(s).	ZABS		■																			
3. Enact the law(s).	MCTI/ZABS			■	■																	
(ii) Streamline import duties.																						
1. Identify areas to be reformed.	MCTI/ZDA	■																				
2. Draft the proposal.	MCTI		■																			
3. Introduce the new system.	MOF/MCTI			■	■																	
4. Follow up the remaining issues, repeat 1-3.	MCTI/ZDA/MOF					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

Industry Strategy for Engineering Products

Action Plan and Implementation Schedule

(Strategy-2 : Ensure quality products)

Actions	Implementation Agency	Year 1				Year 2				Year 3				Year 4				Year 5			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
<u>2. Ensure quality products.</u>																					
(i) Introduce SABS certification into Zambia.																					
1. Negotiate and agree the framework with SABS.	MCTI/ZABS	■																			
2. Establish office and train staff.	ZABS					■															
3. Provide service.	ZABS					■				■				■				■			
(ii) Strengthen national quality measures for domestically manufactured goods.																					
1. Review the existing quality standards.	MCTI/ZABS	■																			
2. Draft compliance rules for national goods.	ZABS					■															
3. Monitor the performance.	ZABS					■															
4. Feedback issues and reform procedures.	MCTI/ZABS					■				■				■				■			

Industry Strategy for Engineering Products

Action Plan and Implementation Schedule

(Strategy-3 : Accelerate the increase of production capacity)

Actions	Implementation Agency	Year 1				Year 2				Year 3				Year 4				Year 5				
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	
3. Accelerate the increase of the production capacity of the existing exporting companies.																						
(i) Establish contact with the target companies.																						
1. Select target companies.	MCTI/ZDA																					
2. Conduct regular visits.	ZDA																					
3. Accumulate companies info in documents.	ZDA																					
(ii) Set annual target and monitor.																						
1. Identify and evaluate company plans.	MCTI/ZDA																					
2. Set annual target.	MCTI/ZDA																					
3. Evaluate performance of IAs.	MCTI/ZDA																					
(iii) Eliminate soft constraints.																						
1. Identify soft constraints.	MCTI/ZDA																					
2. Draft proposals.	MCTI/ZDA																					
3. Implement changes in rules and regulations.	MCTI																					
4. Follow up the remaining issues, repeat 1-3.	MCTI/ZDA																					
(iv) Prioritize physical infrastructure development.																						
1. Identify priority infrastructure projects.	MCTI/ZDA																					
2. Assess budget and feasibility.	MCTI/ZDA																					
3. Recommend priority projects.	MCTI																					

Industry Strategy for Engineering Products

Action Plan and Implementation Schedule

(Strategy-4 : Nurture local supporting industries serving for exporting companies)

Actions	Implementation Agency	Year 1				Year 2				Year 3				Year 4				Year 5			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
4. Nurture local supporting industries serving for exporting companies.																					
(i) Disseminate information and build network.																					
1. Identify potential candidates.	ZDA	■				■				■				■				■			
2. Identify the needs of exporting companies.	ZDA	■				■				■				■				■			
3. Conduct workshops.	MCTI/ZDA		■				■				■				■				■		
(ii) Develop industry clusters.																					
1. Set a scenario of industry clusters.	MCTI/ZDA							■	■												
2. Position MFEZs in industry clusters.	MCTI/ZDA							■	■												
3. Promote investments in identified clusters.	ZDA									■	■	■	■	■	■	■	■	■	■	■	■

Industry Strategy for Engineering Products

Action Plan and Implementation Schedule

(Strategy-5 : Improve realization of FDIs in target segments)

Actions	Implementation Agency	Year 1				Year 2				Year 3				Year 4				Year 5			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
5. Improve realization of FDIs in target segments.																					
(i) Realize investment in copper sheet.																					
1. Identify foreign investors.	ZDA																				
2. Negotiate terms of investment.	ZDA																				
3. Enter into agreement.	ZDA																				
(ii) Realize investment in zinc ingot.																					
1. Identify foreign investors.	ZDA																				
2. Negotiate terms of investment.	ZDA																				
3. Enter into agreement.	ZDA																				
(iii) Realize investment in DRI.																					
1. Identify foreign investors.	ZDA																				
2. Negotiate terms of investment.	ZDA																				
3. Enter into agreement.	ZDA																				
(iv) Find and approach more target investments.																					
1. Identify new target investments.	ZDA																				
2. Identify foreign investors.	ZDA																				
3. Negotiate and enter into the agreement.	ZDA																				

Industry Strategy for Engineering Products

Action Plan and Implementation Schedule

(Strategy-6 : Enforce safety and environmental safeguard standards)

Actions	Implementation Agency	Year 1				Year 2				Year 3				Year 4				Year 5			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
6. Enforce safety and environmental safeguard standards.																					
(i) Create a new implementation and monitoring system.																					
1. Identify issues in implementation and monitoring.	MCTI/ZDA/MOL/MOEn	■																			
2. Draft the new procedures.	MOL/MOEn					■															
3. Obtain the consents of the relevant parties.	MCTI/ZDA/MOL/MOEn					■															
4. Announce the new procedures.	MOL/MOEn					■															
(ii) Implement the new procedures.																					
1. Explain the new system to the stakeholders.	MCTI/ZDA/MOL/MOEn					■															
2. Set a trial period and implement.	ZDA/MOL/MOEn					■				■				■				■			
3. Monitor the performance of the new system.	ZDA/MOL/MOEn									■				■				■			
4. Feed back issues and reform the system.	MCTI/ZDA/MOL/MOEn													■				■			

Ministry responsible for labor (MOL) and Ministry responsible for environment (MOEn)

Industry Strategy for Engineering Products

Action Plan and Implementation Schedule

(Strategy-7 : Create new markets)

Actions	Implementation Agency	Year 1				Year 2				Year 3				Year 4				Year 5			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
7. Create new markets.																					
(i) Identify new markets.																					
1. Study the possibility of new markets.	MCTI/ZDA									■											
2. Conduct a preliminary feasibility.	MCTI/ZDA										■										
3. Add to the target list under Strategy 5.	MCTI/ZDA													■							
(ii) Build business environment for new markets.																					
1. Identify prerequisite conditions from 7-(i).	MCTI/ZDA											■									
2. Draft the plan to realize such conditions.	MCTI/ZDA													■							
3. Make budgetary arrangement for the plan.	MCTI																	■			

Industry Strategy for Engineering Products

Action Plan and Implementation Schedule

(Strategy-8 : Create a culture of training)

Actions	Implementation Agency	Year 1				Year 2				Year 3				Year 4				Year 5				
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	
8. Create a culture of training.																						
(i) Conduct a pilot project for training.																						
1. Design a pilot project.	MCTI/ZDA	■																				
2. Conduct a workshop for the stakeholders.	MCTI/ZDA		■																			
3. Implement a pilot project.	MCTI/ZDA			■	■	■	■															
4. Conduct it in a sustainable form.	MCTI/ZDA							■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
(ii) Introduce "Kaizen" to the industries.																						
1. Introduce the candidates to the Kaizen team.	MCTI/ZDA	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2. Implement "Kaizen" to each candidate.	MCTI/ZDA		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3. Feedback the achievement in the conference.	MCTI/ZDA					■				■				■				■			■	

Note: When Kaizen Institute of Zambia (KIZ) commences its effective operations, the Action 8-(ii) will be implemented by KIZ with assistance of JICA.

Industry Strategy for Engineering Products

Monitoring of Strategy Implementation

- Target (numerical) indicators are to be set for monitoring.
- 20 Action Plans will be monitored by each Implementation Agency.
- Annual review, Mid-term review and Final evaluation will be made by the Evaluation Team.

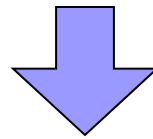
Actions	Implementation Agency	Year 1				Year 2				Year 3				Year 4				Year 5			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
<u>Overall review and monitoring.</u>																					
1. Set target indicators for the strategy period.	MCTI/ZDA			■																	
2. Conduct annual review of strategy.	MCTI/ZDA				■																
3. Conduct mid term review of strategy.	MCTI/ZDA												■								
4. Revise strategy, if necessary.	MCTI/ZDA																				
5. Evaluate the overall performance of the strategy.	MCTI/ZDA																				■

- “Industry Council for Engineering Products” participated by the Private Sector will conduct overall monitoring and consultation.

Industry Strategy for Engineering Products

Final Remark

- Zambia has huge Potentials.
- Regional markets are (will be) steadily expanding.
- But if there is no effective actions taken by all the relevant people, potential will continue to be only “Potential”.



- Let's make move Zambia to the next stage of the industrial development as the *“Hub of Manufacturing of the Engineering Products in the Region”*



Great Success for Zambia!

Thank you very much

**Nobuhisa IWASE
JICA Expert (IMG Inc.)**