CLIMATE PUBLIC EXPENDITURE AND INVESTMENT REVIEW (CPEIR) – PERIOD 2016-2020 – DAK NONG PROVINCE

1. Climate change in Đăk Nông

General introduction

Dak Nong province, located at the southwest gateway of the Central Highlands region, was re-established based on the division of Dak Lak province in 2004 with the capital Gia Nghia. Dak Nong is a multi-ethnic province comprises 40 ethnic groups while ethnic minorities account for about 32% of the province's population.

In 2018, Dak Nong had a population of 645,400 and the province's GRDP reached VND 29,227 billion (equivalent to USD 1.2681 billion). GRDP per capita reached VND 45.24 million dong (USD $1,865) and the GRDP growth rate reached 7.32%.

Despite being affected by a nationwide economic recession, between 2011-2015, the average economic growth rate reached 12.6%/year.

The economy is formed around three main pillars: i) Aluminium industry and aluminium smelting; ii) High-tech agriculture; and iii) Tourism development.

The economic structure of the province has shifted fromagriculture to industry and services. In 2004, the proportion of agriculture accounted for 72.86%. By 2018, the agricultural sector accounted for 42.67% while the non-agricultural sector increased to 57.33%. Industry and construction accounted for 18.35%, services accounted for 36.42%, and tax accounted for 2.57%.[1].

The impact of climate change on Đăk Nông

Due to climate change, droughts and floods are increasingly frequent province-wide. In particular, the Chu Jut and Dak Glong districts most acutely experience floods in the rainy season and drought in the dry season affecting agricultural production and livelihoods. During the rainy season, heavy rains often occur in the rest of the province, causing flash floods and landslides.

According to Dak Nong Hydrometeorology Center, in recent years, weather conditions in the province have changed abnormally compared to before, temperature in months of the year, dry season and rainy season do not follow the general rule as before. The rainy season tends to come late like 2015, some years come as early as 2017, making most of the cashew area in the province almost completely lost.

[1] According to: http://www.tinhdoandaknong.org.vn/thoi/832-dak-nong-voi-nhung-thanh-tuu-sau-15-nam-xay-dung-va-phat-trien.html

Variations in rainfall have affected the density and volume of rains on a yearly basis, consisten with overall declines. Droughts have also been observed, such as 23,055.93 ha of winter-spring crop of 2015-2016 which were affected. A noticeable shift in the summer-autumn seeding season occurred in the province, with some 1-2 months difference as seen in Tuy Duc and Cu Jut.

Activities to respond to climate change [2]

To respond to the impacts of climate change, the province has planned a lake system project with the objective of storing and regulating water sources for domestic use and agricultural production, reducing floods for downstream areas, regulating the climate in the region, facilitating intensive farming, increasing agricultural production, and increasing groundwater levels in the region.

There are 2 reservoirs planned. First, at Dak N'Ting lake, Quang Son commune (Dak Glong) with an average capacity of 4.6 million m^3 designed capacity, ensuring water for 530 hectares of crops in area. Second, at Dak Gu lake, Truc Son commune (Chu Jut) which as has an average capacity of 5.5 million m^3 designed capacity, ensuring water for 600 ha of crops in the area.

Climate urgency has led the provincial government to pursue investment projects to build water reservoirs meeting local requirements and plant watershed protection forests.

The province is directing local authorities to carry out a forest land inventory prior to implementing protective forest planting. The Provincial People's Committee also assigned the Department of Natural Resources and Environment to assume the prime responsibility for, and coordinate with relevant branches in, effectively implementing the National Strategy on Climate Change and the Millennium Development Goals (MDGs).

The El Nino phenomenon greatly affected the production of winter-spring crop 2015-2016 in the province. Drought, affecting water availability for crops, has devastated the districts of Dak Mil, Chu Jut, and Krong No.

In response, the Provincial People's Committee asked localities to raise safety in production, reduce damage caused by lack of water. The agricultural sector is encouraging farmers to incorporate climate-smart practices and apply technical advances to production in order to minimize crop losses.

[2] for reference and integration into the analysis results of public investment in climate change in each locality.

2. Summary of Data on Climate Change Investment in Đăk Nông

2.1 Budget sources for climate change investment

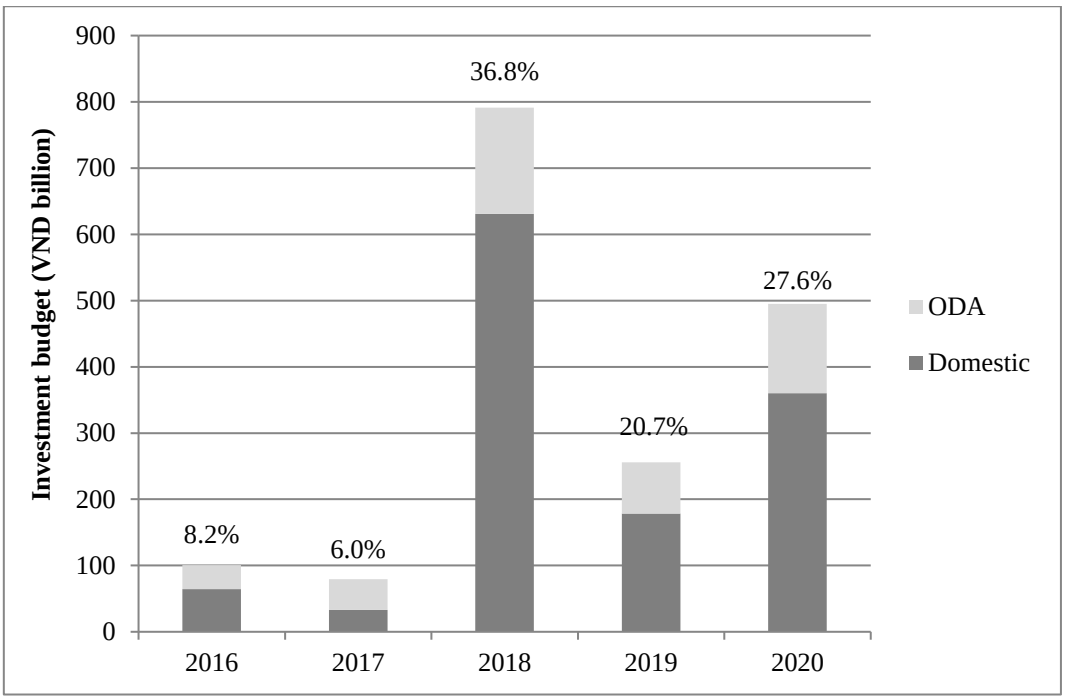


Figure 1: The total investment budget for climate change at Đăk Nông *– the percentage that the climate change budget represents of the total Provincial development investment budget is shown as a % on the top of each bar.*

Table 1: Investment for climate change in Đăk Nông 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	64.3	36.6	100.9	63.8	36.2	1,233.1	8.2
2017	33.0	46.2	79.3	41.7	58.3	1,316.0	6.0
2018	631.0	160.1	791.1	79.8	20.2	2,147.7	36.8
2019	178.3	77.7	256.0	69.7	30.3	1,235.4	20.7
2020	360.2	134.7	494.9	72.8	27.2	1,795.2	27.6

Average investment spending on climate change over the period 2016-2020 of Dak Nong province was about VND 344 billion/year. The investment budget for climate change was highest in 2018 (VND 791 billion) and lowest in 2017 (VND 79 billion) with high variability during the 5-year period.

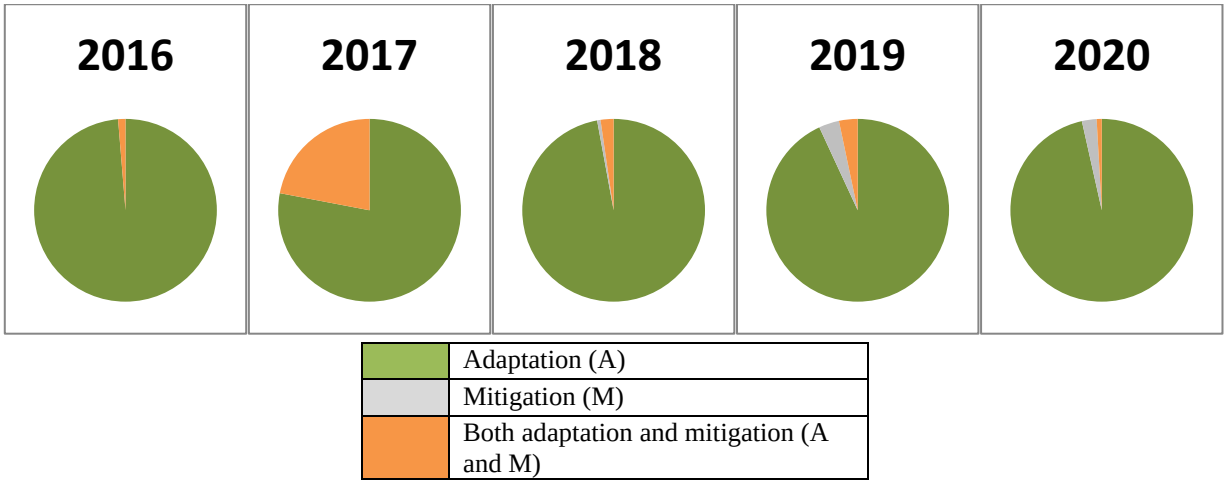
In the 2016-2020 period, the annual average annual domestic investment expenditure on climate change was 253 billion VND, accounting for 74% of the total investment expenditure. ODA contributes about 91 billion

VND, accounting for 26%. The proportion of investment from ODA capital changes dramatically year to year; the lowest was 20.2% in 2018 and the highest was nearly 60% in 2020.

The proportion of investment spending on climate change to total development investment expenditures of the whole province varied from 6.0% to 36.8%, an average of 22.3% for the whole study period.

2.2 Purpose of the investment budget for climate change

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

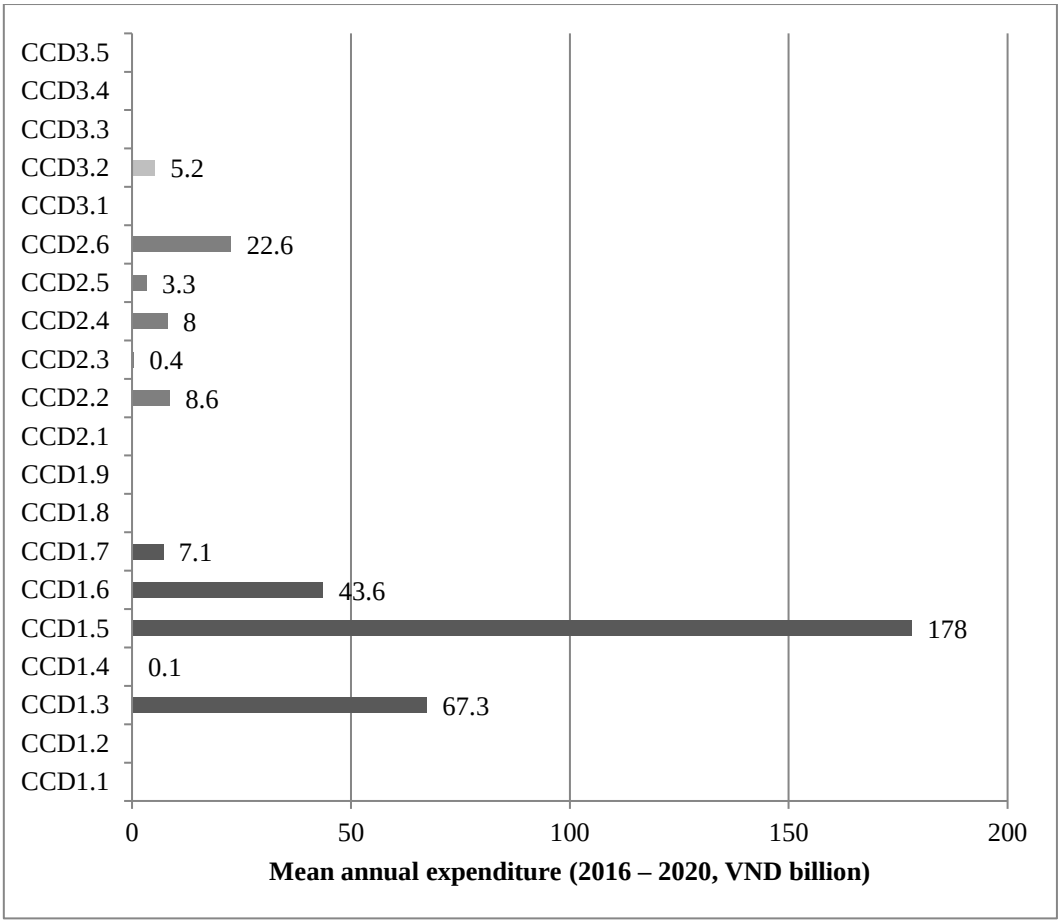


Detailed investment data for climate change adaptation and mitigation

Billion Dongs/%	2016		2017		2018		2019		2020	
Adaptation (A)	99.6	98.7%	61.8	78.0%	767.9	97.1%	238.2	93.1%	477.3	96.4%
Mitigation (M)	-	0.0%	-	0.0%	4.8	0.6%	9.3	3.6%	13.1	2.6%
Both adaptation and mitigation (A and M)	1.3	1.3%	17.4	22.0%	18.4	2.3%	8.5	3.3%	4.5	0.9%

In Dak Nong, nearly 96% of climate-related investments focused on adaptation. There were a few mitigation projects with a total investment of about VND 27.1 billion. Contributions to mixed mitigation and adaptation projects represented a total investment of about VND 50.1 billion, focusing on projects and programs on forest protection and development.

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



Investment in CCD 1.5, Water quality and supply, accounts for the highest proportion of investment spending, with over VND 178 billion/year, or 51.7% of climate change delivery investment. CCD 1.3, Irrigation, investment (VND 67.3 billion/year, 19.6%) and CCD 1.6 (Rural development and food security, investment VND 43.6 billion, rate 12.7%) were the next largest spending categories during the study period.

There are about 10 other related investment areas, with investment values ranging from VND 0.1 to 22.6 billion, including: enhancing disaster risk reduction, traffic, waste management and treatment, and forest development.

The localised Climate Change Action Plan (CCAP) is available for the province, and the above-mentioned investment topics are consistent with this plan. These investments are not driven by the disaster prevention plan for 2019-2020, though they are thematically related. Still, there is no Green Growth Action Plan (GGAP) and Plan for Implementation of Paris Agreement (PIPA) available for the province to verify compliance with the public investment policy for climate change.

2.3 Budget expenditure from ODA

Here are the 5 (five) biggest ODA projects for climate change (Project name, funding source, investment period, share of total ODA investment):

1. Dam Safety Improvement and Repair Project (WB8), Dak Nong Province (2016-2020, 26.1%)
2. Dak N'Ting reservoir, Dak Nong province (2016-2020, 21.2%)
3. The Project of Poverty Reduction in the Central Highlands - Dak Nong Province (2016-2020, 19.8%)
4. Sustainable agricultural transformation project in Vietnam (VNSat project), Dak Nong province (2016-2020, 13.2%)
5. Hospital medical waste treatment support project, Dak Nong province (2016-2020, 7.5%)

2.4 Policy and planning instruments

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