



Position Paper

SHARING EXPERIENCE AND TECHNOLOGY TO FOSTER COMPETITIVENESS AND SUSTAINABILITY IN AGRIBUSINESS

South Africa – Italy Summit, Johannesburg, October 18-19, 2016

The South African agribusiness sector contributes 12% to the domestic GDP, employing 7% of the work force. The sector is highly polarized in large, capital intensive, globally-integrated commercial farms, and small-sized, low-productive and labor intensive farms.

Increasing beneficiation of agricultural resources in rural areas is a key tool to foster job creation, sustainability and food security in the Country. Integrated Agroindustrial Parks (IAPs) offer a reliable framework to mitigate present challenges, allowing smallholder farmers to share resources and investment to increase the added value of agricultural output. IAPs also facilitate an effective international cooperation oriented to generate endogenous and sustainable growth, rather than tenuous aid and assistance.

The Rust de Winter Agripark, located between Gauteng and Limpopo, could be a suitable testbed for cooperation between Italy and South Africa. Italian and South African companies could share knowledge and experiences (agricultural cooperative governance, supporting services, etc.) on the one hand, technologies and know-how on the other (agricultural mechanics, water management solutions, sustainable power generation, etc.) in order to boost agricultural production and value chain development.

Increasing beneficiation of South African agriculture to relaunch its untapped potential

1. Agriculture is a strategic sector for South Africa, in order to enhance sustainability, tackle rural depopulation, and increase **food security** in a warming planet. Agribusiness is a great opportunity to exploit: agriculture currently contributes by 2.4% to the South African GDP and employs 7% of the workforce,¹ but – taking into account the whole agroindustry – its share of GDP rises to 12%. Employment in agriculture has displayed a downward pattern in recent years, given the robust industrial growth experienced by the Country. However, the sector is also expected to generate ~1 million new jobs within 2030, triggering investments and the growth of Small, Medium and Micro-sized Enterprises (SMMEs),² tapping the labor surplus in the rural world.

2. The South African agricultural sector is highly polarized in large, capital intensive, globally-integrated commercial farms, and small-sized, low-productive and labor intensive farms. The challenge for South Africa is thus to **enhance the overall beneficiation of agricultural resources,**

i.e. the capability to add value as commodities move along the value chain. To do so, it is critical to fill the gap between labor-intensive and capital-intensive agriculture.

Seizing the opportunities from the completion of specific value chains in South Africa

3. Given the low availability of high quality soil with reliable access to water supplies, most of the land is dedicated to livestock. Livestock (in particular, cattle and poultry) has experienced a robust growth of more than 40% in the last decade thanks to industry liberalization. However, despite being a significant economic resource, it is highly detrimental to the environment, contributing to 75% of agricultural-related GHG emissions, and being associated with land impoverishment and desertification.

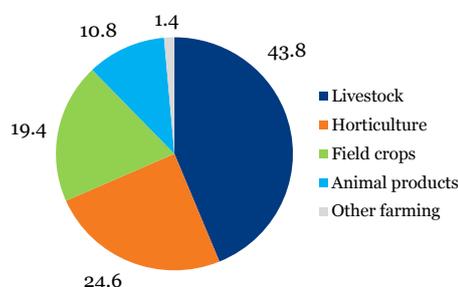


Figure 1. Percentage of South African agricultural production value by sector (Source: TEH-A elaboration on FAO data, 2016)

¹ Source: World Bank data, 2016.

² Source: South Africa Government, “National Development Plan 2030”.

4. Red meat displays an even greater potential for growth, as it has not conquered the world markets yet. However, to unleash such potential, food safety procedures (e.g. an EU-compliant usage of antibiotics) will have to be developed to match existing regulations in Western markets, also with the aim of promoting the Country as a reliable and safe meat producer.³ Public and private investments in **brand promotion, quality certifications and traceability** could therefore significantly boost exports in the sector.

5. Completing the meat processing value chain in specific areas (e.g., secondary processing, abattoirs, etc.) provides sizeable opportunities for international cooperation. There is also significant room for developing the byproduct value chains in the manufacturing sector, e.g. leather products, textiles and apparel.

6. The dairy industry is large and well structured with related value chains. It is mainly located in coastal Provinces due to rainfall and higher quality pastures, and 60% of production is sold as fresh milk, while 40% as concentrated products. Exports have been growing significantly in recent years, as South Africa is improving competitiveness towards major international producers (such as New Zealand) or highly subsidized producers (U.S. and the EU). Dairy product exports amount to more than R1 billion, and are sent mainly to other SADC Countries, with Mozambique, Zimbabwe and Angola making up 82% of total exports.⁴ Increasing production is challenged by low access to financing in order to support the required capital investments in dairy equipment. Related value chains are well-present in the Country thanks to major multinational players⁵, but limited when it comes to small scale equipment manufacturers.

7. South Africa has also emerged as a significant wine producer, ranking 7th worldwide in terms of production volumes⁶, with quality rapidly catching up on historical producers such as France and Italy. The South African wine industry is well-integrated in the world markets and has well-developed wine related value chains, with dynamic ecosystems

³ The experience of Uruguay could be taken as an example of a successful Country-brand promotion in the beef market.

⁴ Source: Department of Agriculture, Forest & Fishery, Republic of South Africa, 2014.

⁵ Such as Tetrapak and GEA in the packaging sector.

⁶ Source: Wine Institute Statistics, 2016.

of specialized marketers, bottlers, traders, import/exporters and other logistical services.⁷

8. Contrary to meat, horticulture production is highly export-oriented, with over 50% of production being sold on international markets. Commercial fruit output is mainly located in the Western and Eastern Cape Provinces, which produce deciduous and citrus fruit (especially grapes and oranges). Other Provinces (particularly, Free State, Mpumalanga, Limpopo and KwaZulu-Natal) produce mainly vegetables, less valuable commercial commodities.

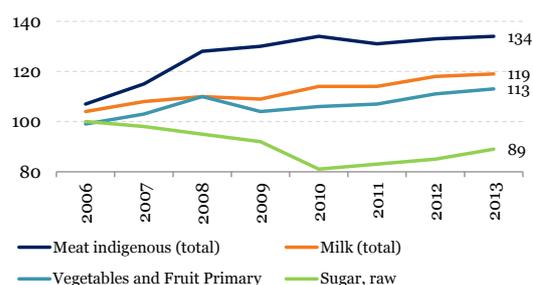


Figure 2. Agricultural production of different sub-sectors, 2006-2013, index number (avg. 2004-06=100) (Source: TEH-A elaboration on FAO data, 2016)

9. Given the size of the sector, South Africa has a considerably developed fruit processing value chain. Non-export production is indeed mainly directed to fruit processors and transformed into fruit juice or canned fruit, whereas just a minority share of production is consumed as fresh fruit. The Country has also many equipment producers – packaging, fruit processing, juice extraction and canning (although this latter industry is hampered by overcapacity).

10. Even though horticulture export has been historically directed towards Western markets – Netherlands and UK, in particular – today we are witnessing the growing importance of **South-South trade**. The size of the domestic horticulture market has grown significantly in the last 20 years, also galvanized by the growth of many indigenous supermarket networks, which are also spearheading the penetration of other Sub-Saharan Countries.

11. The grain sector plays a significant role in northern Provinces: profit margins of crops (such as barley and wheat) are lowering, hence production is expected to diminish, while maize production is likely to increase. However, the exceptional El Niño-induced drought has severely affected grain output in

⁷ Source: Department of Agriculture, Forest & Fishery, Republic of South Africa, 2012.

recent years. Sub-Saharan Africa overall agricultural fell by 15% in 2016 against the previous 5 years average.⁸

Integrating smallholder farmers' into agroindustrial value chains

Increasing the beneficiation of the agribusiness and reducing the polarization of the industry requires a focus on smallholder farmers and rural areas, rather than on commercially-competitive and structured companies located in coastal Provinces.

12. Water management is a primary challenge in a Country with sizeable arid or semi-arid territories: ~40% of water supplied is lost due to poor infrastructure or theft, generating serious hindrances for agricultural development.⁹

13. Whereas 79% of South African land is dedicated to agriculture¹⁰ - an extremely high figure compared to other Sub-Saharan Countries - arable land amounts to just 10% of total land area, and only 12% of that is regarded as high-potential and irrigated land. The Government plans to expand arable and irrigated land by one third within 2030 (further 500,000 ha from the current 1.5 million ha), through better water management of existing resources, infrastructural improvements and new water schemes.¹¹

14. The smallholder farmers' production system is characterized by basic technologies, low margins, and seasonal labor patterns, with an important role played by women. Overcoming major structural problems – land fragmentation, lack of access to credit, poor infrastructure and scarcity of skills – is a pre-condition for developing ancillary services (transport, storage, processing, marketing, etc.) necessary to increase productivity and agricultural added value.

15. Italy was faced with a similar situation in the past and has managed to overcome it developing one of the most effective cooperative systems in the agri-food sector at the international level. The **cooperative model** is an effective tool to aggregate suppliers and increase efficiency in processing and trade phases on domestic and foreign

markets. The proof of that being the Italian experience, where 36% of agricultural production value and 24% of Italy's food industry turnover - especially in meat, fruit and vegetable, milk and wine value chains¹² - is generated by the cooperative system.

Fostering cooperation in the agribusiness for mutual benefits to South Africa and Italy

16. A strong South Africa – Italy partnership in the agroindustry offers great potential. On the one hand, Italy has world leading specialized value chains - such as fruit and vegetable packaging, agricultural machinery, dairy equipment, meat processing, water management, commercial winery equipment, etc. – and an effective and sustainable governance model in the agroindustry to be shared.

17. South Africa, on the other hand, offers a structured market that allow easy integration with Italian mid-sized operators, also for manufacturing machinery and equipment for the local market. Moreover, the Country has a great potential in terms of agricultural production, and could thus become a major export hub for Italian food processors for the whole Sub-Saharan region.

18. However, strong cooperation between the two Countries requires the institutional framework to be successful. The European House - Ambrosetti has developed the theoretical model of **Integrated Agroindustrial Parks** (IAPs), policy tools that can offer an institutional and economic framework to facilitate investment from foreign companies and job creation.

19. A suitable agroindustrial park in which to implement the IAP model could be the **Rust de Winter Super-Agripark project** - located at the border between Gauteng and the Limpopo Provinces – which aims at developing commercial agriculture in an area of 35,000 ha of land, and 150 farms. The project could be the testbed for deploying a pilot-project of cooperation between Italy and South Africa.

⁸ The most severely affected crop is maize: South African production plunged by 39% in 2015/16 resulting in +98% price increase. Source: RIASCO data, 2016.

⁹ Source: South African Department of Water and Sanitation, 2014.

¹⁰ According to the World Bank, the share of land area that is arable, under permanent crops and pastures.

¹¹ Source: "National Development Plan 2030".

¹² Source: Italian Observatory on Agricultural Cooperation, 2015.

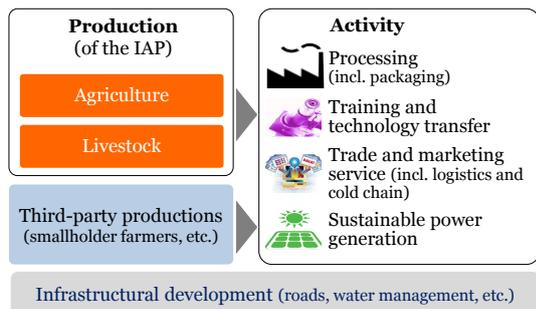


Figure 3. Illustrative scheme of an Integrated Agroindustrial Park (Source: TEH-A elaboration, 2016)

20. A development strategy to make the Rust de Winter Agripark evolve towards the IAP model, in collaboration with Italian companies and public institutions, should be structured along five main axes:

- a. Infrastructure and water management.
- b. Processing facilities (basic packaging, processing and storage).
- c. Sustainable power.
- d. Skills development.
- e. Cooperative governance.

21. The park is located nearby a dam, which should provide water resources for crop farming. However, **60% of the water is lost** due to poor maintenance and infrastructure, making crop farming almost impossible.

22. The 150 farms in the park area are mostly being utilized as livestock farms. This is generating a vicious circle, as overgrazing is unsustainably lowering the quality of the soil. About 30 km of road infrastructure is needed to connect the farms to the highway. Moreover, to minimize water losses, water equipment and infrastructure should be built and installed, in collaboration with Italian companies. Doing so would allow local authorities to cultivate maize, wheat, soya, potatoes, barley, beans, and other vegetables.

23. **Processing facilities** could have a significant impact as job creation-multipliers, stimulating a local backbone of SMMEs also in maize and livestock value chains (meat processing, dairy, leather, biomasses, etc.). The processing facilities required are mainly basic and affordable storage and processing machinery. Appropriate staff training for machinery maintenance should also be allowed for in the project design. Financing could come from government support plans to SMMEs and rural development.¹³

¹³ Such as the National Empowerment Fund, or international development banking institutions (African Development Bank, World Bank).

24. Currently, power is supplied by Eskom. Given also the presence of many livestock farms, a small-scale biomass power plant would bring about significant reductions in methane emissions, thereby proving a reliable and stable source of power for households and commercial activities.

25. Training is an essential factor for a long-term development strategy. Farmers in the instituted the KwaNdaba Training Academy, dedicated to crop farming **skills development and training**. On the one hand, training should entail on-the-job learning for crop farming techniques; on the other, it should focus on developing local management competences. It would also be important to set exchange programs (such as seasonal working camps) between Italy and South Africa, in order to share skills in agribusiness and value chains development.

26. The cooperative model is an effective tool for managing the infrastructural network and human resources. Farmers would access processing facilities and become mutually responsible for water management and power generation. Also, some initiatives could be envisaged by leveraging the well-established relations between the Italian cooperative system (particularly in the Emilia Romagna Region) and South Africa:

- Design of exchange programs for trainees to allow farmers to spend time in the Italian countryside, directly grasping the elements of the Italian cooperative model.
- Full-time involvement of representatives of the Italian agri-food cooperative system to ensure long-term commitment, oversee the project, and provide assistance when required.

27. An interconnected system of integrated agroindustrial parks across South African Provinces could contribute to create the critical mass needed for a close cooperation between South African and Italian companies and territories. This would foster sustainable and endogenous development, particularly in the rural world.

In cooperation with



Main Partners



Partners



Partners

