COASTAL STRIP DEVELOPMENT OF VIETNAM URGENT ISSUES 
AND DEVELOPMENT ORIENTATION OF CREATION OF THE STATE

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Abstract. Vietnam coastal strip with asterisks allow for tremendous potential and significance in the country’s Strategic Prosperity. But the last undeveloped coastal area when commensurate with the potential and inefficient. That is why and how do national coastal strip Developed strong, effective and adequately to the Contribute to Sustainable development and protection of the country? Posts Clarify the cause, of the weakness and Propose Strategic orientations of our country’s development in the coming years coastal strip. 

Keywords: Coastal strip, potencial, effectiveness, Sustainability, strategy and development policy.

1. Introduction

Vietnam has a coastline of about 3,260 km, in 63 provinces and cities under the central authority, the 28 coastal provinces. The coastal strip of land has 115 districts with a population of landlocked about 25 million people and 12.5 to 13 million workers in the age of employment needs. Vietnam’s waters have over 1 million km$^2$ area with thousands of large and small islands; along the coast there are hundreds of places to build the port, dozens of beautiful beaches; has many valuable minerals on a stretch of land and in the sea. Under these circumstances, the author in-depth analysis to find the cause of the weak and propose strategic orientations and policies to develop Vietnam coastal strip more powerful, more efficient and more sustainable.

2. Content

2.1. Essential characteristics and the development of the coastal strip of Vietnam

Vietnam has high terrain to the west. Northwest and lower toward the South Sea. Long coastline of about 3260 km Vietnam (excluding banks of the island), approximately 100 km$^2$ territory just 1 km from the coast (6 times higher than the average level of the world). Vietnam has 114 rivers flowing to the sea (on 28-29 kilometers of coastline has

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an estuary). Every year the rivers flowing into the sea about 880 billion m$^3$ and 250 million tonnes of sediment (concentrated mainly in two large estuaries of the Red River and Mekong) [6].

2.1.1. Vietnam coastal strip is divided into two areas quite well (see chart below)

North and Central coastal interoffice (from Mong Cai in Quang Ninh to the end of Nha Be in Ho Chi Minh City) and coastal Mekong Delta (from Tien Giang to Ha Tien in Kien Giang). Two coastal strip above characteristics are very different with that in the process of development planning must take into account the way ahead.

a) Coastal areas from Mong Cai (Quang Ninh) to Nha Be (Ho Chi Minh City):
Interim coastal area known as North - Central, inhabited by about 26-27 million (in 2015; in that 30-32% of people live mainly in forests and exploitation of forest products and agroforestry development. Along the coastal strip of North - Central has 24 major rivers flowing to the sea gates. Based on the tremendous hydropower potential that the Prime Minister issued Decision No. 1208 / QD-TTg dated 21/7/2011 on approving the planning of national electricity development in 2011-2020 and review to 2030. In 2020 indicate that produces about 330-362 billion kWh (hydro accounting for 23-25%); 2030 production of about 695-834 billion kWh (particularly hydropower accounts for 15-16%). The implementation of the planned hydropower development without careful calculation, caution will cause unpredictable consequences.

According https://vi.wikipedia.org/wiki/thuy-dien-viet-nam [12], currently on the mountainous territory of Vietnam (from north to southeastern end) has 10 major river systems and on this river system has about 200 small hydropower plants with more than 5,000 large dams, reservoirs and irrigation works. In addition to the benefits brought by them (power and water) are also causing adverse consequences for development (sediment reduction will not be able to build on and make the fertile plains; the amount of plankton reduction would reduce plankton where estuaries and coastal and lower the threshold for benefit resulting river fish, marine fish. Lack of water in the dry season and flooding in the rainy season when the water discharge from the reservoir ...).

+ System Red River - Thai Binh River has 37 large and small hydroelectric plants, 1,300 dams, 900 reservoirs and 29 irrigation systems. Red River sediment about 100 million tons / year (ie 1.5 kg / 1m$^3$ of water) flowing prose.

+ The river systems in Central and Highland has 150 large and small hydroelectric power plants (particularly Quang Nam has 62 hydropower projects with a capacity of 1601 MW. Song Ma has some hydropower plants upstream and more than 1,800 works irrigation; Song Lam Nghe An All or river-Ha Tinh, 512 km long (partial flow through Vietnam 361 km), originated from Laos. there are many hydropower plants upstream, 459 dams and reservoirs 1578 water; Song Huong has many hydropower plants, 100 reservoirs; Three Rivers has 4 large hydroelectric plants, 329 irrigation works; Vu Gia-Thu Bon River hydropower potential has the 4th largest country, has built build 10 hydropower plants.

+ At Southeastern, has 4 hydropower plants; 371 dams, 406 reservoirs, 134 irrigation systems.

b) Coastal areas Mekong Delta (from Tien Giang to Ha Tien in Kien Giang)

By 2015 on the territory of 4.1 million km$^2$ about livelihood of about 17.6
Coastal strip development of Vietnam urgent issues and development orientation of creation...

million people. Particularly in the coastal districts have 6-7 million people. Coastal areas Mekong Delta development is less likely seaport and bathing; suffer severely from climate change, rising sea levels and affected very strongly from the tremendous changes in the mainstream and tributaries of the Mekong River system upstream of charge. Previous years 1970-1975 Mekong Delta estuary 9, into the sea and the West Sea. Currently only 7 River door. Two estuaries were depleted (Balai Door door line is a branch of the Tien River and Three charging door is the door of a branch line of the Hau River). According http://iwarp.org.vn/img-svc/files [13], MRC Kong said, hydropower potential in the Mekong River Basin is about 53,900 MW (in the Chinese territory of 23,000; 30,900 MW in the downstream portion (13,000 mainstream and tributaries of 17,900 MW: in which of Laos 13,000; 2,200 Cambodia, Thailand and Vietnam 700 of 2,000 MW). Specifically:

- On the territory of China: expected Mengsong 600 plants: Genlantan 150; Jinghong in 1500; Nuozhadu 5500; Dacha Oshan 1350; Mawan 1250-1500; Xiaowan 3600-4300; Gongguogiao 750; HyangDang 1800; Miaowei 1640... Part of the Chinese Lancang contribute 80-90% of sediment flowing into the Mekong River Basin. When they do the dams would reduce water flow 55-60% of the Delta Mekong Delta.

According http://iwarp.org.vn/img-svc/files [13], the Mekong River Commission, said in 2009 the country plans to build 20 reservoirs with a capacity of about 15 596 m³. Specifically, China 3 lakes (capacity 718 million m³). Laos 3 lakes (5408 million m³ capacity); Thailand 9 lakes (5462 million m³ capacity); Vietnam 5 lakes (4,000 million m³ capacity associated with the two branches of the Mekong is Sesan and Serepok).

The influence of the Mekong Delta to the Mekong is huge. First by building too many hydropower plants and reservoirs in the upstream sediment and reduce the flow of water in Vietnam, and then by changing the flow dynamics do riverbank landslides, erosion sea. According to news reports of the Vietnam Television Station at 19 am on 30.11.2016, each year about 500 hectares of the Mekong Delta was swept out to sea and dozens of kilometers of riverbank erosion. In Ca Mau province, Tran Van Thi district has encroached into the sea about 1 km; Hao area each year Genh transgression about 100 meters inland. Under this momentum after about 80 years up to 70% of the area of Kien Giang province and about 50% of the area of Ca Mau will be flooded.

2.1.2. Vietnam is a country heavily influenced by the sea and from the South China Sea

Two large deltas of Vietnam (Red River Delta and Mekong Delta) Landlocked and strongly affected by sea level rise. Currently, annual 2 delta region produces about 65-67% of cereals and rice production 70-72% of the country [9]; important contribution to ensuring food security and national food.

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<th>Table 1. Scenarios for sea level rise (cm)</th>
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<td>2030</td>
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<td>Low Scenario</td>
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<td>High Scenario</td>
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(Source: Ministry of Natural Resources and Environment: Climate Change Scenario and rising sea levels for Vietnam (2012))
- On the territory of the downstream section:
  * Laos: Pakbeng 1230; Luang Prabang 1410; Xayabori 1200; Paklay 1320; Sanakham 700; Ban Koum 1872; Latsua 800;
  * Laos - Thailand: Pak Khom 1079 MW
  * Cambodia: Stung Treng 980; Sambor 2,600MW, Don Sahong 240 MW
  (Source: Graphic by Michael Buckley [13])

According to the Ministry of Natural Resources and Environment, in 50 years, every year Vietnam must receive 10-15 storm; sea level rise of 15-20 cm. The ministry predicted sea level rise scenario 3 2100.

Also according to the Ministry of Natural Resources and Environment (reported
above), if sea level rise of 1m, the flooded area of the Mekong Delta is about 39%, of the Red River Delta, about 10%, of the central provinces about 2.5% and the Ho Chi Minh city about 20% of the area. And about 35% of the population of the Mekong Delta, 9% of the population of the Red River Delta, 9% of the population of Central and about 7% of the population of Ho Chi Minh City directly affected.

The mainland coastal strip has about 1.2 million hectares of sand, 1 million hectares of saline land, 0.5 million hectares of acidic soil, silt 0.6 million hectares of land, about 7 thousand hectares of marsh and about 20 thousand hectares of mangroves (most in the Mekong Delta). South China Sea is a place rich in natural resources but also the ease comes to natural disasters and happen many international disputes. Vietnam is one of the countries bordering the South China Sea. Apart from Vietnam, South China Sea is surrounded by eight other countries are China, the Philippines, Indonesia, Brunei, Malaysia, Singapore, Thailand and Cambodia. The South China Sea sea traffic route connecting arterial Pacific - Indian Ocean, Europe - Asia, Middle East - Asia. Five of the ten major trade sea routes in the world related to the South China Sea. This is considered a route of international maritime transport’s second busiest in the world. Every day there are between 150-200 boats crossing the South China Sea kinds. In East Asia there are about 536 ports, of which there are two major types of ports in the world and is the most modern ports in Singapore and Hong Kong. Trade and shipping industry growing in the region.

Looking at a map can see the "front" of our country is the South China Sea and the western inland regions of our country are the following countries: Laos, Cambodia, Thailand and part of Myanmar and part of the territory of China Nations with a total area of 1,260 thousand natural to km2 (more than 3.7 times the area of Vietnam) and a population of more than 100-120 million (approximately 1.2-1.3 times the population of Vietnam). According to preliminary estimates, the South China Sea have a direct impact on the lives of some 300 million people living in coastal areas of eight countries mentioned above and Vietnam.

2.1.3. Essential development situation of Vietnam coastal strip

According to the planning report development of Vietnam’s seaport system period 2011- 2020 of the Ministry of Transport is far along the coast of Vietnam has built 54 ports (ports with capacity only about the size of 0.5 million tons / year) [5]. In 2015 the volume of goods shipped through the ports reached 57.4 million tons (about 5% of the total freight volume of the country: 57,400 / 1,141,139 tonnes). Date 01/18/2010 Prime Minister issued Decision No. 129 / QD-TTg approving the detailed planning of coastal roads Vietnam from Mong Cai in Quang Ninh to Ha Tien, Kien Giang with total length of 3041 km. But so far, the new building is approximately 1880 km [4].

Implementing the decision of the Prime Minister (Decision No. 1353 / QD-TTg dated 09/23/2008 on approving the Master Plan for the development of coastal economic zones Vietnam 2020) 2016 in the coastal areas of our country has formed 15 economic zones (14 zones which were put into operation). It was Van Don (Quang Ninh), Dinh Vu - Cat Hai (Hai Phong), Nghi Son (Thanh Hoa), Southeastern Nghe An (Nghe An), Vung Ang (Ha Tinh province), Hon La (Quang Binh), Leg plant- Lang Co (Thua Thien Hue), Chu Lai (Quang Nam), Dung Quat (Quang Ngai), Nam Phu Yen (Phu Yen), Van Phong (Khanh Hoa), Dinh An (Tra Vinh), Phu Quoc (Kien Giang) and Nam Can (Ca
Mau). Three provinces in 2010 by the Prime Minister to allow undertakings established in coastal economic zones. It’s the Pacific (EZ Diem Dien), Nam Dinh (Ninh Co Economic Zone) and Quang Tri (EZ Southeast Quang Tri). The total area of land and water surface of 15 coastal economic zones is about 69 thousand hectares (land area for the project layout to produce about 20 thousand hectares) [1,2]. Also, in the coastal belt has formed 20 industrial parks with the lips of several hundred hectares / district; 4 search and rescue centers, rescue; 12 center and beach resort is relatively large and relatively developed.

Along the coastal strip has been formed 25 urban centers, including the role of major urban economic center - seaport relatively large scale as Ha Long; Hai Phong, Nghi Son, Vung Ang, Chan May, Da Nang, Dung Quat and Quy Nhon, Van Phong - Nha Trang, Ho. Ho Chi Minh City, Vung Tau- Cai Mep-Thi Vai and Phu Quoc. Associated with the urban system of 11 airports (will build the airport in Van Don scale) [3] and 29 industrial parks. At the same time, has formed a special tourism clusters such as Ha Long - Cat Ba; Hue - Danang; Van Phong - Nha Trang - Dai Lanh; Long Hai - Vung Tau - Con Dao; Rach Gia - Ha Tien - Phu Quoc.

According to the report "Development planning in coastal zones Vietnam 2020" [10], now only count on the scope of the districts associated with coastal economic activities at sea, the coastal strip and sea Vietnam have generated about 40-42% of the national GDP and generate jobs for about 13 to 13.5 million. But such a large role, but the level of economic development are not. In addition to the coastal cities, the port area and the airport, the agricultural elsewhere, forestry or fishing net net, net salt is also difficult. Poverty rate is higher than the country’s average (also at about 9.8% compared to 7% by the new poor standards of Vietnam).

2.2. Oriented development strategies Vietnam coastal areas and the role of the State in the coming years

From the above analysis, the author initially propose strategic development orientations of Vietnam’s coastal strip. Whereby:

2.2.1. Oriented development strategies in coastal zones: Modernization urban centers - industrial seaport and port associated with the development of marine tourism that takes into account climate change and sea level rise

For coastal strip is about 53-55% contribution to GDP in countries such as Vietnam Marine Strategy to 2020 [1] proposed necessarily thinking and innovation development strategy for coastal areas. Vietnam wants to achieve a GDP / person more than $ 20,000 / year to raise a total GDP is more than 10 times today. We can not increase much faster GDP mountainous territory and can not rise much more marine GDP but GDP can increase rapidly in the territory Delta and the coastal areas. Therefore, port modernization, industrialization associated with the port on the basis of the development of the product value chain and associated territorial clusters that our nuclear industry is - seaports; industries - aviation, seaport - cruise, port - fishing and seafood processing.

Finishing 3 Special Administrative Region - economic scale in 3 coastal North - Central - South: Van Don; Van Phong - Nha Trang; Phu Quoc. While our country is still a serious shortage of capital, not to grow rampant style 15 economic zones restricted to provincial administrative boundaries. Need finishing 20 industrial zones
in the coastal strip towards modernization, that is attracting large-scale projects, with high-tech; consume less energy and using less land.

Expanding international links with the large islands in the East Asian region (Ba Li of Indonesia, Phuket in Thailand, Singapore, Philippine Boracay, Pangko of Malaysia; Hainan of China; Taiwan; Korea’s Jeju; Hokaido of Japan to develop island tourism chain [7].

2.2.2. Strengthening the role of the state for the development of the coastal strip of Vietnam

a) Innovation development model associated with production restructuring in terms of climate change and sea level rise

State measures to flourished mangrove systems to protect the coast and avoiding the storm; while preserving freshwater resources for the population. Renewing agricultural ecosystems adapted to marine climate change and sea level rise, salt water intrusion in the dry season. In coastal areas on the basis of calculation of economic efficiency - social - environmental considerations developed between rice and shrimp farming and livestock development to adapt to the dry season and water shortages. Agricultural ecosystems adapted saline soil conditions and a long dry season, flood season is not as large as short and flood many years ago. At the same time, there are plans

Group formed the strong marine economy, the global stature of the people of Vietnam as well as foreigners, as the Group’s representative in the fields of ports, shipping, logistics, industrial mechanic, energy industry, seafood processing industry, marine tourism. In the process of attracting foreign direct investment required to respect national security and defense.

State should focus on developing a number of islands have huge economic potential to create important factors to exploit and protect marine national territory from the sea; firstly are Phu Quoc, Van Don, Ly Son. Co, Isles Cham ...

State to take measures for sustainable development mountainous areas of the country and in coordination with the countries of the Mekong River Basin to be most beneficial for the development of the coastal strip - which bring economic locomotive major national health for years to come.

b) Promulgating and implementing policies to ensure the modernization and sustainable development of the coastal strip of Vietnam

The State shall encourage and prioritize attracting investors with high potential for investment, modern technology and business to contribute to genuine change development patterns in the coastal belt in the direction of improving the efficiency and sustainability. At the same time, restrictions and gradually eliminate the source of pollution of the marine environment. There are strong sanctions for non-layout works with high risk of pollution in coastal areas and not allow business establishments do not have waste treatment facilities. Compulsory for all individuals, organizations and businesses to safely handle the waste before it is discharged into the sea. The state should take measures to restrict immigration from outside the region (the country’s western region and elsewhere) on the coastal strip.
3. Conclusion

XXI century is the century of ocean. Vietnam is a maritime nation, not out of this trend. In order to exploit the sea and marine resources for the country to enrich necessarily developed coastal strip and scientifically organized. To develop the coastal strip to innovative thinking, action and strategy to have as well as developing policies to ensure successful coastal zone in the context of climate change and sea level rise occurs fierce. The State has a decisive role in developing effective, sustainable coastal areas of Vietnam. Adjust system planning hydropower plants, reservoirs, dams and irrigation projects on the upper part of the river has strategic significance and extremely urgent.

REFERENCES