

Economic Development Policy Situation And Implication For Agriculture Of Ca Mau - Case Of Three Provinces Ca Mau, Bac Lieu, Soc Trang (2015-2020)

Pham Hung Nhan^{1*}, Dinh Tran Ngoc Huy, MBA^{2*}

^{1*}Political School of Ca Mau Province, Vietnam. (corresponding)

^{2*}Banking University HCMC Ho Chi Minh city Vietnam – International University of Japan,
Japan. (corresponding)

ABSTRACT

In the years 2015-2020, the agricultural economy of the Ca Mau Peninsula has developed relatively comprehensively, playing a key role in the local economic structure, firmly ensuring national food security in all situations. The article focuses on clarifying the preconditions affecting the actual situation of agricultural economic development in the Ca Mau Peninsula, thereby proposing issues related to general policies to remove bottlenecks and bottlenecks in the economy, the process of restructuring the region's agricultural sector in the next period.

Keywords: Ca Mau peninsula, economy, agriculture

1. Introduction

Ca Mau Peninsula is a sub-region of the Mekong Delta region (the Mekong Delta), located in the southernmost part of Vietnam, with an area of about 1.6 million hectares, in the provinces of Hau Giang, Soc Trang, Bac Lieu, Ca Mau, part of Kien Giang, part of Can Tho city. With a coastline of approximately 600 km, the CFCM has the East coast and the Gulf of Thailand coast, with many large estuaries; at the same time has great advantages in terms of natural conditions, climate, aquatic resources and natural resources. Favored nature, many beautiful landscapes along with the interference of many different cultural regions, the BDCM has conditions to develop attractive eco-tourism and cultural tourism; With a population of more than 4 million people (accounting for 4.5% of the total population of the country), this is also a large product consumption market. In general, this area is favorable for the development of agriculture, forestry and fishery, thereby developing into a large general economic region, which can spread to the whole Mekong Delta.

The most prominent economic development potentials and advantages of the CCM is the agricultural economy; but currently facing many difficulties due to many reasons, including that the provinces in the region do not have policies on linkage and coordination in development, especially infrastructure, transportation, seed supply chain (shrimp and rice), agricultural logic, etc., leading to local competition, farmers always suffer from the devaluation season, the scene of calling for help and rescue of agricultural products is happening every day. What is the solution

to the problem of agricultural economics in the BCC in the near future, especially in the state of fertile land with great development potential, but facing many challenges in the complex and dangerous contexts? from global climate change? What needs to be researched to build a mechanism for synergizing the great strength of the region, in the integration trend? The article from a historical perspective wants to focus on approaching these practical issues and is limited to the main and most direct scope of the three provinces of Ca Mau, Bac Lieu, and Soc Trang in the Ca Mau Peninsula (BDCM).

2. Contents

2.1. Natural and social conditions in Ca Mau, Bac Lieu and Soc Trang provinces

Climate and topography: The three provinces are located in a tropical climate affected by the monsoon, with clear dry and rainy seasons every year. Average annual rainfall: 2,000-2,300mm. Average temperature: 26.0C-26.50C-26.70C. The terrain is relatively flat. This area is less affected by storms and tropical depressions, not directly affected by floods of the Mekong river system; but is strongly influenced by the tides of the East Sea and a part of the diurnal tidal regime of the West Sea.

Natural resources

*** Land resources** - In terms of land size, the three provinces have 1120.3 thousand hectares (data according to the General Statistics Office, 2018), accounting for 27.45% of the total land area of the Mekong Delta; in which agricultural land has 458.2 thousand ha, accounting for 17.5% of agricultural land in the Mekong Delta; forestry land has 108.5 thousand ha, accounting for the highest - 42.78% of forestry land in the Mekong Delta; specialized land has 55 thousand ha, accounting for 21.69% of specialized land in the Mekong Delta; residential land has 17.1 thousand ha, accounting for 13.44% of land in the Mekong Delta.

- The proportion of agricultural land in the three provinces accounts for 40.9% of the total natural land area; in which the province with the highest percentage of agricultural land is Soc Trang - 64.33%; Bac Lieu - 38.16%; Ca Mau has the lowest percentage of agricultural land at 27.43%. The percentage of forestry land is the highest in the Mekong Delta (42.78%); in which Ca Mau has the highest proportion of forestry land in the total land area at 18.2%; In the remaining two provinces, the proportion of forestry land in the total land area is low from over 1.4% to nearly 3% (Ministry of Agriculture and Rural Development, 2019, p.59).

- Soc Trang's soil is highly fertile, suitable for the development of wet rice, short-term industrial crops such as sugarcane, soybeans, corn, vegetables such as onions, garlic and fruit trees such as pomelo, mango, durian... Bac Lieu's land is also capable of growing rice, perennials, crops and annual industrial crops. Although Ca Mau's agricultural land has a low percentage, it is also capable of growing rice, vegetables and crops.

***Forest resources:** Ca Mau forest is a type of wetland including mangroves distributed along the coast and concentrated in Ngoc Hien district; The brackish mangrove forest is mainly located deep inland in the districts of U Minh, Tran Van Thoi and Thoi Binh. Ca Mau forest ecosystem has many rare species of flora and fauna, high biological productivity,

and is of importance for nature conservation. The forest of Soc Trang belongs to the coastal mangrove forest system and the Melaleuca forest in the alkaline soil area. Bac Lieu forest is a mangrove, alum flooded forest with high biological productivity and great environmental and protection value, mainly Melaleuca and mangrove trees.

***Water resources: Rainwater is the main source of water for agricultural crops, freshwater aquaculture, brackish water and partly for domestic use. In the dry season, people often have to use water stored from the rainy season. Salt water is a resource and an advantage of the BDCM provinces to develop shrimp, saltwater fish, brackish water and coastal ecosystems..**

*Marine resources: The sea area and continental shelf under the sovereignty and jurisdiction of Vietnam managed by Ca Mau province covers an area of about 71,000 square kilometers. The continental shelf of Ca Mau sea is a shallow, gentle sea that stretches out to the sea. Soc Trang has 72 km of coastline with 2 large estuaries, Hau River (which flows into two large rivers Tran De and Dinh An) and My Thanh River, with significant sources of seafood including bottom fish, pelagic fish and shrimp. Bac Lieu has a coastline of 56km and a sea area of 40,000 square kilometers. The reserve of bottom fish and floating fish is more than 100,000 tons/year, which can be caught and processed for export (Ministry of Agriculture and Rural Development, 2019, p.37).

The infrastructure

- Road traffic: In addition to the inter-provincial highway 1A connecting Can Tho with 3 provinces, there is also National Highway 60 connecting Soc Trang with Tra Vinh, Ben Tre and Tien Giang provinces. Soc Trang, Bac Lieu and Ca Mau have national highway 1A and national highway Quan Lo - Phung Hiep (Ca Mau has more and national highway 63); 380 km from Ho Chi Minh City and 180 km from Can Tho city. From Ca Mau City, it is possible to travel to the provinces of the Mekong Delta easily.

- Waterway traffic: Soc Trang has 3 large estuaries, namely Dinh An, Tran De of Hau River and My Thanh of My Thanh River, which empty into the East Sea, which is very convenient for waterway and road traffic and tourism economic development. calendar. Bac Lieu has crisscrossed rivers, but is small and sedimented, so it does not serve much for transportation. Ca Mau has large rivers such as Bay Hap river, Ganh Hao river, Doc river, Trem river... which are very convenient for waterway traffic to travel throughout the Mekong Delta and Ho Chi Minh City. Ca Mau has an interlaced system of rivers, canals, canals and ditches, many large rivers are considered as the main canals of the region. Ca Mau also has a number of small ports such as Nam Can port with a cargo capacity of over 10,000 tons/year, Song Doc fishing port, which can accommodate ships of 600 CV or less.

In terms of human resources: The provinces in the Ca Mau Peninsula have a high population density and an abundant workforce of working age. Training and developing human resources in line with the socio-economic development process is one of the important breakthrough programs of the provinces. The labor force participation rate accounts for more than 19% compared to the Mekong Delta region and accounts for more than 3.5% of the labor force nationwide.

Agribusiness history:

In the past decades, the production area of the CFZ has mainly focused on rice with relatively limited freshwater resources and low efficiency. Up to now, it has been shifting to diversified agro-forestry-fishery production models. more diversified, making better use of natural resources, especially salt water for aquaculture. The change in production patterns has changed the demand for different types of water sources and the requirements for control and distribution of water. The Mekong Delta region annually contributes more than 90% of rice exports and nearly 60% of the country's export turnover. Particularly, shrimp export turnover is mainly concentrated in the BCM sub-region. Therefore, the agricultural economic development of the region and sub-region has a direct influence on the economic growth of the country, especially in terms of food security and bringing in foreign currency (Tang Duc Thang, 2011).). The recent transformation of production structure has helped increase added value for export agricultural products. Many key agricultural products of the region such as rice and aquatic products are present in the group of agricultural products with a high market share with an export turnover of over 1 billion USD/year of Vietnam. However, due to small and scattered farming methods; seed quality is not guaranteed, not yet tested and planned; post-harvest processing and preservation technology is still rudimentary, so the products are uneven, of poor quality, and unstable. Agricultural products for export are mainly raw, freshly processed or unprocessed products, with low added value. In addition, the capacity of enterprises to produce, process and export agricultural products is still limited, especially the capacity to manage, research and forecast the market, the competitiveness in the international market has not been experienced. experience. In addition, trade promotion and export promotion have not received much attention, so it has not created favorable conditions for export growth.

2.2. Current status of agricultural economy in Ca Mau peninsula 2015-2020

2.2.1. Agricultural economic growth rate

The BDCM sub-region has achieved relatively high economic growth in general compared to the Mekong Delta and the whole country, but the economic structure has slowly shifted towards industrialization and modernization. Specifically, the agricultural economic structure in the provinces is still high, industry and construction are low, especially Soc Trang and Bac Lieu. The structure of the service sector of the three provinces is quite similar. Because Ca Mau has a more active shifting economic structure (agriculture, forestry and fishery is lower than industry and services), its per capita income is higher than that of Bac Lieu and Soc Trang.

In particular, agro-forestry-fishery (AFF) still plays a very important role in the structure of economic sectors of the BDCM sub-region. The proportion of AFF sector in the economic structure of Bac Lieu, Ca Mau and Soc Trang is 42.96%, 33.38% and 45.42%, respectively. This proportion is higher than the proportions of industry - construction and the respective service industries of the provinces, on the one hand, showing the strength of the AFF sector of the BCM sub-region, but on the other hand, it also shows that the economy of the region is highly dependent. in the AFF sector (the proportion of the agricultural sector in the GDP structure of the country accounted for only 13.96% in 2019).

Table 1: Some economic indicators of the provinces in the Northern Territory in 2019 (Unit: %)

Criteria	Bạc Liêu	Cà Mau	Sóc Trăng
Economic growth rate (in 2010 prices)	10,61	7,0	6,1
Economic structure	100,0	100,0	100,0
+ Agriculture, forestry and fisheries	42,96	33,38	45,42
+ Industry and construction	18,54	32,03	13,75
+ Service	33,50	30,71	37,57
+ Product tax minus product subsidies	5,00	3,88	3,26

Source: Designers in 2019 Bac Lieu, Ca Mau, Soc Trang provinces

However, the proportion of production value (GTS) of the AFF sector fluctuates not the same in the provinces. In the period 2015-2019, this ratio of Bac Lieu and Soc Trang tends to decrease, of which Bac Lieu decreased by 6.57%, Soc Trang decreased by 4.20%. In contrast, the proportion of AFF production value in Ca Mau increased, from 31.07% in 2015 to 33.38% in 2019. Even before that, it increased to 35.84% in 2017 (Ca Mau Statistical Yearbook). , Bac Lieu, Soc Trang, 2019, p.39,44,34). This shows that Ca Mau agriculture still occupies a strategic position in the economic development of the province.

Table 2: Proportion of production value of agro-forestry sector at current prices of provinces in the Central Highlands (Unit: %)

Province	2015	2016	2017	2018	2019
Sóc Trăng	49,62	48,06	47,66	46,91	45,42
Bạc Liêu	49,53	48,28	47,36	45,96	42,96
Cà Mau	31,07	30,16	35,84	35,45	33,38

Source: Designers in 2019 Bac Lieu, Ca Mau, Soc Trang provinces

Through the above data table, the growth of the AFF sector of the provinces in the region is not uniform. Ca Mau is a province in the region with a fairly high growth rate of the AFF industry from 2018 and earlier (in 2018 even achieved an increase of 7.2%) but decreased in 2019 (only at 3.51%). The growth of the AFF sector in Soc Trang in 2019 is 3.53%, equivalent to Ca Mau and the highest is Bac Lieu with 6.05%.

In the past 5 years, the growth rate of the AFF sector has been uneven and volatile. 2016 is the year recorded with the lowest growth rate in 5 years in the period 2015-2019 (Ca Mau and Soc Trang less than 1%, Bac Lieu 4.03%). The level of fluctuations in the growth of the AFF sector between years shows that the industry's growth is unstable and vulnerable to external impacts (such as the impact of climate change in 2016).

Table 3: Growth rate of AFF sector (at 2010 constant prices) (Unit: %)

Province	2015	2016	2017	2018	2019
Sóc Trăng	2,25	0,91	3,27	5,57	3,53
Bạc Liêu	4,15	4,03	4,06	6,25	6,05

Cà Mau	5,15	0,96	5,07	7,20	3,51
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Source: Designers in 2019 Bac Lieu, Ca Mau, Soc Trang provinces

Another data showing the importance of the AFF sector in the economic development of the region is the structure of per capita income from AFF in the total income of the people. This figure in provinces is around 30%, the highest is Ca Mau at 31.1%, Bac Lieu and Soc Trang at 28.2%.

Table 4: Per capita income by month 2019 by source of income

Province	Total income/person /nomth	Monthly Income from wages and salaries	Revenues from agriculture, forestry and fishery	Non-agricultural, forestry and fishery revenues	Other revenue
Income (m VND)					
Sóc Trăng	3.898	1.324	1.099	836	638
Bạc Liêu	2.965	1.056	837	750	321
Cà Mau	3.214	1.112	1.000	845	258
Income structure (%)					
Sóc Trăng	100	34,0	28,2	21,4	16,4
Bạc Liêu	100	35,6	28,2	25,3	10,8
Cà Mau	100	34,6	31,1	26,3	8,0

Source: Vietnam Statistical Yearbook 2019

2.2.2. The structure of the agricultural sector in the BCC sub-region

* Fisheries: Shrimp is the leading pet. The shrimp farming area of the provinces in the region accounts for the main proportion compared to other aquaculture species. The ratio of shrimp farming area to aquaculture area of Soc Trang, Bac Lieu and Ca Mau is 72.92%, 96.84% and 93.43%, respectively, showing the absolute advantage of shrimp. The area for farming fish and other aquatic products accounts for a much smaller percentage (Table 5).

Table 5: Aquaculture area and production of some types of aquatic products of BDCM

	Sóc Trăng		Bạc Liêu		Cà Mau	
	Value	Ratio (%)	Value	Ratio (%)	Value	Ratio (%)
1. Aquaculture area (ha)	78.968	100	136.577	100	305.021	100
+ Shrimp	57.586	72,92	132.264	96,84	284.970	93,43
+ Fish	20.127	25,49	2.898	2,12	19.975	6,55

+ Other seafood	1.255	1,59	1.415	1,04	76	0,02
2.Aquaculture production (tons)	313.706	100	365.000	100	565.650	100
+ Shrimp	168.328	53,66	155.000	42,47	198.491	35,09
+ Fish	132.992	42,39	167.000	45,75	301.726	53,34
+ Other seafood	12.386	3,95	43.000	11,78	65.433	11,57

Source: Designers in 2019 Bac Lieu, Ca Mau, Soc Trang provinces

* Cultivation: Rice is the main and important crop of the BDCM. The rice land area of the provinces accounts for the majority of the total agricultural land area, specifically Soc Trang accounts for 70.18%, Bac Lieu accounts for 79.95% and Ca Mau is 68.92%. Meanwhile, fruit trees, although being a strength of the Mekong Delta in general, are concentrated in the middle and coastal areas (including 3 provinces in the Mekong Delta) and do not thrive. The area of fruit trees in the provinces of Soc Trang, Bac Lieu and Ca Mau only accounts for 13.25%, 5.73% and 5.89% of the area's agricultural production, respectively. Some other annual crops are small compared to rice and fruit trees (sugar cane, legumes, oilseed crops, ornamental flowers, etc.).

Table 6: Area and structure of some crops in the BDCM

Land type	Sóc Trăng		Bạc Liêu		Cà Mau	
	Area (ha)	Rate/Agri land (%)	Area (ha)	Rate/Agri land (%)	Area (ha)	Rate/Agri land (%)
acreage of agricultural land In there:	212.553	-	101.759	-	143.108	-
+ Area of land for rice cultivation	149.162	70,18	81.361	79,96	98.636	68,92
+ Area of land for growing fruit trees	28.167	13,25	5.830	5,73	8.432,9	5,89

Source: Designers in 2019 Bac Lieu, Ca Mau, Soc Trang provinces

* Livestock: The number of buffalo herds, as well as the region's pigs, tends to decrease in the period 2015-2019, in which the average reduction rate of the pig herd is 20.09%/year (in 2019 due to the influence of African cholera epidemic, but in previous years the number of pigs also

tended to decrease). Buffalo herd has a slower decrease, an average of 2.47%/year. However, the herd of cattle and poultry tended to increase during the same period with a relatively high increase, in which the herd of cattle increased on average 11.48%/year and the herd of poultry increased on average 8.49%/year. (Table 7).

Table 7: Number of livestock in the Northern Territory (Unit: thousands)

	2015	2016	2017	2018	2019	Average growth rate (%/year)
Buffalo	4,2	4,1	4,2	4	3,8	-2,47
Cow	27	29,1	30,6	32,8	41,7	11,48
Pig	660,3	692	632,1	611,9	269,2	-20,09
Poultry	9.069	9.529	10.146	11.272	12.564	8,49

Source: Vietnamese designer in 2019

In addition to the main livestock, the provinces in the region also develop a number of wild animals such as crocodiles, pythons, snakes, iguanas, turtles, crabs, ostriches, etc.

* Forestry: Ca Mau's forest area is the largest in the CFRD and the whole Mekong Delta with 96.1 thousand ha. The forest area is mainly planted forest, the proportion of natural forest accounts for only a smaller part (except Bac Lieu, the area of natural forest accounts for 40%). The forest cover rate of Soc Trang and Bac Lieu is very low (2.8% and 1.7 percent, respectively), that of Ca Mau is higher, at 18.4% (Table 8).

Table 8: Forest land area of the BDCM

	Sóc Trăng		Bạc Liêu		Cà Mau	
	Area (ha)	Ratio (%)	Area (ha)	Ratio (%)	Area (ha)	Ratio (%)
1. Total area of forest land with forests						
In there:	10,7	100,0	4,5	100,0	96,1	100,0
+ Natural forest	2,0	18,7	1,8	40,0	11,9	12,4
+ Planted forest	8,7	81,3	2,7	60,0	84,2	87,6
2. Forest cover rate (%)	2,8		1,7		18,4	

Source: Designers in 2019 Bac Lieu, Ca Mau, Soc Trang provinces

2.2.3. Labor situation in the sub-region

About labor structure

According to the 2019 Census data, the provinces in the Central Highlands have a high percentage of rural population. Typically, agricultural labor accounts for the majority (over 70%), urban laborers in the provinces account for less than 30%. With the current labor structure, it is difficult to change the economic structure, because the human resources needed for industry and services require qualified and skilled workers.

In fact, nearly 10 years ago, the Mekong Delta region has always led the country in the rate of net migration. In particular, this rate in two years 2017 and 2018 was up to -4 and -5.8%. This has been and continues to deepen the difficulties in human resources of the region and the Mekong Delta. The weakness in the human resources of the provinces is the negative net migration rate over the years, especially in Soc Trang, which increased significantly in 2018, this data shows that people migrate to other places to live and look for work. causing difficulties when local production methods will lack labor resources.

About the quality of labor

The percentage of trained workers over the years is lower than the average of the Mekong Delta region. (Table 9).

Table 9 Proportion of workers working in the economy who have received training (%)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Country	14,6	15,4	16,6	17,9	18,2	19,9	20,6	21,4	21,9	22,8
ĐBSCL	7,9	8,6	9,1	10,4	10,3	11,4	12,0	12,6	13,3	13,3
Sóc Trăng	5,7	7,9	9,1	11,8	10,1	9,7	10,2	10,3	11,3	12,5
Bạc Liêu	6,7	6,5	8,6	9,7	9,6	8,6	9,9	8,6	8,2	8,8
Cà Mau	5,8	5,5	5,1	7,5	7,1	9,7	10,2	9,8	12,5	12,3

Source: Web site of the General Administration of Accounts

The trained labor force working in the economy of provinces with a small proportion like Bac Lieu province is the lowest in 2018 with only 8.2%, and the highest is 12.4% in Ca Mau province in 2018. when the average of the Mekong Delta is more than 13% of the whole country, about 22%, this rate decreased over the years from 2013 to 2015, increased to 2016 and then decreased continuously. Ca Mau has a big change from 5.8% in 2010, from 2015 (9.7%) has made much better progress to 12.4% in 2018, while Soc Trang this percentage increased slightly in 2018. 2017 and 2018 (Vietnam Statistical Yearbook, 2019). In terms of professional qualifications, leadership, high and middle-level technical expertise account for a very low proportion of the labor force in each province. The average professional level of these provinces is also 3 times lower than the whole country. This is one of the reasons for slow socio-economic growth in this region, hindering the process of industrialization and modernization of agriculture and rural areas and international integration of the Southwest region in particular and the Mekong Delta. Generally speaking.

2.2.4. About science and technology (Science and Technology)

The situation of fluctuations in the number of science - technology establishments over the years from 2015 to 2019 of Soc Trang province increased steadily over the years from 2015 to 2017. Meanwhile, the number of establishments in Ca Mau province did not increase with a total of 6 bases. Particularly in 2018 increased from 06 establishments to 08, mainly science and technology service organizations. Soc Trang's educational and training institutions increased from 01 to 02 since 2017, while Ca Mau has no educational and training institutions in this field. Information technology resources of the provinces of the CMCC are shown in Table 10.

Table 10. Information technology resource indicators

Province	Index HTKT	Index HTNL	Index UD CNTT	ICT Index	Rank		
					2019	2018	2017
Cà Mau	0,15	0,47	0,26	0,2906	50	44	32
Bạc Liêu	0,20	0,31	0,20	0,2366	57	61	61
Sóc Trăng	0,21	0,23	0,22	0,2225	59	51	52

Source: Ministry of Information and Communications (VN ICT index 2019 ranking results)

Thereby, showing indicators on technical infrastructure, human infrastructure index, information technology (IT), IT application index, readiness index for IT - ICT development and application. The index is very low compared to the whole country and the ranking is getting lower and lower for Ca Mau province. This shows that the IT resources of the provinces are very limited.

In the activities of applying science and technology to production and life: Expenses for scientific research and technological development are expenditures including expenditures on development investment, expenditure on scientific research and technological development and expenditures on scientific and technological development. other related. The state of budget expenditure for scientific research and technological development from 2015 to 2019 is quite different in the provinces of the Southwest region, most of the funding is mainly from the local budget. Bac Lieu is the lowest province in terms of funding for this activity, mainly from local sources and no sources from the central government, and non-state sources account for a very low and negligible proportion. Ca Mau is the province with the most funding for scientific research and technology development, mainly from the local budget. In addition, Ca Mau also received significant funding from sources other than the state in 2017 and 2018. Particularly, Soc Trang province in 2018 received nearly 13% from the central budget while Ca Mau received 3. 5% and Bac Lieu are completely absent from the years 2015-2018. During this period, Bac Lieu did not have any research topic or project approved and censored by the Ministry of Science and Technology (According to the report on monitoring results on the situation and results of the implementation of the Science and Technology policy of the People's Council). conscious). The reason is that the province's highly qualified human resources are limited, and there is a lack of leading scientists in each field. Decentralization of investment from the budget for science and technology development is usually the central budget accounting for 70-75%, the local budget 25-30% (Ministry of Science and Technology, 2019 , p.187).

2.2.5. About import and export activities

In terms of export turnover, although Ca Mau has the highest export turnover (US\$1.2 billion/year), in terms of growth rate, it hardly increases. Although Soc Trang and Bac Lieu have low sales, the annual export growth rate is over 11%, of which the diversified export products are Soc Trang with the main export items from rice, shrimp, pangasius and fruit. trees, including purple milkweed are exported to the United States. The data shows that exports of 3 provinces have increased, in which the highest export turnover is Ca Mau. However, all three provinces have the common characteristic that the main export product is seafood, which is highly dependent on the policies of the importing country, affected by seasonality, weather, and unstable prices. . While processed products and products from industrial production in the provinces are almost non-existent, key export products are still heavily dependent on agriculture and seafood (shrimp, crab, rice), Part of the production is raw, or pre-processed, so the added value is low. Therefore, the provinces also consider boosting the production and processing of other products, diversifying the list of export goods, and focusing on the added value of agricultural products.

2.3. Groups of solutions related to agricultural development policy in the Ca Mau Peninsula sub-region

2.3.1. The group of master planning issues for agricultural economic development

Building a general plan for the BDCM sub-region in a modern, synchronous and sustainable direction is the key to fast, sustainable development and climate change adaptation for the whole Mekong Delta region, closely linked to the supply chain of two commodities. The main staples of the sub-region are fisheries (especially shrimp) and rice.

It is necessary to establish an effective inter-sectoral coordination mechanism among provinces in the BDCM sub-region to implement inter-sectoral policies and invest in infrastructure towards positive development in order to enhance commercial competitiveness. This coordination mechanism needs to have a corresponding institutional framework including stakeholders and policy leverage content. Stakeholders include local government authorities, private sector organizations and businesses, and development partners. The policy leverage content of this institutional framework should focus on two main groups of content: (i) regulations to encourage the private sector to participate in providing high-quality services; (ii) a master plan on logistics infrastructure (transportation, logistics center system, multi-modal connectivity) for trade, focusing on key agricultural products of the sub-region.

2.3.2. Group of issues promoting investment and agricultural services

Prioritize the expansion and investment in the agricultural sector. Localities can offer financial incentives to encourage loans to invest in business activities that bring about optimal performance in agricultural services. Strengthening the connection of agricultural product enterprises in the BCC to share information, connect services, share goods, balance two-way transportation of goods to reduce costs, support each other, complement each other in providing services to the whole region.

It is necessary to build a centralized information system to aggregate freight demand data to connect transport units together to gain economies of scale in transportation to reduce unit costs in transport. transportation and storage as well as reducing the empty running factor of the vehicle.

In addition, this sharing will help publicity and transparency in freight rates connecting directly with businesses that need to use the service.

2.3.3. Agricultural development infrastructure problem group

Transport infrastructure development

Invest in renovating and upgrading the sub-region's inland waterway network to increase the volume of transportation through this mode and create a good connection with the road network. Additional public investment is needed in inland ports because the private sector is very limited in investing in upgrading inland port infrastructure. Promote and accelerate research investment to put into planning deep-water port projects in the sub-region towards carefully calculating the demand for the volume of goods that can flow through the port to design a reasonable loading and unloading capacity. , select a suitable port construction site and take into account the factors of intra-regional connectivity. Currently, all three provinces have a need to build deep-water ports, which can lead to excess capacity and competition with each other. Simultaneously, it is necessary to build a road system connecting ports to facilitate the transportation of goods between ports.

The immediate priority solution is to invest in the construction of expressways connecting the provinces in the BRD sub-region and in the Mekong Delta. The development of the CFRD sub-region must be in the context of the general development of the Mekong Delta in relation to the development of transport infrastructure. The long-term solution will prioritize investment in building and developing a system of seaports, airports and centralized logistics centers associated with the development of agricultural, forestry and fishery output for domestic consumption and export.

Development of commercial connection infrastructure

The processing industry planning must be associated with the infrastructure system in the sub-region, serving as a satellite for the logistics center of the Mekong Delta in the future, meeting the needs of production, circulation of goods in the region and export in order to reduce costs. costs and uniformly manage the quality of agricultural and aquatic products. Investment in upgrading or building new wholesale markets should be integrated with monitoring activities such as food safety, phytosanitary, animal health and transport and corridor plans. goods.

Connecting infrastructure services must play an important role in connecting agricultural product value chains to enhance trade competition from farming and processing to domestic consumption or export. The main transport corridors for the two main commodities, which are seafood and rice, of the BCM sub-region have also been identified such as the Quan Lo - Phung Hiep expressway, the Ho Chi Minh - Trung Luong - My Thuan expressway, the national highway and the national highway. Highway 1A,... Most of the exported goods are mainly through the seaport of Ho Chi Minh City. Ho Chi Minh (Cat Lai port). Therefore, it is necessary to have a good organization of transportation between the CFCM sub-region to the ports of Ho Chi Minh City.

It is necessary to have a detailed and clear regional policy of the BCC sub-region for linkages in the development of agricultural logistics services, development of policies to attract

general investment in the field of trade, and the establishment of focal centers and distribution centers. distribution of goods, investment in development and connection of commercial infrastructure on the basis of socio-economic development of the entire CMBC sub-region.

2.3.4. The group of human resources, science and technology in agriculture

Invest in human resource development, especially human resources in the field of production of spearhead industries such as fine processing industry, automation, deep processing of food, foodstuffs and aquatic products... Expand the scale of mining. create human resources in many different forms such as online, online ... pay attention to training highly skilled workers to meet the needs of industrialization and modernization. Strengthen linkages and support for universities in the region in training and developing teaching staff. Coordinating human resource training between the Central Coast region and the Mekong Delta region to train human resources, adopt a policy to support tuition fees and employment right after completing the training course, as well as create favorable conditions to attract human resources. labor force outside the region to participate in economic activities in the region, especially for experts that the region has not yet trained.

Invest in improving the quality and expanding the form of training linkages of the provinces in the region with universities in the southern region. To soon develop a scheme to rearrange the system of training institutions in the region towards focusing on vocational training, techniques in service of aquaculture development, current high technology in processing and post-harvest preservation. to reduce losses, improve product quality, increase commercial value, and strongly export.

On the basis of the planning for sustainable modern agricultural development, it is necessary to invest in research and application of scientific and technological achievements in production and processing soon. Create high-quality agricultural products to meet domestic demand and ensure export, improve competitiveness in the international market. Focus on developing strong agricultural products of the region and create a brand name for export products. Create a favorable environment, improve business capacity and skills for enterprises to export key agricultural products of the BDCM such as rice, fruit trees and shrimp and crabs. Promote trade promotion activities to support agricultural product export enterprises to integrate deeply and sustainably, especially products using high technology.

3. Conclusion

The agricultural economy plays an important role in the Northern Delta region, with the highest value of seafood export turnover in the country, but here people's lives still face many difficulties and hardships with the number of poor households still accounting for a large proportion of the population. significantly higher than in other regions. The CMCC is large with 3 sides facing the sea, rich in potentials and advantages, but the resilience is not strong, the growth rate and economic mechanism shift towards industrialization and modernization are still slow. Agricultural products produced in recent years accounted for a high proportion, but mainly raw or semi-processed products, low gray matter content, did not create a premise for the acceleration and improvement of competitiveness. In fact, in order to improve the value of agricultural production, it must be based on science and technology with a highly skilled workforce such as biotechnology,

modern processing and preservation technology... but now , this is a "low-lying area", so the productivity of crops, livestock and product quality compared to other countries in the region is still low, the competitiveness is not high; There is a lot of loss of products after harvesting.

The Mekong Delta in general, and the BDCM in particular, want to change their skin and skin, and to create resilience for rapid and sustainable development, they must have effective policies of the state; It is necessary to establish a linkage mechanism to take full advantage of opportunities from inside and outside and not yet bring into full play the full strength, in order to accelerate the peninsula into a modern dynamic economic region with stable development. stability, sustainability in the context of climate change and comprehensive proactive international integration. The need to promulgate a specific policy mechanism for the region, in which it is necessary to define in detail the scientific relationship in coordination, regional linkage and between the region and the South in order to synthesize strength to promote comprehensive development, effectively bring into play regional advantages.

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