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Summary of Nigeria Value Chain Analysis

In May 2004, Nigeria launched its strategy for growth and poverty reduction, the National Economic Empowerment and Development Strategy (NEEDS) and the state-level State Economic Empowerment and Development Strategy (SEEDS). NEEDS is based on three pillars, one of which focuses on developing the private sector; (1) empowering people, and improving social service delivery; (2) improving the private sector, focusing on non-oil growth; (3) changing the way government works, and improving governance. Despite the reform efforts, Nigeria still faces significant challenges in accelerating growth, reducing poverty, and meeting the Millennium Development Goals (MDGs). Nigeria is a leading oil-producing country, which provides significant fiscal room in times of high oil prices. However, oil production comes with strong “Dutch Disease” consequences that feed negatively into the competitiveness of the non-oil sector, primarily through the impact that the oil sector has on the naira exchange rate. The objective of this study is to consider what, within this larger economic context, can be done to strengthen the competitiveness of the non-oil sectors of the economy.

Nigeria’s reform efforts and development challenges need strong international support. This study of four sectors of the Nigerian industry was conducted in support of the macroeconomic reforms already impacting the economy, to understand what Nigeria can do to accelerate visible progress in growth and employment goals at the micro level. Specifically, this study provides a value and supply chain analysis for the textiles, shrimp, leather, and cassava industries, addressing issues of market structure and other industry characteristics, such as the degree of value adding in the chain, the impact of factor input costs (intermediate and primary inputs), and the nature of the public–private partnership in these value chains. It finds that the government should continue the following commitments: (1) reduction in policy uncertainty for investors since recent data suggest that current reform is positively impacting investment; (2) provision of more efficient services; (3) development of the financial sector to increase access to credit for its micro, small, and medium enterprise (MSME) core;

(4) a focus on growth drivers in targeted high potential industries, including those oriented to regional and local markets, as opposed to import-oriented sectors. The key challenge for the government will be to continue to push forward innovative solutions for private participation in the provision of services as it is striving to do now.

Comparative Review of Major Systemic Constraints and Policy Efforts

Finance Costs

The cost of finance is particularly constraining for capital-intensive industries—such as yarn spinning and fabric weaving in the cotton textile chain, shrimp trawling, and cassava starch processing, where it impacts levels of stock renewal. Relative to strategic competitors such as Bangladesh, China, India, Indonesia, and Kenya, Nigeria fares poorly with regard to finance costs. The 19 percent annual interest rate in Nigeria is four percentage points higher than in its most costly neighbor, Kenya, and more than three times as much as in China.

Infrastructure Costs

Costly and unreliable infrastructure remains a key constraint for many industries in Nigeria, including shrimp trawling, wax printing, and cassava starch processing operations. In particular, production runs for wax printing and cassava starch processing are frequently and randomly disrupted, causing product spoilage and equipment wear and tear. A detailed study of power, water, and steam generation costs in the textile industry, combined with comparative data from the UN Industrial Development Organization (UNIDO), indicates the extent of this constraint: a firm in Nigeria will pay a total of 45.2 cents for one unit of each input. Firms in Kenya face similar costs because of high water cost outlays, but Nigerian firms do not come close to comparators in Asia, such as India, a modest comparator in which the equivalent is almost half the price (24.2 cents) for all three units. The cost in Nigeria reflects the high cost of power and steam generation: Power costs at least twice

as much as in Nigeria than it does for its nearest comparator, and steam costs almost five times as much.

Labor Market

Nigerian firms face a rigid labor market with a poorly skilled workforce, which particularly impacts the textiles sector. Low labor skills also require a high level of labor supervision, and thus resource allocation tends to be biased toward high administrative overhead. Because of its highly unionized workforce, Nigeria suffers from almost twice as many annual production days lost due to strikes and disputes (totaling 2.4 per year) than the next comparator. The Doing Business statistics rate the rigidity of hours as considerably above regional and OECD averages, which means that the textile industry cannot compete with the 24-hour shift, 7-day working cycle of the globally competitive firms.

Moreover, labor costs are especially high in Nigeria. Apart from South Africa, where costs rise to 222 cents per hour, Nigeria has the highest costs of all its comparators at 92 cents per hour, almost 30 cents more than its closest competitors: Kenya at 66 cents and China at 57 cents. Furthermore, inefficient and costly logistics services weaken the supply chain of time-sensitive production, particularly of the Cassava root for downstream processing, which is subject to a four-day window after harvesting before it spoils. Other manufacturing processes must offset the unpredictability of supply with high inventories to avoid a shortage of stock caused by late delivery. Late delivery is caused primarily by onerous procedures at customs that extend the clearing time. For example, import customs formalities alone require up to 13 different documents for compliance.

Business Regulatory Procedures

Nigeria has relatively efficient procedures for registering a business, but constraints to business relating to licensing requirements and customs regulations through Lagos port remain. Data collected recently show that it takes 17.8 days on average to claim imports from customs (more than twice the duration in China) and 14 days to clear exports (in contrast to 7.7 in China and 4.7 in neighboring Kenya). Coping mechanisms managed by the private sector include the use of neighboring country ports, such as Cotonou in Benin, with unofficial road transfer into Nigeria.

Management Time Utilization

To ensure compliance with the multiplicity of onerous government regulations, firms must manage high administrative overhead and leakage of value added to tackle non-productive activities. Overall, in terms of management time devoted to government matters, Nigeria compares unfavorably with other developing countries, taking almost twice as long as China, which itself is above average.

Binding Constraints: Key Cost Drivers

The constraints described above are prioritized by sector in the following table. It is useful to identify the most binding constraints for the industries and the areas where the largest gains can be accrued if actions are taken to reduce these constraints. These constraints are often dynamically interconnected and therefore it may not be sufficient to tackle only one constraint and expect significant improvements.

Table 1. Constraints in Industry Value Chains of Selected commodities¹

Enabling conditions	Textile	Shrimp	Leather	Cassava
<i>Well functioning credit market</i>	1	1	1	1
<i>Efficient electricity generation and distribution system</i>	1	2	1	1
<i>Reliable and market responsive gasoline/ fuel oil distribution system;</i>	1	1	2	1
<i>Improved transport infrastructure and services;</i>	1	2	1	1
<i>Efficient backward integration (modern agricultural sector)</i>	1 (cotton)	—	1 (raw skins)	1 (cassava root)
<i>Skilled Labor force</i>	2	3	3	3
<i>Capacity building in exporting</i>	2	2	2	2
<i>Enabling, transparent and consistent government regulations</i>	1	1	1	1

¹ On a scale of one to three, one being the most significant constraint as reflected by the value chain analysis.

With the exception of the shrimp industry and the cassava root industry, the single largest cost across the value chains is the primary material input which generally exceeds 50% of the value in the industry chain. These quality and cost factors are subsequently carried downstream through to the final product. The raw materials are of low quality, costly and have insufficient quantity of a scale required for industrial processing—these problems are typically traced back to the agricultural sector which is neglected and underdeveloped. Clearly a major source of improved efficiency in these value chains could be realized through lower cost better quality primary inputs. This is true for the textile chain (i.e. cotton), leather (hides) and cassava (the cassava root).

- In cassava processing, root production is constrained by low yields due to small scale farming, non-mechanized operations, low grade species and poor growing methods. Furthermore, distribution of the root is disadvantaged by a rudimentary rural road system that is mostly unpaved, which makes access and egress to the farms difficult for a time sensitive product that is perishable within 4 days.
- Leather tanning is hampered by the shortage of hides and skins due to competing demands from human consumption of “pomo” and poor animal husbandry practices. At the same time, skin quality is adversely affected by poor abattoir practices because of the lack or absence of government enforcement of animal slaughtering procedures and standards, thus driving up the defective rate of skins and concomitantly leather finishing. In discussions with industry operators, transportation costs were also emphasized as an additional constraint to improved competitiveness.
- Textile processing is adversely affected by low quality cotton as a result of poor growing methods and harvesting practices that contaminate cotton, such as storage in polypropylene bags.
- Finally, shrimp trawling is impacted by the available stock of wild shrimp in the sea and the current rate of harvest, which cannot keep pace with the growth of the industry and adhere to international environmental standards.

Beyond the primary input stage, the value chain constraints become more diversified. Low potential value chains, i.e., those chains in decline, such as the textile industry which

will be made vulnerable to strong competition post MFA, and the footwear industry within the leather value chain, are mainly concerned with a combination of capital costs, logistics, administrative overheads and utility costs after primary inputs. High potential value chains, i.e. those chains which are growing, such as the shrimp industry, leather industry and cassava industry, face different constraints. The major costs factor in the shrimp industry is fuel, followed by capital charges and administrative overheads. Leather industry growth will focus on intermediate input quality and quantity such as chemicals and labor which amount to 23–26% at the wet blue and finished leather stage of production. The overriding cost in the case of cassava is the logistics entailed. An estimated 33% of total cost is attributable to movement of primary inputs to the factories.

Policy Progress

The new private sector-oriented agenda under the government’s NEEDS strategy concentrates on policies that are focused away from the protectionist policies that have proven unsuccessful. There is an increasing focus on competition-enabling reform. These reforms address many of the major binding constraints to growth and private sector development, including macro policy uncertainty, capital costs, infrastructure services, and input quality improvement. Allowing for policy lag effects, the value chain work does suggest that urgent actions are required in the area of farm productivity, infrastructure and finance costs.

At the macro level, the most significant actions have been in stabilizing the exchange rate, strengthening federal fiscal situation, and consolidating the financial sector. The more certain macroeconomic environment is gradually reducing investor perception of risk and will increase levels of investment. Additionally, the current banking consolidation exercise should increase resources available for financial intermediation. These banking reforms, combined with firm management of the macroeconomic environment, provide an enabling environment conducive to achieving lower and thus more competitive interest rates.

At the micro level, protective schemes have proven unsuccessful. For example, the NEPZA (Nigeria Export Processing Zones Authority) tax benefits for shrimp and leather firms are never realized because of conflicting regulation interpretation, and the duty-free incentive scheme is not properly enforced because customs will not grant exemptions, again as a result of conflicting regulation interpretation. Long-term reform is now pulling away from protectionist trade policy to ensure that complementary

² Intermediate stage of processing; hides have been tanned and await finishing stage.

measures will allow these industries to become more competitive. The most significant policy initiative at the micro level has been the privatization and liberalization drive, which, as shown by the cost analysis, should significantly and positively impact each value chain. In particular, the privatization of Lagos port could potentially have a huge impact on trade facilitation costs for export-driven markets. Infrastructure should also get a boost from new initiatives, such as the major new investments planned for the federal trunk road and feeder road networks. Furthermore, reforms will need to focus more on the development of financial institutions to increase intermediation for MSMEs.

A recent Investment Climate Survey showed that Nigeria's low total factor productivity was substantially linked to a set of indirect costs, including infrastructure and regulations, which considerably outweighed labor costs. A focus on the investment climate agenda within a regional market perspective and conducted largely by states will complement and add to current federal reform. Public and private sector coalition building through the establishment of a partnerships founded on evidenced-based policy reform and market oriented service delivery offer the greatest probability of medium-term improvements in power, transport, and regulatory service delivery. Herein lies the opportunity for income and employment growth in the value chains.

This note is part of a series of summaries of analytical work of the Africa Private Sector Unit. This note is authored by Shireen El-Wahab, based on a report entitled *Key findings of the Nigeria Value Chains Analysis and Implications for a Growth Strategy* (June 2005). This report was written by a team led by Peter Mousley and Una Subramanian, and including Peter Yee Michala Paludetto, Selma Hassan, and Mary Agboli. For more information, contact Peter Mousley email at pmousley@worldbank.org or via telephone on 202 473 2266. A copy of the report is also available from www.worldbank.org/afir/aftps