

*At the proposal of the Minister of Agriculture and Rural Development,*

**DECIDES:**

*Article 1.-* To approve the Scheme on the protection of endangered precious and rare aquatic species to 2015, and a vision to 2020, with the following principal contents:

**I. VIEWPOINTS**

- Protection of endangered precious and rare aquatic species in Vietnam is a regular and key task of related management agencies and science institutions as well as of the entire society for the protection of Vietnam's biodiversity and endemic organisms in compliance with international and regional treaties to which Vietnam is a contracting party.

- Protection of endangered precious and rare aquatic species must be based on regularly updated scientific grounds and the system of the State's legal documents; and, at the same time, be conducted in a coordinated manner, from management, protection and development to rational exploitation, associated with the protection of aquatic ecosystems and restoration of resources, contributing to the sustainable development of the fisheries sector.

**II. OBJECTIVES**

1. General objective

To stop the increase of species threatened with extinction, proceeding to restoring and developing endangered precious, rare and endemic aquatic species in Vietnam in a community-participatory approach, contributing to biodiversity conservation and sustainable development of the fishing industry.

**THE PRIME MINISTER**

**DECISION No. 485/QĐ-TTg OF MAY 2, 2008, APPROVING THE SCHEME ON THE PROTECTION OF ENDANGERED PRECIOUS AND RARE AQUATIC SPECIES TO 2015, AND A VISION TO 2020**

**THE PRIME MINISTER**

*Pursuant to the December 25, 2001 Law on Organization of the Government;*

*Pursuant to the November 26, 2003 Law on Fisheries;*

## 2. Specific objectives

- To establish a database system consisting of the lists of precious and rare aquatic species in Vietnam with their biological and ecological characteristics, zones of distribution, extent of endangerment, forms of and solutions for protection of those threatened with extinction;

- To establish and put into operation zones for endangered protection of precious and rare aquatic species in inland waters reserves which already exist or will be established in Vietnam in order to prevent their extinction and preserve their gene sources. To give priority to highly endangered endemic species of economic value or scientific significance;

- To strengthen professional capacity of staff of central and local specialized management agencies and research institutions and, at the same time, raise public awareness about the protection of endangered precious and rare aquatic species in Vietnam;

- To study for supplementation and perfection of policies and legal documents on the protection of endangered precious and rare aquatic species in Vietnam;

- To enhance international cooperation on the management and protection of endangered precious and rare aquatic species.

## III. SCOPE OF THE SCHEME

- Space: To conduct in a coordinated manner the protection of endangered precious and rare aquatic species in Vietnam's catchment-basins.

- Duration: From 2008 to 2020.

## IV. MAJOR TASKS OF THE SCHEME

1. During 2008-2010:

- To establish databases about precious and rare aquatic species which are endangered at different extents on the basis of synthesizing information from the national database center on aquatic organisms and, at the same time, propose appropriate forms of protection for each species;

- To draft legal documents guiding the management, exploitation, conservation and preservation of gene sources, identifying areas and species prohibited from exploitation;

- To build on an experimental basis protection zones for some endemic aquatic species such as spotted sardine, hilsa, bagarius, freshwater parrotfish, Armenian khramulya and Tonkin carp (at the middle stream of Red river and lower stream of Da river); eel, especially *anguilla marmorata* (at the lower stream of Ba river and Huong river); some kinds of fish at the estuary of Tien river in Ben Tre and Tra Vinh provinces; some migratory species in the Mekong river basin (An Giang province), some species in Ca Mau cape and mollusk breeding grounds along Thai Binh, Nam Dinh and Thanh Hoa coasts.

- To build protection zones for turtle breeding grounds in Con Dao,

- To upgrade material and technical foundations for centers for conservation of gene sources of precious and rare aquatic species;

- To restore, regenerate and protect successfully 20 precious and rare aquatic species which are highly endangered (through artificial reproduction for release into natural catchment-basins and preservation of gene sources);

- To improve professional qualifications of staff in the aquatic resource protection system at all levels, raise public awareness about the protection of precious and rare aquatic species;

- To coordinate with regional countries,

especially ASEAN countries and China, in implementing the Convention on International Trade of Endangered Species (CITES).

#### 2. During 2011-2015:

- To work out annual programs on specific networks for monitoring changes in endangered precious and rare aquatic species in all catchment-basins in Vietnam;

- To establish 15 zones for protection of aquatic species along coasts, at estuaries and in lagoons under local management;

- To successfully protect 18 precious and rare aquatic species from a high threat of extinction, raising the total number of protected species to 38 (50% of which are highly endangered);

- To study and enable successful reproduction of 10 precious and rare species for the restoration of resources;

- To continue propagation activities to raise public awareness;

- To develop contents and forms of teaching about the protection of precious and rare aquatic species for school pupils as well as university and college students of biological departments, which are appropriate to each educational level;

- To perfect the system of legal documents conformable with the roadmap of regional and international integration regarding responsible control of the fishing industry and control of transnational trade of precious and rare wild animals;

- To cooperate with countries in the same river basin or sea on the protection of migratory species.

#### 3. During 2016-2020:

- To additionally establish 22-30 zones for protection of precious and rare aquatic species in catchment-basins throughout the country, creating a system of reserves under planning;

- To complete the technology for artificial reproduction of precious and rare aquatic species so as to proactively prepare breeds for additional release into catchment-basins;

- To socialize the protection and restoration of precious and rare aquatic species.

### V. SOLUTIONS FOR IMPLEMENTATION OF THE SCHEME

#### 1. Mechanisms and policies

- To formulate mechanisms and policies for the protection, conservation, regeneration and development of endangered precious and rare aquatic species;

- To formulate mechanisms and policies for decentralization of the management, protection and restoration of endangered precious and rare aquatic species to local (district and commune) administrations and communities;

- To formulate mechanisms to encourage domestic and foreign organizations and individuals to set up technology transfer centers, centers for scientific and technological consultancy on the protection, restoration and development of endangered precious and rare aquatic species;

- To formulate and implement the 2008-2020 strategy on the protection and development of aquatic resources, first of all to meet the requirements for fishing development at reservoirs, rivers, tidal and coastal areas; to ensure harmony between protection, rational exploitation and proactive restoration of aquatic species according to requirements of sustainable development of the fisheries industry, securing stable livelihood for fishermen.

#### 2. Science and technology

- To conduct scientific researches so as to

supplement information on endangered precious and rare aquatic species (their biological and ecological characteristics, population changes...), propose appropriate mechanisms and forms of protection;

- To concentrate on research into technologies for artificial reproduction of endangered precious and rare aquatic species, including the import of advanced technologies from foreign countries so as to prepare pure breeds for release into natural catchment-basins;

- To supplement and perfect technical processes and regulations on artificial reproduction of precious and rare aquatic species, specifying minimum sizes of animals to be exploited, mechanisms for monitoring restricted zones and zones restricted for a definite time limit, as well as activities of producing, trading in and consuming precious and rare aquatic species;

- To focus on breakthrough researches into the management of gene sources, migration and restoration of precious and rare and endemic aquatic species.

### 3. Training and education

- To formulate and implement a strategy on training and strengthening the capability of aquatic resource protection personnel at all levels so as to meet the renewal requirements of the industry; to raise awareness of communities participating in the protection of aquatic resources through on-site and short-term training;

- To compile educational contents and programs on the protection of aquatic resources and precious and rare aquatic species for inclusion in textbooks at all educational levels with appropriate contents, teaching methodologies and management mechanisms so as to raise training quality;

- To attract domestic training institutions, non-governmental organizations and international projects to participate in providing support for training personnel in charge of management and regeneration of resources as well as those directly managing inland aquatic reserves and marine reserves;

- To intensify propagation and education activities in various forms so as to raise community awareness:

+ To compile materials suitable to knowledge levels of fishermen and pupils, helping them be aware of their roles and responsibilities in the protection of endangered precious and rare aquatic species;

+ To organize propagation and education on the mass media so as to raise community awareness;

+ To train fishing controllers, reserve administrators and aquatic resource protection officers into communicators to perform the above-mentioned tasks.

### 4. International cooperation

- To enhance international cooperation, especially with the neighboring countries (China, Thailand, Laos, Cambodia) in the field of protection of migratory aquatic species, establishment of inter-national reserves and other contents related to endangered aquatic species;

- To take the initiative in actively cooperating with advanced nations, institutions and schools in the region and the world in research, education and training so as to quickly approach the region's and the world's advanced scientific and technological standards on nurturing, regeneration, exploitation and protection of aquatic resources, developing human resources and upgrading equipment and facilities for the

industry;

- To implement international commitments related to the exploitation and protection of aquatic resources to which Vietnam has acceded such as the Convention on International Trade in Endangered Species (CITES) and the Convention on Biodiversity (CBD), so as to enhance Vietnam's position in the region and the world; to seek new support capital sources such as from the Global Environmental Fund (GEF), the Clean Development Mechanism (CDM)...

#### 5. Investment

- The State shall arrange state budget capital for the tasks of investing in and researching endangered precious and rare aquatic species, building protection zones and managing gene funds; researching the migration and naturalization of pure breeds, nurturing and regeneration of precious and rare species for release into catchment-basins; building material and technical foundations for research institutions to participate in the protection of precious and rare aquatic species; organizing training and propagation to raise awareness of conservation officers as well as people nationwide;

- To reserve budget funds for investment in building inland aquatic reserves and marine reserves, aquatic resource recreation zones, establishments to salvage precious and rare aquatic species, and establishments to preserve gene sources of endangered aquatic species;

- The total state budget fund for the Scheme in the 2008-2020 period is VND 576.0 billion (see the attached detailed Appendix), of which:

- + During 2008-2010: VND 228 billion;
- + During 2011-2015: VND 223 billion;
- + During 2016-2020: VND 125 billion.

## VI. ORGANIZATION OF IMPLEMENTATION

1. The Ministry of Agriculture and Rural Development shall assume the prime responsibility for, and coordinate with other ministries, branches and provincial/municipal People's Committees in, organizing the implementation of the Scheme on the protection of endangered precious and rare aquatic species.

2. The Ministry of Planning and Investment and the Ministry of Finance shall balance and allocate capital from the state budget and international financial support sources to ensure funds for the implementation of the Scheme.

3. Concerned ministries and branches shall organize the implementation of the Scheme's contents related to their respective branches.

4. Provincial/municipal People's Committees shall organize the implementation of the Scheme through the formulation and implementation of plannings and plans of specific projects; coordinate with ministries, centrally run branches and international organizations in attracting capital sources and providing technical supports so as to gain the best results.

*Article 2.-* This Decision takes effect on the date of its signing.

*Article 3.-* Ministers, heads of ministerial-level agencies, heads of government-attached agencies and presidents of provincial/municipal People's Committees shall implement this Decision.

*For the Prime Minister*  
*Deputy Prime Minister*  
**HOANG TRUNG HAI**

**Appendix 1. GENERAL TABLE OF CAPITAL SOURCES FOR PROJECTS AND INVESTMENT PHASES**

*(Attached to the Prime Minister's Decision No. 485/QĐ-TTg of May 2, 2008, approving the 2008-2020 Scheme on the protection of endangered precious and rare aquatic species)*

*(Unit of calculation: VND million)*

No.	Titles of tasks, projects	Total fund	State budget			Capital of public enterprises	Capital of non-governmental organizations	Notes
			Total	Of which				
				Central budget	Local budget			
<b>A</b>	<b>During 2008-2010</b>	<b>228,000</b>	<b>178,000</b>	<b>119,000</b>	<b>60,000</b>	<b>24,000</b>	<b>25,000</b>	
<i>1</i>	<i>Projects on in-situ protection of precious and rare aquatic species for sustainable development of resources</i>	<i>61,000</i>	<i>58,000</i>	<i>48,000</i>	<i>10,000</i>		<i>3,000</i>	
1	Establishing and putting into operation conservation zones of spotted sardine, hilsa, Armenian khramulya, bagarius, dwarf catfish, freshwater parrotfish, and breeding grounds of aquatic species at the middle stream of Red river and the lower stream of Da river	10,000	9,000	7,000	2,000		1,000	The GEF builds up a model of community - based management of aquatic resources
2	Establishing and putting into operation conservation zones of typical migratory species of the piscifauna in the Tien river estuary basin of Ben Tre and Tra Vinh provinces	10,000	10,000	8,000	2,000			

3	Establishing and managing sea turtle conservation and salvage zones	20,000	18,000	12,000	6,000		2,000	IUCN strengthens sea turtle conservation capacity
4	Zoning off for (in-situ) conservation of <i>Sargassum quinhon</i> , <i>Hydropuntia euchemoides</i> and <i>Kappaphycus cottonii</i> along the central coast	5,000	5,000	5,000				Basic surveys are funded with the central budget
5	Assessing the actual state of ladyfish, oxeye, oil sardine, <i>nematalosa nasus</i> , and suggesting measures to restore their populations	6,000	6,000	6,000				
6	Investigating, surveying, making digital maps on the status of precious and rare aquatic species	10,000	10,000	10,000				
<b>II</b>	<b>Projects on ex-situ protection and multiplication of endangered precious and rare aquatic species</b>	<b>29,000</b>	<b>13,000</b>	<b>8,000</b>	<b>5,000</b>	<b>14,000</b>	<b>2,000</b>	
1	Preserving a number of endemic freshwater species which are precious and rare but threatened with extinction	10,000	6,000	4,000	2,000	4,000		Regional and local aquatic breed centers are funded with the state budget

2	Researching artificial reproduction and the process of raising of <i>Sinohyriopsis cumingii</i> (Lea, 1852)	5,000				5,000		Enterprises coordinate with scientific research institutions
3	Researching artificial reproduction and the process of raising of <i>Gibbosula crassa</i> (Wood, 1815)	4,000				4,000		
4	Researching artificial reproduction and formulating the process of creating breed sources for some sea turtle species (hawksbill, leatherback turtle, green turtle) for release into the sea	10,000	7,000	4,000	3,000	1,000	2,000	
<b>III</b>	<b>Projects on research into endangered precious and rare aquatic species</b>	<b>35,000</b>	<b>25,000</b>	<b>18,000</b>	<b>7,000</b>		<b>10,000</b>	
1	Investigating into and surveying reserves of precious and rare aquatic species, proposing rational exploitation solutions for development of resources	30,000	20,000	15,000	5,000		10,000	Non-governmental organizations provide financial supports for research and management of migratory species

2	Identifying restricted areas, areas restricted for a definite time limit for the protection of endangered precious and rare aquatic species	5,000	5,000	3,000	2,000			
<b>IV</b>	<b><i>Projects on enhancing the management and supervision of changes in endangered precious and rare aquatic species</i></b>	<b>2,000</b>	<b>2,000</b>	<b>2,000</b>				
1	Decree on management of endangered precious and rare aquatic species, legal documents on conservation, preservation of gene sources, exploitation, transportation and consumption of precious and rare aquatic species	2,000	2,000	2,000				
<b>V</b>	<b><i>Projects on enhancing the control of the trade in endangered precious and rare aquatic species and control of alien aquatic organisms</i></b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>				
1	Inventorying and assessing impacts of alien aquatic organisms penetrating into Vietnam	1,000	1,000	1,000				
<b>VI</b>	<b><i>Projects on strengthening management capacity, propagation and education, and fisheries extension</i></b>	<b>98,000</b>	<b>78,000</b>	<b>40,000</b>	<b>38,000</b>	<b>10,000</b>	<b>10,000</b>	

1	Improving professional capacity of protecting aquatic resources for fisheries extension officers in localities where exist species which need to be protected	33,000	33,000	20,000	13,000			
2	Disseminating, propagating on the mass media (radio, television, commune addressing systems) information on the protection of endangered precious and rare aquatic species	65,000	45,000	20,000	10,000	10,000		
<b>VII</b>	<b>Projects on renovating institutions and policies for management of endangered precious and rare aquatic species</b>	<b>2,000</b>	<b>2,000</b>	<b>2,000</b>				
1	Elaborating community regulations on protection of precious and rare aquatic species	1,000	1,000	1,000				
2	Reviewing, assessing effectiveness of current legal documents on the protection of precious and rare aquatic species in Vietnam	1,000	1,000	1,000				
<b>B</b>	<b>During 2011-2015</b>	<b>223,000</b>	<b>188,000</b>	<b>138,000</b>	<b>50,000</b>	<b>7,000</b>	<b>28,000</b>	
<b>I</b>	<b>Projects on in-situ protection of precious and rare aquatic species for sustainable development of resources</b>	<b>35,000</b>	<b>35,000</b>	<b>25,000</b>	<b>10,000</b>			

1	Scientific grounds for building a number of reserves of precious, rare and valuable <b>freshwater</b> mollusks in three places: Bang river in Cao Bang, Ky Cung river in Lang Son and the confluence in Viet Tri	5,000	5,000	5,000				Basic surveys are funded with the central budget
2	Establishing 10 zones for conservation of precious and rare species in inland waters and along coasts under national management	30,000	30,000	20,000	10,000			
<b>II</b>	<b><i>Projects on ex-situ management and multiplication of endangered precious and rare aquatic species</i></b>	<b>53,000</b>	<b>43,000</b>	<b>28,000</b>	<b>15,000</b>	<b>5,000</b>	<b>5,000</b>	
1	Planting for multiplication of <i>Betaphycus gelatinum</i> in Hai Van (Thua Thien-Hue), Hai Phong and Quang Ninh sea areas	3,000	3,000	3,000				
2	Domesticating and allowing the reproduction of a number of freshwater fish species in service of the regeneration of aquatic resources	30,000	20,000	10,000	10,000	5,000	5,000	
3	Testing the production and regeneration of precious and rare coral reefs	20,000	20,000	15,000	5,000			

<b>III</b>	<b><i>Projects on research into endangered precious and rare aquatic species</i></b>	<b>50,000</b>	<b>35,000</b>	<b>25,000</b>	<b>10,000</b>		<b>15,000</b>	
1	Researching biological and ecological characteristics of endangered precious and rare aquatic species	50,000	35,000	25,000	10,000		15,000	
<b>IV</b>	<b><i>Projects on enhancing management and supervision of changes in endangered precious and rare aquatic species</i></b>	<b>25,000</b>	<b>20,000</b>	<b>10,000</b>	<b>10,000</b>	<b>2,000</b>	<b>3,000</b>	
1	Strengthening management capacity for the system of protection of aquatic resources from the central to local levels	25,000	20,000	10,000	10,000	2,000	3,000	
<b>V</b>	<b><i>Projects on enhancing the control of the trade in endangered precious and rare aquatic species and control of alien aquatic organisms</i></b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>				
1	Controlling the exploitation, transportation, consumption, import and export of endangered precious and rare aquatic species	5,000	5,000	5,000				
<b>VI</b>	<b><i>Projects on enhancing management capacity, propagation and education, and fisheries extension</i></b>	<b>25,000</b>	<b>25,000</b>	<b>25,000</b>				

1	Researching for inclusion of contents on the protection of precious and rare aquatic species into general education programs at all levels and programs of pedagogic schools (biology departments)	25,000	25,000	25,000				To be implemented until 2020
<i>VII</i>	<i>Projects on renovating institutions and policies for management of endangered precious and rare aquatic species</i>	<i>15,000</i>	<i>10,000</i>	<i>5,000</i>	<i>5,000</i>		<i>5,000</i>	
1	Establishing databases on changes in precious and rare species through a modern information network for prevention of degradation of resources and loss of biodiversity	15,000	10,000	5,000	5,000		5,000	
<i>VIII</i>	<i>Projects on international cooperation in the protection of endangered precious and rare aquatic species</i>	<i>15,000</i>	<i>15,000</i>	<i>15,000</i>				
1	Cooperating with Cambodia on establishing the Vietnam-Cambodia transnational zone for breed conservation of migratory aquatic species	15,000	15,000	15,000				
<i>C</i>	<i>During 2015-2020</i>	<i>125,000</i>	<i>90,000</i>	<i>55,000</i>	<i>35,000</i>	<i>20,000</i>	<i>15,000</i>	

<b>I</b>	<b>Projects on in-situ protection of precious and rare aquatic species for sustainable development of resources</b>	<b>60,000</b>	<b>35,000</b>	<b>5,000</b>	<b>30,000</b>	<b>15,000</b>	<b>10,000</b>	
1	Establishing zones for conservation of endangered precious and rare species in 15 inland waters areas under local management	60,000	35,000	5,000	30,000	15,000	10,000	
<b>II</b>	<b>Projects on ex-situ and multiplication of endangered precious and rare aquatic species</b>	<b>10,000</b>	<b>10,000</b>	<b>10,000</b>				
1	Preserving a number of endemic saltwater species which are precious and rare but threatened with extinction and difficult to domesticate by caging	10,000	10,000	10,000				
<b>III</b>	<b>Projects on research into endangered precious and rare aquatic species</b>	<b>20,000</b>	<b>10,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	
1	Testing exploitation forms and tools of sizes suitable to each precious and rare aquatic species	20,000	10,000	5,000	5,000	5,000	5,000	
<b>IV</b>	<b>Projects on enhancing the control of the trade in endangered precious and rare aquatic species and control of alien aquatic organisms</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>				

1	Strengthening the capacity of strictly inspecting and supervising the penetration of alien aquatic organisms into Vietnam	5,000	5,000	5,000				
V	<i>Projects on international cooperation on the protection of endangered precious and rare aquatic species</i>	30,000	30,000	30,000				
1	Establishing a regional information forum and exchanging experience with littoral countries on a responsible code of conduct in fishing industry and protection of precious and rare migratory aquatic species	30,000	30,000	30,000				
	<b>Total of A, B and C</b>	<b>576,000</b>	<b>457,000</b>	<b>312,000</b>	<b>145,000</b>	<b>51,000</b>	<b>68,000</b>	

**Appendix 2. LIST OF PROJECTS ON AND TASKS OF PROTECTION OF ENDANGERED  
PRECIOUS AND RARE AQUATIC SPECIES IN THE 2008-2020 PERIOD**

*(Attached to the Prime Minister's Decision No. 485/QĐ-TTg of May 2, 2008, approving  
the Scheme on the protection of endangered precious and rare aquatic species, the 2007-2020 period)*

No.	Titles of projects and tasks	Implementing agencies	Coordinating agencies	Estimated funds (VND billion)	Order of priority	Notes
					Implementation duration	
<b>I. Projects on in-situ protection of precious and rare aquatic species for sustainable development of resources: VND 166.0 billion</b>						
1	Establishing and putting into operation conservation zones of spotted sardine, hilsa, Armenian khramulya, bagarius, dwarf catfish, freshwater parrotfish, and breed grounds of aquatic species at the middle stream of Red river and the lower stream of Da river	Ministry of Agriculture and Rural Development (MARD)	Ministry of Natural Resources and Environment (MNRE), People's Committees of the provinces of Vinh Phuc, Ha Tay, Phu Tho and Hoa Binh	10.0	1  2007-2010	
2	Establishing and putting into operation conservation zones of typical migratory species of the piscifauna in the Tien river estuary basin of Ben Tre and Tra Vinh provinces	MARD	MNRE; People's Committees of Ben Tre and Tra Vinh provinces	10.0	1  2008- 2010	
3	Establishing 10 zones for conservation of precious and rare species in inland waters and along coasts under national management	MARD	MNRE; People's Committees of concerned provinces	30.0	2  2011-2015	

4	Establishing zones for conservation of endangered precious and rare species in 15 inland waters areas under local management	Provincial People's Committees	MARD, MNRE, People's Committees of concerned provinces	60.0	3	
					2015-2020	
5	Establishing and managing sea turtle conservation and salvage zones	MARD	MNRE, People's Committees of the provinces of Khanh Hoa, Binh Thuan, Phu Yen and Ba Ria-Vung Tau	20.0	1	
					2008-2010	
6	Scientific grounds for building a number of reserves of precious, rare and valuable freshwater mollusks in three places: Bang river in Cao Bang, Ky Cung river in Lang Son and the confluence in Viet Tri	MARD	Institute of Ecology and Biological Resources, People's Committees of concerned provinces	5.0	2	
					2010-2012	
7	Zoning off for (in-situ) conservation of <i>Sargassum quinhon</i> , <i>Hydropuntia euchenoides</i> and <i>Kappaphycus cottonii</i> along the central coast	Institute of Marine Resources and Environment	Nha Trang Institute of Oceanology	5.0	2	
					2009-2010	
8	Assessing the actual status of ladyfish, oxeye, oil sardine, <i>nematalosa nasus</i> , and suggesting measures to restore their populations	MARD	Research Institutes for Aquaculture No. 1, 2 and 3	6.0	2	
					2009-2010	

9	Investigating, surveying, making digital maps on the status of precious and rare aquatic species	Department for Exploitation and Protection of Aquatic Resources	Research Institute for Marine Fisheries, Research Institutes for Aquaculture No. 1, 2 and 3, Nha Trang Institute of Oceanology, Institute of Marine Resources and Environment	10	1	
					2008-2010	
<b>II. Projects on ex-situ protection and multiplication of precious and rare aquatic species which are threatened with extinction: VND 82.0 billion</b>						
1	Preserving a number of endemic freshwater species which are precious and rare but threatened with extinction	Research Institutes for Aquaculture No. 1, 2 and 3	Agro-Forestry University of Ho Chi Minh City, Can Tho University, Hue University	10	1	
					2008-2010	
2	Domesticating and allowing the reproduction of a number of freshwater fish species in service of the regeneration of aquatic resources	Research Institutes for Aquaculture No. 1, 2 and 3	Nha Trang University, Agro-Forestry University of Ho Chi Minh City, Can Tho University, Hue University, Fisheries Centers of provinces	30	1	To be prolonged until phase 3
					2010-2020	
3	Preserving a number of endemic saltwater species which are precious and rare but threatened with extinction and difficult to domesticate by caging	Research Institutes for Aquaculture No. 1, 2 and 3, Nha Trang Institute of Oceanology	Nha Trang University, Agro-Forestry University of Ho Chi Minh City, Can Tho University, Hue University,	10	1	
					2015-2020	
4	Testing the production and regeneration of precious and rare coral reefs	Nha Trang Institute of Oceanology	Institute of Ecology and Biological Resources; Institute of Marine Resources and Environment	20.0	2	To be prolonged until phase 3
					2011-2020	

5	Researching artificial reproduction and the process of raising of <i>Sinohyriopsis cumingii</i> (Lea, 1852)	Research Institutes for Aquaculture No. 1, 2 and 3	Institute of Ecology and Biological Resources; Institute of Marine Resources and Environment	3.0	2	
					2008-2010	
6	Researching artificial reproduction and the process of raising <i>Gibbosula crassa</i> (Wood, 1815)	Institute of Ecology and Biological Resources	Research Institutes for Aquaculture No. 1, 2 and 3	4	1	
					2009-2011	
7	Planting for multiplication <i>Betaphycus gelatinum</i> in Hai Van (Thua Thien-Hue), Hai Phong and Quang Ninh sea areas	Research Institutes for Aquaculture No. 1, 2 and 3	Institute of Marine Resources and Environment; Fisheries Service of Thua Thien-Hue province	3	2	
					2011-2014	
8	Researching artificial reproduction and formulating the process of creating breed sources for some sea turtle species (hawksbill, leatherback turtle, green turtle) for release into the sea	Research institutes	Research Institutes for Aquaculture 1, 2 and 3, Research Institute for Marine Fisheries	10.0	1	
					2009-2010	
<b>III. Projects on research into precious and rare aquatic species which are threatened with extinction: VND 105 billion</b>						
1	Investigating into and surveying reserves of precious and rare species, proposing rational exploitation solutions for development of resources	Institute of Ecology and Biological Resources	Institute of Marine Resources and Environment, Hanoi National University, An Giang and Can Tho Universities, Research Institutes for Aquaculture 1, 2 and 3, Fisheries College, research institutes in related localities	30	1	
					2008-2011	

2	Researching biological and ecological characteristics of <i>endangered precious and rare aquatic species</i>	Institute of Ecology and Biological Resources	Research Institutes for Aquaculture 1, 2 and 3, Hanoi National University, Fisheries College, Research Institute for Marine Fisheries, universities and colleges, research institutes in related localities	50	1	
					2008-2012	
3	Testing exploitation forms and tools of sizes suitable to each precious and rare aquatic species	Research Institute for Marine Fisheries	Research Institutes for Aquaculture 1, 2 and 3	20	3	
					2015-2020	
4	Identifying restricted areas, areas restricted for a definite time limit for the protection of endangered precious and rare aquatic species	Department for Exploitation and Protection of Aquatic Resources	Research Institutes for Aquaculture 1, 2 and 3, Research Institute for Marine Fisheries	5.0	1	
					2007-2010	
<b>IV. Projects on strengthening the management and supervision of changes in precious and rare aquatic species which are threatened with extinction: VND 27.0 billion</b>						
1	Decree on management of <i>endangered precious and rare aquatic species</i> , legal documents on conservation, preservation of gene sources, exploitation, transportation and consumption of precious and rare aquatic species	MARD	Legal Department, Aquaculture Department, Science and Technology Department, Research Institute for Marine Fisheries, Research Institutes for Aquaculture No. 1, 2 and 3	2.0	1	
					2008-2010	
2	Strengthening management capacity for the <i>system of protection of aquatic resources from the central to local levels</i>	MARD	Ministry of Finance, Ministry of Planning and Investment, Ministry of Home Affairs and localities	25.0	1	
					2010-2015	

<b>V. Projects on enhancing the control of the trade in precious and rare aquatic species which are threatened with extinction and control of alien aquatic organisms: VND 11.0 billion</b>						
1	Controlling the exploitation, transportation, consumption, import and export of endangered precious and rare aquatic species	Department for Exploitation and Protection of Aquatic Resources	General Department of Customs, CITES Vietnam	5.0	1	2010-2015
2	Inventorying and assessing impacts of alien aquatic organisms which have penetrated into Vietnam	Department for Exploitation and Protection of Aquatic Resources	Provincial/municipal Services of Fisheries and Services of Agriculture and Rural Development	1.0	2	2008-2010
3	Strengthening the capacity of strictly inspecting and supervising the penetration of alien aquatic organisms into Vietnam	Department for Exploitation and Protection of Aquatic Resources	General Department of Customs, CITES Vietnam, provincial/municipal Services of Fisheries, concerned research institutes	5.0	3	2014-2020
<b>VI. Projects on strengthening management capacity, propagation and education, and fisheries extension: VND 123.0 billion</b>						
1	Researching for inclusion of contents on the protection of precious and rare aquatic species into general education programs at all levels and programs of pedagogic schools (biology departments)	Educational Technology Center (Ministry of Education and Training)	Education and training establishments, pedagogic schools, Fisheries College	25.0	2	2011-2015
2	Improving professional capacity of protecting aquatic resources for fisheries extension officers in localities where exist species which need to be protected	Department for Exploitation and Protection of Aquatic Resources	Fisheries Sub-Departments, provincial Centers for Fisheries Extension	33.0	1	2008-2010

3	Disseminating, propagating on the mass media (radio, television, commune loudspeakers) information on the protection of endangered precious and rare aquatic species	Department for Exploitation and Protection of Aquatic Resources	Regional and local newspapers, television and radio stations	65.0	1	2008-2015
<b>VII. Projects on renovating institutions and policies for management of precious and rare aquatic species which are threatened with extinction: VND 17.0 billion</b>						
1	Establishing databases on changes in precious and rare aquatic species with a modern information network for prevention of the degradation of resources and loss of biodiversity	Department for Exploitation and Protection of Aquatic Resources	MNRE, Ministry of Information and Communication, Ministry of Science and Technology	15.0	2	2011-2015
2	Elaborating community regulations on protection of precious and rare aquatic species	Department for Exploitation and Protection of Aquatic Resources	Provincial/municipal Services of Fisheries and Services of Agriculture and Rural Development	1.0	1	2008-2010
3	Reviewing, assessing effectiveness of current legal documents on the protection of precious and rare aquatic species in Vietnam	Department for Exploitation and Protection of Aquatic Resources	Provincial/municipal Services of Fisheries and Services of Agriculture and Rural Development	1.0	1	2008-2009

<b>VIII. Projects on international cooperation in the protection of endangered precious and rare aquatic species: VND 45.0 billion</b>						
1	Cooperating with Cambodia in establishing the Vietnam-Cambodia transnational zone for breed conservation of migratory aquatic species	MARD	Cambodian Ministry of Agriculture	15.0	2	
					2011-2015	
2	Establishing a regional information forum and exchanging experience with littoral countries on a responsible code of conduct in the fishing industry and protection of precious and rare migratory aquatic species	MARD	Ministry of Foreign Affairs, Ministry of Trade, Ministry of Finance	30.0	2	
					2015-2020	
<b>Total of I, II, III, IV, V, VI, VII and VIII</b>				<b>576.0</b>		