

**PRIME MINISTER**

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No: 667/QD-TTg

**SOCIALIST REPUBLIC OF VIETNAM**  
Independence - Freedom - Happiness

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*Hanoi, 27 2005 2009*

**DECISION**

**Approving a program to strengthen and upgrade the sea dyke system  
From Quang Ngai to Kien Giang**

**PRIME MINISTER**

Pursuant to the Law on Government Organization on 25 December 2001;

Consider the request of the Minister of Agriculture and Rural Development (at the submitted document no 2818/TTr-BNN-DD on 18 September 2008),

**DECIDES**

**Article 1.** Approve program to strengthen and upgrade the system of sea dike from Quang Ngai to Kien Giang with the following main contents:

**I. GUIDING VIEWPOINTS**

1. Establish a sea dike system from Quang Ngai to Kien Giang into a closed system to ensure saline prevention, flood drainage, water supply and other related objectives, ensure security and socio-economic development of each coastal region.
2. Sea dike system is built on the basis of using favorable natural conditions, and incorporates the scientific solutions between infrastructure and non-infrastructure solution, organized in association with the coastal population arrangement; meet the demands in short term consistent with the long term' objectives, and adapt to the adverse impacts of climate change to coastal region in Vietnam.
3. Focusing on management and maintenance after construction, especially reforestation of mangroves is inseparable part of the sea dyke system. Strengthen propaganda and education to raise community awareness and responsibility to protect seadyke; while expanding cooperation and exchange experience in the international sea dikes.

**II. OBJECTIVES**

1. Complete a closed seadyke system from Quang Ngai to Kien Giang to prevent the negative impacts from the sea, protect people's livelihood and sustainable socio-economic development in coastal provinces.
2. Contribute to creating infrastructure in accordance with the socio- economic development plan, environmental protection and national defense security of each locality, put priority investment in urgent areas.
3. In the long term, the sea dyke system ensures safety of people, economic development, environmental protection ecological coastal areas, to adapt to the risks of sea level rise and the adverse impact of climate change; while gradually establishes the coastal road for socio-economic development and coastal defense.

**III. MAJOR CONTENTS OF THE PROGRAM**

1. Strengthen and upgrade the existing dykes and build other assisted facilities, plant and maintain wave break forests along the dyke, create an unified and stable seadyke system, ensure security and socio-economic development of the coastal provinces.
2. Base on local socio-economic development plans, in each period, with consideration the effects of climate change, the coastal provinces regularly review, adjust and supplement the planning sea dyke system in accordance with the programs, sector's strategies and the whole country.

**IV. THE SOLUTIONS**

## 1. Infrastructural solutions:

a) Adjust and identify sea dike system: the adjustments of existing dykes and identification new dykes based on the following principles:

- Select dykes that pass to high terrain areas, geological background is relatively good to ensure stability and far from eroded areas.
- In front of sea dike, it requires having planted mangroves area with minimum of 500 m width.
- Use sand dunes, hills, existing infrastructures to complete dyke system; sustainably connect among stable points. In the river mouth, established dike should not affect to flooding releasing, and far away from eroded river bank.
- Selected dike that integrates with transportation service must comply with standards and guidelines of transport sector.
- To depositional areas, steps can be arranged to build extra dykes in front of the main dyke for land reclamation for socioeconomic development.
- To eroded areas, it requires doing research, carefully consider to remove residential areas to behind of the dike. When this solution is impossible, it requests to build infrastructures to prevent erosion, artificial deposition and site keeping.

## b) Dike design guidelines

Based on the importance of protected areas to determine the appropriate design standards, but at least against the storm level 9 and tidal level with 5% frequency, in order: the urban and the concentrated residential areas; security and defense facilities; the economic, cultural and important infrastructure areas and agricultural production areas.

## c) cross-section of the designed dike based on the principles

- Ensure stability in accordance to the design of existing sea dikes, easy to make higher for sea level rise.
- Road traffic is built in the dike's corridor based on sector's standards.
- For sea dikes in central region, it should be reinforced in three sites or arrange appropriate spill and combine to traffic on the dike's crest.

## d) Upgrade and build new bridges, drains:

Improvement of old culverts, building new bridges and culverts must be ensured: prevent water; suitable for agricultural production plan, aquaculture; control salinity intrusion; can be combined with the avoiding storm area for boats and ships. At first, it focuses on the areas where high demands for fresh water, high traffic have, the rest will be done in other phases of the program.

e) Strengthening monitoring, research to evaluate seasonal erosion of sea dike, the adverse effects of nature or negative effects of human ... and promptly proposed solutions and long terms responses to prevent or adapt to the impacts that ensure security and sustainable development of coastal provinces.

e) Planting trees and protecting coastal dikes: resources focus, especially in mobilizing the participation of communities in the protection and conservation of forest areas in front of the dike, ensuring the mangrove forest belts with a width minimum 500m. At the same time, each locality must be planned and plans to create planting area in front of the dike against waves. It must be planted grass on 2 sites of the dike or protect by stable materials to prevent erosion.

## 2. Non –infrastructure solutions:

a) Organize the survey, measurement, basic surveys in each region and each locality, on the basis of the review planned sea dike system from Quang Ngai to Kien Giang, ensuring compliance with the program, socio-economic development strategy in each coastal region, sectoral plan to adapt to negative impacts of climate change in coming years.

b) Continue to research and apply scientific and technological advances to consolidate and upgrade the system of dykes; enhancing research, monitoring, early warning erosion, deposition in high-risk areas to propose adjustments for appropriate sea dikes and prevention measures to mitigate or adapt.

c) Improve management and protection of sand dunes, strictly control the exploitation of natural resources and minerals in coastal areas.

d) Organize the sea dike management after investment, and strengthen propaganda and education to raise awareness, responsibility and mobilize the participation of communities in the management of tree planting and protection of wave brake forests, sea dike protection and ensuring the effectiveness and sustainability.

### 3. Capital investment:

Investment in strengthening, upgrading and building sea dike system from Quang Ngai to Kien Giang is focused from the following sources:

- The central budget to support the target's programs.
- Integrating from related programs and projects in the region such as transportation program in coastal area and coastal defense program and the East Sea – Island program.
- ODA loans, loans and other funding sources.
- Mobilizing from enterprises who benefit directly or have assigned exploitation and use coastal land for business purposes.

## VI. Duration

The program starts from 2009 to 2020, divided into three stages:

- Phase 1: from 2009 to 2012: mainly planting, soil filling to create a closed dyke system from Quang Ngai to Kien Giang.
- Phase 2: from 2013 to 2016: continue to strengthen dykes and roads.
- Phase 3: from 2017 to 2020: building bridges, major drainage, complete dyke system and road system.

### Article 2. Organization of implementation

1. Responsibilities of Province people Committees and cities from Quang Ngai to Kien Giang are:

- To direct the functional agencies developing investment projects and submit to authority for approval and implement approved investment projects.
- To arrange, spend capital from the local budget, combination of capital from other programs and projects in the province and capital support from the central government to, organizing the implementation of projects following the priority, ensuring the activeness and effectiveness of the capital investment.
- To promote the propaganda to enhance awareness and responsibility of local community on dyke protection, forest plantation and protection.
- To guide and encourage people to participate in afforestation, forest protection and management, dike protection and environmental protection in coastal areas.
- To create favorable conditions, and promote the socialization to attract organizations and individuals in construction, management and exploitation of infrastructures and ensure efficient investment and socio-economic development.

2. Ministry of Agriculture and Rural Development shall:

- Implement state management functions in dyke management, ensuring the dike system to be built as planned, become an unified system, consistent with the strategic development of the sector and local level; implement research, mechanism guidelines and policies relating to construction, maintenance and management of sea dikes ...
- Be guiding, investigating and urging the provinces to organize and implement construction projects as planned; apply regulations and standards in design and construction works; provide technical advices to important projects, needing technical complexity when the local authorities require.
- Implement research and apply scientific studies and advanced technologies in upgrading and constructing dikes, bridges, culverts on the dike ...

- Summarize, preliminary evaluate result of each investment phase to withdraw experience to improve the efficiency of investment and feasibility of the program.

3. Ministry of Planning and Investment will coordinate with the Ministry of Finance, Ministry of Agriculture and Rural Development and related localities to arrange capital to implement the program; based on the needs and state budget availability, annually provides budget to individual program to support the local authority in implementation; monitor and supervise the implementation of investment to ensure the performance and efficiency objectives.

4. Central Steering committee for flood and storm prevention is responsible for central monitoring and urge ministries, sectors and localities in organizing the implementation of programs, ensuring appropriate objectives and national action plan in prevention and mitigation of natural disasters by 2020.

**Article 3.** This decision takes effect from the date of signing.

**Article 4.** The ministers, heads of ministerial-level agencies, heads of agencies under the Government, Head of Steering committee for floods and storms prevention, Chairman of Province People Committee and cities: Quang Ngai, Binh Dinh, Phu Yen, Khanh Hoa, Ninh Thuan, Binh Thuan, Ba Ria - Vung Tau, Ho Chi Minh City, Tien Giang, Ben Tre, Tra Vinh, Soc Trang, Bac Lieu, Ca Mau and Kien Giang is responsible for implementing this decisions. /.

**Recipients:**

- As Article 4;
- Secretary of the Party Central Committee;
- Prime Minister, the Deputy Prime Ministers;
- Office of Central Steering Committee on the prevention and fight against corruption;
- Office of the Central Committee and the Party;
- Office of President;
- Ethnic Council and the Commission of the National Assembly;
- Office of the National Assembly;
- Supreme People's Court;
- Institute of the Supreme People's Procuracy;
- State Auditor;
- Fatherland Front of Vietnam;
- The Central Agencies of unions;
- Government office: head office, vice head office, informatic Ports, the Departments, Subsidiaries, Gazette;
- For filling, KTN (4 copies).

**KT. PRIME**

**DEPUTY PRIME**

**(signed)**

**Nguyen Sinh Hung**

LIST OF SEA DIKE SYSTEM FROM QUANG NGAI TO KIEN GIANG  
(promulgated enclosed with the decision no 667 dated 27 May 2009 of the Prime Minister)

No	Name of work	tasks of work	requested investment (billion VND)				Estimated budget in 2009 (billion VND)
			1 <sup>st</sup> phase (2009- 2012)	2 <sup>nd</sup> phase (2013- 2015)	3 <sup>rd</sup> phase (2016- 2020)	Total	
I. Quang Ngai province			300	350	215	865	50
1	sea dykes in Binh Son district	protect local people and production					
2	Sea dykes in Son Tinh district	protect local people and production					
3	Sea Dykes in Tu Nghia district	protect local people and production					
4	Sea Dykes in Mo Duc district	protect local people and production					
5	Sea Dykes in Duc Pho district	protect local people and production					
6	Sea dykes in Ly Son island district	protect local people and production					
II. Binh Dinh Province			150	200	145	495	50
1	Sea Dykes in Hoai Nhon district	protect local people and production					
2	Sea Dykes in Phu My district	protect local people and production					
3	Sea Dykes in Phu Cat district	protect local people and production					
4	Sea Dykes in Tuy Phuoc district	protect local people and production					
5	Sea Dykes in Qui Nhon city	protect local people and production					
III. Phu Yen Province			300	300	280	880	50

1	Sea Dykes in Song Cau district	protect local people and production					
2	Sea Dykes in Tuy an district	protect local people and production					
3	Sea Dykes in Dong Hoa district	protect local people and production					
IV. Khanh Hoa province			300	400	292	992	50
1	Sea Dykes in Van Ninh district	protect local people and production					
2	Sea Dykes in Ninh Hoa district	protect local people and production					
3	Sea Dykes in Nha Trang city	protect local people and production					
4	Sea Dykes in Cam Ranh district	protect local people and production					
V. Ninh Thuan Province			150	150	182	482	30
1	Sea Dykes in Ninh Hai district	protect local people and production					
2	Sea Dykes from Phan Rang town to Thap Cham	protect local people and production					
3	Sea Dykes in ninh Phuoc district	protect local people and production					
VI. Binh Thuan province			600	600	502	1702	100
1	Sea Dykes in Tuy Phong district	protect local people and production					
2	Sea Dykes in Bac Binh district	protect local people and production					
3	Sea Dykes in Phan Thiet city	protect local people and production					
4	Sea Dykes in Ham Thuan Nam district	protect local people and production					
5	Sea Dykes in Ham	protect local					

	Thuan Tan district	people and production					
6	Sea Dykes in La Gi town	protect local people and production					
VII. Ba Ria- Vung Tau province			800	800	447	2047	100
1	Sea Dykes in Xuyen Moc district	protect local people and production					
2	Sea Dykes in Dat Do district	protect local people and production					
3	Sea Dykes in Long Dien district	protect local people and production					
4	Sea Dykes in Vung Tau city	protect local people and production					
5	Sea Dykes in Con Dao island district	protect local people and production					
6	Sea Dykes in Ba Ria town	protect local people and production					
VIII. Ho Chi Minh city			300	400	236	936	50
1	Sea Dykes in Can Gio district	protect local people and production					
IX. Tien Giang province			400	500	522	1422	50
1	Sea Dykes in Go Cong Dong district	protect local people and production					
2	Sea Dykes in Tan Phu Dong district	protect local people and production					
X. Ben Tre province			500	500	480	1480	100
1	Sea Dykes in Binh Dai district	protect local people and production					
2	Sea Dykes in Ba Tri district	protect local people and production					
3	Sea Dykes in Thanh Phu district	protect local people and production					

XI. Tra Vinh province			400	500	346	1246	50
1	Dykes in river mouths of Ta, Huu Co Chien river in Chau Thanh district, Cau Ngang	protect local people and production					
2	Sea Dykes in Duyen Hai district	protect local people and production					
3	Sea Dykes in the south of Rach Tra Cu, Tra Cu district	protect local people and production					
XII. Soc Trang province			200	200	282	682	50
1	Cu Lao Dung sea dykes, Cu Lao Dung District	protect local people and production					
2	Sea dykes from My Thanh 1 Bridge to My Thanh 2 bridge, my Thanh district	protect local people and production					
3	Sea Dyke from My Thanh 2 bridge to Rach Bac Lieu, Chau Thanh district	protect local people and production					
XIII. Bac Lieu province			400	400	242	1042	50
1	East sea dykes	protect local people and production					
2	Dykes in river mouths	protect local people and production					
XIV. Ca Mau province			900	1200	1019	3119	150
1	West sea dykes	protect local people and production					
2	East sea dykes	protect local people and production					
3	Dykes in river mouths	protect local people and production					
XV. Kien Giang province			800	800	483	2083	100
1	Sea dykes from Mui Nai to Cong Cung Lon 2	protect local people and production					
2	Sea dykes from Cong	protect local					



	Cai Tre to Rach Gia city	people and production					
3	Sea Dykes in Rach Gia city	protect local people and production					
4	Sea Dykes from Tac Cau ferry station to Cong Tieu Dua (An Bien- an Minh)	protect local people and production					
	<b>Total</b>		<b>6.500</b>	<b>7.300</b>	<b>5.681</b>	<b>19.481</b>	<b>1010</b>