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

1. Climate change in Long An

General introduction

Located in the southern key economic region[1], Long An connects the Southeast with the Mekong Delta region. The administrative centre of Long An is Tan An city, about 45 km from Ho Chi Minh City along Highway 1A.

In 2018, the population of Long An was estimated at 1.5 million. The gross regional domestic product (GRDP) per capita was VND 68.6 million (~ 2,980 USD). The total GRDP reached VND 103.1 trillion (USD 4.48 billion) and the GRDP growth rate has been impressive in recent years, attaining 9.5%; the highest in the Mekong Delta region.

Long An is famous for its diversified agricultural products, particularly high-quality rice and fruit trees as key agricultural exports. Currently, industry makes up 40% of the provincial economy (GRDP), with services and goods such as textiles, food processing, and construction.

Historically an agricultural province, Long An has made steps towards industry - trade - service – agriculture in order. Since 2012, the province has had a Master Plan for socio-economic development, approved by the Prime Minister. Accordingly, Long An is divided into 3 specific regions: 1) the first region is the focuses on agricultural development in combination with ecotourism; the second region is oriented towards industrial, urban and service development; and the third is a buffer zone to reserve for development.

The impact of climate change on Long An province

The main impacts of climate change in Long An include [2]:

- Lack of water for domestic use in the lowland communes of Can Giuoc and Can Duoc districts[3]. In the dry season, these communes not only lack water for agricultural production, but many households exchange water for domestic use at a price dozens of times higher than normal.
- Saltwater intrusion along rivers Rach Dua, Rach Giong, and Vam Co Dong; Part of the territory of Vinh Hung and Moc Hoa districts is affected by the 3 ‰ salinity boundary, Duc Hoa, Thu Thua, Ben Luc districts, Tan An city, Can Giuoc are affected by the salinity boundary from 5 to 10, particularly in the districts of Chau Thanh, Tan Tru, Can Duoc, there are places up to more than 15%.

[1] The Southeast region's dynamic economic development area includes Ho Chi Minh City, Dong Nai, Binh Duong, Ba Ria-Vung Tau, Binh Phuoc, Tay Ninh, Long An and Tien Giang.
[2] According to the Department of Agriculture and Rural Development of Long An province, https://dantocmiennui.vn/nhip-song-phuong-nam/long-an-thuc-hien-nhieu-giai-phap-ung-pho-giam-thiet-hai-san-xuat-nong-nghiep-do-bien-doi-khi-hau/154083.html
[3] Action plan to respond to climate change in Long An province.

- Sea water and high floods cause landslides along the Vam Co riverbank, flooding in some urban areas as well as in districts in Dong Thap Muoi such as: Tan Hung, Thanh Hoa, a part of districts bordering Vam Co river, areas along Vam Co Dong and Vam Co Tay rivers.

Activities to respond to climate change in Long An

Although Long An has completed the update of the plan to respond to climate change and sea level rise in the 2016-2020 period with 14 priority projects with a total budget of about 1,200 billion VND, the implementation of the plan is still slow and lacks initiative. Logistical difficulty to direct funding from the central budget to the locality has meant a non-allocation thus far. Long An has also directed departments, branches and localities to proactively implement and use the provincial non-business budget allocated by the province, but integration is difficult. In the process of implementation, most Departments, branches and localities are passive and lack clarity. Natural disaster prevention and mitigation is still mainly focused on response and recovery work but warning and prevention do not have necessary funds for proper investment.

Also, implementation priority has been given to "Dong Thap Muoi biotechnology center in Long An".. The project is of regional scale, combining investment in enhancing scientific and technological capacity, providing incubation services for new technologies in biology, as well as contributing to promoting research, application and technology transfer. This is especially important considering the rapid application of technical advances in the field of biotechnology to production and life, meeting the goals of climate change adaptation and sustainable development.

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

2.1 Budget sources for climate change investment

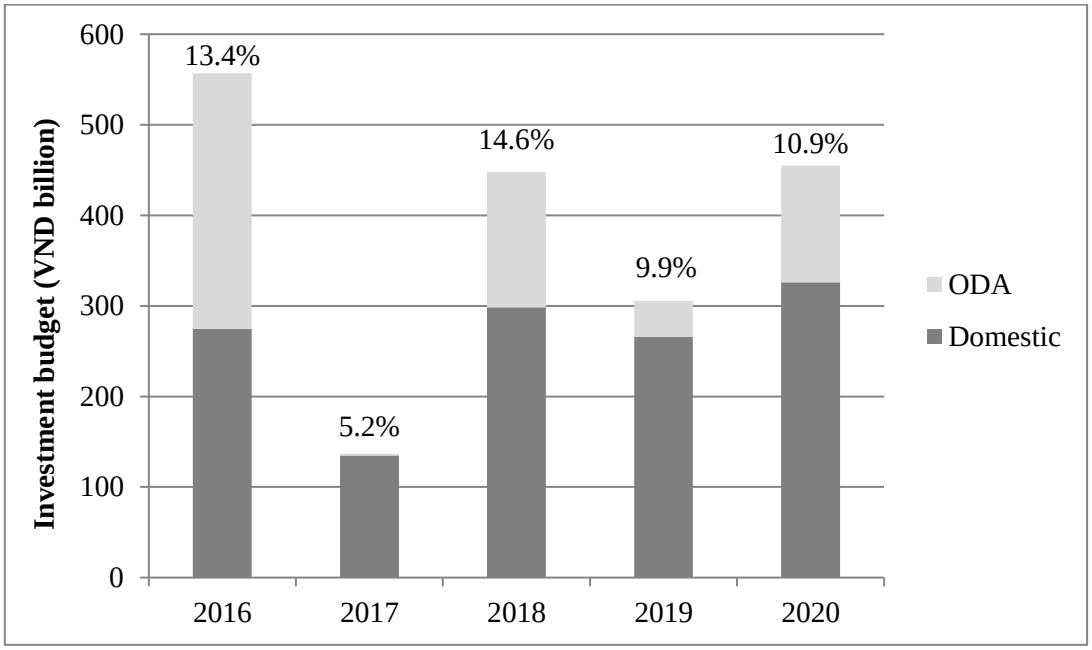


Figure 1: The total investment budget for climate change at Long An *– the percentage that the climate change budget represents of the total Provincial development investment budget is shown as a % on the top of each bar.*

Table 1: Investment for climate change in Long An 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	274.7	282.1	556.7	49.3	50.7	4,142.8	13.4
2017	134.8	1.8	136.6	98.7	1.3	2,632.2	5.2
2018	298.5	149.0	447.5	66.7	33.3	3,072.2	14.6
2019	266.1	39.3	305.4	87.1	12.9	3,074.1	9.9
2020	325.9	129.0	454.9	71.6	28.4	4,184.8	10.9

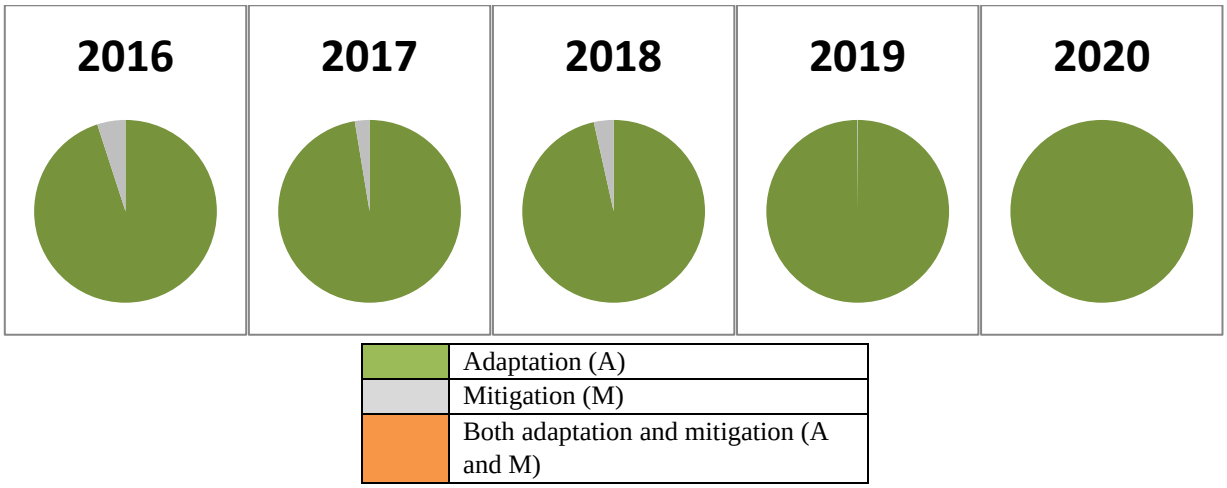
For the 2016-2020 period, climate change based investment of Long An province averaged about VND 380 billion/year. Climate investment budget was highest in 2016 (about VND 560 billion), and lowest in 2017 (VND 137 billion).

Over the 5-year period, the average annual domestic expenditure on climate change investment was VND 260 billion, accounting for nearly 70% of total investment for climate change. ODA contributed the remaining VND 120 billion, accounting for slightly more than 30%. The share of investment from ODA sources ranged from 1.3% in 2017 to a high of 50.7% in 2016, showing erratic shifts. ODA is an outsize anomaly in 2016 due to the Hoa Khanh Tay water supply project, with the project costing 225 billion VND that year.

The proportion of investment spending on climate change as a proportion of total development investment expenditure of the province ranged from 5.2% to 14.6% (average 11.1%).

2.2 Purpose of the investment budget for climate change

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



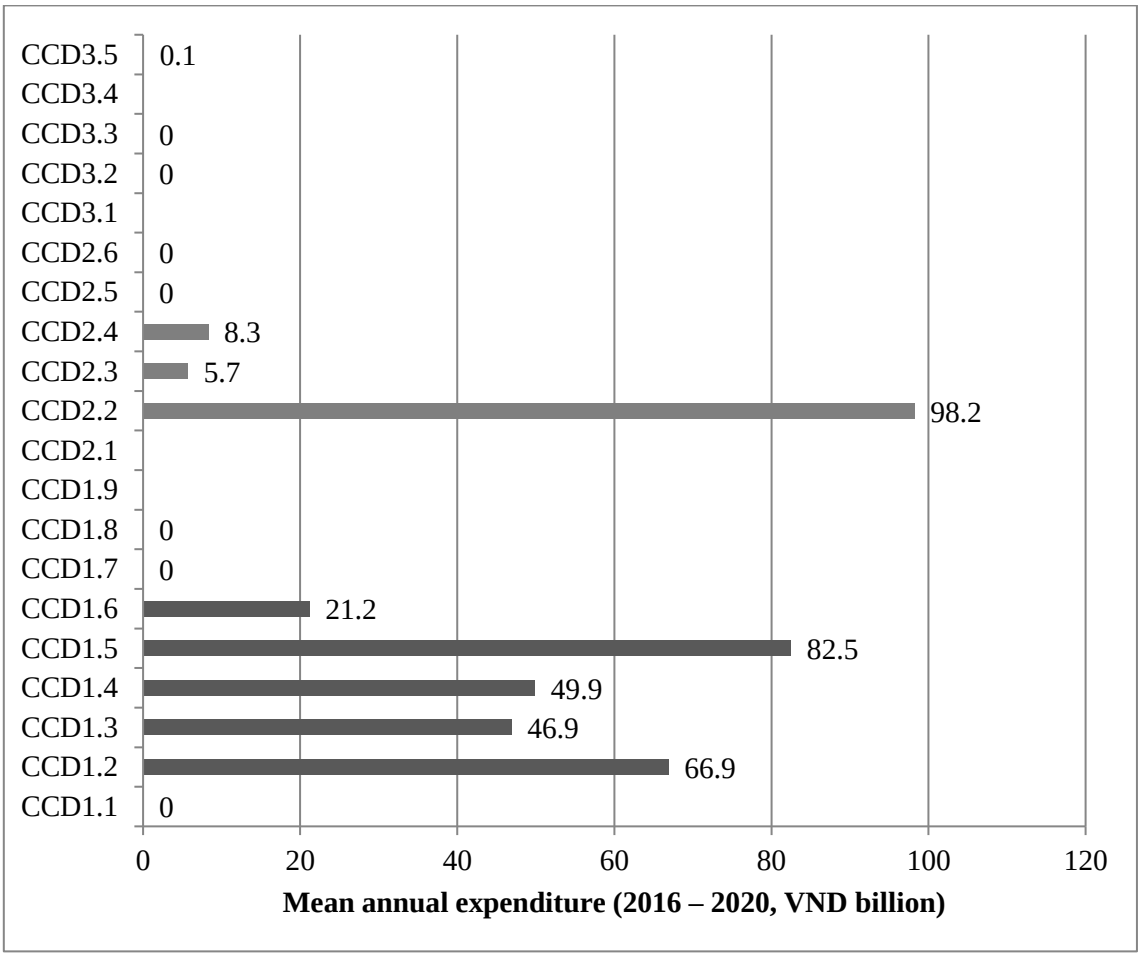
Detailed investment data for climate change adaptation and mitigation

Billion Dong	2016		2017		2018		2019		2020	
Adaptation (A)	530.7	95.0%	133.0	97.4%	431.8	96.5%	305.3	99.9%	454.9	100.0%
Mitigation (M)	27.9	5.0%	3.6	2.6%	15.6	3.5%	0.1	0.1%	-	0.0%

Billion Dong	2016		2017		2018		2019		2020	
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, which garners about 97%. There are only a few projects related to the mitigation sector, such as the treatment of bio-fertilizer production waste from agricultural residues, aquaculture sludge, etc. There are no mixed projects related to both climate change adaptation and mitigation in Long An.

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

- CCD 2.2 (strengthening resilience of urban and residential areas; investment VND 98.2 billion/year, accounting for 25.8%),
- CCD 1.5 (Water quality and supply; investment VND 82.5 billion/year accounting for 21.7%),
- CCD 1.2 (Saline intrusion; investment VND 66.9 billion/year, accounting for 17.6%),
- CCD 1.4 (dyke and river protection embankment; investment VND 49.9 billion/year; accounting for 13.1%) and
- CCD 1.3 (Irrigation; investment VND 46.9 billion/year; accounting for 12.3%) and

The remaining areas of investment include rural development and food security, waste management and treatment, transportation, and tourism, all accounting for less than 6%.

The above investment areas are in line with the priority policy in localized Climate Change Action Plan (CCAP) vis-a-vis dredging of canals to create fresh water sources, freshwater reservoirs, etc (CCD1. 3), saline prevention sluices (CCD1.2), and wastewater treatment (CCD2.4).

2.3 Budget expenditure from ODA

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

1. Hoa Khanh Tay water supply project (2016-2020, 37.4%)
2. Expanding and upgrading urban areas in Vietnam - Tan An city subproject (2016-2020, 35.3%)
3. Transforming Sustainable Agriculture in Vietnam (2016-2020, 15.6%)
4. Support for hospital waste treatment (2016-2020, 6.7%)
5. Phuoc Hoa Irrigation Subproject (2016-2020, 2.7%)

2.4 Policy and planning instruments

Instrument	Yes (√) or No (X)
Local NTP-RCC, report period to 2015	√
Climate Change Action Plan	√[4]
Green Growth Action Plan	X
Plan for Implementation of Paris Agreement	X
Others: none	

[4] http://dcc.gov.vn/tin-tuc/2763/Long-An:-Tich-cuc-ung-pho-voi-bien-doi-khi-hau.html