



Overview from Bangladesh – Blue Economy Challenge Project



Partner organizations :

- Fisheries and Marine Resource Technology Discipline, Khulna University(Contact person : Shikder Saiful Islam)
Involve in indoor tank trial and a student completed submitted M.Sc thesis on this. This trial in university was led by Shikder Saiful Islam, Assistant Professor, Fisheries and Marine Resource Technology Discipline, Khulna University, Bangladesh
- Faculty of Fisheries, Bangladesh Agriculture University, Mymensingh, Bangladesh
Proximate analysis of shrimp feed has been done here.
- Daud Fish Farm, Khulna
The trial ponds were located here

WorldFish Team :

Kazi Ahmed Kabir
Support in coordinating, and implementing the trial program
Md. Shamim Hossain
PL stocking, Feeding, data collection & sampling
Mohammad Mamun Ur Rashid
Assist in research design, cage design, feed formulation, production, and monitoring



Trial Description

- Location : Shahos, Dumoria, Khulna
- Feed type : Pellet feed from Semi-auto feed mill and keep moisture up to 12%, through drying overnight in oven at 65⁰c
- Stocking Density : 15 ind/m³
- Stocking size : 5 gram
- Harvesting size : 20 gram
- Total Cage : 10 x 4 x 2 ponds = 80
- Size of cage : 1-1.2 m³;
- Cage materials : Fine mesh net with iron frame and aeration in each cage
- Feeding regime – 2 times feed/day
- Total Pond replicate: 2
- Pond size : 30 decimal
- Duration of rearing juvenile: 56 days
- Feed is administrated by feeding tray
- Uneaten feed collected and dried for analysis.
- Number of treatment : 10 types of feed (including control CP)
- Number of replicate : 8
- Number of ponds : treatments and replicates are distributed in 2 ponds
- Sampling : Every 15 days interval
- Pond size : 30 decimal



Feeds

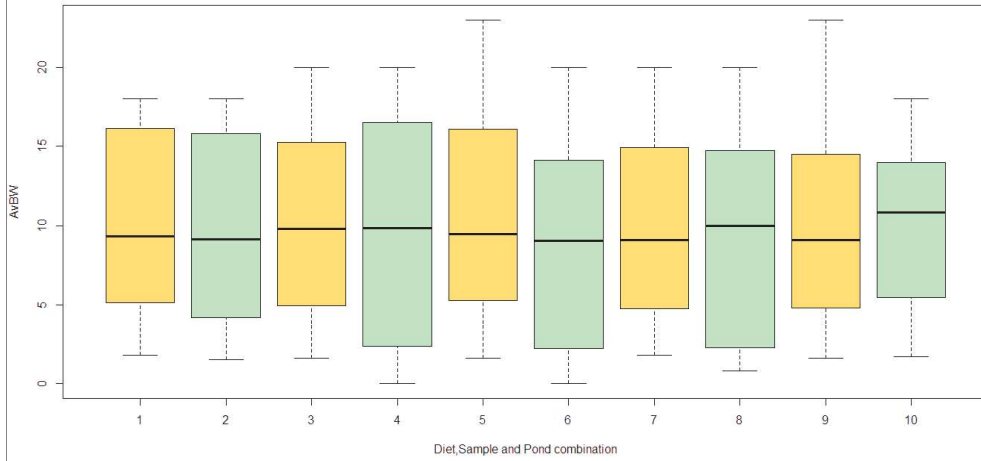
Sl. No	Ingredients	Brand	% of ingredient in Feed								
			A	B	C	D	E	F	G	H	I
1	Fish meal		20.00%	20.00%	20.00%	10.00%	10.00%	0.00%	0.00%	20.00%	20.00%
2	MOC		17.00%	17.00%	17.00%	17.00%	17.00%	17.00%	17.00%	17.00%	17.00%
3	SBM		10.00%	10.00%	10.00%	26.00%	26.00%	42.00%	42.00%	10.00%	24.00%
4	Shrimp meal		8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
5	DORB		10.00%	10.00%	10.00%	9.00%	9.00%	8.00%	8.00%	10.00%	10.00%
6	Fish oil		0.50%	0.50%	0.50%	1.20%	1.20%	2.30%	2.30%	0.50%	0.50%
7	Soy lecithin		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
8	Methionine		0.00%	0.00%	0.00%	0.20%	0.20%	0.45%	0.45%	0.00%	0.00%
9	Soyabean oil		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.50%
10	Novacq		0.00%	2.50%	5.00%	5.00%	0.00%	5.00%	0.00%	0.00%	0.00%
11	Rice Polish		10.00%	10.00%	10.00%	7.00%	7.00%	0.00%	0.00%	10.00%	8.00%
12	Wheat flour		14.75%	12.25%	9.75%	6.85%	11.85%	7.50%	12.50%	14.90%	9.40%
13	Wheat Gluten		7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	0.00%
14	Vitamin premix		1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
15	Mold inhibitor		0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
16	Pellet binder		0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%
17	Cholesterol		0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.00%	0.00%

and CP Shrimp feed

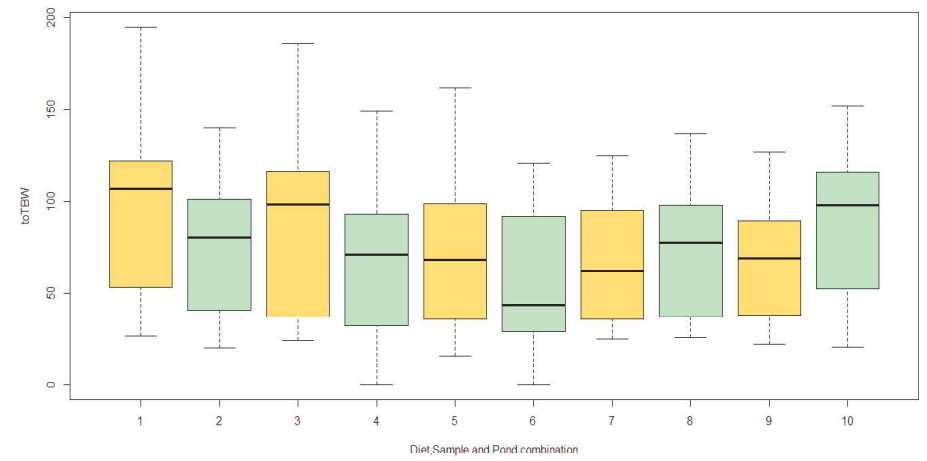


Result

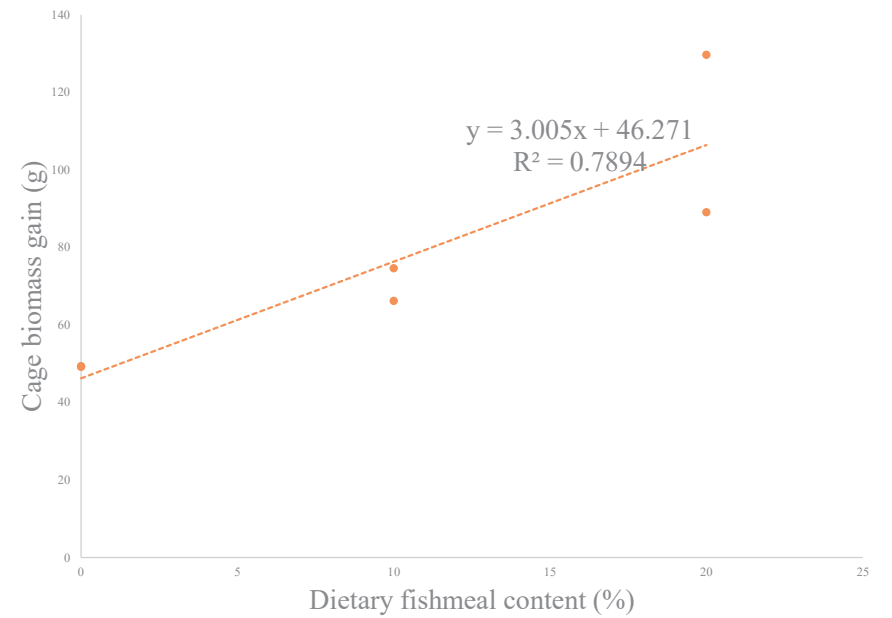
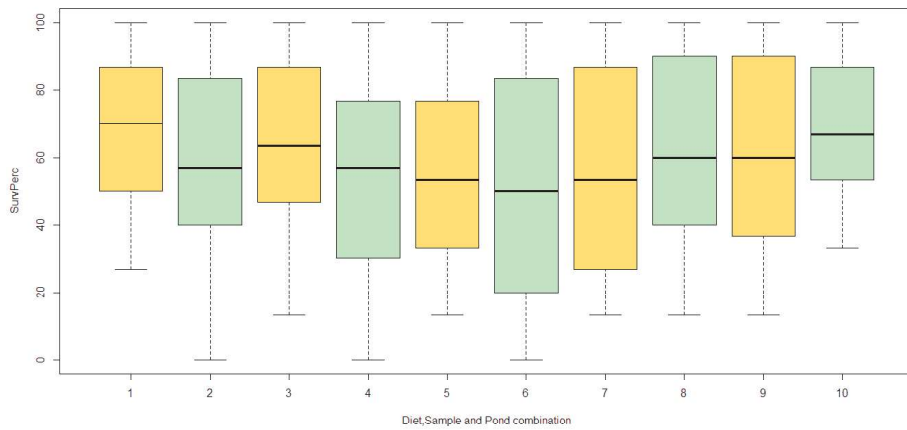
AvBW by treatment



ToTBW by treatment



SurvPerc by treatment





Key outcome

- Control feed showed better result than treated feed
- Cholesterol treated feed showed better performance.

Challenges

- Importation of Novaq in Bangladesh
- Customize Feed production and collection of some ingredients
- Maintenance of cages

Reflections

The local production facilities is necessary to make it accessible and economically viable