CLIMATE PUBLIC EXPENDITURE AND INVESTMENT REVIEW (CPEIR) – PERIOD 2016-2020 - HAU GIANG PROVINCE

1. Climate change in Hau Giang

General introduction

Hau Giang is located in the centre of the Mekong Delta, the City, Vi Thanh, about 240 km southwest of Ho Chi Minh City and 60 km from Can Tho city.

In 2020, Hau Giang's population was about 780,000 people, the total product in the area (GRDP) per capita was VND 47.9 million (~ USD 2,077), the total value of GRDP in the province reached VND 29.8 trillion (USD 1.29 billion). The GRDP growth rate in 2019 and 2020 was 7.1%, higher than the country as a whole.

Hau Giang is a major rice centre in the South West of the country. In addition, the province has boasts high fruit tree production, livestock production as well as freshwater fish and shrimp and livestock.

In pursuit of development, Hau Giang seeks to expand industry, trade, services, and tourism sectors. In so doing, the province is prioritizing investment in the construction of industrial parks and clusters, improving the network of waterways, electricity supply, water supply and drainage, tourism infrastructure, urban development, etc. According to the 5-year Socio-Economic Development Plan (2016-2020), Hau Giang aimed for an average 5-year economic growth rate at over 7%/year. To do this, the economy focused on expanding its service, industry, and agricultural sectors.

The impact of climate change on Hau Giang

Hau Giang's agricultural, fishing, and aquaculture sectors, are particularly affected by climate change. Here:

- Highsurface temperatures and prolonged drought: the increase in heat and declines in rainfall have made significant parts of the province dry, greatly affected agricultural production, increased the risk of forest fire, and worsened quality-of-life outcomes.
- Saltwater intrusion is driving further inland: overall salinity of rivers, canals, and ditches have seen unprecedented increases in some areas such as Long My district, Vi Thuy, and Vi Thanh city. 80% of Hau Giang province's agricultural land is affected by saltwater intrusion, causing exacerbating agricultural production. In addition, saltwater intrusion by rivers can encroach inland up to 50-70km, affecting aquatic life in the direction of narrowing, reducing [agricultural] production, affecting production and incomes.

Activities to respond to climate change in Hau Giang

Hau Giang province has issued Decision No. 1489/QD-UBND dated September 16, 2011 on promulgating the "Action plan to respond to climate change of Hau Giang province", to 2020, vision to 2030.

Implementing the Resolution No. 24 of the Party Central Committee (Session XI) on proactively responding to climate change, enhancing natural resource management and protecting the environment, Hau Giang proposed and implemented projects addressing irrigation infrastructure, sustainable urban development, and

urban transport, which had the combined effects of contributing to economic development and climate change response.

To reduce the damage caused by drought and the effects of saltwater intrusion on agricultural production, the functional departments of Hau Giang province have recommended farmers seed according to the seasonal schedules and avoid water shortages at the start and end of growing seasons. Authorities actively inspect, maintain, and repair dike systems, bumps, electric pump stations in a timely manner. Authorities are also responsible dredging main and inland canals as well as embank seasonal dams to ensure continuous activities on water when saline intrusion occurs.

Hau Giang province has completed a detailed planning stage on pangasius farming and processing in Hau Giang province to 2020 and vision to 2030. The regeneration of aquatic resources is a primary concern. In addition, Hau Giang province is also organizing the construction of fish farming model sites in wet season fields, which have contributed to the protection of aquatic resources and eased adaptation to climate change.[1].

2. Summary of Data on Climate Change Investment in Hau Giang

2.1 Budget sources for climate change investment

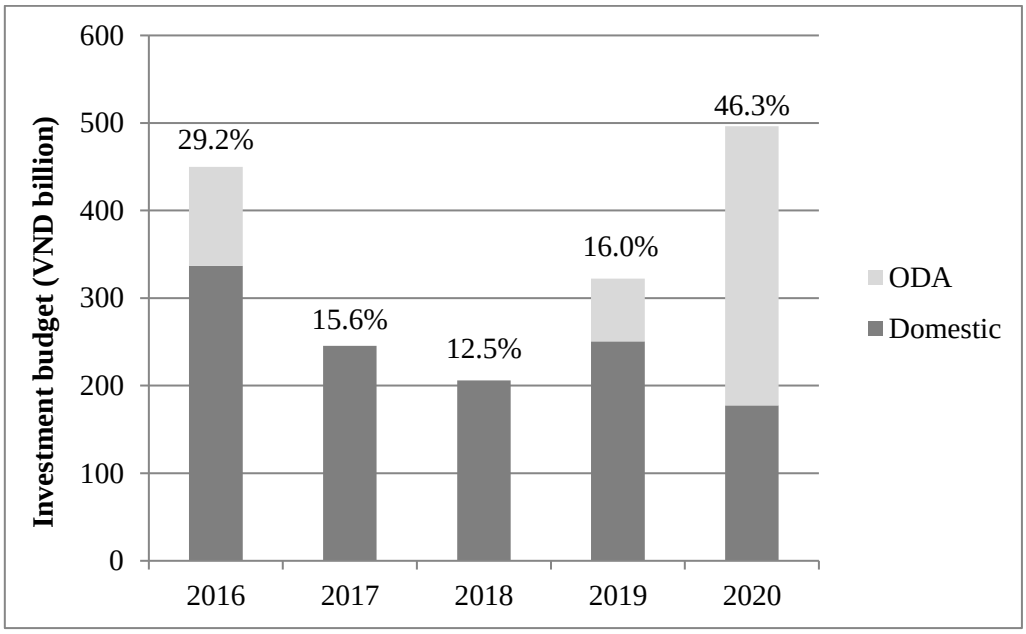


Figure 1: The total investment budget for climate change at Hau Giang *– the percentage that the climate change budget represents of the total Provincial development investment budget is shown as a (%) on the top of each bar.*

Table 1: Investment for climate change in Hau Giang 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 (%)

[1] According to the Natural Resources and Environment Newspaper: https://baotainguyenmoitruong.vn/hau-giang-day-manh-hoat-dong-ung-pho-voi-bdkh-bao-ve-tai-nguyen-va-moi-truong-238711.html

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	337.0	112.7	449.7	74.9	25.1	1,538.3	29.2
2017	245.5	-	245.5	100.0	-	1,578.8	15.6
2018	205.9	-	205.9	100.0	-	1,651.0	12.5
2019	250.5	71.8	322.3	77.7	22.3	2,016.8	16.0
2020	177.7	318.5	496.2	35.8	64.2	1,072.4	46.3

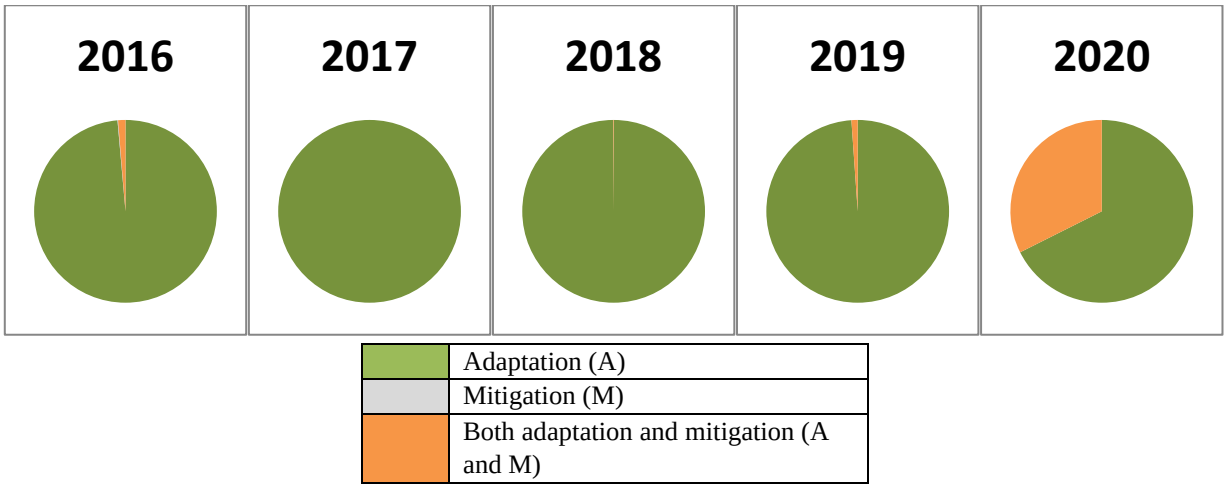
In Hau Giang, average investment spending on climate change in the 2016-2020 period averaged VND 344 billion/year. The investment budget for climate was highest in 2020 (VND 496 billion), and lowest in 2018 (VND 206 billion).

In the 2016-2020 period, average annual domestic expenditure on climate change investment was VND 243 billion, accounting for 71% of the total investment on climate change. ODA contributed VND 101 billion, or 29%. The proportion of ODA is unevenly distributed between years; especially in 2020, when ODA accounted for nearly 65% of investments due to an expanded scope of the Vietnam - Vi Thanh city sub-project and Hau Giang freshwater reservoir project., Vi Thanh City drainage and wastewater treatment project, and Hau Giang sustainable agricultural transformation project (VnSAT).

The proportion of investment spending on climate change on the total development investment of the province varies from 12.5% to 46.3%, with an average of 21.9%.

2.2 Purpose of the investment budget for climate change

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



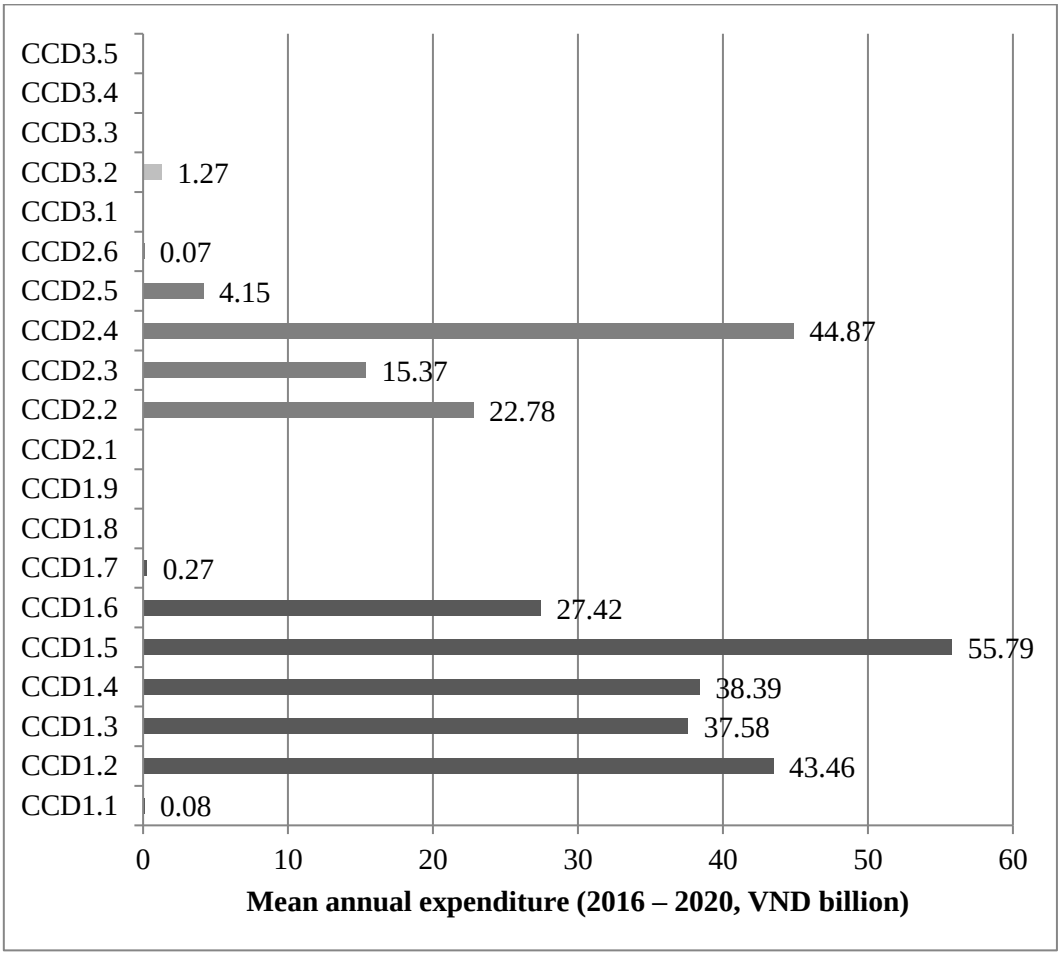
Detailed investment data for climate change adaptation and mitigation

VND Billion	2016		2017		2018		2019		2020	
Adaptation (A)	443.3	99%	245.5	100%	205.7	100%	318.8	99%	335.2	68%
Mitigation (M)	0.7	-	-	-	-	-	-	-	-	-

VND Billion	2016		2017		2018		2019		2020	
Both adaptation and mitigation (A and M)	5.8	1%	-	-	0.2	-	3.5	1%	161.0	32%

Most investments related to climate change are in the field of adaptation, accounting for about 90%. Comparatively, mitigation projects account for a negligible proportion, related to wastewater treatment, medical waste in special hospitals. Hau Giang is implementing several mixed projects, with investments of VND 161 billion in 2020.

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



In Hau Giang during the period 2016-2020, there were 14 tasks with climate change investments. These were CCD 1.5 (water quality and supply, average investment of 55.8 billion/year, accounting for 16.2%), CCD2.4 (waste management and treatment, 44.9 billion/year, 13.0%) and CCD 1.2 (Saline intrusion, 43.5 billion/year, 13,5%) followed by CCD fields 1.4 (dyke and river protection embankment, 38.4 billion/year), CCD 1.3 (Irrigation, 37.6 billion, X%) as well as smaller investments.

The investment in Energy efficiency (CCD 3.2) is not significant (VND 1.3 billion/year) although this sector is clearly mentioned in Green Growth Action Plan (GGAP) and Plan for Implementation of Paris Agreement (PIPA) at the local level. This could be because most energy efficiency investment belongs to the private sector.

There are significant mentions of forestry and biodiversity conservation in local PIPA and GGAP but hardly any expenditure (VND 0.3 billion/year). The local authorities should review and invest more strongly in this sector in the next medium-term period 2021-2025.

2.3 Budget expenditure from ODA

The following 05 (five) biggest ODA projects for climate change (Project name, funding source, investment period, share of total ODA investment):

1. Project on Construction of water drainage and wastewater treatment system in Vi Thanh city (2016-2020, 31.0%)
2. Embankment against Xa No canal erosion phase 2 (2016-2020, 22.4%)
3. Freshwater reservoir in Hau Giang province (2016-2020, 21.6%)
4. Project of sustainable agricultural transformation in Hau Giang province (VNSAT) with loans from World Bank (WB) (2016-2020, 20.5%)
5. Vietnam Urban Expansion - Subproject Vi Thanh City (2016-2020, 4.6%)

2.4 Policy and planning instruments

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