

Nurturing the sources of Growth in Tanzania:

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Ministry of Planning, Economy and Empowerment

Chapter 3

COMPETITIVENESS IN DEVELOPING ECONOMIES

The Roles of Clusters and Cross-Cutting Policies

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Introduction

Competitiveness is high up on the policy agenda for countries around the world and at all stages of development. But while there is little disagreement that countries need to “upgrade their competitiveness” – even more so as the level of globalization is increasing – there are many different views on what competitiveness actually is and which policies should be employed to improve it. In addition, there is a serious argument of whether the competitiveness framework applies equally to advanced as to developing economies and how these differences in terms of economic development affect appropriate policy choices. In particular, questions arise as to the role of cluster initiatives, an instrument that has become more widely used in many countries in recent years, in a developing economy context.

This paper summarizes the discussion of these topics in a presentation made to the Growth Learning Workshop in Bagamoyo, Tanzania on January 19th. Following the issues raised above, the paper is structured around three specific questions:

- How does the competitiveness framework apply in a **developing country context**?
- What are the implications for an **effective policy mix** of cluster efforts and cross-cutting initiatives?
- What issues do **cluster initiatives** in developing countries currently face?

Competitiveness in developing economies

Competitiveness is a term that is widely used but is understood in very different ways. The principal ways in which the term competitiveness is being used reflects the different research objective of two groups:

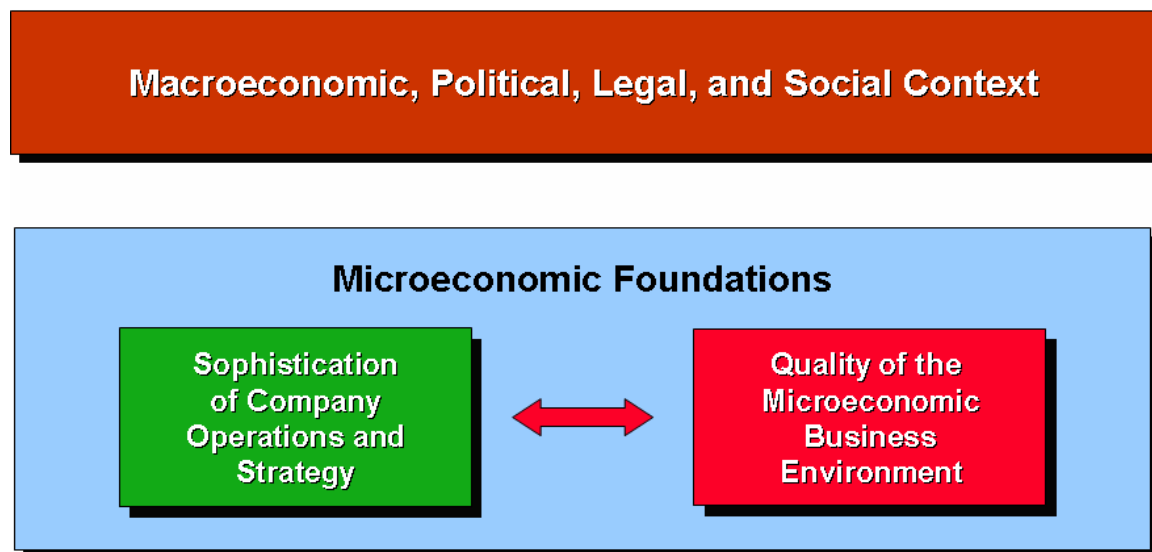
First, international financial institutions (IFI) look at competitiveness in terms of a country's ability to sell goods and services at world markets. IFIs are primarily concerned with the ability of countries to generate export revenues in order to finance imports and serve external debt. In this context, "price competitiveness" is central and developments that lower the relative price of a country's goods and services on world markets, for example falling unit labor costs, devaluation, and even export subsidies as part of a "strategic trade policy" (although viewed with suspicion by IFIs, none the least because of their fiscal costs), increase competitiveness in the sense of raising the ability to sell.

Second, governments and researchers in the tradition of Professor Michael E. Porter look at competitiveness in terms of a country's ability to sustain a high and rising level of prosperity for its population. They are concerned with a nation's ability to earn high and rising wages and capital returns on world markets by selling competitive goods and services that customers are willing to pay high prices for. In this context, productivity becomes the crucial feature that signals the competitiveness of an economy and efforts by companies, governments, and other institutions (like universities) improve competitiveness if they raise the ability of companies to reach high levels of productivity and innovation.

If the objective of the policy debate is to improve the long-term prosperity growth in an economy, the second definition of "competitiveness as productivity" proves to be a better guide towards making appropriate policy choices. It does not engineer short-lived export booms that fail to raise the standard of living and it avoids putting locations into a zero-sum competition with ever lower wages and higher financial incentives as the only means to attract investors. Instead, it leads policy decisions towards sustainably upgrading a country's competitive capabilities and provides the opportunity for locations to become productive

partners, specialized on different economic activities, that profit from their respective strengths.

The drivers of competitiveness, i.e. the combination of factors that together determines the level of productivity and innovation that companies at the given location can reach, can be organized in two broad areas: The macroeconomic, political, legal, and social context and the microeconomic foundations.



Source: Michael E. Porter

The last couple of years have brought increasing clarity on which type of conditions in an economy's overall context are supportive of sustainable economic growth. Measured against this benchmark, there are a number of typical weaknesses that developing economies suffer from and that are among the root causes of why these countries do not register higher level of prosperity:

- Weak **government institutions**
- Legal frameworks dated and **judicial system** ineffective
- Widespread **social challenges**, including inequality and poverty
- Exposure to external shocks leads to high **macroeconomic volatility**
- Structural challenges to support stable **fiscal and monetary policy**

The discussions about governance, property rights, poverty eradication, and the main pillars of the “Washington Consensus” have identified action priorities to address these weaknesses. From the experience of countries that applied these strategies, however, a somewhat sobering lesson has emerged: A sound macroeconomic, political, legal, and social context creates the potential for competitiveness, but is not sufficient. Competitiveness depends on improving the microeconomic capability of the economy and the sophistication of local companies and local competition - ultimately prosperity is created by companies that create goods and services that customers value more than it costs these companies to provide them. A stable macroeconomic environment, then, makes it more likely that a company undertakes the long-term investments in capital equipment or the skill set of its workforce that underpin high productivity. But it does neither lead to automatic improvements in productivity nor does it result in automatic changes in company investments and market behavior.

Looking at the evidence of companies in developing economies, a number of typical weaknesses that drive low productivity again emerge:

Corporate Direction

- Opportunistic pursuit of new businesses, seizing profitable opportunities in whatever area they arise
- Strategy driven by government and other relationships
- Conglomerate business groups compete in highly disparate businesses

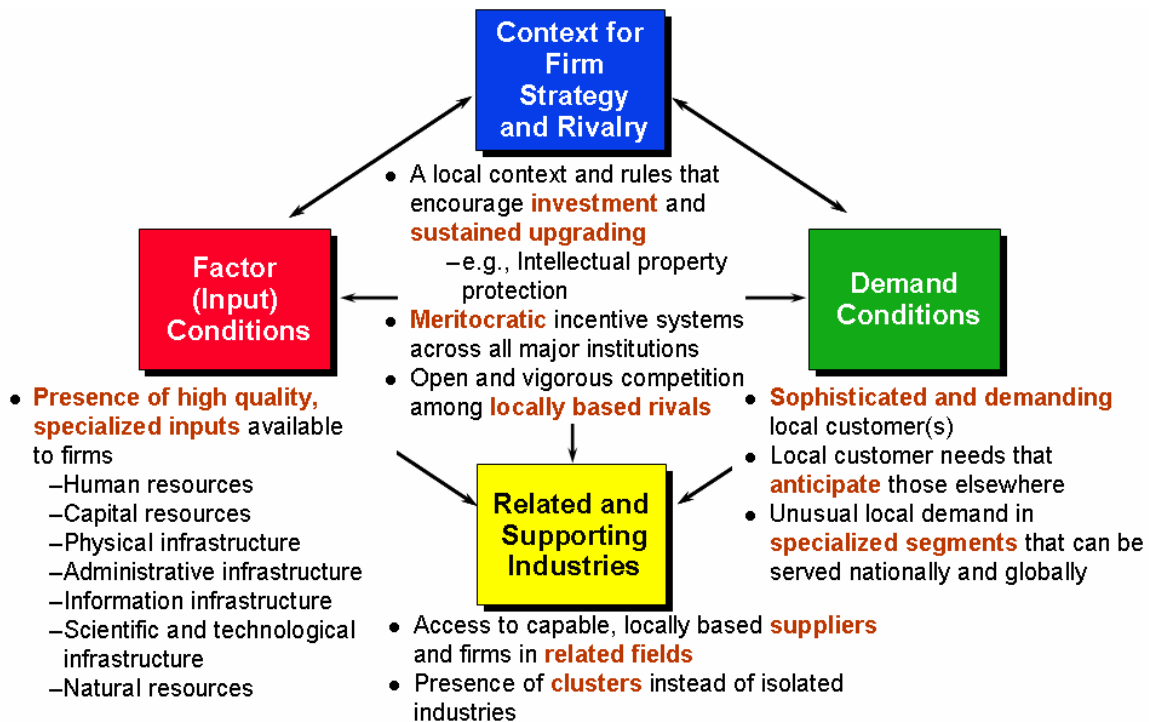
Strategic Positioning

- Focus on the local market
- Wide product lines serving all local industry segments
- Price is the primary basis of competition
- Low input costs are primary competitive advantage
- Emulate foreign best practices
- Imitate products and services of foreign and other domestic competitors

Activities

- Labor intensive parts of the value chain are emphasized
- Low investment in machinery, equipment, brands, R&D, and training
- Foreign partners provide many inputs, know how, and financing

Company behavior is not only the result of management capabilities or the overall context of the economy in which these managers operate. It is the result of decisions that are tightly intertwined with the conditions that these companies face in their microeconomic business environment. To organize the complexity of the multiple dimensions of the business environment, Michael Porter introduced a framework of four different areas that after their graphical representation become known as the “diamond”.



Source: Michael E. Porter

A key element of the diamond is the acknowledgment of the role of clusters, i.e. geographical concentrations of companies, research and educational institutions, government(s) agencies, and others that directly or indirectly interact in creating value in a specific economic field. While some observers have argued that globalization is going to decrease the role of clusters as

economic activities are relocated around the globe, the evidence indicates a quite different pattern: The increasing competition among locations - enabled by lower communication, transport, and trade costs as well as by efforts in more and more countries to provide the basic necessities for economic activity – leads to the emergence of networks of more and more specialized clusters. In a given economic area, e.g. footwear, locations like Italy focus on branding and design, Portugal on short-run production of medium to high quality shoes with very short fashion cycles on the European market, Romania and low to medium quality production for the Italian shoe industry, and China and Vietnam for low quality mass production.

Developing economies again register a number of typical weaknesses that need to be overcome to reach a higher local of competitiveness and prosperity:

- **Widespread weaknesses** across many elements of the business environment
 - Weak infrastructure and low availability of skilled labor
 - Rules and regulations that increase the cost of doing business and reduce companies' exposure to open competition
 - Companies operating in isolation or in clusters focused on a narrow set of activities

- Exiting market positions based on factors **unrelated to microeconomic competitiveness**
 - Low cost labor
 - Preferential access to markets in advanced economies
 - Natural resource endowments
 - Natural tourist attractions

Finally, the economic reform experience across many countries has provided a better understanding of the institutional dimensions that need to be considered to mobilize an effective campaign for upgrading competitiveness. Two dimensions are particularly salient when moving from efforts focused on the overall context of an economy to efforts that are

targeted at company sophistication and the quality of the microeconomic business environment. First, it is important to recognize that competitiveness does not only depend on policy choices made by the central government on the national level, but is also affected by policies at the level of sub-national regions and by joint efforts across national boundaries among neighboring countries. Second, it is critical to understand that government alone can no longer identify the areas that are the most critical bottlenecks stopping companies from achieving higher productivity. And government does also not control all the instruments that are necessary to address these weaknesses. Microeconomic competitiveness reforms require a new type of collaboration between the public and the private sector, including important roles for educational/research institutions as well as institutions that enable collective action by the private sector, such as trade associations and foreign investors' groups.

Developing countries again face a number of typical weaknesses that inhibit their ability to mount effective competitiveness reforms, even when the specific content of such reforms is widely recognized:

- **Low level of trust** throughout the society
- Government institutions strongly **centralized**; public sector structures on the sub-national level weak or non-existent
- Relations to neighboring countries often **suffering** from negative historical legacy
- Private sector institutions either **weak** or not structured to support economic development
- Presence of foreign aid organizations (IFI, government, NGO) with **divergent** development priorities

This discussion suggests that the conceptual framework for microeconomic competitiveness applies to economies at all stages of economic development. The specific conditions and action recommendations generated from applying the framework, however, differ dramatically across countries and stages of development. Developing countries suffer from weaknesses across all dimensions – macro- as well as microeconomic – affecting

Implications for competitiveness upgrading in developing economies

The previous section has developed the conceptual argument for developing countries to adopt an integrated policy approach covering all drivers of competitiveness to enable sustainable prosperity growth. It has also identified the need for a new thinking about organizing appropriate policy processes to address the different nature of policies affecting macro- and microeconomic drivers of competitiveness. This section is devoted to analyzing the implications for adopting an integrated policy approach for competitiveness upgrading.

A first implication is the need to take active steps for integrating macroeconomic and microeconomic reforms. Macroeconomic and other context-level reforms, including opening financial markets to the global markets and opening markets for goods and services through tariff reduction, are helpful because they improve allocative efficiency and provide the stability and confidence needed to support investment and upgrading. The experience of countries like Argentina suggests, however, that such macro reform alone can lead to short term capital inflows and growth spurts that ultimately are not sustainable. Reforms of the microeconomic foundations are needed to raise the level of sustainable prosperity. Over time, the productivity growth that these reforms enable will allow economic growth without inflation, making macroeconomic stability easier to achieve. Understanding the need for an integrated mix of macro- and microeconomic reforms is crucially important for developing economies more exposed to quick changes in foreign investors' sentiments.

A second implication is the need to take active steps for integrating economic and social policies. A reform agenda focused on the macroeconomic context alone easily sees expenditures on social policies as a burden on government balances that needs to be reduced. A reform agenda that focuses on improving competitiveness differs in two important ways: First, it is based on the acknowledgment that there is a long-term synergy between the competitiveness of companies and the social health of a society. Both depend on policies such as improving skill levels, safe working conditions, a sense of equal opportunity, low levels of pollution (pollution is a sign of waste), a transparent, corruption-free business environment, and trust in the rule of law. Second, it is based on the understanding that economic reforms are politically only sustainable if they create a visible improvement in the living conditions and opportunities for the population, instead of eliminating old, inefficient social policies with a

vague promise of macroeconomic growth somewhere down the road. Social policies in developing countries evidently need fundamental reforms but it is important to undertake these reforms with a clear view on their short-term impact on the ability of individuals to participate actively in the new opportunities the economy will have to offer.

A third implication concerns the approach taken in the microeconomic reform agenda itself. Successful microeconomic upgrading is always based on two pillars: The improvement of the general microeconomic business environment and the mobilization of specific clusters. Their combination often proves to have reinforcing effects: General upgrading of the business environment spreads the benefits of clusters and increases their effectiveness. Cluster mobilization enables targeted upgrading of the business environment and roots reforms in the private sector. While in advanced economies there is often a need to move further towards cluster efforts to achieve higher levels of competitiveness, there are a number of reasons why developing economies typically need a stronger focus on the general business environment:

- Cross-cutting weaknesses are a **serious barrier** for higher competitiveness and cluster development in developing countries
- Clusters are **weak or non-existent** and thus provide limited leverage to have a meaningful affect on the overall economy and a nation's standard of living
- Institutions beyond the central government are **too weak** to launch and sustain effective cluster efforts
- Cluster efforts **take too long** to generate the quick economic returns that are needed

Priorities in business environment differ from country to country, but a number of issues tend to be critical for almost all developing economies: Openness to and attraction of foreign investment is critical to upgrade company sophistication, infuse critical skills, not the least in terms of management capabilities, and create linkages to international. The liberalization of rules and regulations affecting the cost of doing business, especially for small domestic firms, is crucial to migrate the large grey economy into the formal sector; a prerequisite to bring them into reach of competitiveness efforts. While developing countries lack the resources for

fast broad-based improvements in infrastructure (physical, telecommunication) and workforce skills, targeted investments in these areas can have a strong impact.

What are Cluster Initiatives?

*Cluster initiatives are **collaborative activities** by a **group** of companies, public sector entities, and other related institutions with the objective to improve the competitiveness of a group of **interlinked economic activities** in a **specific geographic region***

- Upgrading of **company operations and strategies** across a group of companies
- Upgrading of **cluster-specific business environment** conditions
- Strengthening of **networks** to enhance spill-overs and other economic benefits of clusters

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Cluster initiatives, a key tool in mobilizing clusters, can in the short term play an important role in increasing the effectiveness and efficiency of the reforms in the broader microeconomic business environment just discussed. FDI attraction, for example, tends to be much more effective when organized around emerging clusters rather than generic (and often easily copied) strengths in the general business environment. Seeing the foreign investor as the nucleus of a cluster is an important first step to increase the pay-offs the investment creates for the wider economy. The more cluster linkages start to develop, the more value the location generates for the investor and the less likely he is to relocate to another, lower cost location over time. Infrastructure and skill upgrading, to give another example, can also become more effective if targeted on a specific regional cluster, where the investments lead to a meaningful improvement in the microeconomic environment. The investments can then

become the nucleus for further investments that gradually improve the conditions for all conditions. Finally, clusters offer an effective way to upgrade the strategies and operational practices of a large number of companies, instead of improving the behavior of only a few individual ones.

Cluster initiatives can over time also change the institutional conditions, especially the low level of trust between the private and public sector, that are a root cause of why many economic reform programs in developing economies fail to reach their potential. Working in clusters on specific, real-world problems that companies face helps government officials to better understand the reality in which entrepreneurs work. And companies themselves can get a more realistic understanding of the many competing objectives that public policy is trying to serve, often with little resources and organizational capacity.

The role that cluster initiatives play as part of the economic reform agenda in a developing country needs also to be reflected in the clusters that are chosen for mobilization efforts. While the empirical evidence shows that it is not important in which cluster a country or region is specialized, e.g. processed food, telecommunication equipments, or financial services, it is critical important that a region moves towards a cluster mix that shows clear specialization. The choice of which cluster to mobilized is in this context a practical question of matching limited resources (especially management/ leadership resources) with emerging or potential clusters. It is not as pivotal as in the “strategic industrial policy” literature, where a region is seen to have only a hope of prosperity if it has a position in a industry with growing demand, low price elasticity, and economics of scale/scope in production. In practical terms, the cluster selection should be driven by a combination of general conditions that apply in all countries and a number of specific conditions that reflect circumstances in developing countries:

General conditions

- Some viable companies already present
- A core of cluster-specific advantages in the diamond

- Willingness of core leaders in the cluster to get engaged

Specific issues in developing economies

- Focus on existing clusters will significantly limit potential
- Objective is not primarily short-term economic impact

Overall, the choice of clusters in a developing economy should be viewed much more from a portfolio approach, where the sum of clusters is intended to maximize the odds of reaching the multiple policy objectives of cluster efforts and individual failures are fully expected. Such a portfolio approach will involve a wide cross-section of the economy, create opportunities for new clusters to emerge, and consider global market opportunities more than in an advanced economy.

Evidence on cluster initiatives in developing economies

While there is rich literature discussing the practical experience with general business environment upgrading in developing countries, there is much less quantitative evidence on the structure of cluster initiatives under these conditions. The cluster literature itself had in the past concentrated more on building a conceptual tool-kit to classify the phenomena and on individual case studies to analyze it. In the last few years, however, the increasing interest in cluster-driven economic policies as a new approach to economic development has motivated a new stage of much more quantitative analysis.

One strand of this new literature has worked much more systematically on creating databases that classify the entire economy in different economic categories, including so-called traded clusters that most strongly exhibit competition across and tight linkages within locations. This work has become known under the name “cluster mapping” and allows for the first time more systematic analysis of the relationship between a region’s cluster portfolio and its economic performance.⁶ Because of data limitations this work has so far been done mainly in

⁶ See Michael E. Porter, ‘The Economic Performance of Regions, in *Regional Economy* and the web site of the U.S. cluster mapping project at www.isc.hbs.edu

advanced economies in North America and Europe. However, the classifications derived in these studies are currently also applied in transition economies.⁷

The other strand of this literature has focused on cluster initiatives as an important policy tool to mobilized clusters. In 2003 the first global survey of cluster initiatives was presented at the annual gathering of The Competitiveness Institute, a global network of professionals interested in competitiveness and clusters.⁸ It provided data from about 400 cluster initiatives on the policy environment they faced, the cluster they served, the activities they conducted, and the way they were organized. This data was then compared to the self assessment of these cluster initiatives in terms of their performance to generate a first indication of success drivers. In 2005, US AID commissioned a second survey, this time with a specific focus on cluster initiatives in developing and transition economies, a group that had been underrepresented in the first survey. The resulting report Cluster Initiatives in Developing and Transition Economies was based on more than 1400 identified initiatives, more than 700 participating initiatives in total, and more than 170 participating cluster initiatives from developing and transition economies.

The first observation made was that cluster initiatives is clearly not just a phenomena of advanced economies. Many developing economies feature such initiatives, and they are launched by the full spectrum of private, public, and foreign institutions. Second, there was a clear indication that the general findings on likely success factors for cluster initiatives from the sample of advanced economy initiatives also applied in a developing and transition economy context.

There were, however, also a number of observations that related to the unique features of cluster initiatives in less advanced economies. In terms of the policy environment in which cluster initiatives operate developing countries feature a much stronger reliance on national level initiatives than their peers in advanced economies. They also have to deal with a significantly lower level of trust among companies and the public sector. In terms of the profile of cluster initiatives, there is a clear dominance of traditional sectors in less advanced

⁷ See Ketels/Solvell, Innovative clusters in the ten new EU member countries, project report, 2005

⁸ Solvell/Lindqvist/Ketels, The Cluster Initiative Greenbook, Ivory Tower, 2003. (free download at www.cluster-research.org)

economies and only few sign of active industrial policies through cluster initiatives. Cluster initiatives operate in clusters that are weaker than in advanced economies, but play a leading role in their respective economies. And cluster initiatives focus more directly on improving company performance than on business environment upgrading.

An interesting observation concerned the role of foreign donors, an actor not presented in the advanced economy context. It turned out that cluster initiatives launched by foreign aid-agencies have a number of characteristics that set them apart from initiatives in the same countries launched by companies or government agencies:

- Policy environment **lacks clear competitiveness strategy** and provides **little support for cluster mobilization**
- **Low level of trust**, especially among companies and government
- **Clusters are significantly weaker** than in initiatives launched by companies or local government
- Cluster initiatives focus more often on **innovation/linkages to academia**
- Foreign aid-agencies **substitute** weak government institutions, especially on the local and regional level

In summary, cluster initiatives launched by foreign donors seem to be taking place in an environment where it is particularly hard to succeed. While this could very well be intentional, directing aid money towards regions and clusters that have little hope to upgrade competitiveness on their own, the qualitative information available suggests that this is unlikely to be the case. In addition, it is not obvious that donor-funded cluster initiatives have a special strategy to overcome the challenges they face and, ideally, remove the root causes of their existence.

Concluding observations

The competitiveness framework provides new insights into the roles of three key levers of policy reform for development:

- Policies to improve the ***macroeconomic, social, legal, and political context***

- *Cross-cutting policies* to strengthen the general microeconomic foundations
- *Cluster efforts* to mobilize groups of related companies and institutions

In developing economies it is particularly crucial to combine these policies in a reinforcing mix, rather than looking for one policy area to provide the silver bullet. Relative to past economic strategies the new view requires participation from a much wider set of institutions, some of which will need to be created in the process.

Cluster initiatives are an important process tool that policy makers can employ in this context. While such initiatives share many features across countries at different stages, they need to take account of the special context in developing countries. This implies a higher focus on cross-cluster business environment upgrading, particular care to leverage the role of foreign companies and foreign aid-agencies and the use of cluster efforts to reduce the underlying sources for a lack of cluster evolution, for example strengthening of local institutions.