POTENTIALS AND INVESTMENT OPPORTUNITIES FOR PORT DEVELOPMENT IN TRA VINH PROVINCE
1. INTRODUCTION OF MEKONG DELTA

2. INTRODUCTION OF TRA VINH PROVINCE

3. POTENTIALS AND INVESTMENT OPPORTUNITIES FOR PORT DEVELOPMENT IN TRA VINH PROVINCE
The Mekong Delta is the largest economic region of Viet Nam.

The natural area is about 40,060 km² (accounting for 12.3% of the country). Alluvial soil accounts for 1.2 million ha sweet. Soil acidity and salinity accounted for 2.5 million ha of land.

Located in the tropics with mild climate. Average annual temperature is 27°C.

The Mekong Delta has 13 administrative units including one city which directly.

Population: over 18 million people (accounting for 21% of the national population) and over 63% of working age, 78% in agriculture.
GEOGRAPHICAL ADVANTAGES

• The Mekong Delta is bordered on three sides by the sea and located in the central of South East Asia. This is the strategic location for economy and for international commerce.

• It is located next to the South East Asia countries (Thailand, Singapore, Malaysia, Philippines, Indonesia ...) - a dynamic and development economic zone, important markets and investment partners.
The Mekong Delta is the largest economic region of Viet Nam.

The Mekong Delta connects with Laos, Cambodia and Thailand via the Mekong river. With dense net of rivers and canals, it makes water-way the most advantageous compared to many other region in the country.

Provinces in the Mekong Delta are connected by National road 1A. Besides, Ham Luong bridge and Co Chien bridge (will be constructed) will improve the transport system of the Region and make it more comfortable.
POTENTIAL OF MARITIME ECONOMY

- The region has maritime economic potential with the deep water routes and international transit port.
- Located in the area of major maritime transportation and international airlines, between South Asia and East Asia as well as Australia and other islands in the Pacific. This is very important position in international exchange.
LOCATED IN THE INTERNATIONAL MARITIME ROUTS

INTERNATIONAL MARITIME ROUTS IN ASIA

DISTANCE FROM DINH AN AND SAIGON TO OTHER PORTS

<table>
<thead>
<tr>
<th>Port</th>
<th>Miles from Dinh An</th>
<th>Miles from Saigon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaoshiung</td>
<td>438</td>
<td>568</td>
</tr>
<tr>
<td>Bangkok</td>
<td>363</td>
<td>533</td>
</tr>
<tr>
<td>Singapore</td>
<td>333</td>
<td>463</td>
</tr>
<tr>
<td>Manila</td>
<td>238</td>
<td>368</td>
</tr>
<tr>
<td>Hông Kông</td>
<td>1112</td>
<td>965</td>
</tr>
<tr>
<td>Hải Phòng</td>
<td>97</td>
<td>647</td>
</tr>
<tr>
<td>Vũng Tàu</td>
<td>227</td>
<td></td>
</tr>
<tr>
<td>Quy Nhơn</td>
<td>371</td>
<td>221</td>
</tr>
<tr>
<td>Văn phòng</td>
<td>287</td>
<td>137</td>
</tr>
<tr>
<td>Sài Gòn</td>
<td>150</td>
<td></td>
</tr>
</tbody>
</table>
TRA VINH PROVINCE IN MEKONG DELTA REGION

- The natural area of Tra Vinh Province is 229,200 ha, bordered on the east by the East Sea with 65km long coast, on the west by Vinh Long Province, on the south by Soc Trang Province and on the north by Ben Tre Province.

- Tra Vinh Province is located in the tropics having moderate climate, average temperature of 26-27 °C, average humidity of 80-85%/ year. This Province is rarely affected by storms and floods.

- Population: about 1.1 million people, in which 60% of the workforce. The young and well-trained workforce shall be potential human resources for the development goals of the whole Tra Vinh province.
The whole province has three National Highways No. 53, 54 and 60, that has been upgraded to third level plateau, connecting Tra Vinh with Ho Chi Minh city and other provinces in Mekong Delta Region.
Dinh An Economic Zone consists of communes and villages in the South of Road 914 belonging to Tra Cu and Duyen Hai districts including specialized areas, technical – social infrastructure work, service works and public facilities...
The whole province has three National Highways No. 53, 54 and 60, that has been upgraded to third level plateau, connecting Tra Vinh with Ho Chi Minh city and other provinces in Mekong Delta Region.

Existing provincial highways: 911, 912, 913, 914, 915
Tra Vinh Province has its coastal line of more than 65km, surrounded by Tien and Hau rivers with tow estuaries Dinh An and Cung Hau, very convenient for development of waterway traffic.
Dinh An Economic Zone consists of communes and villages in the South of Road 914 belonging to Tra Cu and Duyen Hai districts including specialized areas, technical – social infrastructure work, service works and public facilities...
Long Duc Industrial Zone is located in Long Duc commune, Tra Vinh township, which can accommodate 2,000 ton vessels.
ADVANTAGES IN INVESTMENT AND ECONOMIC DEVELOPMENT OF TRA VINH PROVINCE

• National main projects: Improvement Project of Navigation Channel to Bassac River; Co Chien Bridge, Duyen Hai thermo-electric plant; Dinh An Economic Zone and Sai Gon – Trung Luong Highway.

• Economics: growth during 2006-2010: 11.64%; total export turnover in 2010: 140mil.USD with annual average growth at 26.42%.

• Incentive polices for investment: tax incentives; infrastructure incentives; other incentives such as technology hand-over, encouragement on science and technology activities, vocational training for employees assistance policy, reward policy for attracting investors who have implemented the investment projects, assistance policy for registration of enterprise establishment...
Presently, the improvement project of navigational channel to the Bassac river has been implemented, of which the Bypass channel is first dredged and the remaining work items within the project such as dredging the inner section of the Bassac river, breakwater, etc are planned to be gradually constructed in the next phases.

By 2020, it is planned to study the feasibility of building a hard cargo port in an appropriate position offshore for 30,000 - 50,000 DWT vessels or larger vessels depending on the eco-social development of the Area.
EXISTENCE OF SEA PORTS

The Bassac river: The main channel empties into the Dinh An estuary, with a length of 203km; the tributary flows into the Tran De estuary, with a length of 50km.

- Sea port Group in the Bassac river area includes Can Tho general ports (Hoang Dieu, Cai Cui, Tra Noc - Can Tho City), My Thoi port (An Giang), Dai Ngai port (Soc Trang), Tra Cu port (Tra Vinh) and specialized ports along the Bassac river. The capacity of the port complex is about 10 million T/year.

The Tien river: The main channel with a length of 248.5km flows into the Tieu estuary.

- Sea port Group in the Tien river area consists of Cao Lanh - Sa Dec general port (Dong Thap), My Tho port (Tien Giang), Vinh Thai port (Vinh Long), Ham Luong port (Ben Tre) and specialized ports located along the Tien river. The capacity of the port complex is about 3 million T/year.

The construction scale of these ports is serviced of 5,000 vessels.
General and specialized ports in the provinces in the Mekong Delta Area: these ports are mainly upgraded, expanded and re-built in some local provinces; no ports are constructed in centralized industrial zones. Ports with an expected capacity of 14 – 15 million T/year in 2020 are as follows:

• On the Bassac river system: My Thoi port in An Giang, Dai Ngai port in Soc Trang Tra Cu port in Tra Vinh, Binh Minh in Vinh Long and in specialized ports for oil, liquefied natural gas and large industrial facilities are located along the riverside. The construction scale of these ports is expected to be in service of 5,000 – 10,000 DWT vessels.

• On the Tien river system: Cao Lanh - Sa Dec port in Dong Thap, My Tho port in Tien Giang, Vinh Thai port in Vinh Long Ham Luong port in Ben Tre and specialized ports for large industrial facilities are located along the riverside. The construction scale of these ports is expected to meet 3,000 – 5,000 DWT ships.
# Dry Cargo Throughput Via Main Sea Ports

## Table: Dry Cargo Throughput via Port (1,000T)

<table>
<thead>
<tr>
<th>No</th>
<th>Port</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>Average growth rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Bassac river area</td>
<td>751</td>
<td>774</td>
<td>863</td>
<td>1,509</td>
<td>1,996</td>
<td>2,246</td>
<td>2,362</td>
<td>3,903</td>
<td>9,765</td>
<td>37.80%</td>
</tr>
<tr>
<td>1</td>
<td>My Tho port</td>
<td>387</td>
<td>450</td>
<td>419</td>
<td>871</td>
<td>606</td>
<td>712</td>
<td>936</td>
<td>1,353</td>
<td>1,442</td>
<td>17.9%</td>
</tr>
<tr>
<td>2</td>
<td>Tra Noc port</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>72.3%</td>
</tr>
<tr>
<td>3</td>
<td>Can Tho port</td>
<td>364</td>
<td>324</td>
<td>444</td>
<td>638</td>
<td>1,058</td>
<td>1,145</td>
<td>876</td>
<td>1,306</td>
<td>2,843</td>
<td>29.3%</td>
</tr>
<tr>
<td>4</td>
<td>Cai Cui port</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>378.1%</td>
</tr>
<tr>
<td></td>
<td><strong>Annual growth rate</strong></td>
<td>3.1%</td>
<td>11.5%</td>
<td>74.9%</td>
<td>32.3%</td>
<td>12.5%</td>
<td>5.2%</td>
<td>65.2%</td>
<td>150.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Tien river area</td>
<td>354</td>
<td>343</td>
<td>425</td>
<td>440</td>
<td>490</td>
<td>463</td>
<td>689</td>
<td>911</td>
<td>649</td>
<td>7.90%</td>
</tr>
<tr>
<td>4</td>
<td>Dong Thap port</td>
<td>165</td>
<td>156</td>
<td>161</td>
<td>133</td>
<td>169</td>
<td>129</td>
<td>202</td>
<td>370</td>
<td>184</td>
<td>1.4%</td>
</tr>
<tr>
<td>5</td>
<td>Vinh Thai port</td>
<td>64</td>
<td>101</td>
<td>189</td>
<td>169</td>
<td>178</td>
<td>161</td>
<td>207</td>
<td>220</td>
<td>179</td>
<td>13.7%</td>
</tr>
<tr>
<td>6</td>
<td>My Tho port</td>
<td>125</td>
<td>86</td>
<td>75</td>
<td>138</td>
<td>143</td>
<td>173</td>
<td>280</td>
<td>322</td>
<td>286</td>
<td>10.9%</td>
</tr>
<tr>
<td></td>
<td><strong>Annual growth rate</strong></td>
<td>-3.1%</td>
<td>23.9%</td>
<td>3.5%</td>
<td>11.4%</td>
<td>-5.5%</td>
<td>48.7%</td>
<td>32.3%</td>
<td>-28.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>Total</td>
<td>1,105</td>
<td>1,117</td>
<td>1,288</td>
<td>1,949</td>
<td>2,486</td>
<td>2,709</td>
<td>3,051</td>
<td>4,814</td>
<td>10,414</td>
<td>32.40%</td>
</tr>
<tr>
<td></td>
<td><strong>Annual growth rate</strong></td>
<td>1.1%</td>
<td>15.3%</td>
<td>51.3%</td>
<td>27.6%</td>
<td>9.0%</td>
<td>12.6%</td>
<td>57.8%</td>
<td>116.3%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Foreasted Cargo Throughput via Sea Ports

<table>
<thead>
<tr>
<th>Cargo type</th>
<th>Low forecast (mil.T)</th>
<th>High forecast (mil.T)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2015</td>
<td>2020</td>
</tr>
<tr>
<td>General cargo</td>
<td>11.32</td>
<td>17.44</td>
</tr>
<tr>
<td>Coal &amp; ore</td>
<td>38.22</td>
<td>106.9</td>
</tr>
<tr>
<td>Liquid cargo</td>
<td>3.7</td>
<td>4.86</td>
</tr>
<tr>
<td>Transit cargo</td>
<td>0.9</td>
<td>2.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>54.14</strong></td>
<td><strong>132.10</strong></td>
</tr>
</tbody>
</table>
NECESSITY OF SEA PORT INVESTMENT IN TRA VINH PROVINCE

- Goods transported in the Mekong Delta Area are now mainly bulk goods such as rice, fertilizers, construction materials which are all well suited for transport by river and sea. The cargo volume transported by waterways accounts for 65% of goods transported every year in the Mekong Delta Area.
- Mekong Delta is very convenient for waterway: the Mekong River system with many doors to the sea.
- Mekong Delta is the volume of goods transported from the region and imported into the great, but now there are about 70% of the goods must be transferred to Ho Chi Minh city road system. Expected by 2020, the amount of goods across from the Mekong Delta will reach over 22 million tons / year. This has put pressure overload of the system of road and port systems in the Southeast region, which increases costs and reduces competitiveness. This area desperately needs a port to the size and position accordingly.
NECESSITY OF SEA PORT INVESTMENT IN TRA VINH PROVINCE

• Mekong Delta should have deepwater (depths ≥ 14 m) to receive vessels of large tonnage during economic exchange is geared to enhance the value of the goods and to promote faster development MD, is a critical requirement for direct export of the goods and imported fertilizers, pesticides, cement ... serving agricultural, industrial and especially the demand for imported coal for thermal power plantscoal in the southern provinces of Hau and Ca Mau peninsula in the next few years.

• The study of investment in building ports (or navigational channels) for large vessels in/out the Mekong Delta Area is very important in order to minimize the transfer from / to the sea ports of Group 5, supporting the sea ports on the Bassac river as a hub for directly transporting import and export cargos of the Mekong Delta Area to be exchanged with remote marine markets and as an estuary towards the sea, contributing to expanding markets and attracting investment resources to motivate the eco-social development in Mekong Delta Area.
NECESSITY OF SEA PORT INVESTMENT IN TRA VINH PROVINCE

• In this context, with the location in the heart of the Mekong Delta, Tra Vinh province play an important role as a connection between the provinces in the region together.

• Also, with the strength holding the National projects such as Navigation channel Construction Investment through Dinh An estuary - Bassac River, Duyen Hai sea port project... Tra Vinh province is in a position to develop new port project promoting marine industry and other industries.

• The investment in the terminal project in Tra Vinh is very necessary and practical in the current context when all provinces in region are missing the large and modern port to meet the increasing cargo volume year by year in the areas.

• Besides, the large human resources and land/sea area as well as investment promotion policies of the provincial People's Committee of Tra Vinh is the ideal destination for local or international investors.
APPROPRIATE LOCATION FOR SEA PORT INVESTMENT RECEIVING 20,000DWT VESSELS

- Appropriate location for port: On the Bassac River in Tra Cu district of Dinh An economic zone.
- When project of navigational channel to the Bassac river is completed, the port could be received 10,000DWT full load vessels and 20,000DWT offload vessels.
- Conveniently connected to the road network.
- Basin of the port is stable, volume of maintenance dredging every year is low. No need to invest breakwater.
Positions Proposed for Sea Port Which Receiving 30,000DWT Vessels

- Sea port research positions: Northeast breakwater of By Pass canal.
- Duyen Hai sea port project is in the process of basic design, which combines north sand breakwater of the By Pass canal to form a deep basin.
- In the immediate phase, this port can receive vessels up to 30,000DWT. In the future, this port will be studied to be able to receive larger vessels.
The initial investment cost is expensive because having to invest the northeast breakwater. Sediment may be greater, the volume of annual maintenance dredging is large. The number of terminals in the port basin is limited. At present, the terminal management by EVN.
RESEARCH POSITION FOR LARGE VESSELS PORT

• Topography of the coast is flat, directly influenced by waves, wind from the open sea. The two main wind direction is northeast and southwest.

• It is difficult to select options for instant port direct receiver, but suitable for ports, offshore buoy for large ships, which to reduce the load before entrance Bassac River.

• To reach a depth of -10m (CD), the port needs about 6.2 km from shore line. To achieve depth -14m (CD), the port needs 6.9 km from shore line.
1. Land Area: ~ 14.76 ha
2. Berth Line: 212.08m
3. Vessel Capacity: 15,000DWT
4. Cargo: General
5. Investment Amount: ~ 50 mil USD
1. Land Area: ~12 ha
2. Berth Line: 210m
3. Vessel Capacity: 5,000DWT
4. Cargo: Container
5. Investment Amount: ~45 mil USD
VIET THUAN THANH PORT

1. Land Area: ~ 66.78 ha
2. Berth Line: 1.100m
3. Vessel Capacity: 15.000-30.000 DWT
4. Cargo: General and Container
5. Investment Amount: ~ 250 mil USD
SAIGON - HIEP PHUOC PORT

1. Land Area : ~ 39,12 ha
2. Berth Line : 800m
3. Vessel Capacity : 50,000DWT
4. Cargo : General & Container
5. Investment Amount : ~ 220 mil USD
THANK YOU