

Marine Economic Cooperation and Challenges of China & South-East African on Maritime Silk Road

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Keywords: South-east Africa; Marine economy; Fégersa plan; Cooperation \$ challenge

Abstract: In 2014, the South African government proposed a development plan called Phakisa, which regards the marine economy as one of the main drivers of future economic growth in South Africa. China is South Africa's largest trading partner. The economic and trade relations between the two countries have developed rapidly. With the continuous advancement of China's maritime power, the two countries have ushered in tremendous opportunities for cooperation in the marine economy. China and South Africa have strong complementary advantages and realistic needs for cooperation in the above-mentioned fields. Combining the development situation and realistic conditions of the relevant marine industry departments of the two countries, the paper puts forward the way to carry out marine economic cooperation with South Africa.

1. Introduction

The ocean is the well-being of mankind. 65% of the world's megacities are located in coastal areas, and more than 3.1 billion people live within 100km of the coastline. Marine development has enormous economic value. 90% of global trade depends on ocean transportation, 30% of oil and natural gas is produced in the ocean. Coastal tourism is one of the world's largest industries, accounting for more than 5% of global GDP. The output value of the marine economy is between 3 and 6 trillion US dollars [1]. The marine economy involves marine fisheries, marine equipment manufacturing, marine transportation, marine chemicals, marine oil and gas minerals, coastal tourism, marine education and scientific research, etc. It has become a new driving force for global economic development and a new bright spot for international cooperation. The Party's 18th National Congress proposed the strategy of maritime power. In 2013, President Xi Jinping proposed the One Belt, One Road initiative. The 21st Century Maritime Silk Road is an important part of this concept, vigorously develop the marine economy and accelerate the maritime power. Construction has become an important and urgent strategic task for China in the future. South Africa is one of the most developed economies in Africa, with a GDP of 344.9 billion U.S. dollars in 2015. South Africa is surrounded by the sea on three sides and has a coastline of 3,924km and abundant marine resources. In 2014, the South African government proposed the Operation Phakisa, which aims to fully exploit the potential of its blue economy and enhance the country's economic strength[2]. China and South Africa (hereinafter referred to as China-South) are both BRICS countries, and their economic and trade ties have been continuously strengthened. The bilateral trade volume has increased from US\$16.1 billion in 2009 to US\$46 billion in 2015[2]. China's participation in the South African Fei Giza plan to strengthen the China-South cooperation in the marine economy is of great significance for promoting the inclusive growth of the two economies.

2. The Fégersa for Cooperation Opportunities

After 20 years of political change, South Africa's macro economy as a whole maintained a steady

growth momentum, and the status of the international community has been increasing [3]. However, due to the impact of its own economic structure and the impact of the international financial crisis, South Africa's economic development continued to slow down in 2012 [4]. South Africa's economic development is too dependent on the mining industry. Although the mining industry's share of GDP fell from 21% in 1970 to 6% in 2011, as one of South Africa's pillar industries, its export value still accounts for about 60% of South Africa's annual export volume [5]. In contrast, the marine economy has a small share of South Africa's social economy and contributes insufficiently to economic development. In 2010, the marine economic output value was about 54 billion rand (about 3.75 billion US dollars). The economic output value of all coastal provinces is less than that of Gauteng in the inland areas, and the marine industry has not been effectively developed. On the other hand, the geographical location of South Africa determines that its economic development depends to a large extent on marine space and marine infrastructure [6]. The coastal area of South Africa is one of the most densely populated areas in Africa (80 people/km²). 30% of the country's population lives within 60km of the coastline, providing sufficient labor reserves for the development of the marine industry. 90% to 95% of international trade in South Africa depends on ocean transportation [7]. China-South trade accounts for the largest proportion, and investment in South African port construction is economic and strategic for China. In this context, the South African government has proposed a results-oriented Fei Giza plan to provide stable and strong policy support for its marine industry development and cooperation.

As the economic and trade relations between China and South Africa continue to strengthen, the promotion of cooperation between the two countries in the maritime field has become the consensus of the leaders of both sides. In 2013, President Xi Jinping visited South Africa. The two sides signed the Memorandum of Understanding on Cooperation in the Marine and Coastal Zones between the Government of the People's Republic of China and the Government of the Republic of South Africa. With the One Belt, One Road initiative benefiting Africa and the smooth progress of the Fajiza program in South Africa, the marine economic cooperation between the two countries has ushered in new opportunities.

3. Development Of Major Marine Industry Sectors In South & East Africa

3.1 Port Transportation and Port Industry.

Since the beginning of the 21st century, the port transportation industry in South Africa has developed rapidly, and cargo throughput has maintained rapid and steady growth. In 2014, the total throughput of container terminals reached 4.83 million TEU as shown in Figure 1.

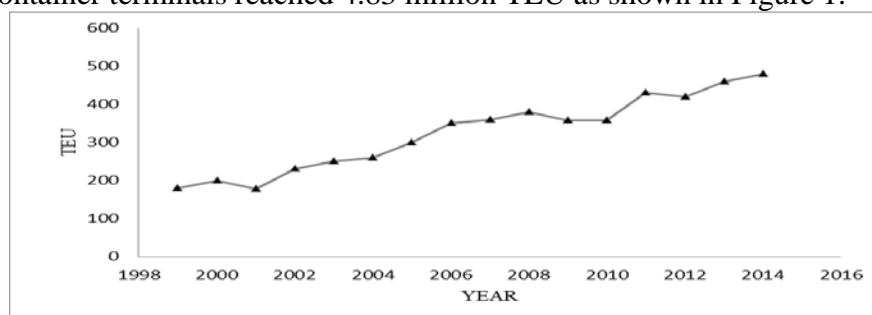


Fig. 1 South African container terminal throughput changes

The South African port system consists of eight major commercial ports and other small ports in Cape Town, Durban, East London, Port Elizabeth, Richards Bay, Saldanha, Port Moselle and Port of Nacula. Among them, Durban is one of the largest ports in Africa. In recent years, it has maintained a steady upward trend. According to the definition of the UN Commission on Trade and Development, it belongs to the third-generation port and is also the gateway city of South Africa. Combined with the current port development profile in South Africa, mineral resources are one of the major export commodities of each port as shown in Table 1.

Table 1 Overview of major ports in South Africa

Port name	Near development zone	Main export goods	Main port industry
Durban	\	Mineral resources / agricultural /sideline products	Chemical, textile, oil refining, shipbuilding
Cape Town	\	Agricultural and sideline products	Non-staple food processing, textile, chemical, shipbuilding
Elizabeth	Kuha Development Zone	Mineral resources / agricultural/ sideline products	Mechanical manufacturing, textile, refining
Saldanha	\	Mineral resources, oil and gas resources	Iron and steel smelting, chemical, ship repair
Richards Bay	Richards Development Zone	Coal, etc.	Aluminum and titanium smelting, furniture, ship repair
Nacula	Kuha Development Zone	Agricultural/sideline products, oil/gas resources	Automobile manufacturing, ship repair, etc.
Mosser	\	Oil, natural gas, etc.	Ship maintenance, etc.
East london	East London Development Zone	Agricultural / sideline products / mineral sands, etc.	Machinery manufacturing, ship repair, textile / food processing

Source: <http://www.transnet-tpt.net/pages/default.aspx>.

The Richards Bay and Saldanha are the main ports for coal and ore export in South Africa. In terms of port industry development, between 2001 and 2010, South Africa established four industrial development zones, three of which are located in the coastal areas, namely the Koba Industrial Development Zone, the East London Industrial Development Zone, and the Richards Bay Industrial Development Zone. The Kuha Development Zone is located in Nelson Mandela City, surrounded by two ports, Elizabeth and Nakula. It mainly develops machinery manufacturing, textile, smelting and other industries. The East London Development Zone relies on the East London Port to focus on the automotive machinery industry. Richards Development Zone relies on Richards Bay to carry out aluminum and titanium smelting, furniture, ship repair and other industries.

3.2 Development of Marine Oil and Gas Resources.

South Africa is one of the most abundant mineral resources in the African continent. Among them, coal is its main energy mineral, accounting for about 70% of domestic energy sources. However, oil and natural gas development is limited by factors such as backward exploration and development capabilities, and economic development. Since 2014, along with the implementation of the Fei Giza program, coastal oil and gas development has been listed as one of the four major development directions in the future. South Africa's daily oil and gas production may reach 370,000 barrels, creating about 130,000 jobs, contributing \$2.2 billion to South Africa's GDP, and having great development potential. Different from most African countries, South Africa has advanced oil and gas development and refining technology, and has more developed refining capacity and downstream industries. Therefore, to make up for the lack of oil and gas resources exploitation capacity is the primary problem to be solved in the development of South Africa's offshore oil and gas industry.

3.3 Marine Fisheries.

South Africa has abundant marine fishery resources and diverse fisheries. Among them, there are dozens of species such as sardines with commercial fishing value. There is also a large amount of krill resources in the untapped Antarctic waters. But the contribution of commercial fisheries to GDP is 0.1%, which is between 4 and 5 billion rand (about 2.8 to 350 million US dollars) . Since 2008, South Africa's fishery production has been generally fluctuating, with a fishery output of about

600,000 tons in 2014. South Africa's per capita annual fish consumption is between 6.4 and 6.7 kg, accounting for only about 4% of personal food consumption, and a large part is used for export. At present, the fishery cooperation mode between China and South Africa is mainly based on fishery trade, and the two have strong complementarity in trade types. The crackdown on illegal fishing and destruction of ecological behavior is increasing. The government also promotes a sea area cooperation management system involving sea users, with a view to achieving better management effects on coastal and marine fishery resources.

3.4 Coastal Tourism.

Tourism is the world's largest industry, and tourism consumption can have a significant stimulating effect on related production and service sectors and is seen as the industry that best integrates Africa into international markets. As an important part of tourism, marine tourism is developing rapidly and its status is constantly rising. From 1990 to 2010, tourism in Southern Africa grew at an average annual rate of 6%, with South Africa being particularly prominent. The rapid development of tourism has brought huge economic benefits to South Africa. In 2015, South Africa received 334 million domestic and foreign tourists, and directly consumed about 918 billion rand (about 65 billion US dollars). Durban has the reputation of South Africa's Hawaii for its beautiful beaches; the Cape Peninsula is bordered by the Indian Ocean to the east, the Atlantic Ocean to the west, diverse beaches and landforms, excellent resource endowments, and transportation. It has advantages over other destinations and drives tourists from all over the world to visit. The high-quality tourism resources and the steady growth of the source market have made the development potential of coastal tourism in South Africa huge.

4. Realistic Needs Of China-South Marine Economic Cooperation

4.1 Trade for Port Infrastructure Construction.

As a link of international trade, there are some problems in the development of South African ports. The aging of infrastructure, the inefficient loading and unloading, and the disrepair of surrounding roads have had a significant impact on the development of ports and port industries. This is a challenge for Chinese companies, but it is also an opportunity for development. The South African government has a very positive attitude towards attracting Chinese companies to invest in infrastructure projects including port construction in the south. After nearly 40 years of reform and opening up, China's overseas engineering construction and management capabilities have reached the world's leading level. Participating in the construction and management of South African port infrastructure is of great significance for promoting economic and trade exchanges between the two countries and safeguarding the import safety of China's strategic resources. .

4.2 Mutual Demand for Oil and Gas Resource Development.

In the field of offshore oil and gas, the South African government hopes to change the single energy structure through oil and gas development. With the promotion of the Fégersa project, the South African government has been actively introducing international oil and gas giants to participate in the exploration and development of oil and gas resources in the country. China's imports of crude oil from Africa account for nearly 30% of China's total crude oil imports. In 2013, Sinopec Group and South African National Oil Company reached a cooperation framework agreement to promote the world-scale Mutombo refining project at the Kuha Industrial Development Zone in Port Elizabeth. This also laid the foundation for the cooperation between the two sides in the field of oil refining and other offshore oil and gas product development.

4.3 Mutual Demand for Going Out Development on Fisheries.

China and South Africa have a long history of cooperation in marine fisheries, but the areas of cooperation are limited to trade in fishery products, and there are huge areas in marine fishing and marine aquaculture. South Africa's marine aquaculture industry has distinct characteristics and a

broad market, but its level of development is very low, and it also has strong development potential. As an important development area of the Fei Giza strategy, the contribution of marine fisheries to South Africa's GDP is planned to exceed 4% by 2033. The South African government needs to actively seek support and cooperation from major marine fisheries countries. China is a big country in marine fisheries, but the current development of fisheries is also facing various difficulties. South Africa's demand for marine fisheries development and its better resource endowment are good destinations for China's marine fisheries to go global. There is a need for cooperation between the two sides in marine fishing and high quality aquatic product farming.

4.4 Mutual Demand for Better Tourism Resources Market.

South Africa received about 10.1 million international visitors in 2016, second only to Morocco in Africa. Tourism is one of the major sources of foreign exchange in South Africa, and its importance to economic development and employment resolution is self-evident. The full development of coastal tourism resources has become a new growth point for tourism development and one of the important goals of South Africa's marine economic development. South Africa's quality coastal tourism resources and distinctive tourism projects are attractive to Chinese tourists. The South African government has set up a visa center in nine major cities in China and opened a tourism office in China to actively attract Chinese tourists. The joint development of coastal tourism resources in South Africa can be a new focus for the China-South marine economic cooperation.

5. Conclusions

The China-South marine economic development has ushered in an opportunity period. The construction of the 21st Century Maritime Silk Road and the Fei Giza plan has provided policy support for the cooperation between the two countries in the marine economy. First of all, the backwardness of technical equipment and backward roads has greatly reduced the throughput of South African ports and the efficiency of cargo transportation. Secondly, capital technology bottlenecks have caused certain obstacles to the exploration of South African marine oil and gas resources. Third, South Africa's labor system is rigid, trade unions are developing rapidly, strikes are frequent, skilled workers are relatively scarce, and labor costs are high. These are all issues that Chinese companies should consider when investing in South Africa.

Acknowledgment

This work is supported by The Funds of Central University of Northwest Minzu University (Grant No: 31920190036).

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