



Position Paper

Agricultural supply chains and agro-industrial parks to feed the growth of the Africa and create partnerships between South Africa and Italy

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Sub-Saharan Africa, with 50% of available arable land worldwide, has huge agricultural potential and fast-growing regional markets: by 2030 they will be worth more than 1,000 billion Dollars. However, it is struggling to consolidate sustainable production and processing supply chains: 70% of agricultural production in Sub-Saharan Africa is subsistence and only 30% of the production sites have primary transformation facilities *in loco* (versus 98% in the developed economies).

Within a context of widespread malnutrition (1 in 4 individuals suffers from that), dependence on imported food supplies (which cost over 40 billion dollars to Africa as a whole), volatile prices of food commodities, the establishment of local commercial and industrial output for consumption, import substitution and export are the keystones to guaranteeing food security, reducing poverty and activating investment, employment and an entrepreneurial approach.

An increasing number of African governments are focusing on the creation of agro-industrial parks as a tool to overcoming subsistence farming and promoting a value chain creation.

South Africa is the no. 1 exporting country in the Sub-Saharan region. Italy is the no. 3 worldwide producer of agricultural machines and the no. 1 for packaging, with a supply chain worth over 150 billion Dollars. The two countries could integrate their competencies and create agro-industrial parks as operational tools to better and more rapidly take advantage of the emerging opportunities in African markets.

Why this is important

1. SSA has over 200 million hectares of uncultivated land, equal to 50% of that available worldwide. About 45% of this land is less than six hours away from consumer markets. Despite this, the **still-latent potential of the continent is enormous.**

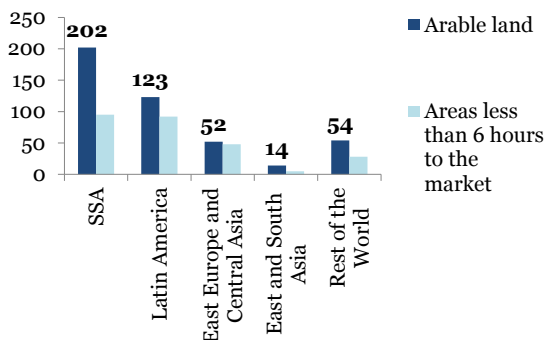


Figure 1 – Potential cultivatable land in the world; millions of hectares (Source: The European House – Ambrosetti based on World Bank data, 2014)

2. Over the last 20 years, **agrifood productivity in Africa has not kept pace** with population growth, resulting in a 5% drop in *per capita* production (compared with +40% in other developing areas) and a level of food availability much lower than the threshold of 2,500 calories per day per person. The FAO estimates that food demand in this area will grow by 3% per year. On the basis of current production output and the population boom,¹ in 2030, the region will be able to satisfy only 30% of its food needs.

3. Even if some countries in the area are strong exporters (e.g., South Africa, the Ivory Coast and Kenya), today Sub-Saharan Africa is a **net importer** of food commodities and products with a cost of over \$40 billion per

¹ 1.2 billion in 2025 and 2 billion in 2050 (1/5 of the world population), compared with the current 925 million.

year (as opposed to areas such as Latin America and Asia which are global suppliers).

Over the last 40 years—due to misguided policies (of local governments and international institutions), under-investment and infrastructural shortcomings in terms of access to markets—the continent has **lost influence**. In 1970, Sub-Saharan Africa’s share of worldwide agribusiness exports was 8%² while today it is just over 2% (less than Thailand which, over the same period, has nearly doubled its share).

4. However, the primary sector remains central to the Sub-Saharan economy. Today it contributes between 25% and 50% of the GDP of countries in the area and accounts for around 60-65% of employment. The benefits of its development are **enabling factors** for the growth of the continent.

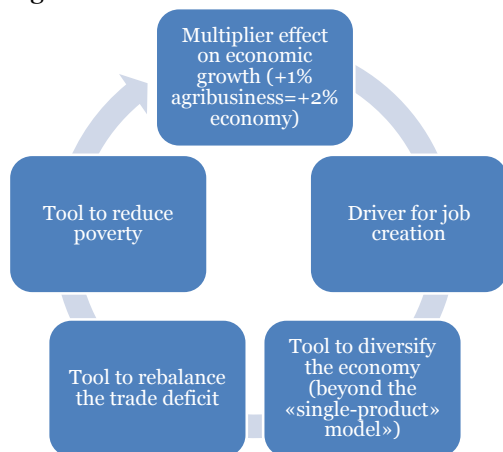


Figure 2 – Benefits of the development of the primary sector (Source: The European House - Ambrosetti)

5. Within this context, there are a number of aspects that make the continent’s agricultural potential a “historic” opportunity: the combined population and economic growth of the Sub-Saharan region will sustain local demand which, according to forecasts, will triple in relation to current levels, surpassing **\$1 trillion**.

In addition, the consolidation of the middle class (+80% as of 2020) will push towards qualitatively higher standards and increased demand for products with a higher nutritional value.

² Africa was one of the world’s largest exporters of agricultural products. For example, Ghana was the leader in cocoa production and Nigeria in the export of palm oil and peanuts.

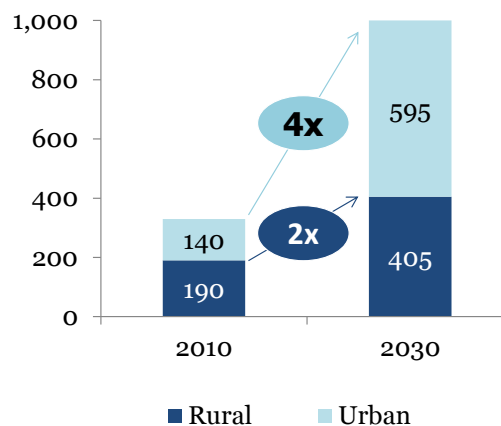


Figure 3 – Value of food consumption markets in Sub-Saharan Africa (Source: The European House – Ambrosetti based on World Bank data, 2013)

Agro-industrial parks as a tool towards developing and integrating value chains

6. Sub-Saharan agribusiness requires intervention along the various phases of the value chain. According to the FAO, by 2050, **investments totaling \$940 billion** in agriculture and downstream support services will be required, opening the door to tremendous opportunities. Areas include primary and intermediate inputs for production and processing (fertilizers, seed, irrigation systems, machinery, etc.), infrastructure (energy, transport, etc.) and cultivation technologies and methods.

7. As part of regional initiatives³ and national strategies, many African governments are looking with increasing interest at the development of **agro-industrial parks** in order to:

- Increase agricultural output.
- Develop the processing industry (only 30% of African products are pre-processed on-site, compared to 98% in developed economies).
- Activate related supply chains (currently, the ratio between value added for agribusiness and that of agriculture is 0.6 in Sub-Saharan Africa, compared with 13 in the United States).

8. The task of an agro-industrial park is to increase the added value produced by agriculture through promoting the development of the processing industry and

³ For example, the CAADP (Comprehensive Africa Agriculture Development Programme) launched in 2003 by the African Union, or the 3ADI (African Agribusiness and Agro-industries Development Initiative) of 2010.

integration of small farmers into the market in an **efficient way**.

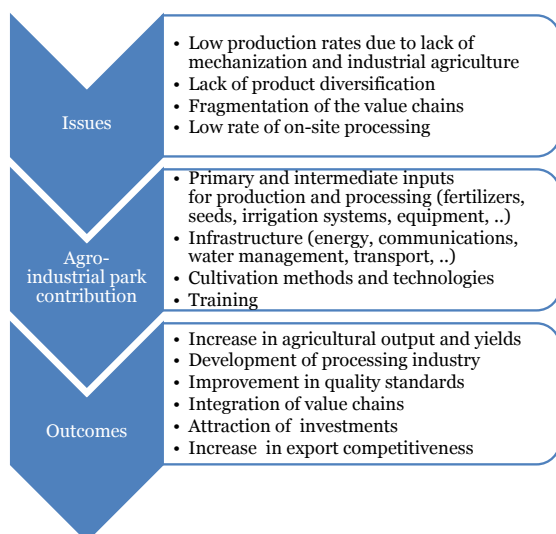


Figure 4 – Contribution and benefits of agro-industrial parks (Source: The European House - Ambrosetti)

9. Agro-industrial parks have been successfully tested in many areas of the world (China, India, Israel and the Middle East, Eastern Europe, Latin America, etc.) utilizing a range of organizational structures and integrating, as necessary, the status of Special Economic Zone, local and export incentives.

Many projects are currently underway in Africa. For example: in 2014 the Congo announced a \$6 billion investment for the creation of 20 parks throughout the country; the collaboration with Italy is supporting the Ethiopian government as part of a \$2.5 billion plan for 17 sites, and similar programs are underway in Nigeria, South Africa, ⁴ Mozambique, Zambia and elsewhere.

10. To implement this type of initiative, five aspects must be taken on:

- Planning: location and size of the park, allocation of space and what it will be used for, selection of types of products/processing, etc.;
- Economic/financial and investment plan: Public-Private Partnership (PPP) model, financing schemes and risk mitigation mechanisms, employment plan (skills, number, etc.), infrastructure, etc.;
- Transport and connectivity: logistics and mobility flows, market access, etc.;
- Organization and governance: management model, activities and their monitoring,

⁴ The government announced (September 2015) the creation of an agribusiness Special Economic Zone in the Western Cape.

relations with internal and external stakeholders, etc.;

- Accountability and communications: standards and security, production quality and sustainability, social-environmental impact, etc..

All this requires specialized and industrial competences.

11. A number of agro-industrial park initiatives have failed due to:

- Poor planning of infrastructure requirements;
- Misalignment with actual market demand (in terms of production, related supply chains, export market potential, etc.);
- Lack of targeted strategies to attract specific investment and companies;
- Failure to involve the local private sector;
- Lack of effective financial frameworks and exit strategies.

What should be done

12. Agro-industrial parks are an institutional innovation guided by entrepreneurial approaches and creation of economic value over the long-term whose operational framework is not neutral with respect to local conditions and cannot be "copied" as-is.

13. For Sub-Saharan Africa the most effective model must provide support for the development of value chains and create an integrated "ecosystem" that connects small farmers, processing industries and other players (suppliers of means of production, financial institutions, logistics services, research organizations, etc.).

14. In 2007 The European House - Ambrosetti developed the concept of the **IAP – Integrated Agro-Industrial Park**, ⁵ designed specifically for the Sub-Saharan context. Its main characteristics are:

- Modularity and scalability (thus avoiding over-investment);
- Governance model (with a specific managing company) with "variable geometry" depending on development status (construction, start-up, full operation);
- Integration of the agricultural and/or livestock supply chain with other park functions in order to maximize synergies;

⁵ The model generated interest from the governments of Zambia, Uganda, Tanzania and Ethiopia.

- Critical mass to allow for economies of scale and develop processes on an industrial basis;
- Application of the principles of energy and environmental sustainability;
- Presence of research, certification and training structures and shared infrastructures.⁶

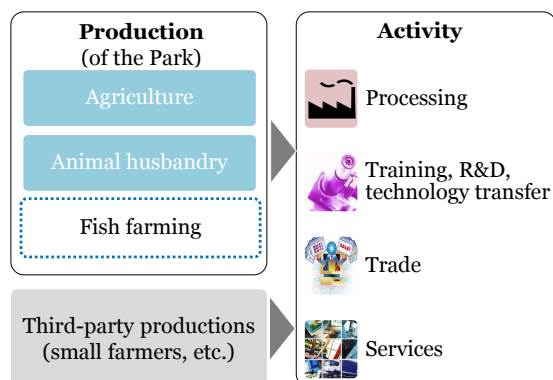


Figure 5 – Basic design of the IAP model
(Source: The European House - Ambrosetti)

15. The IAP model is designed to **promote partnerships** between Italian and African players, with special focus on SMEs.

South Africa and Italy have strengths and interests that could complement each other:

- Both countries have a significant agribusiness sector;⁷
- South Africa is the no. 1 Sub-Saharan exporting country with the most developed logistics-infrastructure system and a processing industry that is the no. 2 manufacturing sector;
- Italy is the no. 3 producer in the world of agricultural machinery and the no. 1 producer of packaging and packing equipment, and is a leader in cold chain, seed, fertilizer and irrigation technologies. The country is also a leader in terms of expertise in engineering, plant engineering and infrastructure construction.

16. Taking advantage of these assets, including through pilot projects, South Africa and Italy can develop an **Italian-South African IAP format** for Sub-Saharan market and export.

⁶ Structures for product and cold chain storage; logistics terminals; commercial space; medical center; accommodation facilities (for employees and visitors).

⁷ GDP: 14% in South Africa and 9% in Italy; workforce: 10% in South Africa and 13% in Italy. Source: DTI and ISTAT, 2014.

17. A key point must be the adoption of a **broad-based and “circular” supply chain approach**.⁸ In fact, the two countries have competences in major supply chains and ones which are in demand in Sub-Saharan markets: fruits and vegetables, grains, wine, oil, nursery gardening, meat and milk.

Main product	By-products	Related products
Meat	Skin	Leather for bags, belts, shoes, furniture, etc.
Milk	Fats	Soap Cosmetics Fuels
	Cartilages	Animal feed Sticks and pet toys
	Bones	Animal gelatin Capsules for medicine High-protein flour Animal feed
	Blood	Fertilizers
	Abomasum	Rennet for cheese
	Rumen contents	Biogas
	Tissue valves	Heart valves for medical devices

Figure 6 – Extended beef supply chain
(Source: The European House - Ambrosetti)

18. The circularity refers to the byproducts of the productions (both agricultural and animal) with technologies for the production of energy – on which Italy has advanced competencies⁹ and active projects in South Africa and in other Sub-Saharan countries – guaranteeing its sustainability and the security of supply for the park.

19. The final element of the partnership is the experience Italy can bring in terms of the governance model. The **Italian cooperative system**, which today involves 10,000 agribusiness companies employing 120,000 individuals, is a point of excellence internationally with competences that can be transferred and applied in the management of parks and integration of small local farmers.

⁸ This entails boosting the added value phases up- and downstream and taking advantage of the supply chains of co-products and by-products to create opportunities for all stakeholders involved (investors, farmers and the local community) and activate economic and industrial spin-offs.

⁹ For example on the technologies from biomass, like sugar cane. Today over 15% of electrical production from renewable sources comes from bioenergies (biomass, biogas, bioliquids).