

# **BUILDING THE SUPPLY CHAIN DATABASE SYSTEM**

by

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## **ABSTRACT**

The lack of data management on ornamental fishes supply chain for export from up-stream to down-stream effected to related agents. It was about as it needed to make decision for the related agents. Private sectors required the data before their decision – making for business, as well as the administrators needed the data for making policy. The lack of the data management caused of competitive capabilities in ornamental fishes industry in Thailand resulted in less capabilities than competitors in international market. The data management on the ornamental fish supply chain for export could be done by collect all data on productive processes, suppliers, producers, consolidators/wholesalers, exporters, logistics service providers, international competitors and all concerned government bureaus. All data then was managed to be database in easily accessing via web page, web board and it should be linked to the network main information. The development of database on ornamental fish supply chain for export found that it should be related agents who responded directly in the process to control, improve and update the data system. This was for increase the capabilities on international marketing competition. The concerned organizations had to check update, inform and cooperate with other related agents for the data development. The database on ornamental fishes supply chain for export had been informed at <http://msc.npru.ac.th/fish/index.php>. The data was last updated in the 30<sup>th</sup> September 2011 of all 843 lists.

## **KEYWORDS**

Database System, Supply Chain, Ornamental Fish, Exporting

## **INTRODUCTION AND OBJECTIVE**

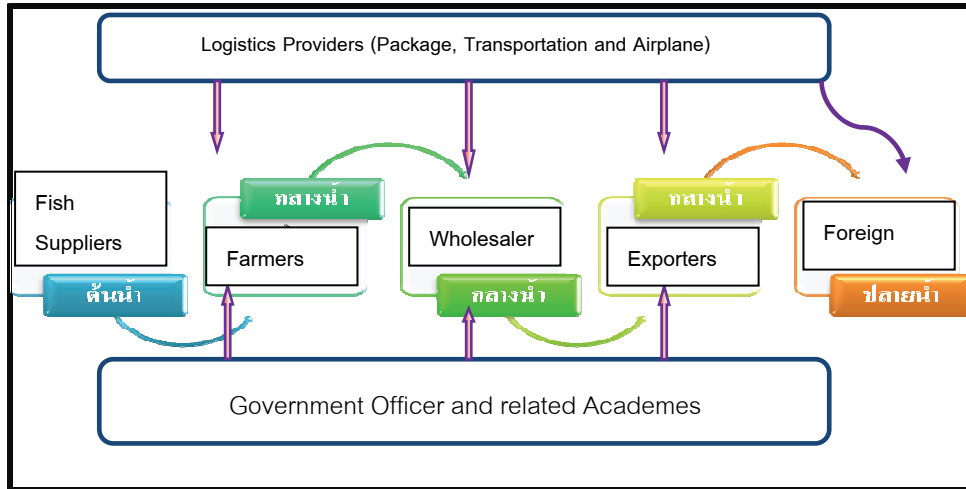
Currently, the ornamental fish for export was another part of business had been grown not only had higher export value but also it was the source of nation income. The ornamental fish was related to other organization on network in order to cooperate and work together in term of management and improvement as the product flow, the information flow and finances flow from culturist to end-user called “supply chain”. The ornamental fish supply chain had compose from up-stream to down-stream as the part of purchaser for ornamental fish farm/ supplier, culturist/ farm, collector/ middleman, exporter/ export enterprise agency and logistic enterprise such as packing business forwarder agent, airline, international market trade partner, government officer and specialist and related organization

The barrier of ornamental fish for export from up-stream to down-stream was production of culturist/ farm, lack of continuous factual improvement, and production system not related to market demand. Most of profit from ornamental fish distribution was collector/ middleman. Exporter/ export cooperative agency had not the export information resource and the logistic system barrier while the potential of competition partner had management system better in addition legal restriction and regulation from nation trade partner and further lack of ornamental fish supply chain system from up-stream to down-stream; therefore, researcher team saw supply chain management significantly so this research objectives were to study and to create ornamental fish for export supply chain database.

## **METHODOLOGY**

Ornamental fish for export supply chain study research framework was to planning the infrastructure ornamental fish for export supply chain database as supplier, culturist/ farm, collector/ middleman, exporter cooperative agency, international market trade partner data, and logistic business for instance packing, shipping agency, airline, officer and specialist from related government office as the picture below

**FIGURE 1  
ORNAMENTAL FISH SUPPLY CHAIN**



Source; This research had been provide by researcher team

To study the demand of data user as breeding/ aquaculture, logistic and international market trade partner export when we got the accuracy data and met the user demand to develop the database. The research procedure was studied about primary data status related to ornamental fish supply chain for exporter. By collecting and studying those data distributed widely both parts as academic and statistic was related to breeding/ aquaculture, market, export, logistic and ornamental fish supply chain for export under collecting each of ministry then these data were divided by grouping in order to user to search easily

**RESEARCH RESULT**

Research team provided the ornamental fish for export supply chain had the details as below;

- First, to open the internet explorer in the top box of address typing the system name as <http://msc.npru.ac.th/fish> then the screen display shown as below picture

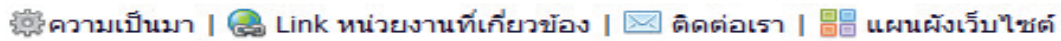
The first page was consisted many parts as follows;



1. Menu bar was composed sub menu such as profile, web link to related organizations, contact us, site map

2. Main menu was composed sub menu for instance aquaculture supplier data, ornamental fish, breeding/aquaculture, exported ornamental fish procedure, logistic enterprise data and research history map

Menu bar was tool tap appeared on the top program divided by main menu group as follow;



1. How profile menu work, it was shown the project history

2. Link with related organizations

2.1. Click “link” menu connected with related organization

2.2. Screen display directly “Link” related organization. In this part showing the related organization detail for example ornamental fish data, URL which was linked to other organization web site

2.3. Click “web link” that you need to see other organization

2.4. The web site display system was opened as below picture

3. Contact us

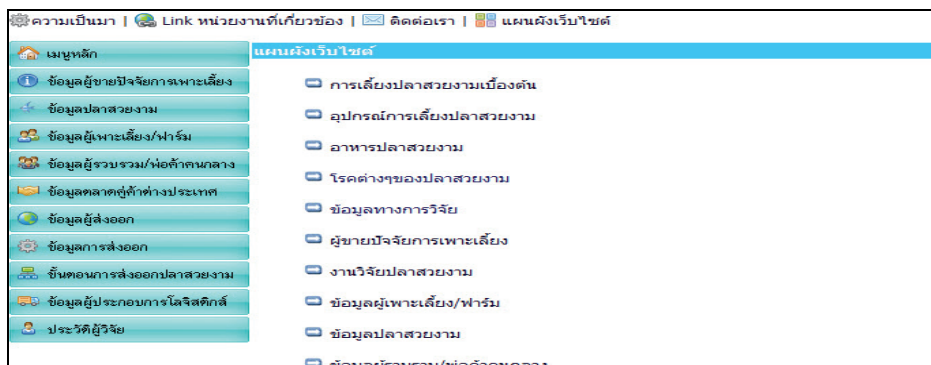
3.1. Click “contact us” menu

3.2. Screen display system of “contact us” shown organization name, address and map

4. Site map

4.1. Click “site map” menu

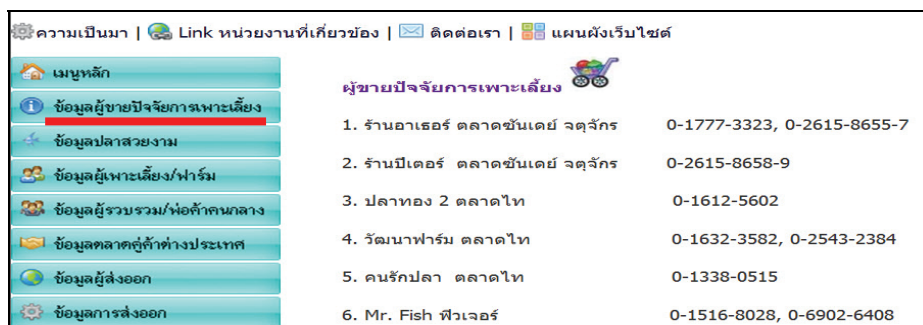
4.2. Screen display system as site map shown all main menus structure of this web site



Main menu was the tool tap on the left site of program by grouping as follows

1. Click “supplier data”

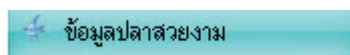
1.1. Screen display system in this part shown their name and address



2. How ornamental fish data worked as follow;

2.1. Starting from click “ornamental fish” menu

2.2. Screen display system shown ornamental fish both fresh-water and salt-water fish



3. How aquaculture/ farm data worked, it had procedure as

3.1. Starting from click “aquaculture/ farm data”

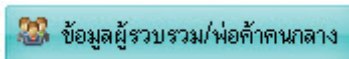


3.2. Screen display system shown aquaculture/ farm data in each province

เมนูหลัก	ข้อมูลผู้เพาะเลี้ยง/ฟาร์ม	ข้อมูลประเภทวิชาการด้านการเพาะเลี้ยง
ข้อมูลผู้ขายปัจจัยการเพาะเลี้ยง		ค้นหา
ข้อมูลปลาสวยงาม		
ข้อมูลผู้เพาะเลี้ยง/ฟาร์ม	นางสายหยุด สุนเทียน	90 หมู่ 4 ตำบลเจ็ดเสมียน อำเภอโพธาราม จังหวัดราชบุรี
ข้อมูลผู้รวบรวม/พ่อค้าคนกลาง	นายสำเร็จ สงวนไว	12 หมู่ 6 ตำบลเจ็ดเสมียน อำเภอโพธาราม จังหวัดราชบุรี
ข้อมูลตลาดคู่ค้าต่างประเทศ	นางพวง ทองมี	91 หมู่ 4 ตำบลเจ็ดเสมียน อำเภอโพธาราม จังหวัดราชบุรี
ข้อมูลผู้ส่งออก	นายบุญลือ เกสร	54/1 หมู่ 2ตำบล เจ็ดเสมียน อำเภอโพธาราม จังหวัดราชบุรี
ข้อมูลการส่งออก	นายมาศย์ บุญเยี่ยม	138/2 หมู่ 6 ตำบลเจ็ดเสมียน อำเภอโพธาราม จังหวัดราชบุรี
ขั้นตอนการส่งออกปลาสวยงาม	นางสาวนภัชกร บุลวรรณรัช	ตำบลแหลมบัว อำเภอนครชัยศรี จังหวัดนครปฐม
ข้อมูลผู้ประกอบการโลจิสติกส์	นายรชช ลัมประสูตร	หมู่ที่ 2 ตำบลโคกพระเจดีย์ อำเภอนครชัยศรี จังหวัดนครปฐม
ประวัติผู้วิจัย		

4. How collector/ middleman data worked, it had procedure as;

4.1. Starting click “collector/ middleman data”



4.2. Screen display system shown collector/ middleman data as below picture

ข้อมูลผู้รวบรวม/พ่อค้าคนกลาง	
	ค้นหา Search
Jirapha Leksarit	(Chirapha Leksrit) 58 Mu 1, Tambon Tha Phraya, Amphor Nakhon Chaisi, Changwat Nakhon Pathom, 73120, Thailand
Jinda Farm	(Peerada Jinda) 762 Bu Khok Lo, Thon Buri, Thon Buri, Bangkok, 10600, Thailand
Janya Farm	(Janya Bunto) 33/2 Mu 7, Tambon Tha Pha, Amphoe Ban Pong, Changwat Ratchaburi, 71140, Thailand
J.R. FARM	(Sakkarin Santasut) 8 Mu 2, Tambon Sam Ruean, Amphoe Mueang Ratchaburi, Changwat Ratchaburi, 70000, Thailand
J.N. Farm	(Jamnian Mekchai) 118/1 Mu 8 Tambon Ban Yang, Amphoe Mueang Nakhon Pathom, Changwat Nakhon Pathom, 73000, Thailand
GW Aquarium	(Worasak Leelamane) 904/34 Tambon Mahachai, Amphoe Mueang Samut Sakhon, Changwat Samut Sakhon, 74000, Thailand

5. How international market trade partner data worked, it had procedure as

5.1. Starting from click “international market trade partner data” menu



5.2. Screen display system of “international market trade partner data” appeared as below picture

## ข้อมูลตลาดคู่ค้าต่างประเทศ



**ประเทศสิงคโปร์**



**ประเทศเยอรมันนี**



**ประเทศมาเลเซีย**



**ประเทศฝรั่งเศส**

6. How exporter data menu worked, it had procedure as follows;

6.1. Starting from click “exporter data” menu



6.2. Screen display shown exporter data appeared as below

### ข้อมูลผู้ส่งออกปลาสวยงาม


1. Bangkok Aquarium Tel. (662) 378-8236, Fax. (662) 373-4904
2. Chaichana Aquarium Tel. (662) 245-4569, Fax (662) 642-5939
3. Cichlidland-Thailand Tel. (662) 643-1924, Fax (662) 246-3315
4. e-aquariumthai Tel. (662) 374-1214, Fax (662) 734-7868
5. Erawan Aquarium Co.,Ltd. Tel. (662) 584-2726, Fax (662) 584-4912
6. Inter Aquarium Co., Ltd. Tel. (662) 587-1330, Fax (662) 578-4418
7. Jeda Aquarium Ltd., Ltd. Tel. (662) 872-0070-3 ext. 222
8. 24k Goldfish Farm Co., Ltd. Tel (662) 294-3900, Tel (662) 294-3899
9. Aeronaut Company Co., Ltd. Tel 277-5430, Fax (662) 267-6034
10. Aqua Biotech innovations Co., Ltd. Tel.& Fax. (662) 221-3130
11. Aqua-thai Export Co., Ltd. Tel. (662) 930-5375-76, Fax. (662) 513-0572
12. Aquatic Plant Center Co., Ltd. (662) 974-1525, Fax. (662) 429-7235

7. How exporting data worked, it had procedure as follows;

7.1. Starting from click “exporting data” menu



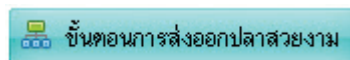
7.2. Screen display system exporting data appeared as below picture

**มูลค่าการส่งออกปลาสวยงามในตลาดโลก ปี 2005 - 2010 **

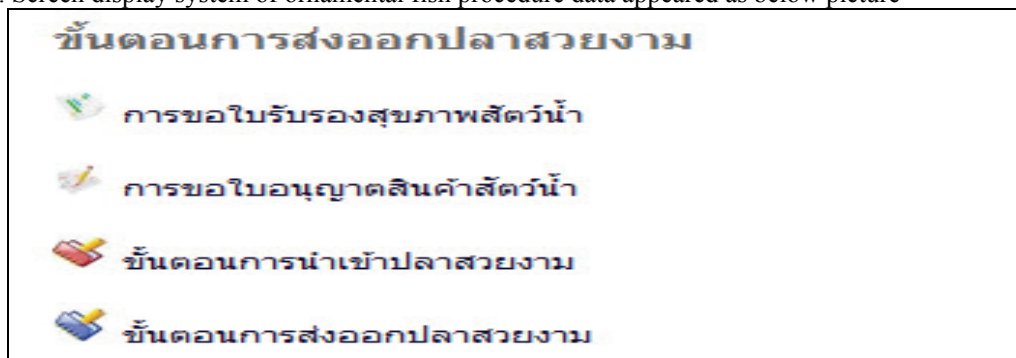
ประเทศ	ปี					
	2005	2006	2007	2008	2009	2010
สิงคโปร์	54,109,102.00	61,433,033.00	66,114,542.00	68,963,307.00	60,088,251.00	58,992,822.00
มาเลเซีย	22,461,506.00	22,384,104.00	27,731,019.00	27,890,451.00	21,222,121.00	21,179,973.00
อินโดนีเซีย	14,386,730.00	9,433,513.00	8,175,359.00	8,924,676.00	11,660,944.00	19,766,172.00
ฮ่องกง	8,852,337.00	7,071,615.00	6,630,355.00	5,915,384.00	6,375,229.00	6,357,750.00
สหภาพยุโรป	7,827,344.00	9,135,007.00	8,252,204.00	8,102,881.00	8,475,001.00	10,240,577.00
สหรัฐอเมริกา	9,793,492.00	10,303,923.00	11,224,017.00	13,255,444.00	12,139,492.00	13,221,689.00
ญี่ปุ่น	16,753,496.00	16,589,002.00	20,682,482.00	21,557,965.00	24,067,287.00	32,101,642.00
ฟิลิปปินส์	7,132,244.00	7,287,482.00	7,382,432.00	7,348,231.00	6,508,719.00	5,990,687.00
ไทย	12,502,707.00	13,707,668.00	16,439,581.00	21,558,093.00	18,224,205.00	18,722,991.00
ฝรั่งเศส	4,150,792.00	4,515,460.00	8,288,082.00	9,464,346.00	3,419,129.00	7,010,891.00

8. How ornamental fish for export worked, it had procedure as follows;

8.1. Starting from click “ornamental fish for export procedure” menu



8.2. Screen display system of ornamental fish procedure data appeared as below picture



### CONCLUSION

Developing the ornamental fish for export supply chain database found we should have organization to in-charge directly such as handle, solution, improvement and always updated in order to increase the international competitive capabilities at the same time reduce redundancy. Related organization whose data to be improved own data have been updated also accuracy at the same time should have public relation (PR) and cooperate with other related organization which had use the same data to join and develop data to update. Ornamental fish for export supply chain database system has been collected data as aquaculture, market export, logistic system, and trade partner market to be connected computer to network also able searching easily for the user group such as agriculturist, student, researcher/ specialist, and businessperson included specified policy person, those persons cloud search wherever had computer connected to internet network. Those system always has been developed to modern data this is to increase ornamental fish for export potential, to sustainable develop competitive capability, to develop as system to connect related organizations, it was to be highest benefit all parts and Thailand is the number one of ornamental fish exporter in the world

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