

# ผลิตภัณฑ์ภาคและจังหวัด แบบปริมาณลูกโซ่ ฉบับ พ.ศ. 2565 Gross Regional and Provincial Product Chain Volume Measure 2022 Edition

สำนักงานสภาพัฒนาการเศรษฐกิจและสังคมแห่งชาติ Office of the National Economic and Social Development Council

## Preface

The Office of the National Economic and Social Development Council (NESDC) is officially responsible for Gross Regional and Provincial Product (GRP and GPP) compilation using a top-down approach by disaggregating annual GDP at the national level into GRP and GPP. Thus, GRP and GPP provide economic and social indicators at regional and provincial levels and benefit for formulating policy and plan for regional and provincial development.

The compilation of Gross Regional and Provincial Product is a part of the National Accounts Statistics of Thailand. The particular focus is on the production approach in compliance with international standard of the System of National Accounts (SNA) using the chained volume measures (CVMs) for measuring real terms. For Gross Regional and Provincial Product 2022 edition, data is revised back to 2020 following the publication of National Income 2022. This also included latest primary data provided by related agencies, and economic indicators for each province. Details of revisions are indicated in the revision note. This data presents eight years of series from 2015 to 2022.

We want to express our sincere gratitude to agencies and individuals, in both public and private sectors providing essential data and valuable comments on enhancing the quality of Gross Regional and Provincial Product compilation. We look forward to continuing and strengthening our cooperation in the future.

(Danucha Pichayanan)

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Secretary-General

National Economic and Social Development Council

May 2024

# Revisions to the Gross Regional and Provincial Product 2022 Edition

Gross Regional Product (GRP) and Gross Provincial Product (GPP) Chain Volume Measures 2022 Edition has been compiled and revised as follows:

- 1. Revised GRP and GPP figures back to 2020 to be consistent with Gross Domestic Product (GDP) in the National Income of Thailand, Chain Volume Measures 2022<sup>1</sup> Edition.
- 2. Compiled and improved indicators of provincial-level production according to the publication and revision of data sources for 2022. Major data sources included:
  - Agricultural, forestry and fishing sector; revising crops and livestock production figures according
    to the Agricultural Statistics of Thailand 2022 from the Office of Agricultural Economics, Ministry
    of Agriculture and Cooperatives; and revising fishing production figures according to the Fisheries
    Statistics of Thailand 2021 from the Department of Fisheries.
  - Mining and quarrying sector: revising mineral production figures according to mineral production of Thailand from the Department of Primary Industries and Mines, the Department of Mineral Fuels, and the data from relevant sources.
  - Manufacturing sector: revising the figures according to the data from the Department of Industrial Works and the Office of the Cane and Sugar Board, Ministry of Industry, and other manufacturing data from relevant sources.
  - Electricity, gas, steam and air conditioning supply sector; Water supply, sewerage, waste management and remediation activities sector; and Construction sector: revising data according to the data from the public sector and the data available from the relevant data sources.
  - Wholesale and retail trade; repair of motor vehicles and motorcycles sector; Transportation and storage sector; Real estate activities sector; and Administrative and support service activities sector: revising income for the Value Added Taxes assessment and the data available from the relevant data sources.
  - Financial and insurance activities sector: revising the data according to the data available from the relevant data sources.
  - Professional, scientific and technical activities sector; Art, entertainment and recreation sector;
    Accommodation and food service activities sector; Public administration and defence,
    compulsory social security sector; Education sector; Human health and social work activities
    sector; and Other service activities sector: revising the data according to the data available from
    the relevant data sources.
- 3. The change in real value added is used in measuring the changes in production outputs at the national, regional, and provincial levels. Meanwhile, the structure of nominal value added or value added at current prices is used in analyzing the production income distribution, which was affected by the changes in production quantities and prices.
- 4. In this publication, r assigned as a superscript of data period(s) in tables stands for "revised", representing revision figures based on the most recent data, coverage, and compilation methodology. Likewise, "p" stands for "preliminary" annual figure, subject to revisions in the next series of publications.

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<sup>\*\*</sup>Any reproduction of data and material in this publication must be properly referred to NESDC as the data source.\*\*

<sup>&</sup>lt;sup>1</sup> See the detailed revisions in the National Income of Thailand 2022 Chain Volume Measures.

# **Executive Summary**

*Overall economy* in 2022 increased by 2.5%, continued from 1.6% in 2021. This was attributed to an expansion in both agricultural and non-agricultural production. Agricultural production rose due to increased main crops production. Non-agricultural production expanded, in response to mitigation of worldwide COVID-19 spread. In particular, the tourism-related services sector expanded, due to an ease of several COVID-19 measures. Additionally, the government continuously implemented measures to stimulate the economy.

*Overall production* in 2022 at current market prices valued at 17,378,017 million baht. After deducting 499,795 million baht of net factor income from the rest of the world, Gross National Income (GNI) registered the value of 16,878,222 million baht, with an expansion of 8.0%. While GNI per capita was 241,632 baht, higher than 224,233 baht in 2021 or a 7.8% growth.

Agricultural production increased by 2.5%, sustained from 2.2% in 2021. The expansion resulted from higher yields of main crops, namely paddy, sugarcane, oil palm and other fruits. However, livestock production remained stable as production of cattle, buffalo and poultry expanded, while swine production decreased. In addition, fisheries production declined.

Non-agricultural production increased by 2.5%, maintained from 1.5% in 2021. The service sector increased by 3.8%, accelerated from 0.3% in 2021. This improvement was attributable to an acceleration in tourism-related sectors such as accommodation and food service activities; wholesale and retail trade, repair of motor vehicle and motorcycle; and transportation and storage. However, the industrial sector grew by 0.1%, slowed down from 3.8% in 2021. The deceleration was driven by the manufacturing production, which grew by 0.7%, slowed down from 4.7% in 2021, due to lower external demand following economic situation of important trading partners.

**Regional production** in 2022 increased from growth rates of Bangkok and vicinities at 3.6%, the West at 2.6%, and the North at 1.4%, improved from 0.5%, 2.5% and 1.2% in 2021, respectively. Moreover, the South increased by 3.2%, rebounded from a 3.2% fall in 2021. In addition, the East and the Northeast increased by 2.2% and 0.3%, slowed down from 4.4% and 3.6%, orderly. Meanwhile, the Central dropped by 2.2%, from an increase of 4.9% in 2021.

	Growth rate			Structure		
Region	in real	in real terms		al terms		
	2021	2022	2021	2022		
Northeast	6.6	0.3	10.4	10.1		
North	1.2	1.4	7.7	7.6		
South	-3.2	3.2	7.9	8.0		
East	4.4	2.2	18.2	18.9		
West	2.5	2.6	3.6	3.6		
Central	4.9	-2.2	5.4	5.2		
Bangkok and vicinities	0.5	3.6	46.8	46.6		
GDP	1.6	2.5	100.0	100.0		

The production income distribution was measured from the proportion of gross regional product (GRP) at current market prices to GDP. The East and the South presented higher shares, which increased from 18.2% and 7.9% in 2021 to 18.9% and 8.0% in 2022, orderly. However, the production shares of Bangkok and vicinities, the Northeast, the North and the Central decreased from 46.8%, 10.4%, 7.7%, and 5.4% in 2021 to 46.6%, 10.1%, 7.6% and 5.2% in 2022, orderly. Meanwhile, the West remained the same at 3.6% as 2021.

The main sectors of each region can be orderly described as follows: Bangkok and vicinities with the highest GDP share of 46.6%, comprised mainly manufacturing production; wholesale and retail trade, repair of motor vehicle and motorcycle; and financial and insurance activities. Secondly, the East with a GDP share of 18.9%, was led by manufacturing production; wholesale and retail trade, repair of motor vehicle and motorcycle; and mining and quarrying. Thirdly, the Northeast posted a 10.1% share of GDP, originated from agriculture, forestry, and fishing; manufacturing production; and wholesale and retail trade, repair of motor vehicle and motorcycle. The South covered 8.0% share of GDP, was led by agriculture, forestry, and fishing; wholesale and retail trade, repair of motor vehicle and motorcycle; and manufacturing production. Fifth, the North accounted for 7.6% of GDP, mainly comprised agriculture, forestry, and fishing; manufacturing production; and wholesale and retail trade, repair of motor vehicle and motorcycle. The Central accounted for 5.2% of GDP, mainly from manufacturing production; wholesale and retail trade, repair of motor vehicle and motorcycle; and electricity, gas, steam, and air conditioning supply. Lastly, the West recorded a share of 3.6% of GDP, mainly attributed to agriculture, forestry, and fishing; manufacturing production; and wholesale and retail trade, repair of motor vehicle and motorcycle.

*GRP per capita* in 2022, the East recorded the highest GRP per capita at 515,683 baht per year. This was respectively followed by Bangkok and vicinities, the Central, the West, the South, the North, and the Northeast. Meanwhile, the Northeast with the lowest GRP per capita, recorded the value of 95,948 baht per year.

*GPP per capita* in 2022 revealed that provinces with high GPP per capita situated in the East, Bangkok and vicinities, and the Central. The most significant gap emerged between Rayong and Narathiwat, with GPP per capita of 1,003,497 and 60,876 baht per year, respectively. The difference was equivalent to 16.5 times. The five provinces with highest GPP per capita were Rayong, Bangkok Metropolis, Chon Buri, Chachoengsao, and Phra Nakhon Si Ayutthaya. On the contrary, Narathiwat, Mae Hong Son, Nong Bua Lam Phu, Mukdahan, and Yasothon had the five lowest GPP per capita.

GRP per capita and Growth rate in 2021-2022

Region	GRP per capita (Baht/year)		Growth rate (%)	
	2021	2022	2021	2022
Northeast	91,510	95,948	5.1	4.8
North	111,020	117,276	1.8	5.6
South	132,005	142,781	-0.6	8.2
East	470,492	515,683	8.1	9.6
West	157,544	173,815	3.4	10.3
Central	278,596	284,408	5.8	2.1
BKK and vicinities	438,753	465,327	0.5	6.1
GDP per capita	232,302	248,789	3.1	7.1

# GPP per capita in 2022 (Baht/year)

The highest 10's		The lowest 10's		
1. Rayong	1,003,497	1. Narathiwat	60,876	
2. Bangkok Metropolis	634,109	2. Mae Hong Son	64,665	
3. Chonburi	598,448	3. Nong Bua Lam Phu	67,363	
4. Chachoengsao	494,545	4. Mukdahan	67,885	
5. Phra Nakhon Si Ayutthaya	456,286	5. Yasothon	72,523	
6. Prachinburi	445,123	6. Sakon Nakhon	77,408	
7. Samut Sakhon	405,187	7. Sa Kaew	78,482	
8. Saraburi	342,370	8. Chaiyaphum	79,864	
9. Samut Prakan	311,251	9. Roi Et	80,249	
10. Nakhon Pathom	295,404	10. Ubon Ratchathani	81,555	

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# Gross Regional and Provincial Product in 2022

# 1. Regional economy

#### Overall regional economy

The regional economy in 2022 can be considered from regional growth rates of Bangkok and vicinities at 3.6%, the West at 2.6%, and the North at 1.4%, which accelerated from 0.5%, 2.5%, and 1.2% in 2021, orderly. While the South increased by 3.2%, rebounded from a fall of 3.2% in 2021. As well as, the East and the Northeast expanded by 2.2% and 0.3%, slowed down from 4.4% and 3.6% in 2021. Lastly, the Central decreased by 2.2%, contrasted with a rise of 4.9% in 2021.

#### Production income structure

Production income structure in 2022, with consideration of the proportion of gross regional product to GDP in nominal terms, revealed higher shares for the East and the South which increased from 18.2%, and 7.9% in 2021, to 18.9%, and 8.0% in 2022. On the contrary, the production shares of Bangkok and vicinities, the Northeast, the North, and the Central, decreased from 46.8%, 10.4%, 7.7%, and 5.4% in 2021, to 46.6%, 10.1%, 7.6%, and 5.2% in 2022, orderly. Meanwhile, the West remained at the share of 3.6%.

#### Regional Growth Rate and Production Income Structure

(%)

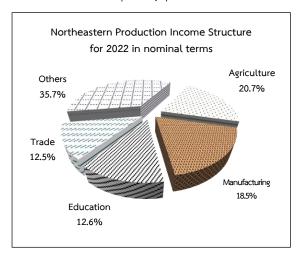
	Growth rate		Struc	cture
Region	in real	. terms	in nomi	nal terms
	2021	2022	2021	2022
Northeast	3.6	0.3	10.4	10.1
North	1.2	1.4	7.7	7.6
South	-3.2	3.2	7.9	8.0
East	4.4	2.2	18.2	18.9
West	2.5	2.6	3.6	3.6
Central	4.9	-2.2	5.4	5.2
Bangkok and vicinities	0.5	3.6	46.8	46.6
GDP	1.6	2.5	100.0	100.0

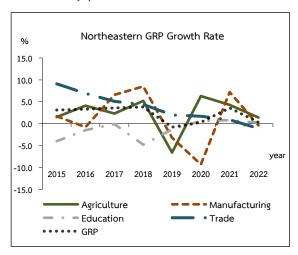
#### The regional production

#### The Northeast

*Overall,* gross regional product (GRP) of the Northeast in real terms expanded by 0.3%, slowed down from 3.6% in 2021, which was attributable to a deceleration in both agricultural and non-agricultural production. Agricultural production, which accounted for 20.7% of the Northeast's total production, grew by 1.4%, decelerated from 4.3% in 2021. Meanwhile, non-agricultural production remained at the same level.

Agricultural production increased by 1.4%, decelerated from 4.3% in 2021. This was due to the impact of monsoon and several storms during Q3/2022, especially for Typhoon Noru. Consequently, crop and animal production and related service activities increased by 1.6%, slowed down from 4.3% in 2021. The deceleration mainly came from rubber and vegetables, while paddy and cassava declined. However, sugar cane and fruit expanded favorably. Agricultural services increased corresponding to the expansion in crop production services and harvesting activities. Livestock production increased, led by cattle, buffalo and swine. Whereas, poultry production decreased, as well as fishery production.





Non-agricultural production remained stable, while there was an expansion in real estate activities which grew by 3.5%. The mining and quarrying expanded by 16.3%, accelerated from 1.1% in 2021, owing to crude oil and natural gas production, as well as other mining and quarrying activities. Administrative and support service activities; professional activities; and education rose by 20.3%, 5.8% and 0.2% respectively. Human health and social work activities grew by 4.3%, mainly driven by public health services and social work activities without accomodation. In addition, transportation and storage expanded by 5.5%, in response to the postal and courier activities and private courier services. Electricity, gas, steam and air conditioning supply grew by 2.0%, led by electric power generation, transmission, and distribution. Water supply, sewerage, waste management; and Arts, entertainment, and recreation rose by 4.5% and 5.7%, orderly. Meanwhile, a decrease was found in manufacturing production with a drop of 0.4%, especially in the production of food products according to a decrease of raw materials, together with a decline in production of beverages, clothing and textiles. Moreover, wholesale and retail trade, repair of motor vehicles and motorcycles; financial and insurance activities; and public administration and defence dropped by 1.1%, 3.5% and 3.9%, orderly.

Construction decreased by 1.1%, attributed to declined public construction. Lastly, accommodation and food service activities; other service activities; and information and communication decreased by 0.9%, 2.5%, and 0.9%, respectively.

#### Northeastern GPP Growth Rate and Production Income Structure

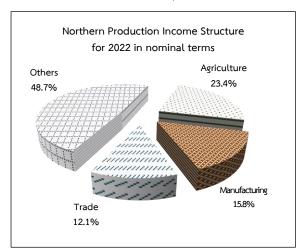
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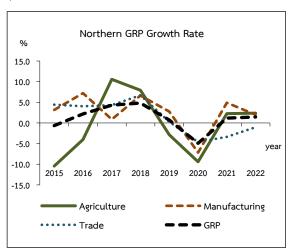
	Growth rate		Struc	cture
Province	in real	terms	in nomir	nal terms
	2021 2022		2021	2022
1. Khon Kaen	1.4	-1.1	12.7	12.3
2. Udon thani	3.2	0.7	6.8	6.9
3. Loei	3.9	0.7	3.4	3.5
4. Nong Khai	4.4	2.1	2.6	2.7
5. Mukdahan	7.7	-2.6	1.7	1.6
6. Nakhon Phanom	4.0	1.2	2.8	2.9
7. Sakon Nakhon	2.0	3.2	3.9	4.0
8. Kalasin	3.1	2.3	3.7	3.8
9. Nakhon Ratchasima	5.9	0.8	18.9	19.1
10. Chaiyaphum	3.4	-0.9	4.1	4.2
11. Yasothon	4.7	-0.4	1.9	1.8
12. Ubon Ratchathani	3.1	0.1	8.1	8.0
13. Roi Et	2.8	-1.2	5.0	4.8
14. Buri Ram	4.7	1.7	5.8	6.0
15. Surin	0.7	-1.5	5.1	5.0
16. Maha Sarakham	4.7	-0.4	4.0	3.9
17. Si Sa Ket	1.3	-0.6	4.7	4.6
18. Nong Bua Lam Phu	5.5	-0.5	1.8	1.8
19. Am Nat Chareon	6.9	-0.4	1.3	1.3
20. Bueng Kan	6.4	5.4	1.7	1.8
GRP	3.6	0.3	100.0	100.0

#### The North

*Overall,* gross regional product (GRP) of the North in real terms increased by 1.4%, continued from 1.2% in 2021, owing to an expansion in both agricultural and non-agricultural production. Agricultural production, which accounted for 23.4% of the North's total production, rose by 2.4%, sustained from 2.3% in 2021. Concurrently, non-agricultural production, accounting for 76.6% of the North's total production, expanded by 1.2% from 0.8% in 2021.

Agricultural production expanded by 2.4%, continued from 2.3% in 2021. Main crops production increased in rice and other fruits. Agricultural services increased due mainly to the expansion in the cultivated and the harvested area. Additionally, livestock production expanded from a rise of cattle and buffalo production. Fishery production also rose by 6.4% in response to freshwater fishing production. Meanwhile, non-perennial and swine output fell.





Non-agricultural production grew by 1.2%, continued from 0.8% in 2021. The sector with an expansion included education and construction which grew by 2.1% and 0.2%, orderly. Accommodation and food service activities expanded by 25.1%, thanks to relaxation of Covid-19 measures. Electricity, gas, steam and air conditioning supply; administrative and support service activities; and professional, scientific and technical activities increased by 3.0%, 18.1%, and 13.4%, respectively. In addition, manufacturing production expanded by 2.0%, with an increase of the production of food products; computers and electronic components and optical products; and wearing apparal, clothing and textiles. Human health and social work activities; real estate activities; and transportation and storage increased by 3.6, 2.3%, and 2.2%, correspondingly. Water supply, sewerage, waste management; and art, entertainment and recreation rose by 7.6% and 2.1%. Meanwhile, the sectors with a decline, included mining and quarrying which decreased by 1.7% in line with crude oil and natural gas production; and mining of coal and lignite. Moreover, wholesale and retail trade, repair of motor vehicles and motorcycles; and financial and insurance activities fell by 1.0% and 1.4%, respectively. Lastly, public administration and defence, compulsory social security; information and communication; and other service activities dropped by 2.9%, 5.6%, and 4.1%, sequentially.

# Northern GPP Growth Rate and Production Income Structure

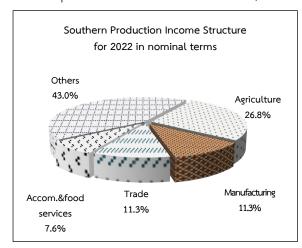
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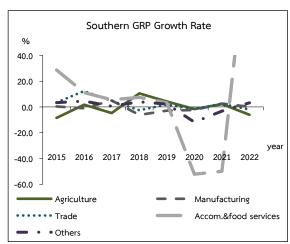
Province		Growth rate in real terms		ture al terms
	2021	2022	2021	2022
1. Chiang Mai	-1.2	1.2	18.9	18.6
2. Lampang	3.0	-1.0	5.9	5.7
3. Uttaradit	5.5	2.8	3.4	3.4
4. Mae Hong Son	2.6	-3.2	1.3	1.2
5. Chiang Rai	1.4	2.4	8.2	8.2
6. Phrae	-1.5	-0.7	2.4	2.4
7. Lamphun	8.2	3.9	6.9	6.9
8. Nan	1.4	2.3	2.8	2.9
9. Phayao	0.6	1.8	2.8	2.7
10. Nakhon Sawan	-0.7	3.0	8.8	9.0
11. Pitsanulok	5.0	-0.3	8.2	8.1
12. Kam Phaeng Phet	-1.4	3.0	8.9	9.7
13. Uthai Thani	11.5	4.6	2.3	2.4
14. Sukothai	3.2	2.6	4.0	4.0
15. Tak	-3.5	-3.2	4.9	4.6
16. Phichit	0.2	3.4	3.8	3.8
17. Petchabun	-0.9	-0.5	6.4	6.4
GRP	1.2	1.4	100.0	100.0

#### The South

*Overall,* gross regional product (GRP) of the South in real terms expanded by 3.2%, rebounded from a decrease of 3.2 % in 2021. This was mainly attributable to non-agricultural production, which accounted for 73.2% of the South's total production, grew by 7.0%, from a fall of 5.0% in 2021. Meanwhile, agricultural production, accounting for 26.8% of the South's total production, decreased by 6.1%, compared to a rise of 2.2% in 2021.

Agricultural production decreased by 6.1%, compared to an increase of 2.2% in 2021. The drop resulted from unfavorable weather conditions and rising cost of production, which led to a decline in the production of major crops, such as rubber, other fruits, and paddy. Besides, fishery production continually dropped, in response to a decrease in freshwater and marine fishing production. While, oil palm and other vegetable still expanded. Furthermore, there was a rise in agricultural services, resulting from an expansion in support activities for crop production and harvesting. In addition, livestock production increased from swine, cattle and buffalo.





Non-agricultural production increased by 7.0%, recovered from a fall of 5.0% in 2021. The expansion was seen in accommodation and food service activities with the astonishing increase of 142.7%, from a fall of 49.9% in 2021. Important factors contributing to this increase was from a rise in the number of foreign tourists and domestic visitors. Transportation and storage, financial and insurance activities, and real estate activities grew by 8.8%, 2.4%, and 4.1%, orderly. In addition, human health and social work activities increased by 4.6%, due to an expansion of public and private health services. Electricity, gas, steam, and air conditioning grew by 8.7%, according to an improvement of economic situation. Arts, entertainment, and recreation expanded by 8.5%. Other service activities; administrative and support service activities; water supply, sewerage, waste management, and remediation activities; professional, scientific, and technical activities; also increased by 5.2%; 89.4%; 1.5% and 7.6%, respectively. Meanwhile, there was a deceleration in manufacturing production, with an increase of 0.1%, due to a decline in rubber and plastic products. On the contrary, food products still expanded. The sectors with a decline included wholesale and retail trade; repair of motor vehicles and motorcycles, which decreased by 2.0%. Furthermore, education; public administration and defence; compulsory social security; and construction dropped by 1.0%, 2.3% and 4.5%, correspondingly. Mining and quarrying declined by 9.4%, in response to the reduction in crude oil and natural gas output from significant production fields. Lastly, information and communication sector decreased by 4.0%.

#### Southern GPP Growth Rate and Production Income Structure

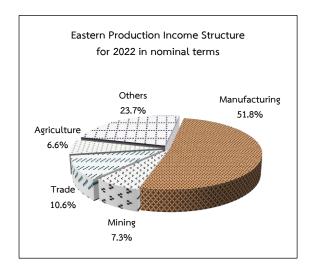
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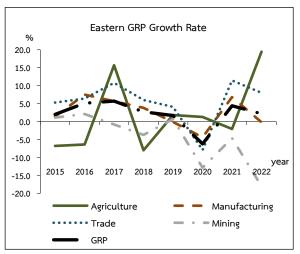
	Growth rate		Struc	cture
Province	in real	terms	in nominal terms	
	2021	2022	2021	2022
1. Phuket	-27.4	46.9	7.9	11.0
2. SuratThani	-2.8	10.4	14.1	15.1
3. Ranong	-3.8	-4.5	2.4	2.1
4. Phangnga	-15.3	12.8	3.6	4.0
5. Krabi	-3.2	6.5	5.6	5.9
6. Chumphon	2.5	-12.1	10.3	8.6
7. Nakhon Si Thammarat	-0.3	-3.1	14.4	13.8
8. Songkhla	2.2	-1.6	19.0	18.3
9. Satun	-1.3	-4.8	2.6	2.4
10. Yala	3.6	-10.7	4.0	3.4
11. Trang	1.6	0.5	5.4	5.3
12. Narathiwat	5.3	-6.7	3.6	3.2
13. Phatthalung	2.1	1.7	3.1	3.1
14. Pattani	2.6	0.3	4.0	3.8
GRP	-3.2	3.2	100.0	100.0

### The East

**Overall,** gross regional product (GRP) of the East in real terms grew by 2.2%, slowed down from 4.4% in 2021. The deceleration was driven by non-agricultural production, accounting for 93.7% of the East's total production, which increased by 1.0%, decelerated from 4.9% in 2021. Meanwhile, agricultural production, accounting for 6.6% of the East's total production, increased by 19.5%, compared to a 2.0% drop in 2021.

Agricultural production grew by 19.5%, in contrast to a 2.0% fall in 2021. The increase was attributable to crop and livestock production, and related service activities which rose by 22.2%, from a decrease of 3.4% in 2021, propelled by higher yields of tropical fruit production such as durian and mangosteen. In addition, fishing production increased by 2.1% in line with production of freshwater and marine fishing. However, livestock production declined by 0.5%, due to lower production of swine affected by African swine fever (ASF).





Non-agricultural production grew by 1.0%, decelerated from 4.9% in 2021. The slowdown was mainly attributed to wholesale and retail trade; repair of motor vehicles and motorcycles which increased by 8.0%, decelerated from 11.5% in 2021. Professional, scientific and technical activities rose by 4.4%, slowed down from 22.7% in 2021. Financial and insurance activities increased by 1.4%, compared to 3.2% in 2021. Besides, the sectors with an expansion included transportation and storage which rose by 4.9%, driven by land transport and sea transport; accommodation and food service activities which increased by 57.4%, recovered from a 21.6% drop in 2021, due to a relaxation of COVID-19 situation; water supply, sewerage, waste management, and remediation activities which grew by 12.8%; real estate activities which rose by 12.7%; and human health and social work activities which increased by 9.1%. Additionally, electricity, gas, steam and air conditioning supply; other service activities; arts, entertainment, and recreation; and administrative and support services activities also increased by 5.8%, 4.7%, 7.4% and 2.9%, respectively. However, sector with contraction was the manufacturing production, which fell by 0.2%, in contrast to an increase of 6.8% in 2021. The key factor was a decrease in production of computer, electronic, and optical products, despite an increase in refined petroleum products and motor vehicles. Meanwhile, mining and quarrying dropped by 18.0%, mainly due to lower crude oil and natural gas production. Lastly, information and communication; public administration and defense, compulsory social security; and education decreased by 6.8%, 1.5%, and 0.1%, respectively.

Eastern GPP Growth Rate and Production Income Structure

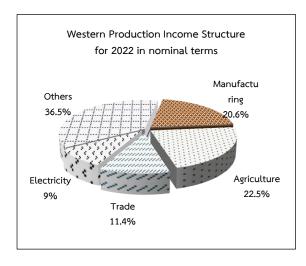
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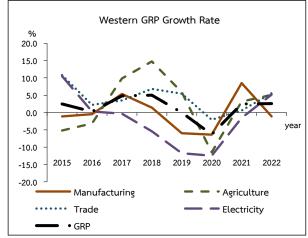
Province	Growth rate in real terms		Structure in nominal terms	
	2021	2022	2021	2022
1. Chonburi	6.8	6.3	34.2	35.8
2. Chachoengsao	15.9	8.1	13.6	13.4
3. Rayong	1.9	-3.1	32.7	33.0
4. Trat	-5.7	19.9	1.5	1.6
5. Chanthaburi	-2.7	17.9	4.6	4.7
6. Nakhon Nayok	-1.5	2.8	1.0	1.0
7. Prachinburi	-2.4	-11.8	10.8	8.9
8. Sa Kaeo	2.0	3.1	1.6	1.6
GRP	4.4	2.2	100.0	100.0

#### The West

*Overall,* gross regional product (GRP) of the West in real terms grew by 2.6%, from a 2.5% in 2021. Agricultural production, accounting for 22.5% of the West's total production, rose by 5.1%, accelerated from 3.2% in 2021. Besides, non-agricultural production, accounting for 77.5% of the West's total production, increased by 1.9%, slowed down from 2.3% in 2021.

Agricultural production rose by 5.1%, from 3.2% in 2021, due to 6.2% increase in crop and livestock production, and related service activities, mainly contributed to higher yields of main crops such as vegetables, paddy, and oil palm. Besides, livestock production grew by 4.0%, due to an increase in cattle, buffalo, swine and broiler production. Meanwhile, fishing production declined by 1.7%.





Non-agricultural production increased by 1.9%, slowed down from 2.3% in 2021. The deceleration was driven by accommodation and food service activities which grew by 13.5%, compared to 15.6% in 2021. Similarly, the sectors with an expansion included electricity, gas, steam, and air conditioning supply which increased by 5.2%, attributed to expansion of both public and private electric power generation, transmission, and distribution; wholesale and retail trade, repair of motor vehicles and motorcycles which expanded by 5.6%; transportation and storage which expanded by 6.0%; mining and quarrying which increased by 2.0%; and real estate activities which rose by 3.3%. Additionally, education; water supply, sewerage, waste management, and remediation activities; financial and insurance activities; human health and social work activities; professional, scientific and technical activities; administrative and support services activities also increased by 0.2%, 0.3%, 0.6%, 2.9%, 19.3%, and 31.1%, respectively. Meanwhile, the sector with contraction was manufacturing production, the main production activities of the West, which declined by 1.1%, due to lower production of beverage products; non-metallic mineral products; basic metals; electrical equipment; and machinery and equipment. Similarly, construction; and information and communication decreased by 4.0% and 7.5%, respectively. Lastly, arts, entertainment, and recreation remained the same.

#### Western GPP Growth Rate and Production Income Structure

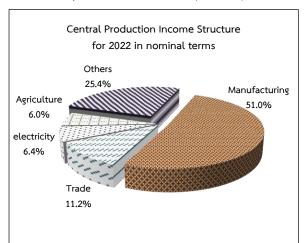
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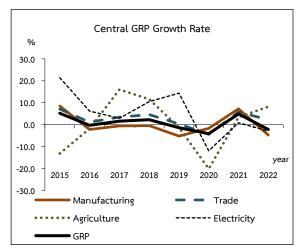
Province		Growth rate in real terms		cture nal terms
	2021	2022	2021	2022
1. Ratchaburi	1.5	-0.7	31.3	31.6
2. Kanchanaburi	2.1	6.8	18.5	19.1
3. Phachuap Khiri Khan	4.7	0.8	16.8	16.2
4. Phetchaburi	2.0	4.6	12.6	12.3
5. Suphan Buri	2.2	5.9	16.0	16.2
6. Samut Songkhram	4.8	-2.4	4.8	4.6
GRP	2.5	2.6	100.0	100.0

#### The Central

*Overall,* gross regional product (GRP) of the Central in real terms dropped by 2.2%, compared to a rise of 4.9% in 2021. The drop was from non-agricultural production, accounting for 93.0% of the Central's total production, which declined by 2.9%, after a rise of 5.0% in 2021. Agricultural production, accounting for 7.0% of the Central's total production, grew by 8.2%, accelerated from a 2.7% in 2021.

Agricultural production grew by 8.2%, accelerated from 3.4% in 2021, mainly attributed to the crop and animal production, and related service activities which expanded by 8.4%, higher than 3.6% in 2021, driven by higher yields of crops such as paddy, vegetables, and sugar cane. Meanwhile, fishing production rose by 0.3%, in line with an expansion of freshwater fishing production. Whereas, livestock production decreased by 2.5%, originated from a drop in production of cattle, buffalo and swine, despite an increase in poultry production.





Non-agricultural production declined by 2.9%, compared to a 5.0% expansion in 2021. This result was mainly from the manufacturing production, the greatest share of the Central production, which dropped by 4.7%, driven by a decrease in production of computers; tobacco products; rubber and plastic products; electrical equipment; and motor vehicles. Electricity, gas, steam and air conditioning supply declined by 2.9%. Public administration and defense; compulsory social security decreased by 3.0%. Transportation and storage dropped by 2.0%. Mining and quarrying dropped by 12.6%. Financial and insurance activities declined by 1.8%. Administrative and support service activities; and information and communication decreased by 6.0%. Conversely, the sectors with an increase included wholesale and retail trade, repair of motor vehicles and motorcycles at 2.3%; accommodation and food service activities at 2.1%; water supply, sewerage, waste management, and remediation activities at 2.5%; education at 0.3% and human health and social work activities at 2.9%. Besides, real estate activities; professional, scientific and technical activities; and art, entertainment and recreation rose by 0.1%, 0.3%, and 1.7%, respectively. Lastly, construction expanded by 9.1%.

Central GPP Growth Rate and Production Income Structure

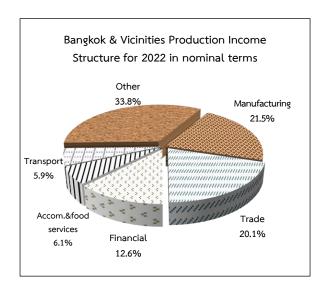
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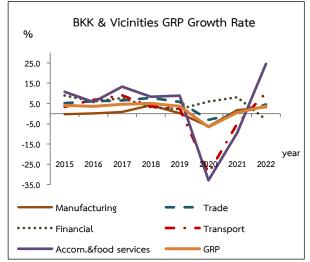
Province	Growth rate in real terms		Structure in nominal terms	
	2021	2022	2021	2022
1. Saraburi	2.8	-2.2	28.3	29.0
2. Singburi	0.2	3.2	3.0	3.1
3. Chai Nat	6.3	6.0	4.5	4.7
4. Ang Thong	-2.9	0.9	3.5	3.6
5. Lopburi	2.5	2.8	12.5	13.2
6. Phra Nakhon Si Ayutthaya	7.6	-4.8	48.2	46.4
GRP	4.9	-2.2	100.0	100.0

#### Bangkok and vicinities

*Overall,* gross regional product (GRP) of Bangkok and vicinities in real terms increased by 3.6%, accelerated from 0.5% in 2021. Non-agricultural production, accounting for 99.4% of Bangkok and vicinities' total production, grew by 3.7%, higher than 0.5% in 2021. Meanwhile, agricultural production, accounting for 0.6% of Bangkok and vicinities' total production, dropped by 1.2%, in contrast to an increase of 2.2% in 2021.

*Agricultural production* declined by 1.2%, compared to an increase of 2.2% in 2021. The decrease was attributable to crop and animal production, and related service activities which dropped by 10.3%, in line with a decrease in livestock production. Meanwhile, fishing production expanded by 25.7%.





Non-agricultural production expanded by 3.7%, accelerated from 0.5% in 2021. The expansion was propelled mainly by manufacturing production, which increased by 3.2%, mainly contributed to an increase in production of motor vehicles, trailers and semi-trailers; food products; beverage; and refined petroleum products. In addition, wholesale and retail trade, repair of motor vehicles and motorcycles also increased by 4.5%. Accommodation and food service activities rose by 24.5%, compared to a fall of 9.6% in 2021, due partly to relaxation of the government measures to control the spread of COVID-19. Transportation and storage grew by 10.2%, originated from an increase in air transport, land transport, and warehousing and transportation support activities. Information and communication rose by 6.9%. Professional, scientific, and technical activities increased by 0.8%. Education expanded by 4.3%. Human health and social work activities increased by 5.5%. Other service activities increased by 2.1%. Administrative and support service activities grew by 1.4%. Electricity, gas, steam, and air conditioning supply rose by 1.8%. Water supply, sewerage, waste management, and remediation activities increased by 0.1%. Meanwhile, the sectors with a decrease were financial and insurance activities which dropped by 2.9%; public administration and defense which decreased by 0.1%; real estate activities which dropped by 0.9%; construction which decreased by 4.6%; and arts, entertainment, and recreation which fell by 0.2%.

Bangkok & Vicinities GPP Growth Rate and Production Income Structure (%)

Province	Growth rate in real terms		Structure in nominal terms	
	2021	2022	2021	2022
1. Bangkok Metropolis	0.5	3.6	70.9	71.0
2. Samut Prakan	0.9	8.9	8.6	9.0
3. Pathum Thani	-0.7	4.9	5.5	5.5
4. Samut Sakhon	0.9	1.0	5.6	5.4
5. Nakhon Pathom	2.6	-1.9	4.8	4.5
6. Nonthaburi	-0.2	2.5	4.6	4.6
GRP	0.5	3.6	100.0	100.0

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# 2. GRP and GPP per capita 1

GRP per capita in 2022 was 248,789 baht per year, compared to 232,302 baht per year in 2021, representing a growth of 7.1%. In terms of region, the East had the highest GRP per capita with 515,683 baht per year, while the Northeast scored the lowest level at 95,948 baht per year. The difference between the highest and lowest was approximately 5.4 times, higher than 5.1 times in 2021. The ranking of GRP per capita from highest to lowest was as follows: the East, Bangkok and vicinities, the Central region, the West, the South, the North, and the Northeast, respectively.

In terms of growth, the growth of GRP per capita in 2022 was as follows: 10.3% for the West, 9.6% for the East, 8.2% for the South, 6.1% for Bangkok and vicinities, 5.6% for the North, 4.8% for the Northeast, and 2.1% for the Central.

**GRP Per Capita** 

Region	Baht/year		Growth rate (%)	
	2021	2022	2021	2022
Northeast	91,510	95,948	5.1	4.8
North	111,020	117,276	1.8	5.6
South	132,005	142,781	-0.6	8.2
East	470,492	515,683	8.1	9.6
West	157,544	173,815	3.4	10.3
Central	278,596	284,408	5.8	2.1
Bangkok and vicinities	438,753	465,327	0.5	6.1
Whole Kingdom	232,302	248,789	3.1	7.1

*GPP per capita* indicated that the provinces with 10 highest GPP per capita were mostly located in the East, Bangkok and vicinities, and the Central. These provinces had significant proportions of non-agricultural production, including manufacturing production; wholesale and retail trade, repair of motor vehicles and motorcycles; transportation and storage; financial and insurance activities; and accommodation and food service activities. Additionally, the provinces with 10 highest GPP per capita were Rayong, Bangkok Metropolis, Chonburi, Chachoengsao, Phra Nakhon Si Ayutthaya, Prachinburi, Samut Sakhon, Saraburi, Samut Prakan and Nakhon Pathom, respectively. Rayong's GPP per capita stood at 1,003,497 baht per year. This was driven by manufacturing production, led by production of refined petroleum products; chemicals and chemical products; and rubber and

<sup>&</sup>lt;sup>1</sup> GPP per capita is simply the value of total GRP or GPP divided by the number of people in the area. GRP or GPP per capita does not reflect how wealthy the people *really* are; it only shows how well off they *would* be if everybody got an equal share of what the economy produces.

plastic products, as well as mining and quarrying, mainly from crude oil and natural gas. Meanwhile, the 10 provinces with the lowest GPP per capita were mostly those whose primary income came from agricultural production, which experienced high uncertainties in both the quantity and price. Moreover, there was low concentration of non-agricultural production, especially for the level of manufacturing production, resulting in less economic activities. The lowest GPP per capita followed by Narathiwat, Mae Hong Son, Nong Bua Lam Phu, Mukdahan, Yasothon, Sakon Nakhon, Sa Kaeo, Chaiyaphum, Roi Et and Ubon Ratchathani. Narathiwat's GPP per capita was recorded at 60,876 baht per year which was mainly from the services sector. Lastly, the difference in GPP per capita between Rayong and Narathiwat was 16.5 times.

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GPP per capita in 2022 (Baht/year)

Province	Baht per year	Province	Baht per year
1. Rayong	1,003,497	40. Uthai Thani	116,862
2. Bangkok Metropolis	634,109	41. Trang	115,957
3. Chon Buri	598,448	42. Loei	114,156
4. Chachoengsao	494,545	43. Tak	112,899
5. Phra Nakhon Si Ayutthaya	456,286	44. Satun	112,502
6. Prachinburi	445,123	45. Uttaradit	111,799
7. Samut Sakhon	405,187	46. Lampang	108,106
8. Saraburi	342,370	47. Nong Khai	104,175
9. Samut Prakan	311,251	48. Ranong	103,800
10. Nakhon Pathom	295,404	49. Phayao	100,588
11. Chanthaburi	270,863	50. Phichit	100,241
12. Phuket	252,279	51. Yala	97,883
13. Ratchaburi	247,560	52. Udon Thani	96,546
14. Pathum Thani	243,639	53. Chiang Rai	94,375
15. Chumphon	238,147	54. Phetchabun	93,465
16. Lamphun	232,559	55. Nakhon Phanom	92,347
17. Phang Nga	224,869	56. Bueng Kan	89,033
18. Phachuap Khiri Khan	211,209	57. Maha Sarakham	88,134
19. Nonthaburi	200,764	58. Buri Ram	88,012
20. Krabi	190,573	59. Sukhothai	87,497
21. Trat	189,386	60. Phatthalung	87,154
22. Surat Thani	180,373	61. Si Sa Ket	86,259
23. Samut Songkhram	165,279	62. Phrae	86,170
24. Kam Phaeng Phet	164,014	63. Nan	86,057
25. Phetchaburi	156,261	64. Surin	85,152
26. Lop Buri	154,449	65. Kalasin	83,907
27. Singburi	151,441	66. Pattani	81,652
28. Songkhla	150,634	67. Am Nat Chareon	81,556
29. Chai Nat	148,039	68. Ubon Ratchathani	81,555
30. Kanchanaburi	145,628	69. Roi Et	80,249
31. Chiang Mai	136,043	70. Chaiyaphum	79,864
32. Nakhon Ratchasima	134,338	71. Sa Kaeo	78,482
33. Nakhon Sawan	131,523	72. Sakon Nakhon	77,408
34. Ang Thong	130,469	73. Yasothon	72,523
35. Khon Kaen	126,636	74. Mukdahan	67,885
36. Nakhon Si Thammarat	125,560	75. Nong Bua Lam Phu	67,363
37. Nakhon Nayok	123,366	76. Mae Hong Son	64,665
38. Suphan Buri	121,781	77. Narathiwat	60,876
39. Phitsanulok	118,558		