CLIMATE PUBLIC EXPENDITURE AND INVESTMENT REVIEW (CPEIR) – PERIOD 2016-2020 – DONG THAP PROVINCE

1. Climate change in Dong Thap

General introduction

Located upstream of the Mekong Delta, the gateway to the Tien River flowing into Vietnam, Dong Thap has a 50km border with Cambodia with 04 border gates.

In 2018, Dong Thap's population was estimated at 1.7 million with a gross regional domestic product (GRDP) per capita of VND 40.0 million (USD 1,737 USD). The total value of the province's GRDP is roughly VND 67.7 trillion (USD 2.94 billion), having achieved a GRDP growth rate reached 6.92% in 2018. The agricultural sector has witnessed impressive growth, particularly rice which surpassed the one billion USD value mark. Seafood exports have also risen, contributing towards the economic growth rate of 6.5% achieved in 2019.

Over the 2016-2020 period, industrial production grew steadily, with the processing industry playing the driving force. Also, tourism is a key sector attracting over 3.9 million visitors in 2019, including 95,000 international visitors. The total revenue from tourism is estimated to have increased by 15% compared to 2018.

The impact of climate change on Dong Thap

The impact of climate change on Dong Thap province is more evident in increasingly erratic rain patterns, heavy rains; storms, abnormal flooding, tornadoes, and thunderstorms which have become more seriously concerning. Riverbank landslides are increasing in frequency and the landslide belt is expanding. Dong Thap province is estimated to lose 30 to 50 ha of land along the riverbank every year due to landslide. Increases in forest fires each year, dozens even, have led to damage to between 10 to 40 hectares of melaleuca forest.

Alum-contaminated land area is expanding, especially in the low-lying Dong Thap Muoi. Pest infestations are more frequent, spreading diseases harmful to rice fields and orchards, and in effect causing economic harm. Epidemics among cattle and poultry are more frequent. Biodiversity has also been seriously affected by the impacts of climate change, especially in the inundated ecosystems of Tram Chim National Park.

According to the Provincial People's Committee, property damage caused by natural disasters and climate change from 2016 to 2018 is estimated at nearly 240 billion VND. Climate change has impacted agricultural production, caused landslides of Tien river banks, landslides on canal banks and canals,. inner field. Thunderstorms, strong winds, and thunder have damaged infrastructure. The damage caused by the floods in 2018 alone is estimated at VND 183 billion.

Activities to respond to climate change in Dong Thap[1]

In response to the impacts of climate change, the province has integrated natural disaster prevention and control (including structural and non-structural measures) as well as climate change adaptation into sectoral and socio-economic development plans. Annual and 5-year plans such as: The local economic restructuring project with a focus on the Scheme on restructuring the agricultural sector, restructuring the tourism industry, the National Target Program for sustainable poverty reduction and construction. new countryside, Sustainable linkage project for Dong Thap Muoi sub-region, etc are key contributions.

- Shifting mindsets by raising and disseminating awareness among officials, civil servants, communities and people about natural disaster prevention and control, the impacts of climate change, and production methods necessary for the agricultural sector restructuring scheme.
- Building models of agricultural production to adapt to climate change such as: Linking rice production and consumption according to SRP standards; model rice production according to 1P5G standard implemented by VNSAT Project in 41 cooperatives, 1 cooperative group, with an area of 22,500 ha; Rikolto project to support farmers and cooperatives to produce rice according to SRP standards in cooperatives of Tan Binh, Binh Thanh, Tan Cuong, Thang Loi; and the BRIA 2 project which trains 2,500 households to produce rice according to SRP standards, linking consumption with OLAM Group.
- Researching advanced cultivation processes, breeding new varieties to adapt to climate change, increase production efficiency to create high quality agricultural products, ensure food safety, and meeting the requirements of the importing country. With integrated pest management (IPM), the model "Together with farmers to protect the environment" helps farmers to reduce production costs and increase profits by 2 - 2.5 million VND/ha compared to rice production under old practices. In addition, implementing the crop rotation model on rice land helps farmers earn 11-40 million VND/ha higher profits than rice cultivation.
- Construction and upgrading of infrastructure, especially traffic works, irrigation, health, education, clean water; Community-based community awareness and disaster risk management project in Dong Thap province (Project 1002); implementing the project of lightning prevention and fighting in Dong Thap province until 2020.
- Project on river bank erosion prevention and control in districts: Chau Thanh, Thanh Binh, Hong Ngu, Cao Lanh City and Sa Dec City. Implementing the program of planning and investing in residential clusters and routes. among localities that have reviewed and arranged them in the province.

2. Summary of Data on Climate Change Investment in Dong Thap

2.1 Budget sources for climate change investment

[1] According to Dong Thap newspaper: http://baodongthap.com.vn/kinh-te/dong-thap-thich-ung-voi-bien-doi-khi-hau-86878.aspx

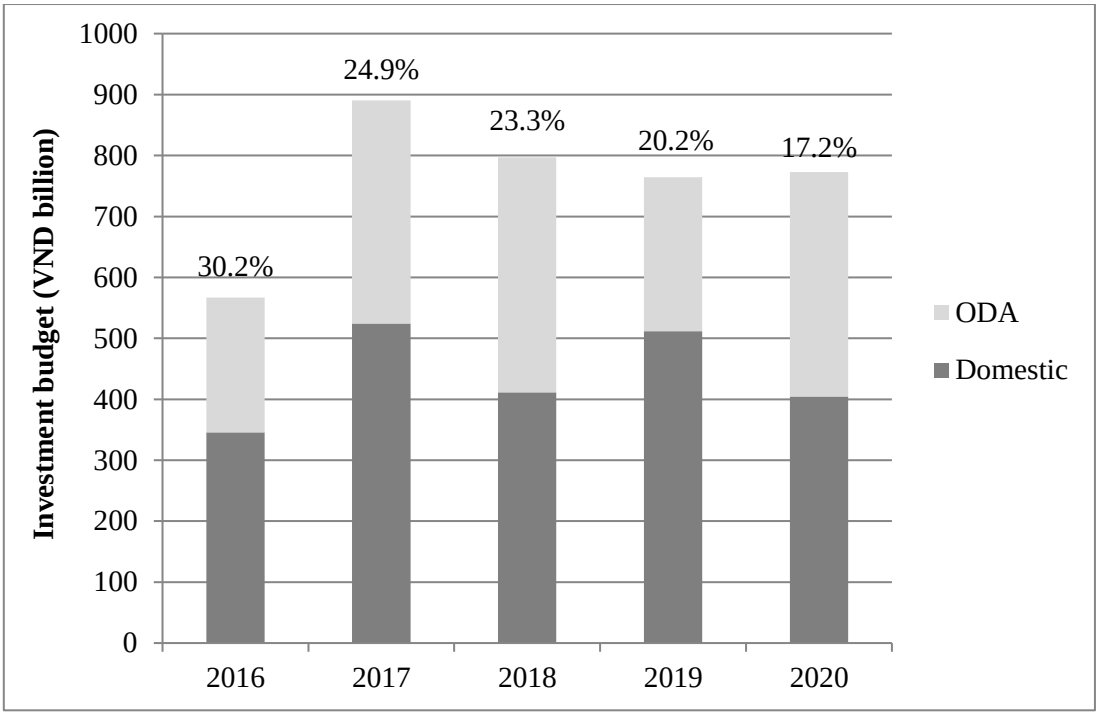


Figure 1: The total investment budget for climate change at Dong Thap *– the percentage that the climate change budget represents of the total Provincial development investment budget is shown as a % on the top of each bar.*

Table 1: Investment for climate change in Dong Thap 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	345.8	221.1	566.9	61.0	39.0	1,874.2	30.2
2017	524.5	365.8	890.3	58.9	41.1	3,579.2	24.9
2018	411.4	385.5	796.9	51.6	48.4	3,413.1	23.3
2019	511.5	253.1	764.6	66.9	33.1	3,790.2	20.2
2020	404.7	368.2	772.9	52.4	47.6	4,493.1	17.2

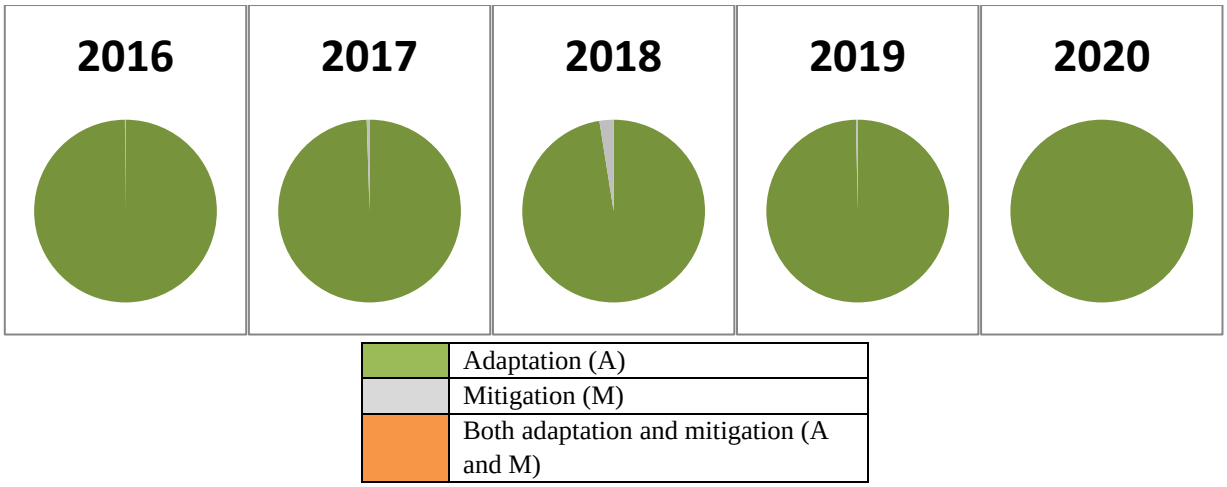
Average investment spending on climate change for the 2016-2020 period of Dong Thap province is about VND 758 billion/year. Climate investment budget was highest in 2017 (VND 890 billion), while the lowest in 2016 (VND 567 billion).

In the 2016-2020 period, the average annual domestic expenditure on climate change investment was VND 440 billion, accounting for nearly 60% of the total investment expenditure/ ODA resources contributed about VND 320 billion, accounting for more than 40% of total investment.

The proportion of investment spending on climate change over total development investment expenditures of the province rose from 17.2% to 30.2% (average 23.16%).

2.2 Purpose of the investment budget for climate change

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

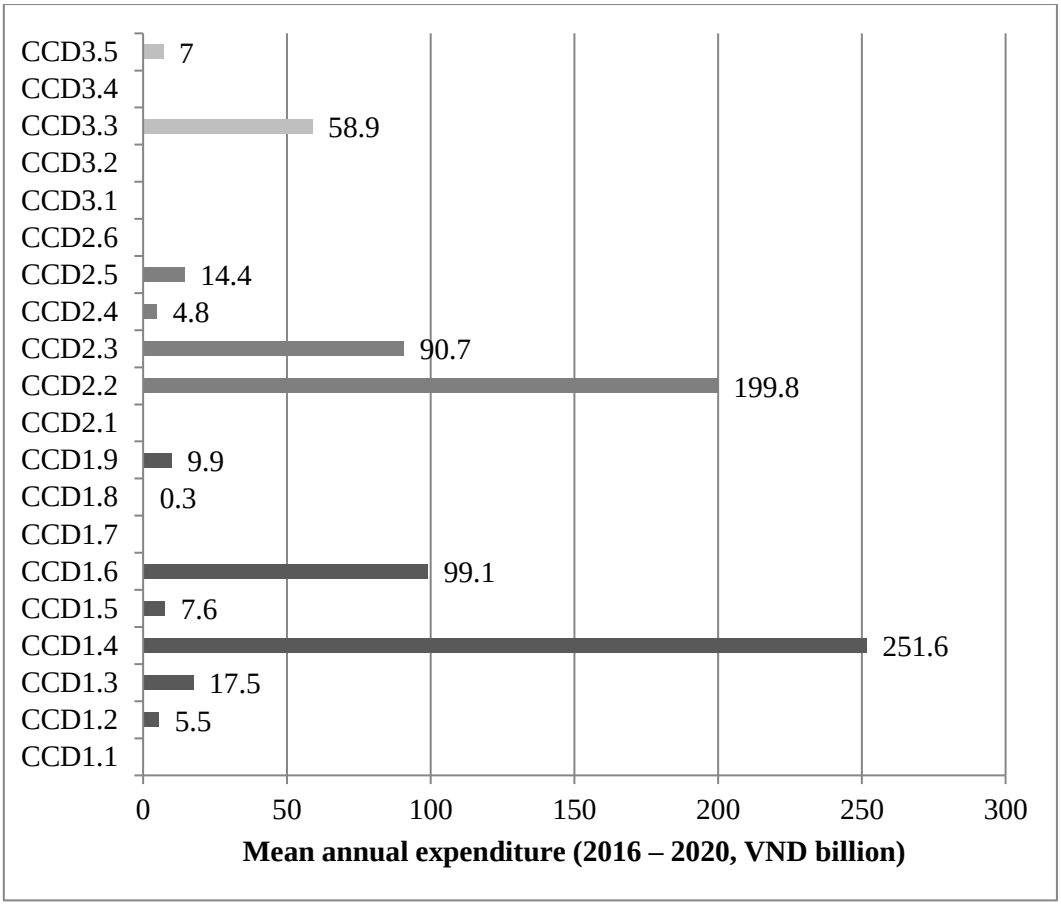


Detailed investment data for climate change adaptation and mitigation

Billion Dong	**2016**		**2017**		**2018**		**2019**		**2020**	
Adaptation (A)	608.3	99.9%	963.2	99.5%	777.2	97.5%	762.2	99.7%	696.9	100.0%
Mitigation (M)	0.4	0.1%	5.1	0.5%	19.7	2.5%	2.4	0.3%	-	0.0%
Both adaptation and mitigation (A and M)	-	0.0%	-	0.0%	0.0	0.0%	-	0.0%	-	0.0%

The majority of investments related to climate change are in the adaptation sector, which accounts for more than 99%. Few projects are dedicated to mitigation, with total investment capital of only about VND 28 billion for the whole period.

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



05 investment topics account for more than 90% of the total investment to respond to climate change, including:

- CCD 1.4 (Dyke and river protection embankment; investment of VND 251.6 billion/year, accounting for 32.8%),
- CCD 2.2 (Improving resilience of urban & residential areas; VND 199.8 billion/year accounting for 26.0%),
- CCD 1.6 (Rural development and food security; VND 99.1 billion/year, accounting for 12.9%),
- CCD 2.3 (Traffic; VND 90.7 billion/year; accounting for 11.8%) and
- CCD 3.3 (Infrastructure and construction; VND 58.9 billion/year; accounting for 7.7%) and

The remaining areas of investment include (CCD 1.3, 2.5, 1.9, 1.5 etc.) Irrigation, Disaster Resilient Specialized Infrastructure, Biodiversity and Conservation, as well as Quality and Water Supply which garnered nearly 9% of the total climate change investment.

Comparing the investment sectors listed above with the local Plan for Implementation of Paris Agreement (PIPA), it can be seen that none have not been mentioned directly in the above Action Plan. Therefore, local policies have not significantly impacted the public investment sector's role in climate.

2.3 Budget expenditure from ODA

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

1. City urban upgrading project. Cao Lanh (Capital from WB) (2016-2020, 27.6%)
2. City drainage system construction project. Cao Lanh (Norwegian Capital) (2016-2020, 9.4%)
3. Upgrading of ring dikes, embankments to prevent landslides, building sluice systems along Tien river, Cao Lanh city (2016-2020, 7.2%)
4. Transforming sustainable agriculture in Vietnam (VNSAT project) in Dong Thap province (2016-2020, 3.2%)
5. Integrated climate resilience and sustainable livelihoods in the Mekong Delta (ICRSL), subproject: Improving flood drainage capacity and developing sustainable climate resilient livelihoods for Dong Thap Muoi, Northern districts of Dong Thap province (2016-2020, 2.8%).

2.4 Policy and planning instruments

Instrument	Yes (√) or No (X)
Local NTP-RCC, report period to 2015	√
Climate Change Action Plan	√[2]
Green Growth Action Plan	X
Plan for Implementation of Paris Agreement	√
Others: none	

[2] Plan No: 04/KH-UBND, January 9, 2014: https://thuvienphapluat.vn/van-ban/tai-nguyen-moi-truong/Ke-hoach-so-04-KH-UBND-thuc-hien-176-CTr-TU-ung-pho-voi-bien-doi-khi-hau-Dong-Thap-2014-225704.aspx; And https://bnews.vn/dong-thap-ban-hanh-chuong-trinh-hanh-dong-ve-ung-pho-voi-bien-doi-khi-hau/64694.html.