CLIMATE PUBLIC EXPENDITURE AND INVESTMENT REVIEW (CPEIR) – PERIOD 2016-2020 - VINH LONG PROVINCE

1. Climate change in Vinh Long

General introduction

Vinh Long province is located between the Tien River and Hau river, tributaries of the Mekong River. Vinh Long city is 135 km south of Ho Chi Minh City and 33 km east of Can Tho City.

In 2018, Vinh Long's population was estimated at1.05 million and the total product (GRDP) per capita reached VND 44.8 million (~ USD 1,946 USD). The total value of GRDP of the province was VND 47.1 trillion (USD 2.05 billion).

In the period 2011-2018, the province's economic growth reached 5.43% / year. In 2019, the GRDP growth rate increased to 6.17%[1], and is forecast to reach 6.5% by 2020. The average GRDP per capita in 2020 is expected to reach VND 53 million (USD 2,300).

In 2018, the value of the agriculture and fishery sector increased by 3.16%, industrial production and services grew as well, and exports reached USD 465 million, increasing by 10.5%. Currently, the province is restructuring its industry and trade sector, industry - handicraft industry, while maintaining high growth. The average industrial production value in the period 2016-2018 was 13.75%/year.

The impact of climate change on Vinh Long

Vinh Long located in the core zone of the Mekong Delta, between two main branches of the Mekong River, the Tien River and the Hau River. Climate change is causing saltwater intrusion and is encroaching further inland. In addition, the province is facing more and more severe heat waves leading to droughts in the dry season and major storms causing urban inundation.

Activities to respond to climate change in Vinh Long

Vinh Long province has developed action plan to respond to climate change with 12 basic solutions in the fields of natural environment, human, public health, economy and society[2].

Specifically, measures to cope with natural disasters; strengthening capacity to forecast and warn natural disasters and climate change; solutions for water resources; agriculture and food security; fisheries; land use planning; energy industry; Transportation; industry and construction; labour - social sector; environmental field; healthcare and public health and solutions to the tourism industry. The total cost of implementing these solutions is more than VND 756 billion with the funding approved by the Prime Minister to Vinh Long.

[1] Information portal from Vinh Long province: https://qppl.vinhlong.gov.vn/Default.aspx?tabid=&qpplid=35271.
[2] At: http://khcnmt.xaydung.gov.vn/Tin-tuc/?vinh-long-chu-dong-ung-pho-voi-bien-doi-khi-hau.html&aid=ogyktjsfvxtynwj

Vinh Long terrain stretching along Tien and Hau rivers, gradually lower from north to south. The terrain is relatively flat and the elevation is quite low compared to the sea level. This is an estuarine floodplain terrain, a sub-topography of the province in the form of a basin in the centre of the province and gradually rising towards the banks of Tien, Hau, Mang Thit rivers and rivers. Previously, with this topography, Vinh Long was not affected by saltwater and was less affected by floods. However, in recent years, there have been many large storms, heavy rain, heatwaves, , thunderstorms, cyclones, floods (rainy season), and drought, and more aggressive saltwater intrusionr.

Vinh Long has initiated many projects to respond to climate change, especially irrigation projects. The province is implementing the scientific research project "Determining urban hydrological flow in the area of Vinh Long city" by Truong Van Hieu - Southern Institute of Meteorology, Hydrology and Environment. The research objective is to determine the urban hydrological flow (surface water flow) in the area of Vinh Long city, and thus support urban management (urban infrastructure, embellishment, and flood control) of the province.

2. Summary of Data on Climate Change Investment in Vinh Long

2.1 Budget sources for climate change investment

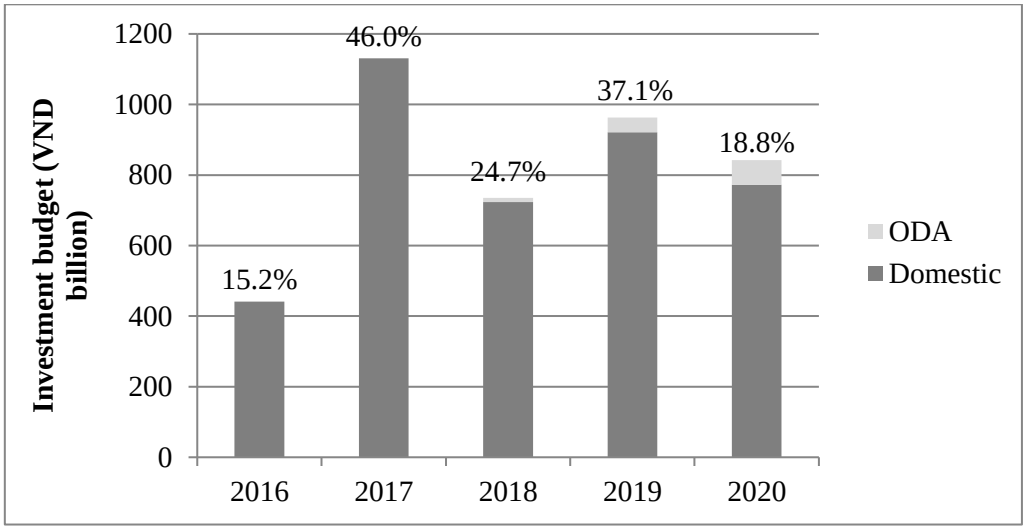


Figure 1: The total investment budget for climate change at Vinh Long *– the percentage that the climate change budget represents of the total Provincial development investment budget is shown as a % on the top of each bar.*

Table 1: Investment for climate change in Vinh Long by year from 2016 to 2020 and by capital source

Year	Domes. Invest. in climate change (billion VND)	Foreign investment in climate change (billion VND)	Total invest. in climate change (domes. + foreign capital) (billion VND)	Rate of domest. Invest. in climate change (%)	Rate of ODA Invest. in climate change (%)	Total public invest. of the province (billion VND)	Ratio of investment in climate change to total public investment of the province (%)
2016	440.8	-	440.8	100.0	-	2,892.0	15.2
2017	1,131.0	-	1,131.0	100.0	-	2,458.2	46.0
2018	723.1	11.9	735.1	98.4	1.6	2,971.6	24.7
2019	921.2	42.2	963.4	95.6	4.4	2,599.2	37.1
2020	772.0	70.2	842.2	91.7	8.3	4,475.0	18.8

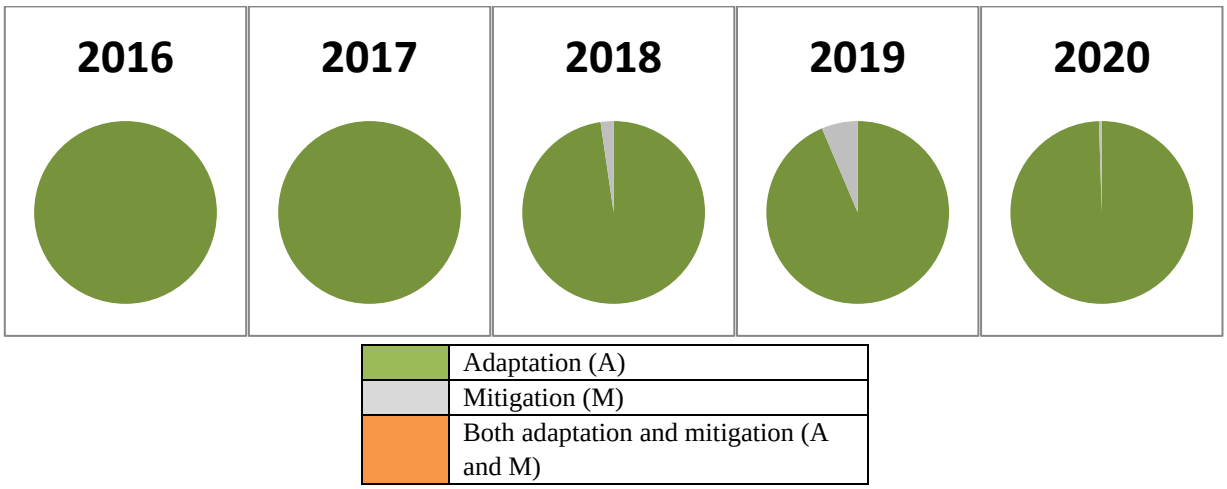
In Vinh Long, average investment spending on climate change for the 2016-2020 period is about VND 823 billion/year. The climate investment budget was highest in 2017 (VND 1,131 billion), while the lowest was in 2016 (VND 441 billion).

In the 2016-2020 period, the average annual domestic expenditure on climate change investment was VND 798 billion, accounting for 97% of the total investment expenditure. The contribution of ODA was only VND 25 billion, accounting for 3%. The share of ODA investment shifted between 1.6% in 2018 to 8.3% in 2020.

Investment expenditure on climate change varies from 15.2% to 46.0% (average 26.7%) of the total development investment of the province.

2.2 Purpose of the investment budget for climate change

a) The "adaptation" or/and "mitigation" project type distribution:

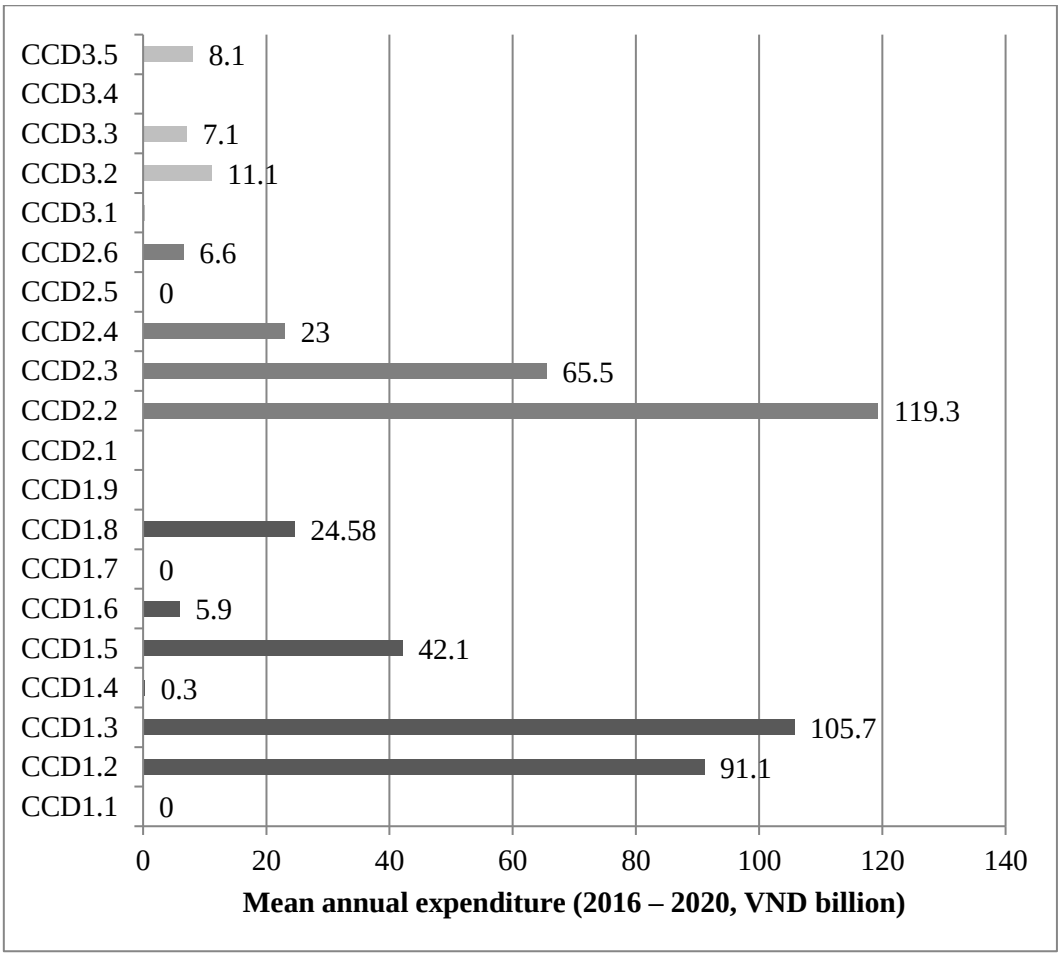


Detailed investment data for climate change adaptation and mitigation

Billion Dong	2016		2017		2018		2019		2020	
Adaptation (A)	440.8	100.0%	1,131.0	100.0%	717.9	97.7%	901.5	93.6%	837.9	99.5%
Mitigation (M)	-	0.0%	-	0.0%	17.1	2.3%	61.8	6.4%	4.3	0.5%
Both adaptation and mitigation (A and M)	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%

Most investments related to climate change are in the adaptation sector, accounting for more than 98%. From 2018 to 2020, several mitigation projects took place, with the highest amounting to more than 83 billion VND in spending. These were projects on management, waste treatment, and a solar PV lighting system., No project has both climate change adaptation and mitigation components in Vinh Long.

b) Allocate investments in response to climate change (CCD) according to specific tasks (Average annual spending in the 2016-2020 period; Unit: billion dong)



Considering investments to respond to climate change in the province, four investment areas are: CCD 2.2 (i.e, strengthening resilience of urban and residential areas; investment VND 119.3 billion/year, accounting for 23.4%), CCD 1.3 (Irrigation; investment VND 105.7 billion/year accounting for 20.7%), CCD 1.2 (Saline intrusion; investment VND 91.1 billion/year, accounting for 17.8%) and CCD 2.3 (Traffic; investment VND 65.5 billion; accounting for 12.8%) accounting for nearly 75%. The remaining fields are listed in detail in the table below.accounting for 12.8%) accounting for nearly 75%..

The above investment areas are relatively consistent with the climate change response solutions specified in the provincial Climate Change Action Plan (CCAP), which aims to improve the resilience of urban and residential areas, irrigation, saline intrusion etc.

2.3 Budget expenditure from ODA

Here are the 02 (two) biggest ODA projects for climate change (Project name, capital source, investment period, share of total ODA investment):

1. Irrigation system to prevent saline water, freshen water in Vung Liem district, Vinh Long province (2016-2020, 89.6%).
2. Vinh Long General Hospital Waste Treatment Support Project (2016-2020, 10.4%).

2.4 Policy and planning instruments

Instrument	Yes (√) or No (X)
Local NTP-RCC, report period to 2015	X
Climate Change Action Plan	√
Green Growth Action Plan	X
Plan for Implementation of Paris Agreement	X
Others: none	