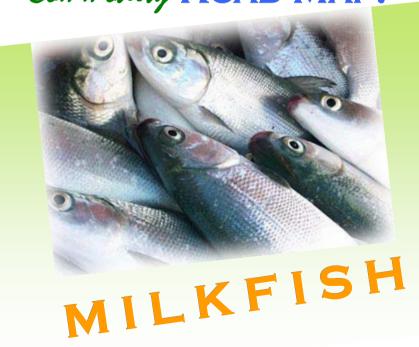


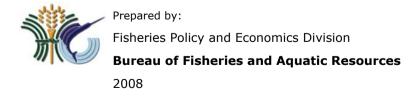






Commodity ROAD MAP:







Milkfish

I. EXECUTIVE SUMMARY

Milkfish is an important commodity in the Philippines. Its production has considerably increased by an average of 8.5% over the past 6 years. The milkfish industry however, is still confronted with problems such as inadequate fry supply, high cost of farm inputs, lack of technology for value-added, lack of manpower to effectively transfer technology, and multi-layered marketing system.

Considering the high demand for milkfish, the Bureau of Fisheries and Aquatic Resources implements programs that will increase milkfish production, sustain milkfish fry requirements, generate livelihood opportunities, provide alternate markets for milkfish and improve quality of processed products. The programs include the establishment of milkfish hatcheries and processing plants, and creation of market for low quality milkfish as fish bait. "Road maps" were already developed and to determine, among others, areas with low and high supply of milkfish. Regions with surplus production can supply these in regions with scarce milkfish supply.

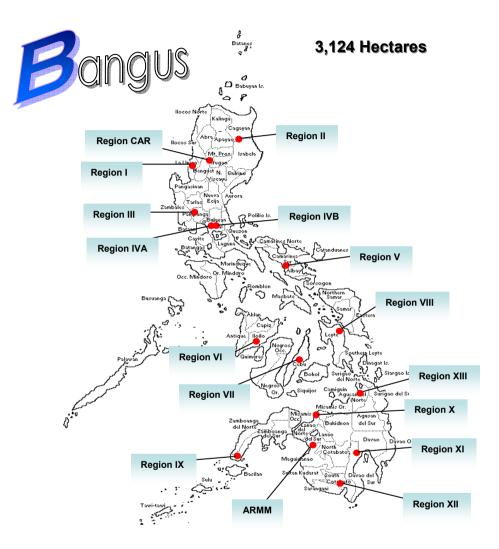
II. OVERVIEW OF THE INDUSTRY

Milkfish (*Chanos chanos*, Forskal) belongs to the Chanidae family which is nearly related to tuna and salmon because of its fusiform shape and migratory nature. It is widely distributed in the Indo-pacific region and abundantly collected in the South and Southeast Asian, and West Pacific Regions.





Milkfish is popularly cultured in the Philippines because it is a better food-converter species. It is cultured in brackishwater ponds, pens and cages. In terms of fry supply, fish farmers are entirely dependent on fry collected along the coastlines during breeding season. However, the problem of unstable natural fry supplies due to changes in environmental conditions, fluctuation in natural recruitment and coastal pollution hinders the expansion of the milkfish industry.



4

Commodity Roadmap: Milkfish



C. Supply Chain

Producers usually sell the milkfish to a "consignacion" or broker with a 12% margin inclusive of the mark-up and marketing costs. In turn, the broker sells to wholesalers at a margin of 20 - 30%. Wholesalers distribute to "viajeros", and the "viajeros" to the retailers in the wet markets. Both the wholesalers and "viajeros" get 30% - 40% margin.

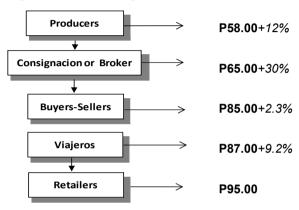


Figure 3. Supply chain of milkfish

III. STRATEGIES AND INTERVENTIONS

In line with the implementation of the MTPDP 2005-2010 to support PGMA's 10-point agenda, BFAR is expected to expand the present milkfish production areas by 3,190 hectares. This expansion is expected to generate a total of 86,260 jobs and an annual milkfish production increment of at least 25,000 metric tons. Additional Central Hatcheries will be established in strategic areas to sustain the supply of cheap but high quality milkfish fry to fishfarmers all over the country. This intervention is expected to help reduce the cost of fingerlings by 50%. BFAR is also expected to establish lead price including tri-media information dissemination of wholesale and farmgate prices in fishports in order to reduce percentage of mark-up of marketing layers by 20%-30%. The long term goal, though, is to eliminate marketing layers through the organization of cooperatives and provision of credit facilities.

A. Production Trend

Milkfish production has considerably increased for the past 6 years (see Fig 1). An estimated 8.5% growth has been achieved from 2000 to 2006. In 2006, milkfish production recorded a moderate increase of 9% as compared with 2005. Harvests from freshwater culture environment contributed 11% to the total milkfish production, while harvests from brackishwater contributed a total of 70% due to an increase in stocking density and expansion of fishing operators. In addition, a 19% has been contributed by production from marine fishcages and fishpens.

Bangus Production, 2000-2006

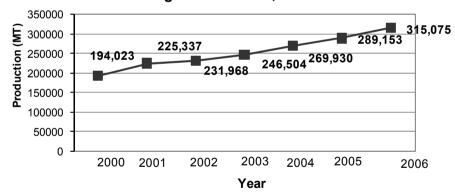


Figure 1. Milkfish production data, 2000-2006 (BAS, 2006)



Table 1: 2006 Milkfish Production and Requirements at 1.98 kg per capita consumption

Region	Population a/	Production b/ (MT)	Requirement (MT)	Gap (MT)
CAR	1,529,425	(1411)		· ·
CAR		75 547	3,028	(3,028)
1	4,422,483	75,517	8,757	66,760
III	3,032,872	591	6,005	(5,414)
Ш	8,297,012	59,926	16,428	43,498
NCR	11,070,287	2,216	21,919	(19,703)
IV-A	10,940,575	39,773	21,662	18,111
IV-B	1,612,601	4,005	3,193	812
V	5,079,867	1,925	10,058	(8,133)
VI	6,778,143	68,656	13,421	55,236
VII	5,970,149	6,587	11,821	(5,234)
VIII	4,058,787	8,784	8,036	747
IX	3,452,079	10,073	6,835	3,238
Х	3,013,186	8,038	5,966	2,072
ΧI	5,771,878	9,180	11,428	(2,248)
XII	2,910,459	14,006	5,763	8,243
ARMM	2,330,394	2,686	4,614	(1,928)
CARAGA	2,393,402	3,112	4,739	(1,627)
Philippines	82,663,599	315,075	163,674	151,401

a/ - NSCB data

b/ - BAS data, 2006

B. Supply and Demand

Table 1 shows that there is surplus in milkfish production in Regions I, III, IV A&B, VI,VIII,X, IX, XI and XII and deficit in Regions II, NCR, V, VII, XI, ARMM and CARAGA. National production, however, shows a net surplus of more than 151,401 metric tons.

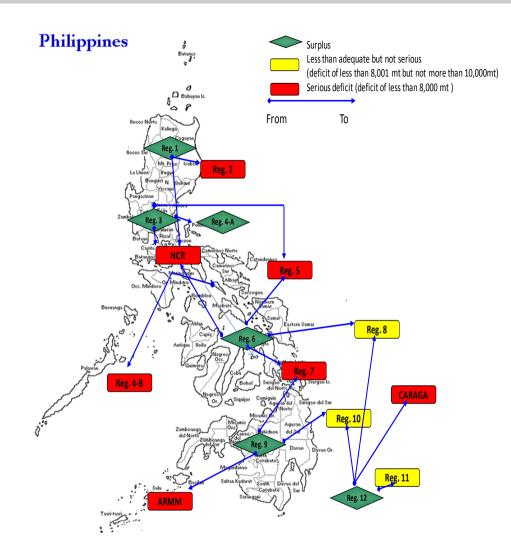


Figure 2. Milkfish distribution map.

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