Transformation of Agribusiness in Kenya by Fostering Agripreneurship

Peter Kayatz

February 24th, 2019

Abstract

Digital business, manufacturing, and agriculture are the three pillars of industrial transformation for African countries. This article compares different strategic approaches to agricultural transmutation and examines their goals and measures, with a particular focus on Kenya. Finally, an entrepreneurial approach to developing the agribusiness by agripreneurship is defined, and its implications for Kenya discussed.

1 Introduction

The African countries have the opportunity to pursue three tracks to industrialization. One track makes use of the low demand in resources for digital enterprises, e.g., in the IT or mobile business. Another track leverages their relative labor-abundance for labor-intensive and export-oriented light manufacturing. Moreover, a third track leverages their advantages in agriculture for globally competitive production based on agriculture.[1]

Countries like Kenya - "Silicon Savannah Nairobi" or Ruanda have already a high reputation for their efforts in boosting digital private enterprises, public-private partnerships, as well as start-ups. In cities like Lagos, Johannesburg, Nairobi, Kigali or Accra, local and international companies, universities, and a lively start-up scenes inspire and stimulate each other. By the end of 2018, 442 co-working spaces, incubators, and start-up accelerators support entrepreneurship and innovation on the continent. USD 560 million was invested in venture capital funds last year, especially in South Africa, Kenya, and Nigeria; and also in Rwanda, Ghana, Egypt, Uganda, Senegal and Morocco.[2]

The second track to industrialization, export-oriented manufacturing, could be endangered by the growing trend towards reshoring, fueled by the rapid developments of industry 4.0. [3]

Thirdly, agricultural resources based on land and climate in combination with advance production technologies and innovative business models, provide an attractive perspective for the future economic growth of African countries.[4]

Some authors have linked the concept of agricultural entrepreneurship to the development of non-agricultural businesses by established farmers. Other authors by stating that agricultural activity also provides entrepreneurial opportunities such as the development of new products and innovations in the business process, distribution, and marketing.[5] However, entrepreneurship has always been an integral aspect of the agricultural sector, demonstrated by the permanent, however slow adaption of agrarian production to permanently developing market needs.[6] And in the last years, there has been a growing consensus that the identification, evaluation, and pursuit of entrepreneurial opportunities is a distinctive aspect of entrepreneurship.[7]

The following sections focus on approaches for the agricultural transformation in Africa, highlighting the respective approaches of Kenya, followed by a critical discussion of the entrepreneurial aspects of the agrobusiness, and its relevance for transforming African industries, not restricted to the agrobusiness.

2 The ACET Approach

A CCORDING to the ACET - ("African Center for Economic Transformation"), agriculture can lead the economic transformation in many countries in Africa if farm productivity is raised and farming is linked to manufacturing and other sectors of the economy through agroprocessing, other agriculture-based manufacturing, and finance, logistics, and other upstream and downstream services.

The agricultural transformation incorpo-

rates two main processes: modernizing farming by boosting productivity and running farms as modern businesses, and strengthening the links between farms and other economic sectors in a mutually beneficial process, whereby farm output supports manufacturing (through agroprocessing), and other sectors support farming by providing modern manufactured inputs and services.[1]

Modernized farming has the following characteristics:

- Higher productivity, achieved through scientific approaches to farming.
- Running farms as a modern commercial enterprise.
- Diversification of products for the farming system as a whole, but with specialization on individual farms.
- Greater resilience against weather variability and climate change.
- More trade with other sectors of the economy.

Achieving them requires action on four fronts:

- Assisting often uneducated traditional smallholders to acquire the knowledge to modernize operations, boost productivity, raise their incomes and become more resilient.
- Attracting and assisting some educated youth in taking up farming and operate small and medium-sized commercial farms.
- Encouraging the small number of large commercial farms to develop mutually beneficial links with small and medium-sized farms.
- Removing barriers to women in farming so that the capacities of all farmers - not just half of them - accelerates the pace towards farm modernization.

A modernized farm sector with strong linkages to other economic sectors contributes to overall economic transformation by:[8][9][10]

• Boosting the production of food staples to improve food security and keep living costs low, making it easier to keep wages competitive and support labor-intensive manufacturing.

- Supporting agro-processing with raw agricultural outputs at the scale, quality, and reliability required.
- Supporting other agribusinesses by purchasing their products and services, including businesses manufacturing agricultural machinery, implements, and intermediate inputs and those providing transportation, logistic, and financial services.
- Raising farmers' incomes and expanding markets and jobs throughout the nonfarm segments of agricultural value chains.
- Expanding markets for nonagricultural sectors, such as those producing nonfood or durable consumption items.
- Improving the balance of payments by expanding and diversifying exports and substituting domestic production for food and other agriculture-based imports that can be produced competitively at home.
- Increasing government revenues and personal savings through higher agricultural incomes, which converts to national investments for growth.

3 The Kenyan Approach

KENYA has achieved impressive advances, in innovation and entrepreneurship, privatesector enterprise, infrastructure, public service delivery, and human capabilities. According to the Kenyan "Agricultural Sector transformation and Growth Strategy, 2019 - 2029", agriculture is the "bedrock" of the development of Kenya, and the key to creating equitable and sustainable growth for the Kenyan people. However, the proclaimed main objective of the initiative is to achieve food and nutrition security and retain affordability, even for the less well-off.[11] These goals are mirrored by article 43 of the constitution of Kenya, stating, "Every person has the right to be free from hunger, and to have adequate food of acceptable quality."

Remarkably, this strategic main-objective differs from the objectives stated by the African Center for Economic Transformation (ACET) for the agricultural transformation. The ACET focuses on agriculture as the primary industry to foster and leverage other industry sectors. This is a rather holistic economic view on agriculture emphasizing the necessity of crosslinking the different industry sectors for mutual benefit. On the other hand, the Kenyan approach emphasizes the direct output of agriculture in the form of sufficient food for reasonable pricing.

Kenya has defined the following three superordinate goals for the agricultural transformation in the period between 2019 and 2029. These are as follows:

- Increase small-scale farmer incomes
- Increase agricultural output and value addition
- Boost household food resilience

Additionally, Kenya has defined a set of nine measures, called "flagship projects" to support these goals. Six of these procedures directly support the three superordinate goals, and the last three provisions are enabling measures for increasing overall success.

Increase small-scale farmer incomes

- 1. 1000 farmer-facing SMEs provide inputs and equipment including for irrigation, processing, and post-harvest aggregation.
- 2. Subsidize high-needs farming households with inputs from multiple providers enabled by e-voucher delivery system.

Increase Agricultural Output and Value Addition

- 3. Set-up six agro-processing hubs.
- 4. Unlock 50 new large-scale private farms.

Boost Household Food Resilience

- 5. Restructure the strategic food reserve.
- 6. Boost food resilience.

Enabling Measures

- Launch three knowledge and skills building programs focused on technical and management skills in the field.
- 8. Strengthen research and innovation, and launch priority digital and data use cases for better decision making and performance management.
- 9. Actively monitor two key food system risks:
 - Sustainable and climate-smart natural resource management.
 - Crisis management for pests diseases, climate and global price shocks.

4 The Kenyan Youth Agribusiness Strategy

THE claimed mission of the "Kenya Youth Agribusiness Strategy 2017 - 2021" is "Positioning the Youth at the Forefront of Agricultural Growth and Transformation".[12]

However, foreword of the report clarifies that the superordinate goal of the strategy is to fight youth unemployment. And the identified underlying cause of the high rate of youth unemployment is stated right in the second paragraph of the foreword: "Youth unemployment is primarily a problem of labour demand. The Kenyan economy is not creating sufficient jobs to cater for the increasing number of young labour market entrants." [12]

Kenya has defined a set of eleven measures to achieve the superordinate goals of fighting youth unemployment by fostering agribusinesses.

- 1. To transform the mindset and perceptions of the youth towards agribusiness.
- 2. To equip youth with appropriate agribusiness skills, knowledge, and information.
- 3. To enhance access to affordable and youthfriendly financial services for agripreneurship.
- 4. Enhance access and sustainable use of land for the youth in agribusiness.
- 5. To engage youth in research, development, and utilization of innovative agricultural technologies.
- Enhance access to factors of production, utilization of modern technologies and utilization of "Good Agricultural Practices" (GAP) to increase efficiency.
- 7. To increase the utilization of agricultural products through value addition.
- 8. Improved access to affordable, suitable output markets for the youth.
- 9. Support implementation, reviews, and development of policies that create an enabling environment for youth in agripreneurship.
- 10. Promote youth-inclusive climate-smart agricultural technologies and create green jobs for environmental sustainability.
- 11. Promote an integrated approach to address cross-cutting challenges including gender disparities, cultural barriers, alcohol and substance abuse, HIV & AIDS, weak governance, and value systems amongst others.

5 Discussion

THE previous chapters briefly delineate the different goals and approaches to transform agriculture, by the ACET ("African Transformation Report - Agriculture Powering Africa's Economic Transformation 2017"[1]), and by the Kenyan government ("Agricultural Sector Transformation and Growth Strategy - Towards Sustainable Agricultural Transformation and Food Security in Kenya 2019 - 2029"[11] and "Kenya Youth Agribusiness Strategy 2017 - 2021"[12]).

The "ACET approach" presents a holistic economic view on agriculture, emphasizing the necessity of crosslinking the different industry sectors for mutual benefit. On the other hand, the Kenyan approach emphasizes the direct output of agriculture in the form of sufficient food for reasonable pricing and a possible solution to the problem of youth unemployment.

Almost all of the devised actions of the "Kenya Youth Agribusiness Strategy 2017 - 2021" reflect a somewhat paternalistic approach of pushing the youth into agriculture to solve the youth unemployment problem. For clarification only: it sounds a bit like "Give them a shovel, tell them, how to use it, provide them with land,-and let's go!". Maybe a more positive approach towards the creativity and potential capacities of the Kenyan youth could leverage not only the supportive age pyramid in Kenya, but also modernize the Kenyan industries, including but not restricted to agriculture, from within.

Additionally, the simple goal of diminishing the unemployment rate often leads to measures, that achieve this goal by wasting precious resources, without any impact on efficiency, industrial growth, and innovation. A similar effect can be evidenced in retraining programs of the "German Employment Agency", that decrease only official unemployment rates.

As evidenced by the prospering mobile and IT-entrepreneurship scene of Nairobi, internationally recognized as "Silicon Savannah", the creative potential of the youth is a significant driver of entrepreneurial spirit and economic thriving. Moreover, Kenya has the necessary entrepreneurial infrastructure for a successful industrial transformation, verified by a visit of the author to Nairobi in late January 2019. Students take up courses in "Entrepreneurship & Innovations Management" at the "School of Business" at "University of Nairobi", and have their prototypes developed and manufactured at the maker space "Gearbox". Supported by

the Kenya National Innovation Agency ("KE-NIA"), or by the local support system "*iHub*", regional acting venture capital supports start-up companies, that reside at the "Nairobi Science & Technology Park", or at the co-working space "Nairobi Garage".

Already back in 1997, R.E. Nelson and S.D. Johnson emphasized in their paper "*Entrepreneurship Education as a Strategic Approach to Economic Growth in Kenya*" the difference between "*entrepreneurship*" and merely running a small business to support surviving, mainly in the informal sector.[13] They discuss the role of technical education and training in supporting economic growth in Kenya, including entrepreneurship education, teacher training, and stimulation of small enterprises through training and consultancy. Additionally, the importance of creating an entrepreneurial culture through education is stressed.

In their paper, the authors define the entrepreneur as "... the key actor in the private enterprise sector and can be defined as a person who is able to look at the environment, identify opportunities for improvement, gather resources, and implement action to maximize those opportunities. The entrepreneur can be depicted as a role model in the community, a provider of employment opportunities for others, a stabilizing factor in society, and a primary contributor to the development of natural and human resources within a nation"

Characteristic traits of such an entrepreneur are self-confidence, originality, people-oriented, task-result-oriented, future-oriented, risk-taker. [13].

A long term goal for the Kenyan Agribusiness Strategy could be to develop an entrepreneurial culture to support the transformation of agriculture. This implies to leveraging on the capacities of the younger generation, by helping them understand the entrepreneurial attitudes and skills needed to be successful, either as employers or employees.

The impact of entrepreneurship education in agribusiness programs may not be immediately evident but should have sustained effects on a real entrepreneurial culture in Kenia's agricultural transformation process. Kenyan agriculture would link to manufacturing and other sectors of the economy through agro-processing, other agriculture-based manufacturing, and finance, logistics, and other upstream and downstream services, as proposed by the ACET report.[1]

Not only would there be no necessity to

separate an "Agricultural Sector Transformation and Growth Strategy - Towards Sustainable Agricultural Transformation and Food Security in Kenya" from a "Kenya Youth Agribusiness Strategy". Additionally, by this approach,

Kenya could achieve the necessary economic transformation, ensure food and nutrition security, and fight youth unemployment using one single unified efficient concept.



Dr. Dr. Peter Kayatz

P^{ETER} Kayatz, a trained biologist, is the owner of the consulting firm "Waterbergh Management", and a designated expert in entrepreneurship, lean start-up, and business model canvas. He is a teacher of entrepreneurship at MCI - Management Center Innsbruck, and supports entrepreneurs, as a trainer and coach, in developing their venture from pre-incorporation to exit, with a particular focus on sustainable business model development. His special interests relate to the entrepreneurial development of sub-Saharan Africa, particularly Silicon Savannah, Nairobi, Kenya, and Kigali, Rwanda.

References

- [1] ACET-The African Center for Economic Transformation. Agriculture towering africa's economic transformation. African Transformation Report, 2017.
- Hans Stoisser. Afrika und digitalisierung chancen fuer deutsche unternehmen. Audit Commettee Quarterly - Das Magazin f
 ür Corporate Governance, III/2018, 2018.
- [3] Andrea Szalavetz. Condemned to be Left Behind?, chapter 5 Industry 4.0 in 'Factory Economies', page 210. Brussels ETUI aisbl 2017, 2017.
- [4] Bruce Mtigwe Shadreck Zhou, Isaac J Minde. Smallholder agricultural commercialization for income growth and poverty alleviation in southern africa: A review. African journal of agricultural research, 2013.
- [5] Emilio Pindado and Mercedes Sánchez. Researching the entrepreneurial behaviour of new and existing ventures in european agriculture. *Small Business Economics*, 49(2):421–444, jan 2017.
- [6] Claudia S.L. Dias, Ricardo Gouveia Rodrigues, and Joao J. Ferreira. What's new in the research on agricultural entrepreneurship? *Journal of Rural Studies*, 65:99 – 115, 2019.
- [7] Thomas Lans, Pieter Seuneke, and Laurens Klerkx. Agricultural entrepreneurship. In Encyclopedia of Creativity, Invention, Innovation and Entrepreneurship, pages 1–7. Springer New York, 2017.
- [8] Bruce F. Johnston and John W. Mellor. The role of agriculture in economic development. The American Economic Review, 51(4):566–593, September 1961.
- [9] C. Peter Timmer. The Agricultural Transformation, chapter 8, pages 275–331. Elsevier, 1988.
- [10] C. Peter Timmer. The structural transformation and the changing role of agriculture in economic development: Empirics and implications. In Wendt Lecture, October 30, 2007 American Enterprise Institute Washington, DC, 2007.
- [11] Agricultural Sector Transformation and Growth Strategy 2019-2029. Government of Kenya, 2018.

- [12] Kenya Youth Agribusiness Strategy 2017-2021. Minstry of Agriculture, Livestock & Fisheries, Council of Governers, 2017.
- [13] Robert E. Nelson and Scott D. Johnson. Entrepreneurship education as a strategic approach to economic growth in kenya. *Journal of Industrial Teacher Education*, 35(1):7–21, 1997.