CLIMATE PUBLIC EXPENDITURE AND INVESTMENT REVIEW (CPEIR) – PERIOD 2016-2020 - THANH HOA PROVINCE

1. Climate change in Thanh Hoa

General introduction

Thanh Hoa is the northernmost province in the Central region, ranked 3rd largest in terms of population and 5th in terms of area.

In 2018, the estimated population of the province was 3.6 million with a gross regional domestic product (GRDP) per capita of VND 41.1 million (equivalent to USD 1,785). The total value of the province's GRDP is approximately VND 146.2 trillion (USD 6.35 billion) The GRDP growth rate reached 15.2% in 2018 and 17.2% the following year, the highest growth rate ever. In recent years, the economic structure of the GRDP shifted towards industry and services. Namely, the construction industry accounted for 44% (up 1.5%), the agriculture-forestry-fishery sector accounted for 12.7% (decreased by 1.4), services sector 36.7% and product tax 6.6% (up 3.2%).

Despite difficulties affecting the agricultural sector, such as a large-scale African swine fever outbreak, the production value increased by 2.27% in 2019. Over the same period, the industrial production value increased 32.6%. The service industries continued to grow well, many sectors prospered, especially tourism, merchandise export, transportation services etc.

The impact of climate change on Thanh Hoa

Due to the impact of climate change, Thanh Hoa is frequently and heavily affected by storms, floods, landslides, and heavy rain, causing great damage to people's lives and property, as well as negatively impacting production activities. As a coastal province (the coast is more than 102 km long), Thanh Hoa is affected by coastal erosion, particularly in the area of Quang Cu commune, Sam Son city.[1]

One notable event occurred in 2018, when the province was affected by 15 natural disasters. Many public works of the State were destroyed while 38 people died and/or wentmissing, 11 people were injured, 362 houses were completely damaged, 59 schools were affected, and more than 30,000 hectares of rice and crops were damaged. Estimated damage was over VND 2,800 billion (equivalent to 124 million USD).

Activities to respond to climate change in Thanh Hoa

Recognizing the impact of climate change on the province's economy, in 2011, the Provincial People's Committee issued an action plan to respond to climate change for the period 2011-2015, with a vision to

[1] According to http://m.tinmoitruong.vn/moi-truong/anh-huong-bien-doi-khi-hau-bo-bien-quang-cu---thanh-hoa-bi-xam-thuc-nghiem-trong_4_26483_1.html

2020. In 2013, an action plan was issued to implement Resolution No. 24-NQ/TW of the XI Central Executive Committee on "Proactively responding to climate change, enhancing natural resource management and environmental protection". On the date of May 25, 2017, the Provincial People's Committee continued to issue action plans to respond to climate change in Thanh Hoa province until 2020, with a vision to 2030. At the same time, directing all levels, departments and branches to actively build implement the plan to respond to climate change.[2]

Public awareness campaigns utilizing propaganda, dissemination and education to raise awareness about climate change, climate change adaptation, natural disaster prevention and mitigation of greenhouse gas emissions have been of interest for implementing by branches and localities.

With international partners, Project "Capacity building for natural disaster prevention and response to climate change in Hoang Hoa and Quang Xuong districts" funded by World Vision Organization; Project "Restoration and management of protective forests" funded by the Japan International Cooperation Agency; Project "Strengthening resilience to the impacts of climate change for vulnerable communities in coastal Viet Nam" funded by Green Climate Fund (GCF) have been instrumental towards climate change mitigation and adaptation in Thanh Hoa province.

In October 2018, the Provincial People's Committee approved the project "Embankment against coastal erosion in Quang Nham commune (Quang Xuong)"to consolidate, upgrade, and complete crucial sea and river dikes as well as control saline intrusion in the most severely affected areas. In recent years, the province has also invested in building, repairing, upgrading and solidifying over 475,000 m of dikes, 170,624m of embankment, repairing and newly built 391 culverts, and over 14.9 ha of breakwater trees.

According to the assessment of the Department of Sea and Islands and the Department of Natural Resources and Environment, the response to climate change in the province still faces many difficulties and limitations, including: raising awareness of the community on climate change, funding implementation of climate change related works projects (e.g. upgrading river and sea dikes, planting protective forests), and strengthening the capacity to forecast natural disasters and monitor climate change.

The Department of Natural Resources and Environment advised the Provincial People's Committee to review and supplement strategies and programs to respond to climate change; develop action plans to respond to climate change in the province in the period of 2021-2030, with a vision to 2050 in accordance with the latest climate change scenarios announced by the Ministry of Natural Resources and Environment in 2016.

2. Summary of Data on Climate Change Investment in Thanh Hoa

2.1 Budget sources for climate change investment

[2] According to http://baothanhhoa.vn/moi-truong/tich-cuc-hanh-dong-ung-pho-voi-bien-doi-khi-hau/106981.htm

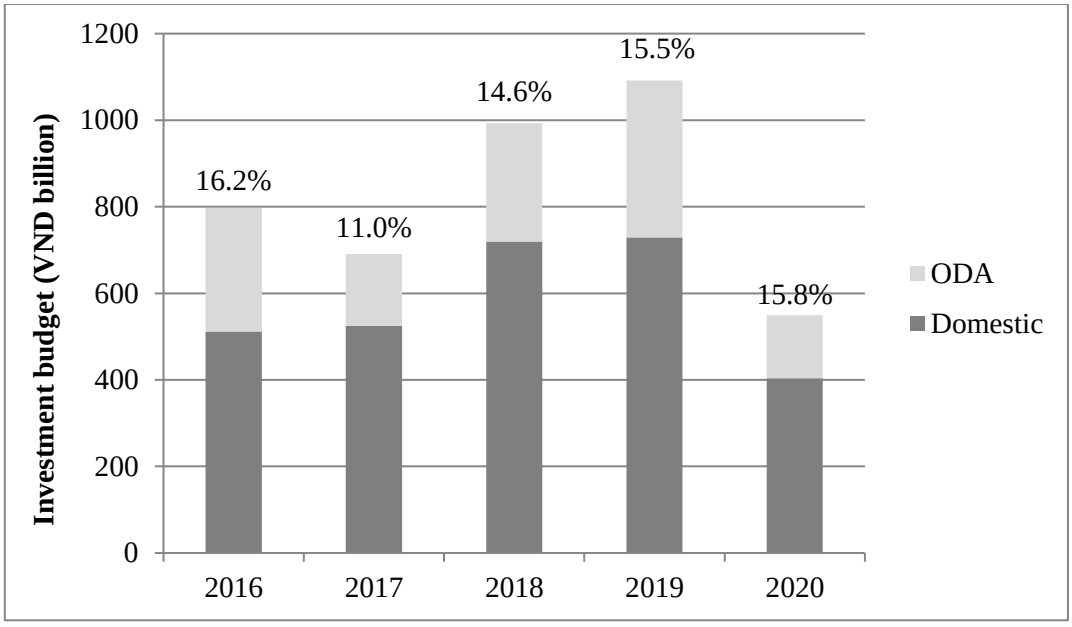


Figure 1: The total investment budget for climate change at Thanh Hoa *– the percentage that the climate change budget represents of the total Provincial development investment budget is shown as a % on the top of each bar.*

Table 1: Investment for climate change in Thanh Hoa 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	512.0	285.2	797.2	64.2	35.8	4,914.6	16.2
2017	524.8	165.9	690.6	76.0	24.0	6,291.7	11.0
2018	719.5	273.5	993.0	72.5	27.5	6,782.1	14.6
2019	729.3	362.1	1,091.4	66.8	33.2	7,036.1	15.5
2020	403.7	145.7	549.4	73.5	26.5	3,487.7	15.8

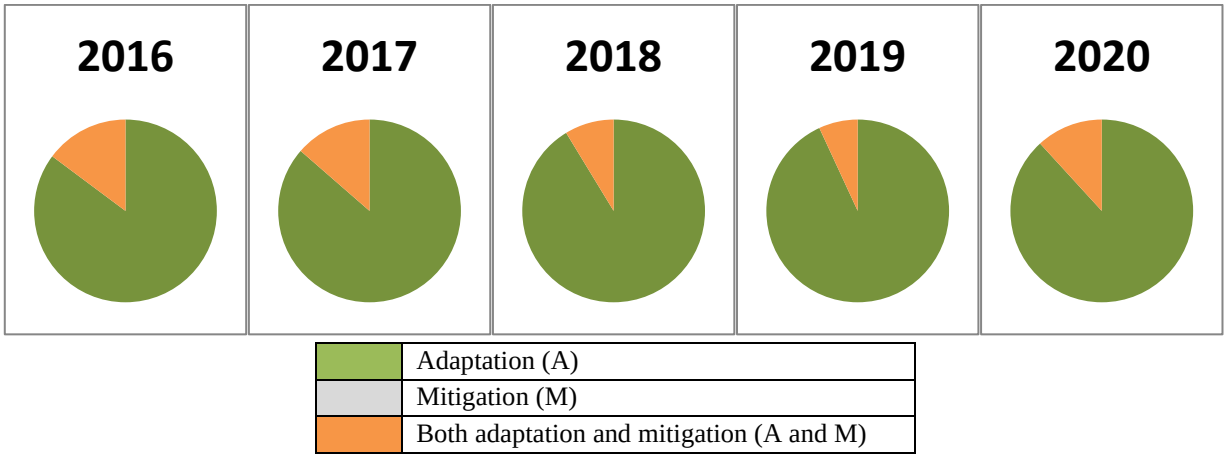
In Thanh Hoa, average climate change related investment spending in the 2016-2020 period is estimated at ~ VND 824 billion per year. The investment budget related to climate change is highest in 2019 (1,091 billion VND) and lowest in 2020 (549 billion VND).

From 2016-2020, the annual average annual domestic investment expenditure on climate change was VND 578 billion, representing about 70% of the total climate-related investment expenditure. From 2016-2020, the annual contribution of ODA was ~ VND 246 billion, accounting for about 30% of climate-related investment. The proportion of investment from ODA sources has fluctuated over the years.The lowest proportion was 24% in 2017 and the highest was 36% in 2016.

The ratio of investment spending on climate change to total development investment expenditures of the whole province varied from 11% to 16%, averaging 14.5% from 2016-2020.

2.2 Purpose of the investment budget for climate change

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

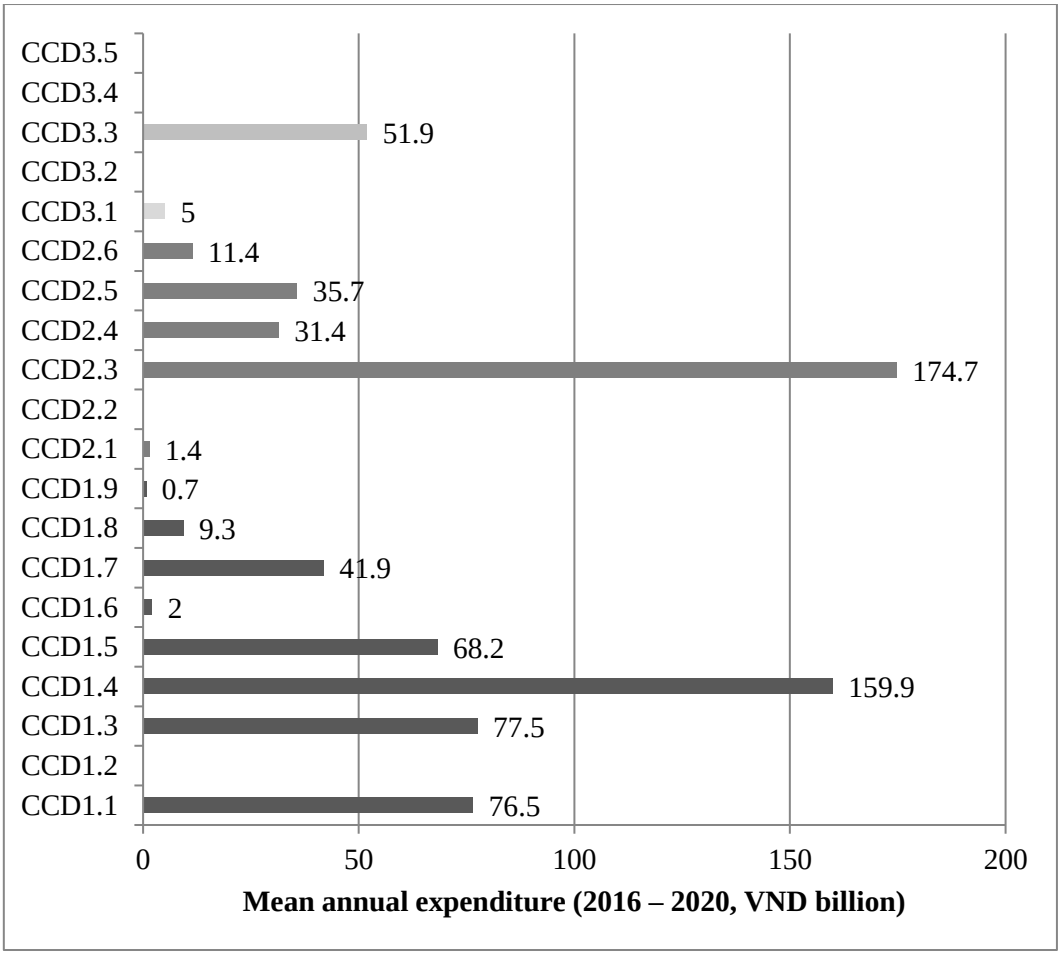


Detailed investment data for climate change adaptation and mitigation

Billion Dongs/%	**2016**		**2017**		**2018**		**2019**		**2020**	
Adaptation (A)	679.3	85.2%	602.9	86.4%	906.7	91.3 %	1,016.4	93.1%	484.5	88.2%
Mitigation (M)	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Both adaptation and mitigation (A and M)	117.9	14.8%	94.7	13.6%	86.3	8.7%	75.1	6.9%	64.9	11.8%

In Thanh Hoa, investment related to climate change is mainly tied to adaptation, accounting for nearly 90% of the investment budget. The remaining 10% of the budget (~VND 440 billion) is composed of investments contributing to both climate change mitigation and adaptation; these include projects on: planting and tending protection forests, special-use, production, rehabilitation projects and urban wastewater treatment in Bim Son town and Central urban environmental improvement project.

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



Regarding the areas (topics) of investment projects to respond to climate change locally, the five main investment areas, accounting for 75% of the total investment value, are:

- Traffic (CCD 2.3), investment of VND 174.7 billion /year, accounting for 23.4%
- River dike and embankment (CCD 1.4): investment of VND 159.9 billion/year, accounting for 21.4%
- Irrigation (CCD 1.3), investment VND 77.4 billion/year, accounting for 10.4%
- Coastal and coastal protection (CCD 1.1), investment of VND 76.5 billion/year, accounting for 10.2% and
- Water quality and supply (CCD 1.5), investment of 68.2 billion/year, accounting for 9.1%.

In addition, the following investment areas have been implemented: Infrastructure and Construction, Forest Development (the REDD$^+$ policy was put forward as the main climate change policy in the province), Specialized Disaster Resilient Infrastructure, Waste Management and Treatment, Strengthening Natural Disaster Risk Reduction, Fishing and fisheries etc.

The above investment areas (except Transportation) have been mentioned directly and/or indirectly in the local Action Plans/Programs related to climate change and green growth such as: Climate Change Action Plans (CCAPs), Green Growth Action Plan (GGAP), and the Plan for Implementation of Paris Agreement (PIPA) and REDD+ Action Plan (2016-2020).These activities are in accordance with National target program to respond to climate change (NTP-RCC) to 2015 of Vietnam.

2.3 Budget expenditure from ODA

The five largest ODA projects for climate change (Project name, capital source, investment period, share of total ODA climate-related investment):

1. Results-based Rural Water Supply and Sanitation Program in 8 Red River Delta Provinces (2016-2020, 20.5% of ODA)
2. Repair and improve dam safety (WB8). (2016-2020, 16.2%)
3. Support for medical hospital waste treatment (2016-2020, 11.6%)
4. Handling landslide of Sam Son coast, Sam Son city. (2016-2020, 10.2%)
5. The project for comprehensive socio-economic development of Thanh Hoa city. (2016-2020, 9.1%)

2.4 Policy and planning instruments

Instrument	Yes (√) or No (X)
Local NTP-RCC, report period to 2015	X
Climate Change Action Plan	√[3]
Green Growth Action Plan	√
Plan for Implementation of Paris Agreement (PIPA)	√
Others: REDD Action Plan (2016-2020)	

[3] On June 23, 2011, Thanh Hoa Provincial People's Committee issued Decision No. 2001 / QD-UBND promulgating the action plan to respond to climate change (CC) of the province for the period 2011-2015, with a vision. to 2020; And the Decision No. 3716 / QD-UBND, September 9, 2020, On the Approval of Action Plan to Respond to Climate Change of Thanh Hoa Province for the period 2021 - 2030, with a vision to 2050.