

SOCIALIST REPUBLIC OF VIETNAM
Independence – Liberty – Happiness

Ha Noi, June 06th, 2009

Draft 1

THE PROJECT
OF VIETNAM *PANGASIUS* RESEARCH INSTITUTE

I. BACKGROUND

1. *Pangasius hypophthalmus* and *pangasius bocourti*: Being indigenous *pangasius* species, belonging to *Pangasiidae*, which cultured popularly in 10 provinces of the Mekong Delta and mostly in An Giang, Dong Thap, Can Tho, especially the riverside areas of Tien and Hau rivers. Just within 10 years (1998-2008), after the success of breeding fish production by artificial generating technology in co-operation with the scientists of CIRAD Institute (France), the farming area is being increased significantly, approx. 6,160 ha currently. The yield of farming fishes is increased up to forty-fold; gained 1.3 million tons in 2008. Vietnamese *Pangasius hypophthalmus* which has been developed and become a remarkable phenomenon in international aquaculture is the farming fish ranked the third after salmon and tilapia in the world, and it also covers much potential to be developed ...

2. *For fish strain*: The annual fish strain output gained about 02 billion fishes, which is enough to meet farming demand; currently breeding *pangasius hypophthalmus* which is free from diseases researched successful and being replaced the existing low-grade breeding source. However, the infrastructure for producing *pangasius hypophthalmus* strain hasn't been modernized, without mandatory applied standards, as well as invested in sync, and the quality of parental fish strain hasn't been good.

3. *Feed production for farming fish*: More than 90 factories of aqua-feed production are available at present, and more than half of these are the factories of feed production for *pangasius hypophthalmus* with the capacity of 1,200,000 tons, and the import quantity is 600,000 tons, and the 10% of remaining feed quantity is processed by pisciculturists. However, the price of feed for *pangasius hypophthalmus* is still high, holding up to 80% the farming cost with the quality isn't insured, and there aren't many home feed production enterprises yet, and the majority of them are foreign associated companies.

4. *For farming fish*: The technological process of intensive farming on *pangasius hypophthalmus* has been built in Viet Nam with the high yield of 200-500 tons/ha/crop. There is about 60-70% the quantity of *pangasius hypophthalmus* farmed in collective farms. However, there is still 30-40% this quantity produced by farming households with small scale and without being organized, which results in the difficulty in providing input factors and loan capital, as well as applying science and technology for sewage treatment. Vertical integration series hasn't been organized and carried out widespread,

so redundancy or shortage of *pangasius hypophthalmus* materials is still occurred frequently.

5. *For processing:* The system of more than 80 factories for processing *pangasius hypophthalmus* has been established with the design capacity of over 1.2 million tons of raw fish materials per year. These factories are equipped modern technology and equipments, which meets the high requirements of international market. The businesses which are able, experiential, enough ability of international competition, active in processing, trading and exporting frozen pellet *pangasius hypophthalmus* product have started to develop the processing of value added products, but the density isn't still high.

6. *For export:* In 2008, the exported *pangasius hypophthalmus* output of Viet Nam gained 640,000 tons with the export value of USD 1,453 million. However, product forms are still monotonic; price competition, discount through quality degradation, and abuse of methods which applied to pump water into pellet products or increase ice-plating rate are still popular in export, which cause the critical effects on the prestige and quality of *pangasius hypophthalmus* in the world.

7. *For the State management:* Planning work hasn't been carried out promptly and caught the production yet. The system of aquaculture authorities from the Central to the local is still missing and unsound. The regulations regarding the registration of location, scale and yield for *pangasius hypophthalmus* farms aren't available. The system of surveying and warning on environment hasn't been invested in sync, and local environmental pollution still occurs in some places, especially in the dry season, and epidemic development results in risks for farmers. The system of breeding quality management isn't available, and the feed quality for fish as well as environmental treating agents aren't good. The information and statistic system isn't also available. There is still the existing weakness of the forecast work on production and market.

8. *For development planning:* The Decision No. 630/2009/QĐ-TTg issued by prime minister on 18th May 2009 regarding the establishment of **Steering Committee on pangasius production and consumption in the Mekong Delta. The project of pangasius development, production and consumption in the Mekong Delta up to 2020** is going to be issued by the Government. As expected, the farming area of 13,000 ha, the yield of 1,850,000 tons and the export value of USD 2.1-2.3 billion will be obtained in 2020.

9. Because of hot development, planning deficiency, inadequacy on Governmental management affairs, weak production engineering, inadequacy on the joint between production and consumption, many difficulties have been arising to *pangasius hypophthalmus* production and consumption in recent years, which causes the loss and even the bankruptcy of many pisciculturists and businesses.

10. To restrict the disadvantage effects, industrialization and modernization will be carried out rapidly forwards developing knowledge economy, and mobilization mechanism of resources from farmer & fisherman and business community is required, and with the State budget, investment will be performed on focus for researching, developing and applying scientific and technological achievements with the management on the harmonious regime so that production development, protection and regeneration on environmental resources as well as social justice are ensured.

II. NECESSITY OF INSTITUTE ESTABLISHMENT

To continue the development of *pangasius* industry in our country, the establishment of *Vietnamese Pangasius Research and Development Institute* is an imperative need, which meets requirements in the existing situation, in accordance with the lines of the Party and international economic development tendency.

1. The Political Report of the Central Committee at the tenth Nationwide Delegate Congress of the Party has been emphasized: *“Comprehensive development in agriculture will be carried out, the strong shift of rural economy and agriculture structure trending the value added created higher and higher attached to processing industry and market; mechanization, electrification, irrigation will be performed, also scientific-technological and biotechnological progress shall be applied in production for enhancing the yield, the quality and the competitive power in accordance with the features of each region and each locality”*.

2. In the Political Report, the orientation of mobilizing diversified resources for developing science, technology and scientific-technological market specified: *“We shall advocate the innovation of scientific-technological management mechanism trending of the State investment in national research programs with international and regional level, and build the scientific-technological potential in some priority fields; diversifying investment resources, mobilizing the participation of economic components and promoting the international integration into scientific-technological fields”*.

3. In globalization process, the determinant to the existence and development of each nation, each economy and each business is that the reinforcement of comprehensive and competitive capacity via solutions on science, technology and management. Multinational groups, corporations and advanced occupational-social organizations all use their budget for establishing and operating research and development organizations on technology and management systems in order to solve the problem of stable development basing on scientific-technological and managing achievements in accordance with developing knowledge economy and high-level civil society, which creates new competitive advantages.

4. In the past years, the State budget used for scientific research activities in fishery hasn't still been enough against the demand. Though the capacity and the level of public institutes have been improved partial, the mechanism associated strictly with real production and trade requirements

isn't available. So, the routing step from "*The State do science*" into "*The people do science*" will be created for promoting rapidly research and development activities on science, technology and management in the whole industry with the power source of the whole people, including production and trade organizations and farmer & fisherman community nationwide, in accordance with the mode of "*order and payment reality*".

5. With the financial source formed by the mode of socialization, mobilization of support resources from businesses and farmer & fisherman community and those who join in production and export of aquatic products, the Institute will be an institution with the collection of interdisciplinary, intellectual and capable scientists for solving scientific and managing problems due to the reality of "order", and then serving the said businesses and community, in accordance with the operation of market mechanism. The Institute will be the junction for establishing the network of scientific organizations, and this will attract scientific-technological and managing resources overseas and develop cooperative relationships with private research institutes, non-governmental and non-profitable organizations, official support resources from other countries and international organizations in order to serve the stable development of Vietnamese fishery.

III. MAIN CONTENTS OF THE PROJECT

1. Name

Name: **Vietnam *Pangasius* Research Institute**

Name in English: ***Vietnam Pangasius Research Institute***

Name in short: ***VPI***

2. Objectives:

Vietnam *Pangasius* Research Institute (under called as **the Institute**), a research and development and application organization on interdisciplinary science, established for mobilizing home and abroad capable scientists, supporting the community of businesses and farmer & fisherman in developing Vietnam *Pangasius* industry in accordance with the direction which is stable, responsible, friendly with the environment and enough the competitive capacity in the international market.

3. General principles:

a) The Institute is an independent and private research and development organization on science and technology, operating under the form of scientific-technological joint stock company.

b) The Institute is incorporated with independent accounting and its own seal and entitled to open its account in the bank. The Institute is registered at Ministry of Science and Technology, operating under the Law on Science and Technology, the statutory regulations and the organization and operation rules of the Institute.

c) Centers and units established by the Institute or organizations acknowledged as members of the Institute are the scientific operating units which are incorporated in full with independent accounting and their own

seals and entitled to open bank accounts as well as register business licence in the State administrations in accordance with the statutory regulations.

d) The head office of the Institute located in Can Tho city; the research offices of Centres/Units directly under the Institute located in home proper regions.

e) The Institute is free from taxes and accounts payable to the State budget in accordance with the regulations of Law on Science and Technology and the Law in force.

4. Organization of the Institute: The organization wheel of the Institute includes:

a) **Administrative Council:** Being the organization of juridical persons and individuals who join in establishing the Institute

b) **Councils:** Scientific Council, Certification Council

c) **Management Committee:** Including Director and Deputy Director of the Institute

d) **Scientific Research and Development Centers (R/D):** include

- Research Centre on Genetics and Fish Strain Selection
- Research Centre on Nutrition and Feed
- Research Centre on Diseases, Drugs and Vaccines
- Research Centre on Farming Environment and Technology
- Research Centre on Market Development

e) **Scientific-Technological Application and Service Units:** include

- Test and Analysis Centre
- Applied Informatics and Information Centre
- Manpower Training and Developing Centre
- Vietnam *Pangasius* Scientific and Technological Magazine

f) **Functional Departments:** include

- The Office of the Institute
- Personnel Department
- Financial Planning Department
- International Relationship Department

g) **Associated Organizations:** Including Institutes, Universities, Research Centers, Companies, home and abroad technological transfer and application organizations which join in or combine the activities with the Institute and/or the Units directly under the Institute.

5. Main activities of the Institute

a) Holding the activities of new technological research, development, trial application, experiment and applied services in the research fields on genetics, strain selection, strain production, research and production of feed, preventive and treating drugs, vaccines, bioproducts, and *pangasius* farming and processing technologies for satisfying the demand of enterprises and farmer & fisherman community.

b) Holding the research and establishment on standards, processes, specifications for insuring food safety, quality and accessing the origin of products during Vietnam *pangasius* production, processing and export.

c) Holding the studies of home and export markets, establishing strategies and plans of market development; planning the development of distribution and consumption chain; researching on the legal basis which serves the settlement of commercial disputes arising in Vietnam *pangasius* production and export.

d) Holding the research and development on green technology, waste treatment for protecting environment, regenerating ecosystems and natural resources, insuring the conditions of stable development in Vietnam *pangasius* industry.

e) Holding the construction on development programs and projects of product groups through the stages from material production to preservation, processing, export and home consumption based on public management and stable development principles for increasing the competitive ability of Vietnam *pangasius* products.

f) Holding social-economic studies, community survey, construction on advanced and efficient management models, establishment of express value series against Vietnam *pangasius* products.

g) Holding information activities on science, technology and economy for serving the production and export of enterprises and farmer & fisherman community.

h) Holding the research and application of information technology achievements to *pangasius* trade and production, giving the support to enterprises and farmer & fisherman community for developing e-commerce and intensifying management ability.

i) Holding medium term and short term developing and training activities for the staff of enterprises and farmer & fisherman community.

j) Promoting international co-operation activities for researching, developing and applying of scientific achievements in fishery; establishing, maintaining and developing the relationship with home and abroad research-development organizations.

k) Holding constant management, maintenance and development on material basis and finance of the Institute and its member units.

6. Finance of the Institute

a) The initial capital of the Institute formed by the contribution of founder Members, including Binh An Fishery Joint Stock Company, research institutes, companies and individuals who join in the founder Group of the Institute, and other promoters.

b) Receivables from scientific services and research-development activities of the Institute and units directly under the Institute.

c) The support accounts from the State budget by the orders to scientific research and development activities, applied research themes, trial production – experiment projects, standard construction themes carries out by the Institute and its Centers.

d) The financing accounts from home and abroad organizations and individuals.

e) Other accounts.

7. Management principles of the Institute

a) Administrative Council includes Founder Members, juridical persons and individuals who volunteer their contribution to initial financial source for establishing and maintaining the operation of the Institute.

b) Director of the Institute nominated or dismissed by the Administrative Council. Deputy Directors proposed by the Director and nominated or dismissed by the Administrative Council.

c) Member Units established by the Administrative Council in accordance with the Director's proposal. The Chief of member Units proposed by the Director and nominated or dismissed by their own Administrative Council.

d) Organization and operation regulations of the Institute made by the Administrative Council with the acceptance in writing from Ministry of Science and Technology.

8. Scale of investment

a) The list of necessary equipments invested in each specialized department.

b) Demands and requirements on quality against the personnel recruitment in each department.

c) Demands on plan, experimental equipment, workshop, experimental house.

9. Personnel training and recruitment plan of the Institute

a) Short term recruitment plan 2009-2012

b) Long term recruitment plan up to 2015-2020

c) Short term and long term training plan.

10. Strategy on association and co-operation with other Institutes and Universities

Firstly, the establishment of association with the following Institutes and Universities will be priority.

a) Aquaculture and Research Institutes 1, 2, 3, Ministry of Agriculture and Rural Development

b) Can Tho University, An Giang University, Ho Chi Minh City Agro-forestry University, Nha Trang University

c) CIRAD Institute (France), Research Institutes in Norway, Denmark, Netherlands, England, the United States, Taiwan

d) Aquaculture and Services Companies in Norway: Pharmaq, AKVA, EWOS and other home and abroad companies

e) Vietnamese *pangasius* production, processing and export companies.

IV. INITIAL PERFORMANCE STEPS

1. Establishing the Founder Shareholder Council of the Institute.

2. Administrative Council established by the Founder Council.

3. The Project of Institute establishment approved by the Administrative Council.

4. Deciding the establishment of the Institute and making relevant registration procedures.
5. Deciding the nomination of the Institute's Executive Board.
6. Deciding the approval for Management and Organization Regulations of the Institute.
7. Establishing and approving the Operation Plan 2009-2012.
8. Entering into the Co-operation Agreement with companies, Pharmaq, Ewos, AKVA regarding research on diseases, tests of vaccines, feed production and farming technology development.
9. Entering into the Co-operation Agreement with Hai Dang-EDC Company in respect of establishing the Laboratory in the Institute.
10. Holding the inauguration of the Institute within 2009./.

Drafter

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