NATIONWIDE DISSEMINATION OF GET EXCEL TILAPIA IN THE PHILIPPINES

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- Objective
  - Dissemination of newly improved breed (GET EXCEL TILAPIA) to local farmers nationwide

Tilapia production from 1997-2000 in metric tons (Source 1998-2003, BFAR Profile)

Year	Quantity (MT)	% Increase (Decrease)
2002	122,316	+14.58
2001	106,746	+29.23
2000	82,601	+9.49
1999	75,437	+4.74
1998	72,021	-21.57

Supply/production and demand analysis per region for Tilapia (@ 1.5 kcy) (Fisheries Commodity Road Map for Tilapia, 2002)

Region	Production (MT)	Requirement (MT)	GAP
CAR	2,414	2,048	(366)
I	3,088	6,301	(3,213)
II	4,305	4,220	85
III	61,936	12,046	49,890
IV	33,286	32,589	697
V	5,055	7,012	(1,957)
VI	568	9,313	(8,745)
VII	123	8,552	(8,429)
VIII	103	5,416	(5,313)
IX	1,175	4,637	(3,462)

Supply/production and demand analysis per region for Tilapia (@ 1.5 kcy) (Fisheries Commodity Road Map for Tilapia, 2002)

Region	Production (MT)	Requirement (MT)	GAP
X	582	4,121	(3,539)
XI	648	7,784	(7,136)
XII	8,432	3,897	4,535
ARMM	433	3,618	(3,185)
CARAGA	269	3,143	(2,874)
Total	122,417	114,697	7,720

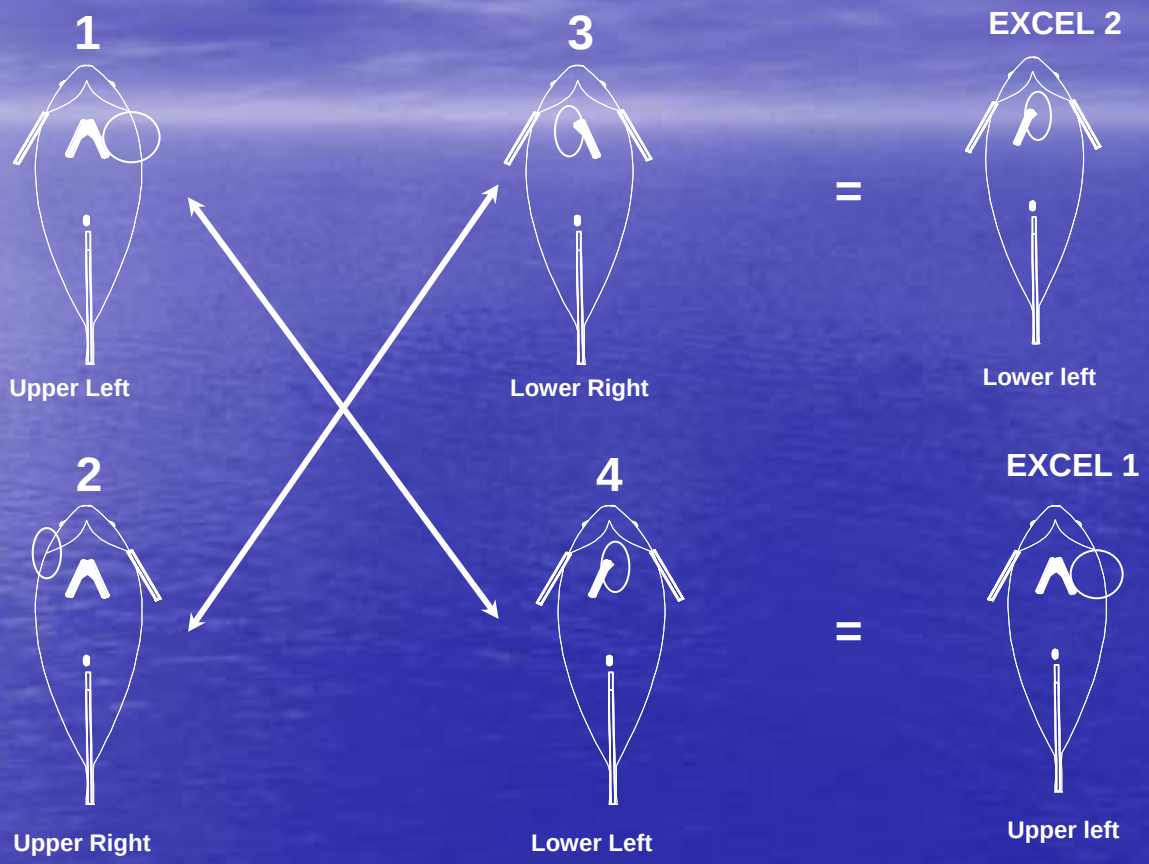
The Four Parent Lines of GET EXCEL Tilapia

- 8th Generation GIFT strain - developed by crossing the best performing genetic groups from eight diverse Nile tilapia strains and their crosses.
- 13th Generation FAC Selected Tilapia (FaST) – a product of within family selection (based on body weight) of *O. niloticus* in a rotational mating scheme.
- Egypt strain – originated from 8 locations in Egypt namely Monsour, Manzalla, Timsah Lake, Ismaillia, Abassa, Mariut, Suez Canal and Idku.
- Kenya strain – progeny of founderstocks collected in 1989 from Lake Turkana.

Dissemination Strategy of GET EXCEL 2002

- Production and Breeding
  - Produced selected lines are breed to bring forth four groups of foundation stocks given to the twelve central hatcheries.
  - The foundation stocks are reared separately by group until large enough to be sexed (about 5 g) and fin clipped.
  - Produced breeders of EXCEL 1 and 2 by central hatcheries are disseminated to provincial/municipal hatcheries and certified/registered private hatcheries which served as satellite station.
  - GET EXCEL 2002 being disseminated to fishfarmers is produced by mating EXCEL 1 and EXCEL 2.

Fish marking used to identify foundation stocks and parent stocks of GET EXCEL 1 and 2.



Legend:

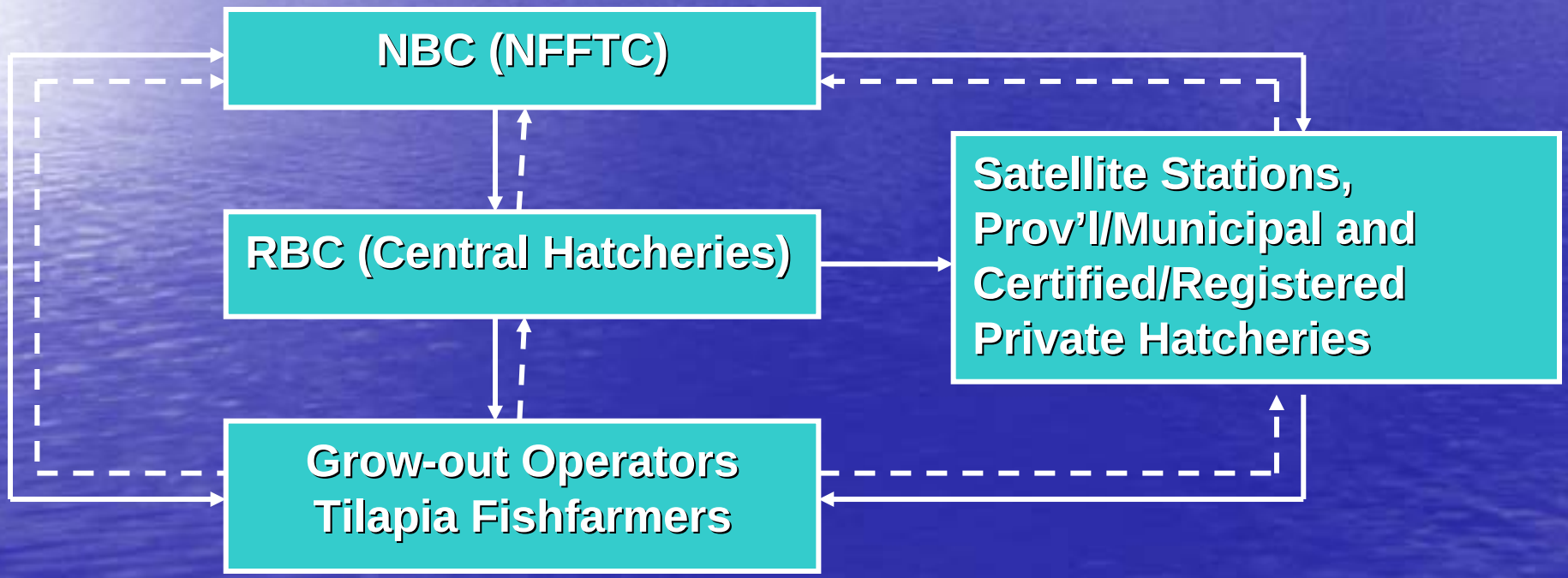
Upper right = Right pectoral fin
Lower right = Right pelvic fin

Upper left = Left pectoral fin
Lower left= Left pelvic fin

- Training
  - Hatchery managers, technical staff of ROS/Central hatcheries and the registered/certified private hatcheries are required to undergo training on Breeding and Dissemination of GET EXCEL Tilapia with emphasis on Broodstock Management.

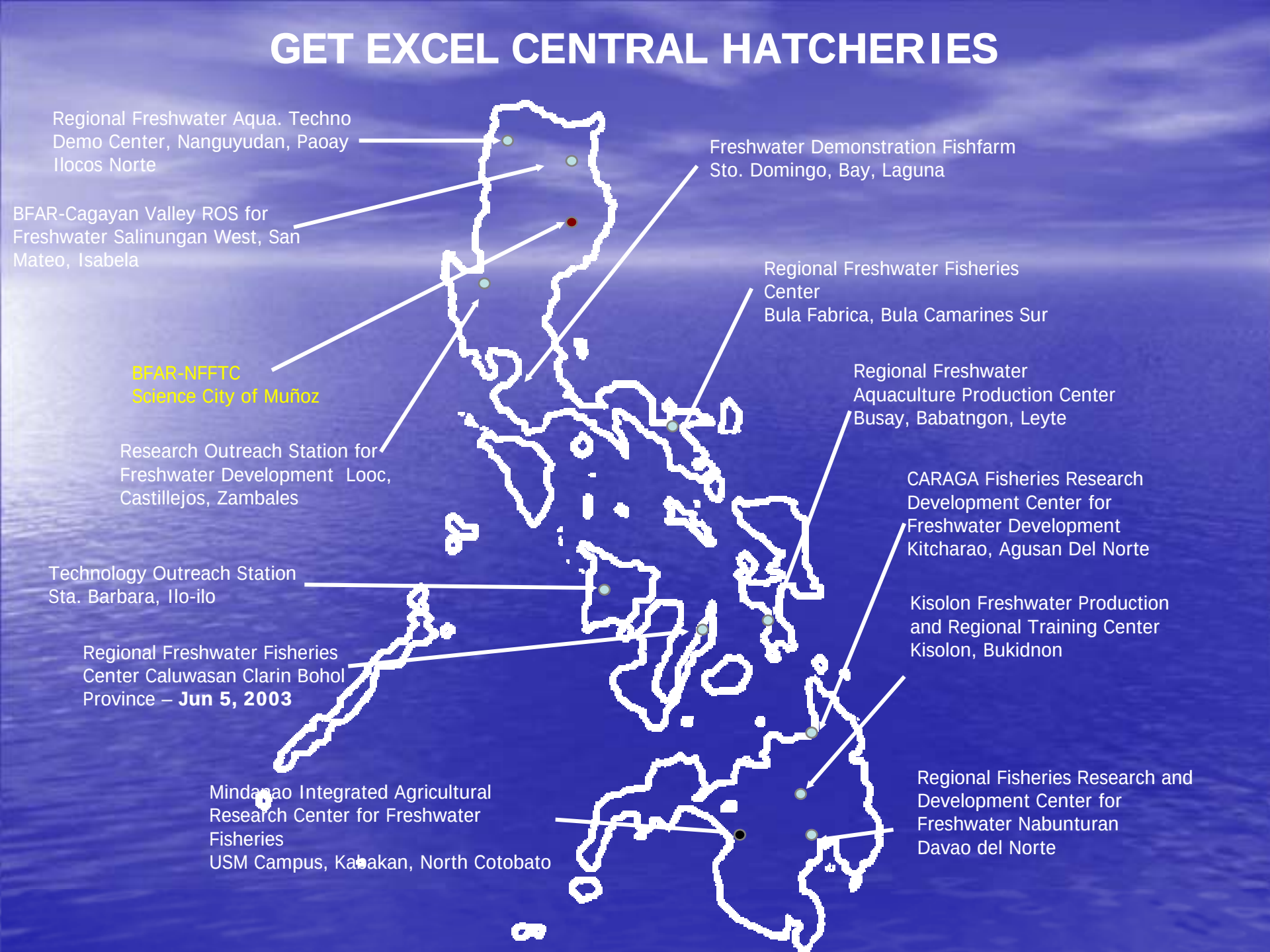
- Evaluation
  - Prior to the distribution of Get EXCEL tilapia broodstock an on-site evaluation of all the Central Hatcheries and certified/registered private hatcheries is being done.
  - The evaluation team is composed of the Chairman as represented by BFAR Assistant Regional Director and members namely:
    - BFAR Regional Extension Group,
    - Representative Provincial Fishery Officer.
    - Representative from the private hatcheries
    - NFFTC representative (in case applicant is requiring further evaluation)
  - Release of broodstock commence after issuance of registration (to applicants who passed the qualification)

- **Distribution**
  - Transfer of Improved Breeds from National Broodstock Center to Multiplier and Grow-out Operators



- BFAR-NFFTC served as National Broodstock Center
- Central Hatcheries serve as Regional Broodstock Center
- Registered Private Hatcheries/Municipal Hatcheries as Satellite Station

GET EXCEL CENTRAL HATCHERIES



Technology Demonstration: Result of GET EXCEL 2002 in Pond

Cooperator	BFAR-NFFTC	BFAR-NFFTC	Noel Ramirez	Remedios Aquino
Location	Muñoz, Nueva Ecija	Muñoz, Nueva Ecija	Pila, Bataan	San Miguel, Bulacan
Pond Area (ha)	0.06	0.06	0.235	0.1700
Type of Operation (based on stocking density)	Extensive	Extensive	Semi-Intensive	Semi-Intensive
Stocking Rate	2 pcs/m^2	2 pcs/m^2	3 pcs/m^2	3 pcs/m^2
No. of fingerlings stocked	1,200 pcs	1,200 pcs	7,000 pcs	5,100 pcs
Date stocked	Feb. 17, 2003	Feb. 15, 2003	Sept. 11, 2003	July 17, 2003
Date harvested	Oct. 20, 2003	Oct. 20, 2003	Apr. 10, 2004	Feb. 1 8, 2004
Amount of feeds consumed	1,318.6 kls	1,741.5 kls	2,558.5 kls	2,419.44 kls
Feed Conversion Ratio (FCR)	1.84	2.45	0.95	1.02
Survival Rate	90%	85%	82.57 %	90.80 %

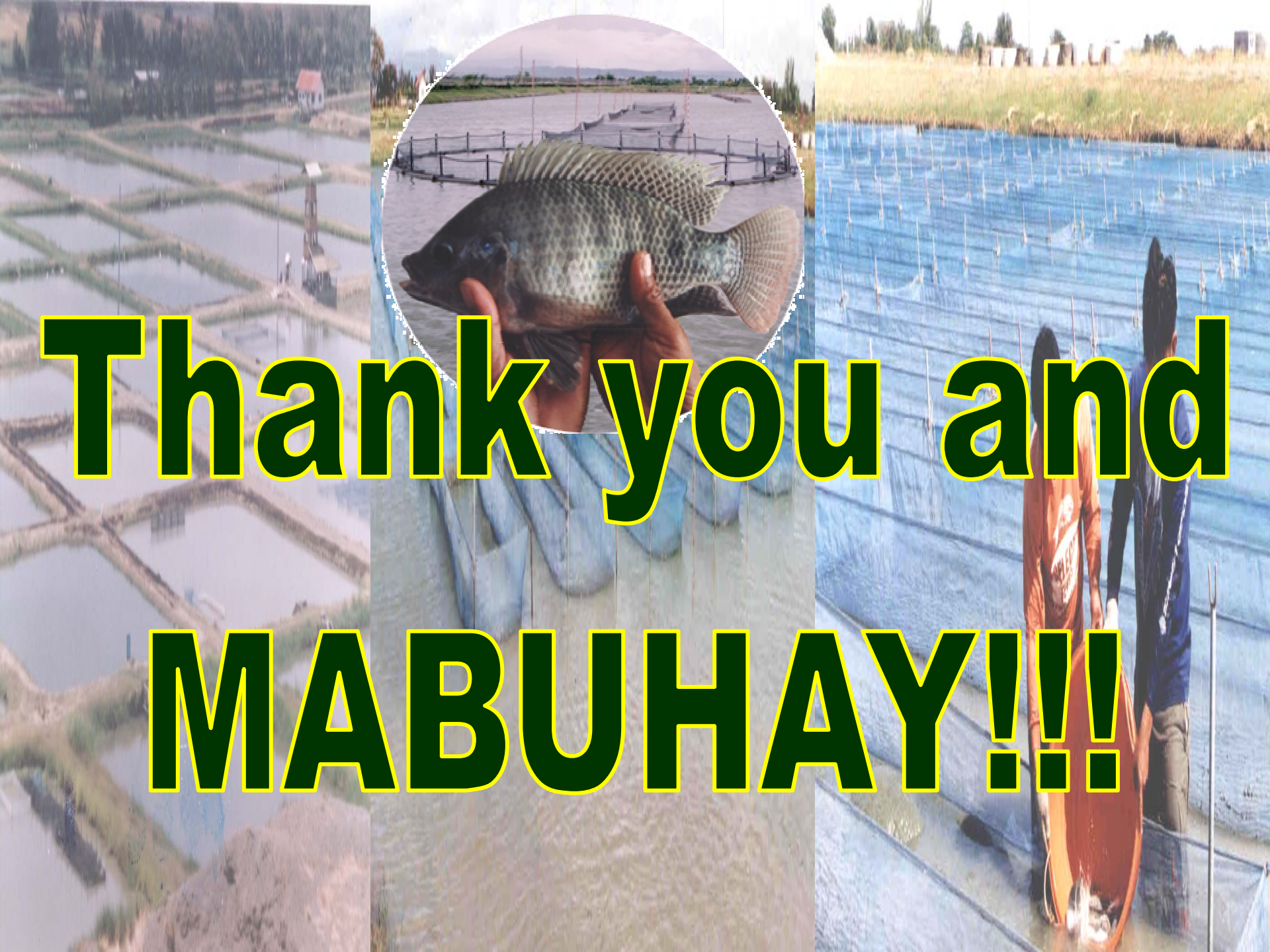
Cooperator	BFAR-NFFTC	BFAR-NFFTC	Noel Ramirez	Remedios Aquino
Expenses ($)				
Fingerlings	21.57	21.57	18.88	13.75
Labor	17.98	17.98	71.92	26.97
Electricity	-	-	5.84	8.99
Transportation	-	-	29.66	10.79
Chicken manure	-	-	5.61	42.79
Inorganic (16-20-0)	-	-	4.94	22.24
Agrilime	-	-	6.74	-
Marketing Expenses	-	-	227.47	145.11
Feeds	459.87	607.43	873.71	814.35
Total ($)	499.42	646.98	1,244.77	1,084.99

Cooperator	BFAR-NFFTC	BFAR-NFFTC	Noel Ramirez	Remedios Aquino
Output (Quantity)				
Average Body Weight at Harvest (kls)	300 g = $7.44 350 g = $9.38 400 g = $16.39 600 g = $298.94 750 g = $268.59 850 g = $115.11	300 g = $7.37 350 g = $9.28 400 g = $16.23 600 g = $295.96 750 g = $265.91 850 g = $113.96	300 g = $93 350 g = $94 400 g = $1,474 626 g = $1,015	300 g = $72.92 350 g = $545.63 400 g = $1,428 626 g = $312.46
Kilos harvested	715.85	708.71	2,676.45	2,360
Price per kilo ($)	$1.13	$1.13	300 g = $1.15 350 g = $1.35 400 g = $1.44 626 g = $1.53	$1.02
Gross Income ($)	814.23	802.74	3,905.00	2418.55
Net Income ($)	314.81	155.76	2,660.23	1,333.56
Income per square meter ($)	0.52	0.26	1.13	0.78
Income per month ($)	39.35	19.47	380.03	190.51
Production cost per kilo ($)	0.70	0.91	0.46	0.46

Cooperator	BFAR-NFFTC	BFAR-NFFTC	Noel Ramirez	Remedios Aquino
If sold as fillet				
Price per kilo of fillet ($)	4.49	4.49	4.49	4.49
Kilos fillet	237.67 kls	235.30 kls	846.26 kls	591.75 kls
Whole fish <400g ($)	19.00	18.56	233.76	633.89
Fillet ($)	1,067.00	1,056	3,799.70	2,656.98
Gross Income ($)	1,086.00	1,075.05	4,033.46	3,290.87
Expenses (Fillet)	35.95	35.63	128.23	89.64
Total expenses (fillet + prod'n) ($)	535.37	682.61	1,373.00	1,174.63
Net Income ($)	551.58	392.44	2,660.46	2,116.24
Income per square meter ($)	0.92	0.65	1.13	1.24
Income per month ($)	68.95	49.05	380.06	302.32

SUMMARY

- The fish is now disseminated in central hatcheries and satellite station located strategically in different regions of the country using a well structured dissemination strategy.


Thank you and
MABUHAY!!!