Appendix-I

Questionaries during Survey on small fish species consumed by the Bodo communities

(i) What are the different types of fishes available in the water bodies of your locality?

Answers: .....

.....

(ii) How do you catch the fish for your dietary item?

Answers: .....

.....

(iii) What fishes you generally prefer in your daily diet?

Answers: .....

.....

(iv) Whether the popular large fishes are used in your regular diet?

Answers: .....

.....

(v) What are the small fishes you consume regularly?

Answers: .....

.....

(vi) Whether the small fishes which you consume have any commercial value?

Answers: .....

.....

(vii) Where from you collect the small fishes for regular consumption?

Answers: .....

.....

The persons who had been interacted for the field survey are enlisted below:

1. Benudhar Gayari, Sillgari, Kokrajhar
2. Daniram Boro, Deeplai Beel, Kokrajhar
3. Bathuram Narzery, Gaurang, Kokrajhar.
4. Rinkhang Basumatary, Patgaon, Kokrajhar
5. Mihiram Daimary, Dotma, Kokrajhar.
6. Gambari Brahma, Batabari, Kokrajhar.
7. Bhanumati Narzery, Kachugaon, Kokrajhar.
8. Jaymati Basumatary, Santhaibari, Kokrajhar.
9. Binita Khaklary, Hlang Bazar, Kokrajhar.
10. Hungma Wary, Jaleswari, Kokrajhar.
11. Jaykhungur Narzery, Tipkai, Kokrajhar.
12. Ansuma Narzery, Diabari, Kokrajhar.

Appendix-II

Optimum water quality requirement for a fish

Sl. No.	Parameters	Optimum level
1.	Colour (colour unit)	Clear water with greenish hue <100 colour unit
2.	Transparency (cm)	30-40
3.	**Turbidity (mg/l)**	**<30**
4.	**Solids (mg/l)** **a. Total** **b. Suspended**	 **<500** **30-200**
5.	**Temperature (^{0}C)** **a. Tropical climate** **b. Temperate climate**	 **25-32** **10-12**
6.	**pH**	**6.5-8.5**
7.	Hardness (mg/l)	30-180
8.	**Alkalinity (mg/l)**	**50-300**
9.	Chlorides (mg/l)	31-50
10.	**Salinity (ppt)**	**<0.5**
11.	**Dissolved oxygen (mg/l)**	**5-10**
12.	Total dissolved CO_2 free (mg/l)	<3
13.	Ammonia nitrogen (mg/l) a. Unionised b. Ionised	 0-0.1 0-1.0
14.	Nitrite nitrogen (mg/l)	0-0.5
15.	Nitrate nitrogen (mg/l)	0.1-3
16.	Total nitrogen (mg/l)	0.5-4.5
17.	Total phosphorus (mg/l)	0.05-0.4
18.	Potassium (mg/l)	0.5-10
19.	Calcium (mg/l)	75-150
20.	Silica (mg/l)	4-16
21.	Iron (mg/l)	0.01-0.3
22.	**B.O.D. (mg/l)**	**<10**
23.	**C.O.D. (mg/l)**	**<50**
24.	Hydrogen sulphide (mg/l)	<0.002
25.	Residual chlorine (mg/l)	<0.003

Appendix-III

Retention time of fatty acids and methyl ester (FAME)

Fatty acid	Retention time, min	times (to 11:0 int. std.)
4:0 Butyric	10.49	0.46
6:0 Caproic	12.36	0.54
8:0 Caprylic	15.69	0.68
10:0 Capric	20.39	0.89
11:0 Undecanoic	22.99	1.00
12:0 Lauric	25.58	1.11
13:0 Tridecanoic	28.15	1.22
14:0 Myristic	30.65	1.33
14:1 Myristoleic	32.63	1.42
14:1 *trans*-Myristelaidic	32.01	1.39
15:0 Pentadecanoic	33.04	1.44
15:1 Pentadecenoic	34.98	1.52
16:0 Palmitic	35.41	1.54
16:1 *trans*-Palmitelaidic	36.39	1.58
16:1 Palmitoleic	36.88	1.60
17:0 Margaric	37.54	1.63
17:1 Margaroleic	38.92	1.69
18:0 Stearic	39.78	1.73
18:1 *trans* 6-Petroselenic	40.50	1.76
18:1 *trans*-Elaidic	40.61	1.77
18:1 *trans* 11-Vaccenic	40.72	1.77
18:1 Petroselenic	40.90	1.78
18:1 Oleic	40.99	1.78
18:1 Vaccenic	41.18	1.79
18:1 Octadecenoic	41.54	1.81
18:2 *trans*-Linolelaidic	41.69	1.81
18:2 *trans* 9-Linolelaidic	42.11	1.83
18:2 *trans* 12-Linolelaidic	42.53	1.85
18:2 Linoleic	42.87	1.86
20:0 Arachidic	43.75	1.90
18:3 g-Linolenic	44.25	1.92
20:1 Eicosenic *cis* 5	44.42	1.93
20:1 Eicosenic *trans* 11	44.45	1.93
20:1 Eicosenic *cis* 8	44.67	1.94
20:1 Eicosenic *cis* 11	44.82	1.95
20:1 Eicosenic *cis* 13	44.99	1.96
18:3 Linolenic	45.02	1.96
18:2 Linoleic—conjugated	45.35	1.97
18:2 Linoleic—conjugated	45.40	1.97
21:0 Heneicosanoic	45.69	1.99
18:2 Linoleic—conjugated	46.18	2.01
18:4 Octadectetraenoic	46.39	2.02
20:2 Eicosadienoic	46.65	2.03
22:0 Behenic	47.46	2.06
20:3 g-Eicosatrienoic	47.94	2.09
22:1 Cetoleic	48.27	2.10
22:1 Erucic	48.50	2.11
20:3 Eicosatrienoic	48.68	2.12
20:4 Arachidonic	48.94	2.13
23:0 Tricosanoic	49.22	2.14
22:2 Docosadienoic	50.17	2.18
24:0 Lignoceric	50.79	2.21
20:5 Eicosapentaenoic	50.96	2.22
24:1 Nervonic	51.92	2.26
22:3 Docosatrienoic	51.98	2.26
22:4 Docosatetraenoioc	52.28	2.27
22:5 Docosapentaenoic	54.75	2.38
22:6 Docosahexaenoic	55.82	2.43

Factors(f_{TG}) for conversion of FAMEs TG equivalents

4:0 Butyric	0.8627	0.9868
6:0 Caproic	0.8923	0.9897
8:0 Caprylic	0.9114	0.9915
10:0 Capric	0.9247	0.9928
11:0 Undecanoic	0.9300	0.9933
12:0 Lauric	0.9346	0.9937
13:0 Tridecanoic	0.9386	0.9941
14:0 Myristic	0.9421	0.9945
14:1 Tetradecenenoic	0.9417	0.9944
15:0 Pentadecanoic	0.9453	0.9948
15:1 Pentadecenoic	0.9449	0.9947
16:0 Palmitic	0.9481	0.9950
16:1 Hexadecenoic	0.9477	0.9950
17:0 Margaric	0.9507	0.9953
17:1 Margaroleic	0.9503	0.9952
18:0 Stearic	0.9530	0.9955
18:1 Octadecenoic	0.9527	0.9955
18:2 Octadecdieoic	0.9524	0.9954
18:3 Linolenic	0.9520	0.9954
18:4 Octadectetraenoic	0.9517	0.9954
20:0 Arachidic	0.9570	0.9959
20:1 Eicosenic	0.9568	0.9959
20:2 Eicosadienoic	0.9565	0.9958
20:3 Eicosatrienoic	0.9562	0.9958
20:4 Arachidonic	0.9560	0.9958
20:5 Eicosapentaenoic	0.9557	0.9958
21:0 Heneicosanoic	0.9588	0.9961
22:0 Behenic	0.9604	0.9962
22:1 Docosaenoic	0.9602	0.9962
22:2 Docosadienoic	0.9600	0.9962
22:3 Docosatrienoic	0.9598	0.9961
22:4 Docosatetraenoic	0.9595	0.9961
22:5 Docosapentaenoic	0.9593	0.9961
22:6 Docosahexaenoic	0.9590	0.9961
23:0 Tricosanoic	0.9620	0.9964
24:0 Lignoceric	0.9963	0.9965
24:1 Nervonic	0.9632	0.9965

[c] F_{Ai} is the conversion factor for conversion of FAMESs to corresponding fatty acids.

[D] F_{Tgi} is the conversion factor for conversion of FAMEs to triglycerides for individual fatty acids.