



(10)

FIRST 138 CASE STUDIES OF COMPOSITE FISH CULTURE IN INDIA

BULLETIN No 23

Central Inland Fisheries Research Institute

(Indian Council of Agricultural Research)

BARRACKPORE - 743101, WEST BENGAL, INDIA

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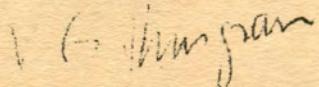
species combination tailored to make use of all the available ecological niches in the pond eco-system, fish yields ranging from 3 - 6.5 t/ha/yr were generally obtained. Productions even as high as 7,284 kg/ha/8 months and 5,890 kg/6 months have been obtained against the Project target of only 3 t/ha/yr. The results have further indicated the possibility of attaining still higher productions through more efficient pond fertilization, supplementary feeding, and pond aeration.

The technology of composite culture is best applicable to water spread areas ranging from 0.1 ha to about 2.5 ha, and having a depth ideally of about 6 ft. It is essential that the technology should make its impact all over India wherever waters of appropriate area exist for the people to realise the fruits of freshwater aquaculture research and improve their nutritional standard and better their social and economic status. The results that have been attained in various trials of composite fish culture are not generally known and a case-history approach has been considered to be one of the best for people to know what the technology means in terms of fish production per unit area of water. This publication presents the first 138 case-studies that have been pursued and that are within the knowledge of this Institute. In the case-studies presented, 66 are related to privately owned waters and 72 in governmental or institutional waters.

In this presentation all the operational inputs have been taken into account and the cost of production per kg of fish arrived at in each case separately, each pond forming a case study. An attempt has been made to divide the country into four zones, viz. Eastern, Southern, Western, and Central. The productions that have been attained and the expense that has been incurred in pond fish culture, which fall in a particular zone, have also been averaged and presented separately. This exercise, however, does not take into account the technical supervisory costs and expenditure of capital nature, such as that which might be involved in new pond construction or pond rental. The readers are requested to fill in these costs, if they wish, for working out the over-all cost-benefit of composite fish culture. In doing so, however, it may be borne in mind that only a fraction of the supervisory effort proportional to and relevant to the water area concerned

should be reckoned rather than the total supervisory costs. An efficient supervisory aquaculturist can, perhaps control a couple of scores of hectares of water area.

It is hoped that these case studies will trigger further work in composite fish culture and it is felt that by the time 500 case studies are brought to light, the technology would have found a firm footing on our land.



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FIRST 138 CASE STUDIES OF COMPOSITE FISH CULTURE IN INDIA

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| (iii) | Western region | Table | 3 |
| (iv) | Central region | Table | 4 |

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| 3. | <u>Centres of the Western Region</u> | |
| Karnal | ... | 120-125 |
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| 4. | <u>Centres of the Central Region</u> | |
| Jaunpur | ... | 126-137 |
| Ranchi | ... | 138 |

EASTERN REGION

(ORISSA, WEST BENGAL & ASSAM)

Case studies from 1 to 85

Number of case studies : 85

Total area : 28.50 ha

WEIGHTED AVERAGES OF INPUTS AND COSTS STRUCTURE OF COMPOSITE FISH CULTURE IN THE EASTERN REGION OF INDIA CONSISTING OF JHARKHAND, WEST BENGAL AND ASSAM
 (1972-76)

TABLE-1

Number of case studies : 85

Total area : 28.50 ha

Average area per pond : 0.3352 ha

| Item of inputs | Quantity/ ha/year | Average price level <u>C</u> Rs. | Expenditure/ha/yr Rs. |
|--|----------------------|---|--------------------------|
| Mahua oil cake | 2645 Kg | 0.34/Kg | 902 |
| L i m e | 392 Kg | 0.25/Kg | 97 |
| Cowdung | 11090 Kg | 19.00/ton | 220 |
| Ammonium sulphate | 221 Kg | 0.71/Kg | 158 |
| Single super phosphate | 175 Kg | 0.94/Kg | 164 |
| Mariate of potash | 19 Kg | 0.68/Kg | 13 |
| U r e a | 201 Kg | 2.13/Kg | 429 |
| Fingerlings | 6143 | 104.00/1000 | 639 |
| Mustard oil cake or ground nut oil cake | 3326 Kg | 0.98/Kg | 3319 |
| Rice bran | 3637 Kg | 0.46/Kg | 1678 |
| Aquatic and terrestrial weeds | 17 tons | 5.00/ton | 85 |
| Labour charges | - | - | 2041 |
| Netting charges | - | - | 276 |
| Miscellaneous charges | - | - | 348 |
| Total cost - 10369 | | | |

Average cost/ha/year - Rs.10,369

Average yield/ha/year - 3543 Kg

* Cost of production per Kg of fish - Rs.2.93

* Does not include rental, imputed costs of owner management/labour, interest on working capital, depreciation of farm equipment, managerial costs.

SOUTHERN REGION

(TAMIL NADU & ANDHRA PRADESH)

Case studies from 86 to 109

Number of case studies : 24

Total area : 3.17 ha

TABLE 2

WEIGHTED AVERAGES OF INPUTS AND COSTS STRUCTURE OF COMPOSITE FISH CULTURE IN THE SOUTHERN REGION OF INDIA CONSISTING OF TAMIL NADU AND ANDHRA PRADESH (1972-1976)

Number of case studies : 24

Number of case studies under State Central Collaboration : 24

Total area : 3.17 ha

Average area per pond : 0.1321 ha

| Item of inputs | Quantity/ha /yr | Average Price level C Rs. | Expenditure/ ha/yr. Rs. |
|---------------------------|-----------------|------------------------------|----------------------------|
| 1) Mahua Oil Cake | - | 0. - | - |
| 2) Lime | 329 Kg | 0.29/Kg | 96 |
| 3) Cowdung | 11,232 Kg | 38.00/ton | 429 |
| 4) Ammonium Sulphate | 278 Kg | 8.78/Kg | 217 |
| 5) Single super Phosphate | 268 Kg | 0.77/Kg | 206 |
| 6) Muriate of Potash | 38 Kg | 1.05/Kg | 40 |
| 7) Fingerlings | 6858 | 53.00/1000 | 368 |
| 8) Ground nut oil cake | 2593 Kg | 1.30/Kg | 3374 |
| 9) Rice bran | 3756 Kg | 0.47/Kg | 1778 |
| 10) Aquatic weeds | 62 tons | 5.00/ton | 310 |
| 11) Miscellaneous | - | - | 86 |
| | | Total | 6904 |

Average yield/ha/year = 2582 Kg

Average cost/ha/year = Rs.6904

*Cost of production per Kg of fish = Rs.2.67

*Does not include rental, wages & salaries, interest on working capital, depreciation of farm equipment, netting charges.

W E S T E R N R E G I O N

(MAHARASHTRA & HARYANA)

Case studies from 110 to 125

Number of case studies : 16

Total area : 3.95 ha

(MAHARASHTRA & HARYANA)

Case studies from 110 to 125

Area : 3.95 ha - Maharashtra & Haryana

Number of case studies : 16

Total area : 3.95 ha

TABLE. 3

WEIGHTED AVERAGES OF INPUTS AND COSTS STRUCTURE OF COMPOSITE
FISH CULTURE IN THE WESTERN REGION OF INDIA CONSISTING OF
MAHARASTRA AND HARYANA . (1972-1976)

Number of case studies : 16

Number of case studies under State Central Collaboration : 16

Total area : 3.95 ha

Average area per pond : 0.2469 ha

| Item of inputs | Quantity/ha/yr | Average price level C.Rs. | Expenditure/ha/ yr. Rs |
|--|----------------|------------------------------|---------------------------|
| 1) Mahua Oil Cake | 500 Kg | 0.70/Kg | 348 |
| 2) Lime | 810 Kg | 0.41/Kg | 336 |
| 3) Cowdung | 8660 Kg | 36.00/ton | 318 |
| 4) Ammonium sulphate | 229 Kg | 0.92/Kg | 211 |
| 5) Single super phosphate | 275 Kg | 0.50/Kg | 138 |
| 6) Muriate of potash | 47 Kg | 0.60/Kg | 28 |
| 7) Fingerlings | 8069 | 67.00/1000 | 542 |
| 8) Ground nut oil cake or mustard oil cake | 7520 Kg | 1.34/Kg | 10,043 |
| 9) Wheat bran or Rice bran | 3287 Kg | 0.57/Kg | 1873 |
| 10) Aquatic weeds | 44 tons | 16.00/ton | 710 |
| 11) Miscellaneous | - | - | 520 |
| | | Total | <u>15,067</u> |

Average yield/ha/year = 5527 Kg

Average cost/ha/year = Rs 15,067

*Cost of production per Kg of fish = Rs 2.73

*Does not include rental, wages & salaries, interest on working capital, depreciation of farm equipment, netting charges.

CENTRAL REGION

(UTTAR PRADESH AND BIHAR)

CASE STUDIES FROM - 126 to 138.
NUMBER OF CASE STUDIES - 13.
TOTAL AREA - 2.17ha.

TABLE - 4

WEIGHTED AVERAGES OF INPUTS AND COSTS STRUCTURE
OF COMPOSITE FISH CULTURE IN THE CENTRAL REGION
OF INDIA CONSISTING OF UTTAR PRADESH & BIHAR

1972-76

Number of case studies : 13

Number of case studies under State Central Collaboration : 13

Total area : 2.17 for 13 case studies.

Average area per pond : 9.1669 ha

| Item of inputs | Quantity/ha/yr | Average price level C R | Expenditure/ha/yr Rs. |
|-----------------------------|----------------|-------------------------|--------------------------|
| 1) Mahua Oil cake | 967 kg | 0.97/kg | 934 |
| 2) Lime | 716 kg | 0.27/kg | 192 |
| 3) Cowdung | 10,239 kg | - | |
| 4) Ammonium Sulphate | 354 kg | - | |
| 5) Single Superphosphate | 291 kg | - | |
| 6) Urea | 136 kg | - | |
| 7) Muriate of potash | 46 kg | - | |
| 8) Poultry droppings | 243 kg | - | |
| 9) Fingerlings | 5368 | 28.00/1000 | 155 |
| 10) Mustard Oil cake | 4757 kg | 0.78/kg | 3730 |
| 11) Rice bran or wheat bran | 4850 kg | 0.38/kg | 1576 |
| 12) Cattle feed | 609 | 1.05/kg | 639 |
| 13) Aquatic weeds | 37 tons | 5.00/ton | |
| 14) Miscellaneous | - | - | 19 |
| Total | | | 8241 |

Average yield/ha/year = 3457 kg

Average cost/ha/year = Rs. 8241

*Cost of production per kg of fish = Rs. 2.38

*Does not include rental, wages and salaries, interest on working capital, depreciation of farm equipment, netting charges,

CENTRAL INLAND FISHERIES RESEARCH SUB-STATION OF C.I.F.R.I.
(ICAR) : CUTTACK : ORISSA

CASE STUDY-1

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT CUTTACK DURING
1973-74

Location of the pond - Killa Fish Farm (Orissa)
Water area of pond - 0.15ha
Culture period - 9½ months

| <u>Item of inputs</u> | <u>per ha</u> | <u>Purchased at the rate of (Rs.)</u> | <u>Expenditure/ha (Rs.)</u> |
|------------------------------|---------------|--|-----------------------------|
| Mahua oil cake | 2000kg | 0.45/kg | 900.00 |
| Lime | — | — | — |
| Cowdung | 10 tonnes | 0.14/kg | 1400.00 |
| Urea | 106kg | 1.0/kg | 106.00 |
| Triple Super-phosphate | 224kg | 0.67/kg | 150.08 |
| Amm. Sulphate | 7500 nos. | (Sc. 2.5 : C 1 : R 2.5 : GC 1 : M 1 : CC 2 + few catla X rohu hybrid + few Chitala + few grey mullet @ Rs. 70/thousand | 525.00 |
| Supplementary feed (1 : 1.5) | | | |
| G.O.C. | 7410kg | 1.29/kg | 9558.90 |
| R.P. | 11,116kg | 0.45/kg | 5002.20 |
| Weeds | 10.3 tonnes | 8 X 40 days | 320.00 |
| | | | 18000.46 |

| <u>Species</u> | <u>Density /ha</u> | <u>In wt. (q)</u> | <u>Final wt. (q)</u> | <u>Survival %</u> | <u>Production kg/ha</u> |
|----------------|--------------------|--------------------|----------------------|-------------------|-------------------------|
| S.C. | I 187 I 1688 | 146.62 3.19 | 1498.10 | 96.20 | 2546.45 |
| Catla | 450 I 300 I | 78.33 I 10.00 I | 1339.61 | 73.30 | 686.98 |
| Rohu | 1875 | 21.67 | 994.82 | 95.08 | 1663.00 |
| Mrigal | 750 | 54.28 | 1298.90 | 86.70 | 787.21 |
| Common carp | 1500 | 15.10 | 1007.33 | 98.19 | 1462.54 |
| Grass carp | 750 + 50 | 24.28 I 64.00 I | 1758.69 | 89.00 | 1616.38 |
| Carp Hybrid | 57 | 10.40 | 770.00 | 62.50 | 25.64 |
| Chital | 57 | 114.58 | 1175.00 | 75.00 | 46.95 |
| | | | TOTAL — | 8835.15 | |

Gross production 8835kg/ha/286 days - Net production 8631kg/ha/286 days

* Production cost per kg. - Rs. 2.03

* Does not include rental value, wages and salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting.

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CASE STUDY-2

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT CUTTACK DURING
1973-74

Location of the pond - Killa fish farm, Cuttack. (Orissa)
Water area of pond - 0.4ha.
Culture period - one year.

| <u>Item of inputs</u> | <u>per ha</u> | <u>Purchased at the rate of (Rs)</u> | <u>Expenditure (Rs)</u> |
|------------------------------|----------------------|--|-------------------------|
| Mahua oil cake | 2000kg | 0.45/kg | 900.00 |
| Lime | | | |
| Cowdung | 3.1 tonnes (3100) | 0.14/kg | 434.00 |
| Urea | 188kg | 1.0/kg | 188.00 |
| Triple Super-phosphate | 425kg | 0.67/kg | 284.75 |
| Ammon. sulphate | 125kg | 0.58/kg | 72.50 |
| Fingerlings | 7500 nos | (Sc 2.5 : C 1 : R 2.5 : GC 1 : M 1 : CC 2) + few catla X rohu hybrid + few chitala + few grey mullet @ Rs. 70/thousand | 525.00 |
| Supplementary feed (1 : 1.5) | | | |
| G.O.C. | 6457.5kg | 1.29 | 8330.17 |
| R.P. | 8172.5kg | 0.45 | 3677.62 |
| Weeds | 40.1 tonnes | 8 X 160 days | 1120.00 |
| | | | 15532.04 |

| <u>Species</u> | <u>Density /ha</u> | <u>In wt. (g)</u> | <u>Final wt. (g)</u> | <u>Survival (%)</u> | <u>Production kg/ha</u> |
|----------------|--------------------|-------------------|----------------------|---------------------|-------------------------|
| S.C. | 1875 | 49.90 | 1539.00 | 99.73 | 2903.45 |
| Catla | 52 | 212.50 | | | |
| | 375 | 126.40 | 782.00 | 99.67 | 585.25 |
| | 323 | 17.53 | | | |
| Rohu | 1875 | 34.00 | 646.00 | 96.40 | 1167.25 |
| Mrigal | 750 | 48.66 | 1129.00 | 99.67 | 843.38 |
| Common carp | 1500 | 18.75 | 1415.00 | 95.50 | 2028.13 |
| Grass carp | 750 | 18.25 | 2600.00 | 90.67 | 1768.88 |
| Carp hybrid | 28 | 65.50 | 718.00 | 100.00 | 19.75 |
| Chital | 62 | 92.60 | 643.00 | 88.00 | 35.38 |
| Grey mullet | 250 | 0.09 | 190.00 | 78.00 | 37.83 |
| | | | | TOTAL | 9389.30 |

Gross production 9389kg/ha/yr - Net production 9088kg/ha/yr.

* Production cost per kg - Rs. 1.65

* Does not include rental value, wages and salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting.

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(ICAR) : CUTTACK : ORISSA

CASE STUDY-3

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT CUTTACK DURING
1974-75

Year of experimentation - 1974-1975.
Location of the pond - Killa Fish Farm, Cuttack.
Water area of the pond - 0.5ha.
Culture period - one year.

| <u>Item of inputs</u> | <u>per ha</u> | <u>Purchased at rate of</u> | <u>Expenditure</u> |
|-----------------------|---------------|--|--------------------|
| Mahua oil cake | 2,000kg | .25/kg | 500.00 |
| Lime | 263kg | 0.40/kg | 105.20 |
| Cowdung | 8,750kg | 0.18/kg | 1,575.00 |
| Urea | 137kg | 1.0/kg | 137.00 |
| I.S.P. | 117kg | 0.67/kg | 78.30 |
| Fingerlings | 10,000 | (C1 : SC 2.5 : R 2 : GC 1.5 : CC 2 : M 1 + few chilla + freshwater prawn) @ Rs. 70/ thousand | 700.00 |
| Supplementary feed :- | | | |
| G.O.C. | 9,213kg | 1.35/kg | 12,437.55 |
| R.P. | 7,938kg | 0.49/kg | 3,889.62 |
| Weeds | 7,812kg | 8 X 32 | 256.00 |
| | | | 19,678.76 |

| <u>Species</u> | <u>Density/ha</u> | <u>In wt. (g)</u> | <u>Final wt. (g)</u> | <u>Survival %</u> | <u>Production kg/ha</u> |
|----------------|-------------------|-----------------------|--------------------------|-----------------------|-----------------------------|
| S.C. | 2,500 | 17.59 | 1,047.31 | 96.80 | 2,534.50 |
| Catla | 1,000 | 44.73 | 694.23 | 97.5 | 676.875 |
| Rohu | 2,000 | 28.86 | 641.83 | 80.75 | 1,110.375 |
| Mrigal | 1,000 | 33.62 | 816.07 | 98.75 | 805.875 |
| C.C. | 2,000 | 25.62 | 1,096.23 | 88.00 | 1,929.375 |
| G.C. | 1,500 | 71.08 | 1,358.18 | 83.30 | 1,749.000 |
| Chitala | 40 | 706.25 | 1,625.00 | 83.30 | 40.625 |
| Prawn | 88 | 43.5 | 230.00 | 100.00 | 20.125 |
| | | | | TOTAL | 8,866.75 |

Gross production 8,866.75kg/ha/yr
Net production 8,495.63kg/ha/yr

* Cost of production per kg - Rs. 2.22

* Does not include rental value, wages and salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting.

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CASE STUDY 4

COST STRUCTURE ON COMPOSITE FISH CULTURE AT ASKA CENTRE UNDER CIFRI/
IDRC PROJECT ON RURAL AQUACULTURE DURING 1975-76

Location of the pond - Karnoli, Dist. Ganjam (Orissa)
Area - 0.29ha.

(Private C.I.F.R.I./I.D.R.C. Collaboration)

| Items of inputs | Quantity /ha | Actual quantity applied (kg) | Purchased at the rate of | Expenditure (Rs) |
|------------------------------|--------------|------------------------------|--------------------------|------------------|
| Mahua oil cake | 1058kg | 307 | 0.24/kg | 72.80 |
| Raw cowdung | 483kg | 140 | 0.04/kg | 5.58 |
| Urea | 107kg | 31 | 2.09/kg | 64.84 |
| Super phosphate | 1976kg | 51 | 1.13/kg | 57.69 |
| Lime | 162kg | 47 | 0.25/kg | 11.79 |
| Fish feed (G.O.C. + R.B.) | 6250kg | 1813 | — | 1263.09 |
| Fish seed | — | — | 35.00/1000 | 53.28 |
| Misc. expenditure | — | — | — | 58.10 |
| Wages | — | — | — | 633.29 |
| Cost of fishing equipment | — | — | — | 145.25 |
| | | | TOTAL — | 2365.71 |

Total quantity of fish harvested = 553.05kg
(About 10% to be harvested)

Total production/ha ~ 1907

* Cost of production per kg of fish - Rs. 4.27

* Does not include rental value, input cost of owner management/ labour, interest on working capital, cost of repairs and maintenance.

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CASE STUDY 5

COST STRUCTURE OF COMPOSITE FISH CULTURE AT ASKA CENTRE UNDER CIFRI/
IDRC PROJECT ON RURAL AQUACULTURE DURING 1975-76

Location of the pond - Khadabagh, Dist. Ganjam (Orissa).
Area - 0.37ha.

(Private C.I.F.R.I./I.D.R.C. Collaboration)

| Items of inputs | Quantity /ha | Actual quantity applied (kg) | Purchased at the rate of C. (Rs) | Expenditure (Rs) |
|---------------------------|--------------|---------------------------------|-------------------------------------|------------------|
| Mahua oil cake | 1058kg | 392 | 0.24/kg | 92.85 |
| Raw cowdung | 480kg | 178 | 0.04/kg | 7.11 |
| Urea | 108kg | 40 | 2.09/kg | 82.70 |
| Super phosphate | 176kg | 65 | 1.13/kg | 73.58 |
| Lime | 162kg | 60 | 0.25/kg | 15.04 |
| Fish Feed (G.O.C. + R.B.) | 6250kg | 2312 | — | 1610.93 |
| Fish seed | 5250 | 1941 | 35.00/1000 | 67.95 |
| Misc. expenditure | — | — | — | 74.10 |
| Wages | — | — | — | 807.69 |
| Cost of fishing equipment | — | — | — | 185.25 |
| | | | TOTAL — | 3017.20 |

Total quantity of fish harvested - 1724.850kg
(About 10% to be harvested)

Total production/ha - 4662kg

* Cost of production per kg of fish - Rs. 1.75

* Does not include rental value, input cost of owner management/labour, interest on working capital, cost of repairs and maintenance.

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CASE STUDY 6

COST STRUCTURE OF COMPOSITE FISH CULTURE AT ASKA CENTRE UNDER CIFRI/
 IDRC PROJECT ON RURAL AQUACULTURE DURING 1975-76

Location of the pond - Baragaon, Dist. Ganjam (Orissa).
 Area - 0.17ha.

(Private C.I.F.R.I./I.D.R.C. Collaboration)

| Items of inputs | Quantity /ha | Actual quantity applied (kg) | Purchased at the rate of C. Rs. | Expenditure (Rs) |
|------------------------------|--------------|------------------------------|---------------------------------|------------------|
| Mahua oil cake | 1058kg | 180 | 0.24/kg | 42.73 |
| Raw cowdung | 480kg | 82 | 0.04/kg | 3.27 |
| Urea | 108kg | 18 | 2.09/kg | 38.06 |
| Super phosphate | 176kg | 30 | 1.13/kg | 33.86 |
| Lime | 162kg | 28 | 0.25/kg | 6.92 |
| Fish feed (G.O.C. + R.B.) | 6250kg | 1064 | — | 741.33 |
| Fish seed | 5250 | 893 | 35.00/1000 | 31.27 |
| Misc. expenditure | — | — | — | 34.10 |
| Wages | — | — | — | 371.69 |
| Cost of fishing equipment | — | — | — | 85.25 |
| | | | TOTAL — | 1388.48 |

Total quantity of fish harvested - 1075.450kg
 (About 10% to be harvested)

Total production/ha - 6330kg

* Cost of production per kg of fish - Rs. 1.29

* Does not include rental value, input cost of owner management/
 labour, interest on working capital, cost of repairs and maintenance.

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CASE STUDY-7

COST STRUCTURE OF COMPOSITE FISH CULTURE AT ASKA CENTRE UNDER CIFRI/
 IDRC PROJECT ON RURAL AQUACULTURE DURING 1975-76

Location of the pond - Joypur, Dist. Ganjam (Orissa)
 Area - 0.56ha.

(Private C.I.F.R.I./Collaboration)

| Items of inputs | Quantity /ha | Actual quantity applied (kg) | Purchased at the rate of C. Rs. | Expenditure (Rs) |
|---------------------------|--------------|------------------------------|---------------------------------|------------------|
| Mahua oil cake | 1058kg | 593 | 0.24/kg | 140.59 |
| Raw cowdung | 480kg | 269 | 0.04/kg | 10.77 |
| Urea | 108kg | 60 | 2.09/kg | 125.21 |
| Super phosphate | 17.6kg | 99 | 1.13/kg | 111.41 |
| Lime | 162kg | 91 | 0.25/kg | 22.78 |
| Fish feed (G.O.C. + R.B.) | 6250kg | 3501 | — | 2439.23 |
| Fish seed | 5250 | 2940 | 35.00/1000 | 102.89 |
| Misc. expenditure | — | — | — | 112.20 |
| Wages | — | — | — | 1222.98 |
| Cost of fishing | — | — | — | 280.50 |
| | | | TOTAL — | 4568.56 |

Total quantity of fish harvested - 2635.965kg
 (About 10% to be harvested)

Total production/ha. - 4707kg.

* Cost of production per kg of fish - Rs. 1.73

* Does not include rental value, imputed cost of owner management/labour, interest on working capital, cost of repairs and maintenance.

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 (ICAR) : BARRACKPORE : WEST BENGAL

CASE STUDY-8

COST STRUCTURE ON COMPOSITE FISH CULTURE AT ASKA CENTRE UNDER CIFRI/
 IDRC PROJECT ON RURAL AQUACULTURE DURING 1975-76

Location of the pond - Babanpur, Dist. Ganjam (Orissa)
 Area - 1.00ha

(Private C.I.F.R.I./I.D.R.C. Collaboration)

| Items of inputs | Quantity /ha | Actual quantity applied (kg) | Purchased at the rate of C (Rs.) | Expenditure (Rs.) |
|------------------------------|--------------|------------------------------|----------------------------------|-------------------|
| Mahua oil cake | 1060kg | 1060 | 0.24/kg | 251.10 |
| Raw cowdung | 481kg | 481 | 0.04/kg | 19.24 |
| Urea | 107kg | 107 | 2.09/kg | 223.65 |
| Super phosphate | 177kg | 177 | 1.13/kg | 199.00 |
| Lime | 163kg | 163 | 0.25/kg | 40.68 |
| Fish feed (G.O.C. + R.B.) | 6252kg | 6252 | — | 4356.70 |
| Fish seed | 5250 | 5250 | 35.00/1000 | 183.76 |
| Misc. expenditure | — | — | — | 200.40 |
| Wages | — | — | — | 2184.36 |
| Cost of fishing equipment | — | — | — | 501.00 |
| | | | TOTAL — | 8159.89 |

Total quantity of fish harvested - 2397.85kg
 (About 10% to be harvested)

Total production/ha - 2398kg

* Cost of production per kg of fish - Rs. 3.40

* Does not include rental value, imputed cost of owner management/
 labour, interest on working capital, cost of repairs and maintenance.

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CASE STUDY-9

COST STRUCTURE ON COMPOSITE FISH CULTURE AT ASKA CENTRE UNDER CIFRI/
 IDRC PROJECT ON RURAL AQUACULTURE DURING 1975-76

Location of the pond - Nuagaon, Dist. Ganjam (Orissa).
 Area - 0.38.

(Private C.I.F.R.I./I.D.R.C. Collaboration)

| Items of inputs | Quantity /ha | Actual quantity applied (kg) | Purchased at the rate of C. (Rs) | Expenditure (Rs.) |
|------------------------------|--------------|------------------------------|----------------------------------|-------------------|
| Mahua oil cake | 1060kg | 403 | 0.24/kg | 95.48 |
| Raw cowdung | 480kg | 183 | 0.04/kg | 7.31 |
| Urea | 108kg | 41 | 2.09/kg | 85.04 |
| Super phosphate | 177kg | 67 | 1.13/kg | 75.67 |
| Lime | 163kg | 62 | 0.25/kg | 15.47 |
| Fish feed (G.O.C. + R.B.) | 6252kg | 2378 | — | 1656.59 |
| Fish seed | 5250 | 1996 | 35.00/1000 | 69.87 |
| Misc. expenditure | — | — | — | 76.20 |
| Wages | — | — | — | 830.58 |
| Cost of fishing equipment | — | — | — | 190.50 |
| | | | TOTAL — | 3102.71 |

Total quantity of fish harvested - 225.75kg
 (About 10% to be harvested)

Total production/ha - 600kg

* Cost of production per kg of fish - Rs. 13.74

* Does not include rental value, imputed cost of owner management/ labour, interest on working capital, cost of repairs and maintenance.

NOTE - A serious poaching occurred in this case to the extent of about 2631 Kg/ha

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CASE STUDY-10

COST STRUCTURE ON COMPOSITE FISH CULTURE AT ASKA CENTRE UNDER CIFRI/
IDRC PROJECT ON RURAL AQUACULTURE DURING 1975-76

Location of the pond - Kalasandhapur, Dist. Ganjam (Orissa).
Area - 0.93ha.

(Private C.I.F.R.I./I.D.R.C. Collaboration)

| Items of inputs | Quantity /ha | Actual quantity applied (kg) | Purchased at the rate of C. (Rs) | Expenditure (Rs) |
|------------------------------|--------------|------------------------------|----------------------------------|------------------|
| Mahua oil cake | 1060kg | 986 | 0.24/kg | 233.56 |
| Raw cowdung | 480kg | 447 | 0.04/kg | 17.89 |
| Urea | 108kg | 100 | 2.09/kg | 208.02 |
| Super phosphate | 178kg | 164 | 1.13/kg | 185.10 |
| Lime | 162kg | 151 | 0.25/kg | 37.84 |
| Fish feed (G.O.C. + R.B.) | 6250kg | 5816 | — | 4052.34 |
| Fish seed | 5250 | 4884 | 35.00/1000 | 170.93 |
| Misc. expenditure | — | — | — | 186.40 |
| Wages | — | — | — | 2031.76 |
| Cost of fishing equipment | — | — | — | 466.00 |
| | | | TOTAL — | 7589.84 |

Total quantity of fish harvested - 2381.80kg
(About 10% to be harvested)

Total production per ha - 2561kg.

* Cost of production per kg of fish - Rs. 3.19

* Does not include rental value, imputed cost of owner management/
labour, interest on working capital, cost of repairs and maintenance.

NOTE - A serious poaching occurred in this case to the extent of
1075kg/ha.

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CASE STUDY-11

COST STRUCTURE OF COMPOSITE FISH CULTURE AT ASKA CENTRE UNDER CIFRI/IDRC PROJECT ON RURAL AQUACULTURE DURING 1975-76

Location of the pond - Nalabanta, Dist. Ganjam (Orissa)
Area - 0.74. ha

(Private C.I.F.R.I./I.D.R.C. Collaboration)

| Items of inputs | Quantity /ha | Actual quantity applied (kg) | Purchased at the rate of C. (Rs) | Expenditure (Rs) |
|---------------------------|--------------|------------------------------|----------------------------------|------------------|
| Mahua oil cake | 1060kg | 785 | 0.24/kg | 185.82 |
| Raw cowdung | 480kg | 356 | 0.04/kg | 14.24 |
| Urea | 110kg | 79 | 2.09/kg | 165.50 |
| Super phosphate | 180kg | 131 | 1.13/kg | 147.26 |
| Lime | 160kg | 120 | 0.25/kg | 30.11 |
| Fish feed (G.O.C. + R.B.) | 6250kg | 4627 | — | 3224.04 |
| Fish seed | 5250kg | 3885 | 35.00/1000 | 135.99 |
| Misc. expenditure | — | — | — | 148.30 |
| Wages | — | — | — | 1616.47 |
| Cost of fishing equipment | — | — | — | 370.75 |
| TOTAL | — | — | — | 6038.48 |

Total quantity of fish harvested - 2272.85kg
(About 10% to be harvested)

Total production/ha - 3071kg

* Cost of production per kg of fish - Rs. 2.66

* Does not include rental value, imputed cost of owner management/ labour, interest on working capital, cost of repairs and maintenance.

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CASE STUDY-12

COST STRUCTURE OF COMPOSITE FISH CULTURE AT ASKA CENTRE UNDER
 CIFRI/IDRC PROJECT ON RURAL AQUACULTURE DURING 1975-76

Location of the pond - Padhala, Dist. Ganjam (Orissa).
 Area - 0.26ha.

(Private C.I.F.R.I./I.D.R.C. Collaboration)

| Items of inputs | Quantity /ha | Actual quantity | Purchased at the rate of applied C. (Rs) (Kg) | Expenditure (Rs) |
|---------------------------|--------------|-----------------|---|------------------|
| Mahua oil cake | 1060Kg | 276 | 0.24/Kg | 65.28 |
| Raw cowdung | 480Kg | 125 | 0.04/Kg | 5.00 |
| Urea | 110Kg | 28 | 2.09/Kg | 58.14 |
| Super phosphate | 180Kg | 46 | 1.13/Kg | 51.74 |
| Lime | 160Kg | 42 | 0.25/Kg | 10.58 |
| Fish feed (G.O.C. + R.B.) | 6250Kg | 1625 | — | 1132.65 |
| Fish seed (number) | 5250 | 1365 | 35.00/1000 | 47.78 |
| Misc. expenditure | — | — | — | 52.10 |
| Wages | — | — | — | 567.89 |
| Cost of fishing equipment | — | — | — | 130.25 |
| TOTAL — | | | | 2121.41 |

Total quantity of fish harvested - 1018.80Kg
 (About 10% to be harvested)

Total production/ha - 3920Kg.

* Cost of production per Kg of fish - Rs. 2.08

* Does not include rental value, imputed cost of owner management/labour, interest on working capital, cost of repairs and maintenance.

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CASE STUDY-13

COST STRUCTURE OF COMPOSITE FISH CULTURE AT ASKA CENTRE UNDER CIFRI/IDRC PROJECT ON RURAL AQUACULTURE DURING 1975-76

Location of the pond - Charmaria, Dist. Ganjam (Orissa).
 Area - 0.29ha.

(Private C.I.F.R.I./I.D.R.C. Collaboration)

| Items of inputs | Quantity /ha | Actual quantity applied (Rs) | Purchased at the rate of C. (Rs) | Expenditure (Rs) |
|---------------------------|--------------|------------------------------|----------------------------------|------------------|
| Mahua oil cake | 106C. | 307 | 0.24/%, | 72.80 |
| Raw cowdung | 480Kg | 140 | 0.04/Kg | 5.58 |
| Urea | 110Kg | 31 | 2.09/Kg | 64.84 |
| Super phosphate | 180Kg | 51 | 1.13/Kg | 57.69 |
| Lime | 160Kg | 47 | 0.25/Kg | 11.80 |
| Fish feed (G.O.C. + R.B.) | 6250Kg | 1813 | — | 1263.09 |
| Fish seed (numbers) | 5250 | 1522 | 35.00/1000 | 53.28 |
| Misc. expenditure | — | — | — | 58.10 |
| Wages | — | — | — | 633.29 |
| Cost of fishing equipment | — | — | — | 145.25 |
| | | | TOTAL — | 2365.72 |

Total quantity of fish harvested - 1305.00Kg
 (About 10% to be harvested)

Total production/ha - 4500Kg

* Cost of production per Kg of fish - Rs. 1.81

* Does not include rental value, imputed cost of owner management/labour, interest on working capital, cost of repairs and maintenance.

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CASE STUDY-14

COST STRUCTURE ON COMPOSITE FISH CULTURE AT ASKA CENTRE UNDER
CIFRI/IDRC PROJECT ON RURAL AQUACULTURE DURING 1975-76

Location of the pond - V. K. Das - 2, Dist. Ganjam (Orissa).
Area. - 0.34ha.

(Private C.I.F.R.I./I.D.R.C. Collaboration)

| Items of inputs | Quantity /ha C. | Actual quantity applied (Kg) | Purchased at the rate of C (Rs)/Kg | Expenditure (Rs) |
|---------------------------|--------------------|------------------------------|------------------------------------|------------------|
| Ma hua oil cake | 141Cm | 480 | 0.26 | 124.77 |
| Raw cowdung | 6170Kg | 2094 | 0.02 | 44.21 |
| Urea | 250Kg | 85 | 2.15 | 182.59 |
| Super phosphate | 285Kg | 97 | 1.04 | 101.08 |
| Lime | 365Kg | 123 | 0.30 | 36.63 |
| Fish feed (G.O.C. + R.B.) | 4700Kg | 1596 | 0.70 | 1117.18 |
| Fish seed (numbers) | 5255 | 1784 | 35.03/1000 | 62.49 |
| Misc. expenditure | — | — | — | 67.70 |
| Wages | — | — | — | 731.57 |
| Cost of fishing equipment | — | — | — | 169.25 |
| | | | TOTAL | 2637.46 |

Total quantity of fish harvested - 1080.10Kg

Total production/ha - 3176.76Kg

*Cost of production per " of fish - Rs. 2.44

*Does not include rental value, imputed cost of owner management/labour, interest on working capital, cost of repairs and maintenance.

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CASE STUDY-15

COST STRUCTURE ON COMPOSITE FISH CULTURE AT ASKA CENTRE UNDER
 CIFRI/IDRC PROJECT ON RURAL AQUACULTURE DURING 1975-76

Location of the pond - P. Ront, Dist. Puri (Orissa).
 Area - 0.15ha.

(Private C.I.F.R.I./I.D.R.C. Collaboration)

| Items of inputs | Quantity /ha C. Kg. | Actual quantity applied (Kg) | Purchased at the rate of C. (Rs) /Kg | Expenditure (Rs) |
|---------------------------|------------------------|------------------------------|--------------------------------------|------------------|
| Mahua oil cake | 1410 | 212 | 0.26 | 55.11 |
| Raw cowdung | 6170 | 925 | 0.02 | 19.52 |
| Urea | 250 | 38 | 2.15 | 80.64 |
| Super phosphate | 285 | 43 | 1.04 | 44.64 |
| Lime | 365 | 55 | 0.03 | 16.18 |
| Fish feed (G.O.C. + R.B.) | 4700 | 705 | 0.70 | 493.41 |
| Fish seed (numbers) | 5255 | 788 | 35.03/1000 | 27.60 |
| Misc. expenditure | | | | 29.90 |
| Wages | | | | 323.10 |
| Cost of fishing equipment | | | | 74.75 |
| | | | TOTAL — | 1164.65 |

Total quantity of fish harvested - 547.85Kg

Total production/ha - 3562.33Kg.

* Cost of production per Kg of fish - Rs. 2.13

* Does not include rental value, imputed cost of owner management/labour interest on working capital, cost of repairs and maintenance.

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CASE STUDY-16

COST STRUCTURE ON COMPOSITE FISH CULTURE AT ASKA CENTRE UNDER
CIFRI/IDRC PROJECT ON RURAL AQUACULTURE DURING 1975-76

Location of the pond - Dandamunda, Dist. Puri (Orissa).
Area - 0.16ha.

(Private C.I.F.R.I./I.D.R.C. Collaboration)

| Items of inputs | Quantity /ha <u>C.</u> (Kg) | Actual quantity applied (Kg) | Purchased at the rate of <u>C.</u> Rs. /Kg. | Expenditure (Rs) |
|---------------------------|--------------------------------|------------------------------|--|------------------|
| Mahua oil cake | 1410 | 226 | 0.26 | 58.79 |
| Raw cowdung | 6170 | 987 | 0.02 | 20.83 |
| Urea | 250 | 40 | 2.15 | 86.03 |
| Super phosphate | 285 | 46 | 1.04 | 47.63 |
| Lime | 385 | 58 | 0.30 | 17.26 |
| Fish feed (G.O.C. + R.B.) | 4700 | 752 | 0.70 | 526.41 |
| Fish seed (numbers) | 5255 | 841 | 35.03/1000 | 29.44 |
| Misc. expenditure | | | | 31.90 |
| Wages | | | | 344.71 |
| Cost of fishing equipment | | | | 79.75 |
| | | | TOTAL | 1242.75 |

Total quantity of fish harvested - 575.15Kg

Total production/ha - 3594.68Kg.

* Cost of production per Kg of fish - 2.16

* Does not include rental value, imputed cost of owner management/labour, interest on working capital, cost of repairs and maintenance.

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CASE STUDY-17

COST STRUCTURE ON COMPOSITE FISH CULTURE AT ASKA CENTRE UNDER CIFRI/IDRC PROJECT ON RURAL AQUACULTURE DURING 1975-76

Location of the pond - Gamha, Dist. Puri (Orissa).
Area - 0.50ha.

(Private C.I.F.R.I./I.D.R.C. Collaboration)

| Items of inputs | Quantity /ha C. Kg | Actual quantity applied (Kg) | Purchased at the rate of C Rs. /kg | Expenditure (Rs) |
|---------------------------|--------------------|------------------------------|------------------------------------|------------------|
| Mahua oil cake | 1410 | 706 | 0.26 | 183.56 |
| Raw cowdung | 6170 | 3081 | 0.02 | 65.04 |
| Urea | 250 | 125 | 2.15 | 268.62 |
| Super phosphate | 285 | 143 | 1.04 | 148.70 |
| Lime | 365 | 181 | 0.30 | 53.88 |
| Fish Feed (G.O.C. + R.B.) | 4700 | 2348 | 0.70 | 1643.60 |
| Fish Seed (numbers) | 5255 | 2624 | 35.03/1000 | 91.93 |
| Misc. expenditure | | | | 99.60 |
| Wages | | | | 1076.28 |
| Cost of fishing equipment | | | | 249.00 |
| | | | TOTAL — | 3880.21 |

Total quantity of fish harvested - 1648.35Kg.

Total production/ha. - 3296.70Kg.

* Cost of production per Kg of fish - 2.35

* Does not include rental value, imputed cost of owner management/labour, interest on working capital, cost of repair and maintenance.

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CASE STUDY-18

COST STRUCTURE ON COMPOSITE FISH CULTURE AT ASKA CENTRE UNDER
 CIFRI/IDRC PROJECT ON RURAL AQUACULTURE DURING 1975-76 —————

Location of the pond - L. Benera, Dist. Puri (Orissa).
 Area - 0.09ha.

(Private C.I.F.R.I./I.D.R.C. Collaboration)

| Items of inputs | Quantity /ha <u> </u> Kg | Actual quantity applied (Kg) | Purchased at the rate of <u> </u> C. Rs./Kg | Expenditure (Rs) |
|---------------------------|---------------------------|------------------------------|--|------------------|
| Mahua oil cake | 1410 | 127 | 0.26 | 32.99 |
| Raw cowdung | 6170 | 554 | 0.02 | 11.69 |
| Urea | 250 | 22 | 2.15 | 48.28 |
| Super phosphate | 285 | 26 | 1.04 | 20.73 |
| Lime | 365 | 33 | 0.30 | 9.69 |
| Fish feed (G.O.C. + R.B.) | 4700 | 422 | 0.70 | 295.39 |
| Fish seed (numbers) | 5255 | 472 | 35.03/1000 | 16.52 |
| Misc. expenditure | | | | 17.90 |
| Wages | | | | 193.43 |
| Cost of fishing equipment | | | | 44.75 |
| | | | TOTAL — | 697.37 |

Total quantity of fish harvested - 287.30 Kg

Total production/ha - 3192.22 Kg

* Cost of production per Kg of fish - Rs. 2.42

* Does not include rental value, imputed cost of owner management/labour, interest on working capital, cost of repairs and maintenance.

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CASE STUDY-19

COST STRUCTURE ON COMPOSITE FISH CULTURE AT ASKA CENTRE UNDER CIFRI/IDRC PROJECT ON RURAL AQUACULTURE DURING 1975-76

Location of the pond - U. Jenä No. 2, Dist. Puri (Orissa).
Area - 0.50ha.

(Private C.I.F.R.I./I.D.R.C. Collaboration)

| Items of inputs | Quantity /ha <u>kg</u> | Actual quantity applied <u>kg</u> | Purchased at the rate of <u>Rs/kg</u> | Expenditure (Rs) |
|------------------------------|------------------------|-----------------------------------|---------------------------------------|------------------|
| Mahua oil cake | 1110 | 706 | 0.26 | 183.56 |
| Raw cowdung | 6170 | 3081 | 0.02 | 65.04 |
| Urea | 250 | 125 | 2.15 | 268.62 |
| Super phosphate | 285 | 143 | 1.04 | 148.70 |
| Lime | 365 | 181 | 0.30 | 53.88 |
| Fish feed (G.O.G. + R.B.) | 4700 | 2348 | 0.70 | 1643.60 |
| Fish seed (numbers) | 5255 | 2624 | 35.03/1000 | 91.93 |
| Misc. expenditure | | | | 99.60 |
| Wages | | | | 1076.28 |
| Cost of fishing equipment | | | | 249.00 |
| | | | TOTAL — | 3880.21 |

Total quantity of fish harvested - 1336.10 kg

Total production/ha - 2672.20 kg

* Cost of production per kg of fish - Rs.2.90

* Does not include rental value, imputed cost of owner management/labour, interest on working capital, cost of repairs and maintenance.

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CASE STUDY-20

COST STRUCTURE ON COMPOSITE FISH CULTURE AT ASKA CENTRE UNDER
CIFRI/IDRC PROJECT ON RURAL AQUACULTURE DURING 1975-76

Location of the pond - V. K. Das No. 3, Dist. Puri (Orissa).
Area - 0.30ha

(Private C.I.F.R.I./I.D.R.C. Collaboration)

| Items of inputs | Quantity /ha <u>kg</u> | Actual quantity applied <u>kg</u> | Purchased at the rate of <u>Rs.</u> / <u>kg.</u> | Expenditure |
|---------------------------|------------------------|-----------------------------------|--|-------------|
| Mahua oil cake | 1410 | 424 | 0.26 | 110.21 |
| Raw cowdung | 6170 | 1850 | 0.02 | 39.05 |
| Urea | 250 | 75 | 2.15 | 161.28 |
| Super phosphate | 285 | 86 | 1.04 | 89.28 |
| Lime | 365 | 109 | 0.30 | 32.35 |
| Fish feed (G.O.C. + R.B.) | 4700 | 1410 | 0.70 | 986.82 |
| Fish seed (numbers) | 5255 | 1576 | 35.02/1000 | 55.20 |
| Misc. expenditure | | | | 59.80 |
| Wages | | | | 646.20 |
| Cost of fishing equipment | | | | 149.50 |
| | | | TOTAL — | 2329.69 |

Total quantity of fish harvested - 646.96kg

Total production/ha - 2156.53kg.

* Cost of production per kg of fish - Rs. 3.60

* Does not include rental value, imputed cost of owner management/labour, interest on working capital, cost of repairs and maintenance.

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CASE
 STUDY-21

COST-STRUCTURE ON COMPOSITE FISH CULTURE AT ASKA CENTRE
 UNDER CIFRI/IDRC PROJECT ON RURAL AQUA CULTURE DURING
 1975-76

Location of the pond : V.K. Das No.4, Dist. Puri (Orissa)

Area : 0.19ha

(Private CIFRI/IDRC Collaboration)

| Items of inputs | Quantity/ha C. Kg. | Actual Quantity applied (Rs.) | Purchased at the rate of C. Rs./Kg. | Expendi- ture |
|------------------------------|-----------------------|--|--|------------------|
| Mahua oil cake | 1410 | 268 | 0.26 | 69.85 |
| Raw cow dung | 6170 | 1173 | 0.02 | 24.75 |
| Urea | 250 | 48 | 2.15 | 102.22 |
| Super phosphate | 285 | 54 | 1.04 | 56.59 |
| Lime | 365 | 69 | 0.30 | 20.50 |
| Fish feed (G.O.C + R.B) | 4700 | 894 | 0.70 | 625.42 |
| Fish seed(numbers) | 5255 | 999 | 35.03/1000 | 34.98 |
| Misc.expenditure | - | - | - | 437.90 |
| Wages | - | - | - | 409.55 |
| Cost of fishing equipment | - | - | - | 94.75 |
| | | | TOTAL | 1476.51 |

Total quantity of fish harvested - 413.75 Kg.

Total production/ha - 2177.63 Kg.

* Cost of production per Kg. of fish -Rs3.57

* Does not include rental value, imputed cost of owner management/labour, interest on working capital, cost of repairs and maintenance.

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SASE
 STUDY-22

COST STRUCTURE ON COMPOSITE FISH CULTURE AT ASKA CENTRE
 UNDER CIFRI/IDRC PROJECT ON RURAL AQUA CULTURE DURING
 1975-76

Location of the pond : V.K. Das No.5, Dist : Puri (Orissa)

Area : 0.32 ha.

(Private CIFRI/IDRC Collaboration)

| Items of inputs | Quantity/ha C Kg. | Actual quantity applied (No.) | Purchased at the rate of C Rs./Kg. | Expenditure (Rs.) |
|---------------------------|----------------------|-------------------------------------|---------------------------------------|----------------------|
| Mahua oil Cake | 1410 | 451 | 0.26 | 117.40 |
| Raw cow dung | 6170 | 1971 | 0.02 | 41.60 |
| Urea | 250 | 80 | 2.15 | 171.80 |
| Super phosphate | 285 | 91 | 1.04 | 95.10 |
| Lime | 365 | 116 | 0.30 | 34.46 |
| Fish feed (G.O.C+R.B) | 4700 | 1502 | 0.70 | 1051.18 |
| Fish seed (numbers) | 5255 | 1678 | 35.03/1000 | 58.79 |
| Misc. expenditure | - | - | - | 63.70 |
| Wages | - | - | - | 688.34 |
| Cost of fishing equipment | - | - | - | 159.25 |
| | | | Total - | 2481.62 |

Total quantity of fish harvested - 839.25 Kg.

Total production/ha - 2622.65 Kg.

* Cost of production per Kg. of fish - Rs 2.96

* Does not include rental value, imputed cost of owner management/labour, interest on working capital, cost of repairs and maintenance.

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 BARRACKPORE : WEST BENGAL

CASE
 STUDY-23

COST STRUCTURE ON COMPOSITE FISH CULTURE AT ASKA CENTRE
 UNDER CIFRI/IDRC PROJECT ON RURAL AQUA CULTURE DURING
 1975-76

Location of the pond : V.K. Das No.6 Dist: Puri (Orissa)

Area : 0.68 ha

(Private CIFRI/IDRC Collaboration)

| Items of inputs | Quantity/ha C. Kg. | Actual quantity applied Kg. | Purchased at the rate of C Rs./Kg. | Expenditure (Rs.) |
|-------------------------------------|-----------------------|-----------------------------------|--|----------------------|
| Mahua oil cake | 1410 | 960 | 0.26 | 249.73 |
| Raw cow dung | 6170 | 4192 | 0.02 | 88.48 |
| Urea | 250 | 170 | 2.15 | 365.44 |
| Super phosphate | 285 | 194 | 1.04 | 202.30 |
| Lime | 365 | 247 | 0.30 | 73.31 |
| Fish feed (numbers) (G.O.C.+R.B) | 4700 | 3194 | 0.70 | 2236.02 |
| Fish seed | 5255 | 3570 | 35.03/1000 | 125.07 |
| Misc. expenditure | - | - | - | 135.50 |
| Wages | - | - | - | 1464.21 |
| Cost of fishing equipment | - | - | - | 338.75 |
| | | | Total - | 5278.81 |

Total quantity of fish harvested - 1609.89 Kg.

Total production/ha - 2367.48 Kg.

* Cost of production per kg. of fish - Rs3.28

* Does not include rental value, imputed cost of owner management, labour, interest of working capital, cost of repairs and maintenance.

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 BARRACKPORE : WEST BENGAL

CASE
 STUDY-24

COST STRUCTURE ON COMPOSITE FISH CULTURE AT ASKA CENTRE
 UNDER CIFRI/IDRC PROJECT ON RURAL AQUACULTURE DURING
 1975-76

Location of the pond : Mohonta No.1, Dist. Puri (Orissa).

Area : 0.40 ha.

(Private CIFRI/IDRC Collaboration)

| Items of inputs | Quantity/ha C.(Kg.) | Actual quantity applied (Kg) | Purchased at the rate of C. Rs./Kg. | Expenditure (Rs) |
|----------------------------|------------------------|---------------------------------|--|---------------------|
| Mahua oil cake | 1410 | 565 | 0.26 | 146.89 |
| Raw cow dung | 6170 | 2466 | 0.02 | 52.04 |
| Urea | 250 | 100 | 2.15 | 214.95 |
| Super phosphate | 285 | 114 | 1.04 | 118.99 |
| Lime | 365 | 145 | 0.30 | 43.12 |
| Fish Feed (G.O.C + R.B) | 4700 | 1879 | 0.70 | 1315.21 |
| Fish Seed (numbers) | 5255 | 2100 | 35.03/1000 | 73.56 |
| Misc. expenditure | - | - | - | 79.70 |
| Wages | - | - | - | 861.24 |
| Cost of fishing equipment | - | - | - | 199.25 |
| Total - | | | | 3104.95 |

Total quantity of fish harvested - 982.30 kg.

Total production/ha - 2455.75 Kg.

* Cost of production per kg of fish -Rs3.16

* Does not include rental value, imputed cost of owner management/labour, interest on working capital, cost of repairs and maintenance.

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 BARRACKPORE : WEST BENGAL

CASE
 STUDY-25

COST STRUCTURE ON COMPOSITE FISH CULTURE AT ASKA CENTRE
 UNDER CIFRI/IDRC PROJECT ON RURAL AQUACULTURE DURING
 1975-76

Location of the pond : Mohanty No.2, Dist. Puri (Orissa)

Area : 0.20 ha

(Private CIFRI/IDRC Collaboration)

| Items of inputs | Quantity/ha C. Kg. | Actual quantity applied (Kg.) | Purchased at the rate of C. Rs./Kg. | Expenditure (Rs.) |
|---------------------------|-----------------------|-------------------------------------|---|----------------------|
| Mahua oil cake | 1410 | 282 | 0.26 | 73.35 |
| Raw cow dung | 6170 | 1231 | 0.02 | 25.99 |
| Urea | 250 | 50 | 2.15 | 107.34 |
| Super phosphate | 285 | 57 | 1.04 | 59.42 |
| Lime | 365 | 72 | 0.30 | 21.53 |
| Fish feed (G.O.C.+R.B) | 4700 | 938 | 0.70 | 656.78 |
| Fish seed (numbers) | 5255 | 1049 | 35.03/1000 | 36.74 |
| Misc. expenditure | - | - | - | 39.80 |
| Wages | - | - | - | 430.08 |
| Cost of fishing equipment | - | - | - | 99.50 |
| | | | Total - | 1550.53 |

Total quantity of fish harvested - 281.50 Kg.

Total production/ha. - 1407.50 Kg.

* Cost of production per Kg. of fish - Rs5.50

* Does not include rental value, imputed cost of owner management/ labour, interest on working capital, cost of repairs and maintenance.

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CASE
 STUDY-26

COST STRUCTURE ON COMPOSITE FISH CULTURE AT ASKA CENTRE
 UNDER CIFRI/IDRC PROJECT ON RURAL AQUACULTURE DURING
 1975-76

Location of the pond : Mahento No.3, Dist. Puri (Orissa)

Area : 0.20 ha.

(Private CIFRI/IDRC Collaboration)

| Items of inputs | Quantity/ha C.Kg. | Actual quantity applied (Kg.) | Purchased at the rate of C Rs./Kg. | Expenditure (Rs) |
|---------------------------|----------------------|-------------------------------------|--|---------------------|
| Mahua oil cake | 1410 | 282 | 0.26 | 73.35 |
| Raw cowdung | 6170 | 1231 | 0.02 | 25.99 |
| Urea | 250 | 50 | 2.15 | 107.34 |
| Super phosphate | 285 | 57 | 1.04 | 59.42 |
| Lime | 365 | 72 | 0.30 | 21.53 |
| Fish feed (G.O.C.+R.B) | 4700 | 938 | 0.70 | 676.78 |
| Fish seed (numbers) | 5255 | 1049 | 35.03/1000 | 36.74 |
| Misc. expenditure | - | - | - | 39.80 |
| Wages | - | - | - | 430.08 |
| Cost of fishing equipment | - | - | - | 99.50 |
| | | | | Total - 1550.53 |

Total quantity of fish harvested - 199.90 Kg.

Total production/ha - 999.50 Kg.

* Cost of production per kg of fish - Rs7.76

* Does not include rental value, imputed cost of owner management/labour, interest on working capital, cost of repairs and maintenance.

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CASE
 STUDY-27

COST STRUCTURE ON COMPOSITE FISH CULTURE AT ASKA CENTRE
 UNDER CIFRI/IDRC PROJECT ON RURAL AQUACULTURE DURING
 1975-76

Location of the pond : Batavillo, Dist: Puri (Orissa)

Area : 0.49 ha

(Private CIFRI/IDRC Collaboration)

| Items of inputs | Quantity/ha C. Kg | Actual quantity applied (Kg) | Purchased at the rate of C. Rs./Kg. | Expenditure (Rs) |
|-----------------------------|----------------------|------------------------------------|---|---------------------|
| Mahua oil cake | 1410 | 692 | 0.26 | 179.88 |
| Raw cowdung | 6170 | 3019 | 0.02 | 63.73 |
| Urea | 250 | 122 | 2.15 | 263.23 |
| Super phosphate | 285 | 140 | 1.04 | 145.72 |
| Lime | 3365 | 178 | 0.30 | 52.80 |
| Fish Feed (G.O.C.+ R.B.) | 4700 | 2301 | 0.70 | 1610.60 |
| Fish Seed (numbers) | 5255 | 2572 | 35.03/1000 | 90.08 |
| Misc. expenditure | - | - | - | 97.60 |
| Wages | - | - | - | 1054.66 |
| Cost of fishing equipment | - | - | - | 244.00 |
| | | | | Total - 3802.30 |

Total quantity of fish harvested - 1202.30.

Total production/ha - 2453.67Kg.

* Cost of production per Kg. of fish ₹.3.16

* Does not include rental value, imputed cost of owner management/ labour, interest on working capital, cost of repairs and maintenance

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CASE
 STUDY-28

COST STRUCTURE ON COMPOSITE FISH CULTURE AT ASKA CENTRE
 UNDER CIFRI/IDRC PROJECT ON RURAL AQUACULTURE DURING
 ——————
 1975-76

Location of the pond : K.C. Nayak, Dist. Puri (Orissa)

Area : 0.50 ha

(Private CIFRI/IDRC Collaboration)

| Items of inputs | Quantity/ha C.Kg. | Actual quantity applied (Kg) | purchased at the rate of C. Rs./Kg. | Expenditure (Rs) |
|---------------------------|----------------------|---------------------------------|--|---------------------|
| Mahua oil cake | 1410 | 706 | 0.26 | 183.56 |
| Raw cowdung | 6170 | 3081 | 0.02 | 65.04 |
| Urea | 250 | 125 | 2.15 | 268.62 |
| Super phosphate | 285 | 143 | 1.04 | 148.70 |
| Lime | 365 | 181 | 0.30 | 53.88 |
| Fish feed (G.O.C+R.B) | 4700 | 2348 | 0.70 | 1643.60 |
| Fish seed(numbers) | 5255 | 2624 | 35.03/1000 | 91.93 |
| Misc.expenditure | - | - | - | 99.60 |
| Wages | - | - | - | 1076.28 |
| Cost of fishing equipment | - | - | - | 249.00 |
| | | | Total - | 3880.21 |

Total quantity of fish harvested - 665.20 Kg.

Total production/ha - 1330.40 Kg.

* Cost of production per Kg. of fish - Rs5.83

* Does not include rental value, imputed cost of owner management/labour, interest on working capital, cost of repairs and maintenance.

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CASE
 STUDY-29

COST STRUCTURE OF EXPERIMENTS CONDUCTED AT KALYANI CENTRE DURING 1972
 (State central collaboration)

Location of the pond : Kulia Farm Kalyani, Dist. Nadia (West Bengal)

Area of the pond : 0.15 ha

| Items of inputs | Quantity/ha. (Kg.) | Actual quantity applied (Kg.) | Average rate (Rs.) | Expenditure (Rs.) |
|-------------------|---|----------------------------------|-----------------------|----------------------|
| Mahua Oil cake | 250 ppm | 375.0 | 26.67/q | 100.00 |
| Ammonium Sulphate | 268 | 40.20 | 51.73/q | 20.80 |
| Phosphate | 150 | 22.50 | 41.00/q | 9.25 |
| Muriate of potash | 24 | 3.60 | 51.00/q | 1.85 |
| Urea | - | - | - | - |
| Cowdung | - | - | - | - |
| Lime | 200 | 30.00 | 20.00/q | 6.00 |
| Fingerlings | 5000 Nos./ha C 10 : R 30 : M 12.5 : ... sc 200.00 S.C.25 GC10:C.C 12.5 | | | |
| Oil Cake | 1600 | 240.00 | 90.70/q | 218.00 |
| Rice bran | 1600 | 240.00 | 40.80/q | 98.00 |
| Diesel (Approx.) | - | - | - | 100.00 |
| | | | Total - | <u>753.90</u> |

Growth of fishes

| Species | Initial wt. (g) | Period of rearing (months) | Av.wt. attained (g) | Total weight harvested (Kg.) |
|-------------|--------------------|-------------------------------|------------------------|---------------------------------|
| Catla | 90 | 6 | 334 | 46.1 |
| Rohu | 79 | 6 | 387 | 82.0 |
| | 45 | 4 | 137 | 2.6 |
| Mrigal | 20 | 5 | 571 | 48.0 |
| Silver carp | 59 | 6 | 492 | 91.55 |
| Grass carp | 31 | 6 | 2530 | 151.80 |
| Common carp | 1 | 6 | 606 | 43.0 |
| | 20 | 4 | 249 | 10.2 |
| | | | | <u>475.25</u> |

Total quantity of fish harvested : 475.25 Kg.

Gross production 3168 Kg/ha/6 months

Net production 2917 Kg/ha/6 months

* Cost of production per Kg. of fish Rs.1.59

* Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of Hydrilla & Napier grass.

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CASE
 STUDY-30

COST STRUCTURE OF EXPERIMENTS CONDUCTED AT KALYANI CENTRE DURING 1972-73
 (State Central Collaboration)

Location of the pond : Kulia Farm, Kalyani, Dist. Nadia (West Bengal)

Area of the pond : 0.23 ha

| Items of inputs | Quantity/ha (kg) | Actual quantity applied (kg) | Average rate (Rs) | Expenditure (Rs) |
|---|---------------------|---------------------------------|----------------------|---------------------|
| Mahua oil cake | 250 ppm | 575 | 26.67/q | 153.35 |
| Ammonium Sulphate | 447.8 | 103 | 51.73/q | 53.28 |
| Phosphate | 247.8 | 57 | 41.00/q | 23.37 |
| Muriate of potash | 39.1 | 9 | 51.00/q | 4.59 |
| Urea | 43.5 | 10 | 100.00/q | 10.00 |
| Cowdung | 2500 | 575 | 1.00/q | 5.75 |
| Lime | 478.3 | 110 | 20.00/q | 22.00 |
| Fingerlings 5000 Nos/ha C 48: R 30:M 30 | | | | 180.00 |
| Oil cake | 4430.4 | 1019 | 90.70/q | 224.23 |
| Rice bran | 4039.1 | 29 | 40.80/q | 379.03 |
| Diesel (approx.) | - | - | - | 250.00 |
| | | | | Rs. 2005.60 |

Growth of fishes:

| Species | Initial wt. (g) | Period of rearing (months) | Average weight attained (g) | Total weight harvested (kg) |
|--------------|--------------------|-------------------------------|--------------------------------|--------------------------------|
| Catla | 121 | 12 | 688 | 266.25 |
| Rohu | 92 | 12 | 593 | 199.30 |
| Mrigal | 32 | 12 | 708 | 220.25 |
| Misc. fishes | - | - | - | 44.30 |
| | | | | 730.10 |

Total quantity of fish harvested - 730.1 kg

Gross production ... 3174 kg/ha/yr

Net production ... 2656 kg/ha/yr

* Cost of production per Kg of fish - Rs.2.75

* Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance.

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CASE
 STUDY-31

COST STRUCTURE OF EXPERIMENTS CONDUCTED AT KALYANI CENTRE DURING 1972-73
 (State Central Collaboration)

Location of the Pond : Kulia Farm, Kalyani, Dist. Nadia (West Bengal)

Area of the Pond : 0.15 ha

| Items of inputs | Quantity/ha (kg) | Actual quantity applied | Average rate (Rs) | Expenditure (Rs) |
|-------------------|---------------------------------|-------------------------|-------------------|------------------|
| Mahua Oil Cake | 250 ppm | 375 | 26.67/q | 100.00 |
| Ammonium Sulphate | 360 | 54 | 51.73/q | 27.93 |
| Phosphate | 130.4 | 30 | 41.00/q | 13.84 |
| Muriate of potash | 20.9 | 4.8 | 51.00/q | 2.45 |
| Urea | 26.0 | 6.0 | 100.00/q | 6.00 |
| Cowdung | 2500 | 375 | 1.00/q | 3.75 |
| Lime | 347.8 | 80 | 20.00/q | 16.00 |
| Fingerlings | 5000 Nos./ha C 40 : R 30 : M 30 | | C 120.00 | |
| Oil cake | 3166.7 | 475 | 90.70/q | 430.82 |
| Rice bran | 2826.7 | 424 | 40.80/q | 172.21 |
| Diesel (Approx) | - | - | - | 150.00 |
| | | | | <u>1043.00</u> |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av.wt. attained | Total weight harvested (kg) |
|---------|--------------------|-------------------------------|-----------------|--------------------------------|
| Catla | 86 | 11 | 366 | 115.7 |
| Rohu | 85 | 11 | 413 | 93.6 |
| Mrigal | 101 | 11 | 607 | 131.9 |
| | | | | <u>341.2</u> |

Total quantity of fish harvested : 341.2Kg

Gross production : 2275 Kg/ha/11 months

Net production : 1802 Kg/ha/11 months

* Cost of production per Kg of fish : Rs. 3.06

* Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance.

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CASE
 STUDY-32

COST STRUCTURE OF EXPERIMENTS CONDUCTED AT KALYANI CENTRE DURING 1972-73
 (State central collaboration)

Location of the pond : Kulia Farm, Kalyani, Dist. Nadia (West Bengal)

Area of the pond : 0.13 ha.

| Items of inputs | Quantity/ha (Kg) | Actual quantity applied (Kg) | Average Rate (Rs) | Expenditure (Rs) |
|-------------------|--|---------------------------------|----------------------|---------------------|
| Mahua Oil Cake | 250 ppm | 325 | 26.67/q | 86.68 |
| Ammonium Sulphate | 803.1 | 104.4 | 51.73/q | 54.01 |
| Phosphate | 443.1 | 57.6 | 41.00/q | 23.62 |
| Potash | 69.2 | 9.0 | 20.40/q | 4.59 |
| Urea | 96.1 | 12.5 | 100.00/q | 12.50 |
| Cowdung | 2500 | 325 | 1.00/q | 3.25 |
| Lime | 961.5 | 125 | 20.00/q | 25.00 |
| Fingerlings | 5000 Nos/ha CI:R3:M 1.25 : SC 2.5 : Gc 1 : Cc 1.25 | | | 200.00 |
| Oil Cake | 5892.3 | 766 | 90.70/q | 694.00 |
| Rice bran | 4669.2 | 607 | 40.80/q | 247.65 |
| Diesel (approx.) | - | - | - | 200.00 |
| | | | Total | Rs. 1551.30 |

Growth of fishes:

| Species | Initial weight (g) | Period of rearing (months) | Average weight attained (g) | Total weight harvested (Kg) |
|-------------|-----------------------|-------------------------------|--------------------------------|--------------------------------|
| Catla | 101 | 12 | 1152 | 64.50 |
| Rohu | 50 | 12 | 497 | 96.40 |
| Mrigal | 21 | 12 | 906 | 69.80 |
| | 7.5 | 4 | 381 | 6.10 |
| Silver carp | 40 | 7 | 631 | 97.20 |
| | 15.4 | 4 | 494 | 61.80 |
| | 40. | 12 | 1820 | 9.10 |
| Grass carp | 45 | 5 | 2032 | 44.70 |
| | 45 | 12 | 5040 | 126.00 |
| | 82 | 4 | 1593 | 66.90 |
| Common carp | 1 | 12 | 1555 | 124.40 |
| | 20 | 10 | 1064 | 53.20 |
| Misc. | - | - | - | 27.70 |
| | | | | 847.80 |

Total quantity of fish harvested : 847.80 Kg

Gross production ... 6521.5 Kg/ha/yr

Net production ... 6286 Kg/ha/yr

Cost of production per Kg of fish Rs. 1.83

* Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of repairs & maintenance, cost of Hydrilla & Napier grass.

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Case
 study -33.

COST STRUCTURE OF EXPERIMENTS CONDUCTED AT KALYANI CENTRE DURING 1973-74
 (State Central Collaboration)

Location of the Pond : Kulia Farm, Kalyani, District Nadia. (West Bengal)

Area of the Pond : 0.23 ha

| Items of inputs | Quantity/ha (Kg) | Actual quantity applied (Kg) | Average Rate (Kg) | Expenditure (Rs) |
|---|---------------------|---------------------------------|----------------------|---------------------|
| Mahua Oil Cake | 250 ppm | 675.0 | 26.67/q | 180.02 |
| Ammonium Sulphate | 225 | 51.75 | 56.49/q | 29.23 |
| Phosphate | 125 | 28.75 | 41.42/q | 11.91 |
| Potash | 20 | 4.6 | 52.58/q | 2.42 |
| Cowdung | 9739 | 2240.0 | 1.00/q | 22.40 |
| Fingerlings 6000 nos./ha C4 : R1 : M2 : Cc3 | | | | 90.90 |
| Oil Cake | 3791 | 872.0 | 82.24/q | 717.13 |
| Rice bran | 5691.3 | 1309.0 | 25/q | 327.25 |
| Diesel (Approx) | - | - | - | 150.00 |
| | | | Total | 1531.26 |

Growth of fishes

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (Kg) |
|-------------|--------------------|-------------------------------|-------------------------|--------------------------------|
| Catla | 19 | 12 | 360 | 149.55 |
| Rohu | 22.5 | 12 | 711 | 71.10 |
| Mrigal | 22.5 | 12 | 600 | 207.15 |
| Common carp | 13.5 | 12 | 281 | 106.25 |
| | | | Total | 534.05 Kg |

Total quantity of fish harvested : 534.05 Kg
 Gross production : 2322 Kg/ha/yr.
 Net production : 2211.5 Kg/ha/yr.
 * Cost of production per Kg of fish : Rs. 2.87

* Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of repairs & maintenance.

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CASE
 STUDY-34

COST STRUCTURE OF EXPERIMENTS CONDUCTED AT KALYANI CENTRE DURING 1973-74
 (State Central collaboration)

Location of the pond : Kulia Farm, Kalyani, District Nadia (West Bengal)

Area of the pond : 0.15 ha.

| Item of inputs | Quantity/ha (Kg) | Actual quantity applied (Kg) | Average rate (Rs) | Expenditure (Rs) |
|-------------------|--------------------------|---------------------------------|-------------------|------------------|
| Ammonium Sulphate | 270 | 40.5 | 56.49/q | 22.88 |
| Phosphate | 150 | 22.5 | 41.42/q | 9.32 |
| Potash | 24 | 3.6 | 52.58/q | 1.89 |
| Cowdung | 11,600 | 1740 | 1/q | 17.40 |
| Fingerlings | 6000 Nos/ha C4:R1:M2:Cc3 | | | 60.30 |
| Oil Cake | 4,723.3 | 708.5 | 82.24/q | 582.67 |
| Rice bran | 6,896.7 | 1,034.5 | 25/q | 258.63 |
| Diesel (approx) | - | - | - | 100.00 |
| | | | | Total - 1,053.09 |

Growth of fishes:

| Species | Initial Weight (g) | Period of rearing (months) | Average weight attained (g) | Total weight harvested (Kg) |
|--------------|--------------------|----------------------------|-----------------------------|-----------------------------|
| Catla | 19.4 | 12 | 353 | 68.90 |
| Rohu | 18.9 | 12 | 351 | 35.80 |
| Mrigal | 17.2 | 12 | 562 | 86.55 |
| Common Carp | 14.4 | 12 | 344 | 58.85 |
| Misc. fishes | - | - | - | 2.00 |
| | | | | Total - 252.10 Kg. |

Quantity of fish harvested - 252.10 Kg.

Gross production - 1680.7 Kg/ha/yr

Net production - 1576 Kg/ha/yr

Cost of production per Kg. of fish Rs.4.18

Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance.

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CASE
 STUDY-35

COST STRUCTURE OF EXPERIMENTS CONDUCTED AT KALYANI CENTRE DURING 1973-74
 (State Central Collaboration)

Location of the Pond : Kulia Farm, Kalyani, District Nadia (W.B.)
 Area of the Pond : 0.13 ha.

| Item of inputs | Quantity/ha (Kg) | Actual Quantity applied (Kg) | Rate (Rs) | Expenditure (Rs) |
|---|------------------|------------------------------|-----------|-------------------|
| Ammonium | 595 | 77.35 | 56.49/q | 43.70 |
| Sulphate | | | | |
| Phosphate | 305.8 | 39.75 | 41.42/q | 16.45 |
| Potash | 43.1 | 5.6 | 52.58/q | 2.94 |
| Cowdung | 5,846 | 760 | 1.00/q | 7.60 |
| Lime | 576.9 | 75 | 35.46/q | 26.60 |
| Urea | 29.2 | 3.8 | 100/q | 3.80 |
| Fingerlings 6000 nos/ha C 1: R0.5 : M1: Sc2:Cc2.5:Cc3 | | | | 134.56 |
| Oil Cake | 6596.1 | 857.5 | 82.24/q | 705.21 |
| Rice bran | 9846.1 | 1280 | 25/q | 320.00 |
| Diesel (approx) | | | | 150.00 |
| | | | | Total Rs. 1410.87 |

Growth of fishes:

| Species | Initial Wt(G) | Period of rearing (months) | Av. Wt. attained (g) | Total weight harvested (kg) |
|----------------------|---------------|----------------------------|----------------------|-----------------------------|
| Catla | 19.2 | 12 | 1208 | 39.85 |
| Rohu | 19.0 | 12 | 785 | 36.90 |
| Mrigal | 17.3 | 12 | 1025 | 72.80 |
| Silver Carp | 20.5 | 12 | 2196 | 237.15 |
| | 494.0 | | | |
| Grass Carp | 110.2 | 12 | 3143 | 499.80 |
| | 1593.0 | | | |
| Common Carp | 14.5 | 12 | 1000 | 126.05 |
| Miscellaneous fishes | | | | 4.00 |
| | | | | Total 1016.55 Kg |

Total quantity of fish harvested : 1016.55 Kg

Gross production : 7819.6 Kg/ha/Yr

Net production : 6638 Kg/ha/Yr

*Cost of production per Kg of fish : Rs.1.39

*Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of Hydrilla & Napier grass, cost of repairs & maintenance.

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CASE
 STUDY-36

COST STRUCTURE OF EXPERIMENTS CONDUCTED AT KALYANI CENTRE DURING 1973-75
 (State Central Collaboration)

Location of the Pond : Kulia Farm, Kalyani, District Nadia (West Bengal)
 Area of the Pond : 0.15 ha.

| Item of inputs | Quantity/ha (Kg) | Actual Quantity applied (Kg) | Average Rate (Rs) | Expenditure (Rs) |
|-----------------|--------------------------------|------------------------------|-------------------|------------------|
| Ammonium | 471.3 | 70.7 | 56.49/q | 39.94 |
| Sulphate | | | | |
| Phosphate | 262.1 | 39.32 | 41.42/q | 16.29 |
| Potash | 38.3 | 5.75 | 52.58/q | 3.02 |
| Cowdung | 10966.7 | 1645 | 1.00/q | 16.45 |
| Lime | 573.3 | 86 | 35.46/q | 30.50 |
| Fingerlings | 6000Nos/ha | | | |
| | C1 : R 0.5 : M1:Sc2:Gc 2.5:Cc3 | | | 132.80 |
| Oil Cake | 16,313 | 2447 | 82.24/q | 2012.41 |
| Rice bran | 17,150 | 2572.5 | 25/q | 643.12 |
| Diesel (approx) | | | | 250.00 |
| | | | Total | Rs. 3144.53 |

Growth of fishes:

| Species | Initial Wt. (g) | Period of rearing (months) | Actual Wt. attained (g) | Total weight harvested (Kg) |
|-------------|-----------------|----------------------------|-------------------------|-----------------------------|
| Catla | 18.9 | 22 | 1680 | 67.22 |
| Rohu | 22.2 | 22 | 1253 | 21.30 |
| Mrigal | 22.2 | 22 | 914 | 212.10 |
| Silver Carp | 17.8 | 22 | 1830 | 265.45 |
| Grass Carp | 17.8 | 22 | 2329 | 232.90 |
| Common Carp | 13.7 | 22 | 800 | 194.32 |
| | | | Total | 993.29 Kg |

Total quantity of fish harvested : 993.29 Kg
 Gross production : 6622 Kg/ha/22 months
 Net production : 6486 Kg/ha/22 months
 Cost of production per Kg. of fish. : Rs. 3.16
 Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance , cost of Hydrilla & Napier grass.

(Due to heavy poaching, the percentage realisation was very poor e.g. Catla-40%, Rohu 37.7%, Grass Carp 44.4% and Silver Carp 76.3%)

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CASE
 STUDY-37

COST STRUCTURE OF EXPERIMENTS CONDUCTED AT KALYANI CENTRE DURING 1974-75
 (State Central Collaboration)

Location of the Pond : Kulia Farm, Kalyani, District Nadia (W.B)
 Area of the Pond : 0.13 ha

| Items of inputs | Quantity/ha (Kg) | Actual Quantity applied (kg) | Rate (Rs) | Expenditure (Rs). |
|---|---------------------|---------------------------------------|--------------|----------------------|
| Mahua oil cake | 250 ppm | 450.00 | 44.00/q | 198.00 |
| Ammonium Sulphate | 315.0 | 40.95 | 60.00/q | 24.57 |
| Phosphate | 201.5 | 26.20 | 41.40/q | 10.85 |
| Potash | 24.0 | 3.12 | 69.00/q | 2.15 |
| Cowdung | 12,230.8 | 1590.0 | 1.50/q | 23.85 |
| Lime | 707.7 | 92.0 | 43.30/q | 39.84 |
| Fingerlings 7000 nos./ha C1:R0.5:M1.5:Sc2.5:Gc2:Cc2.5 | | | C | 245.00 |
| Oil cake | 7,452.7 | 968.85 | 80/q | 775.08 |
| Rice bran | 6,596.1 | 857.50 | 25.00/q | 214.37 |
| Fish meal | 1,076.9 | 140.00 | 198.00/q | 277.00 |
| Diesel (approx). | | | | 226.00 |
| | | | Total Rs. | <u>2036.91</u> |

Growth of fishes

| Species | Initial Wt. (g) | Period of rearing (months) | Av.Wt. attained (g) | Total Wt. harvested (Kg) |
|-------------|--------------------|----------------------------------|---------------------------|-----------------------------|
| Catla | 17.0 | 12 | 523 | 53.85 |
| Rohu | 2.8 | 12 | 534 | 43.25 |
| Mrigal | 7.0 | 12 | 469 | 81.60 |
| Silver Carp | 83.0 | 12 | 911 | 247.80 |
| Grass Carp | 72.0 | 12 | 1150 | 230.55 |
| Common Carp | 30.9 | 12 | 777 | 129.85 |
| | | | Total | <u>786.90 (Kg)</u> |

Total quantity of fish harvested : 786.90 Kg
 Gross production : 6053 kg/ha/yr
 Net production : 5737 kg/ha/yr

* Cost of production per Kg. of fish : Rs.2.58

* Does not include rental value, wages and salaries, interest on working capital, depreciation of farm equipment , cost Hydrilla & Napier grass, cost of repairs and maintenance, cost netting.

COST STRUCTURE OF EXPERIMENTS CONDUCTED AT KALYANI CENTRE DURING 1975-76
 (State Central Collaboration)

Location of the pond : Kulia Farm Kalyani, Dist. Nadia. (West Bengal)

Area of the pond : 0.15 ha

| Items of inputs | Quantity/ha | Actual quantity applied (Kg) | Average Rate (Rs) | Expenditure (Rs) |
|---|-------------|------------------------------|-------------------|------------------|
| Ammonium Sulphate | 403.0 | 60.50 | 93.50/q | 56.67 |
| Phosphate | 223.0 | 33.50 | 100.00/q | 33.50 |
| Potash | 12.0 | 1.80 | 69.00/q | 1.24 |
| Cowdung | 11,633.0 | 1745.00 | 1.50/q | 26.18 |
| Lime | 266.0 | 40.00 | 43.30/q | 17.32 |
| Fingerlings 4260 nos./ha C1.09 : R1.17: Mo.99: Sc2.33: Gc1.45: Cc2.97 | | | | <u>370.00</u> |
| Oilcake | 6,523.0 | 978.50 | 74.20/q | 782.80 |
| Rice bran | 4,986 | 748.00 | 198.00/q | 187.00 |
| Fish meal | 363 | 54.50 | - | 107.91 |
| Diesel (Approx) | - | - | - | 200.00 |
| | | | Total | 1782.62 |

Growth of fishes

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (Kg) |
|-------------|-----------------|----------------------------|----------------------|-----------------------------|
| Catla | 37 | 14 | 1017 | 52.90 |
| Rohu | 19 | 14 | 659 | 47.45 |
| Mrigal | 50 | 14 | 707 | 58.65 |
| Silver carp | 289 | 14 | 1113 | 141.35 |
| Grass carp | 85 | 14 | 1798 | 151.00 |
| Common carp | 12 | 14 | 664 | 106.90 |
| | | | Total | 558.25 Kg |

Total quantity of fish harvested : 558.25 Kg

Gross production : 3722 Kg/ha/14 months

Net production : 3156 Kg/ha/14 months

*Cost of production per Kg of fish : Rs 3.19
 (some fish has been lost due to decoity)

*Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, loss of repairs & maintenance, cost of Hydrilla & Napier grass.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
 (I.C.A.R)
 ————— BARRACKPORE : WEST BENGAL —————

Case
 study -39

COST STRUCTURE OF EXPERIMENTS CONDUCTED AT KALYANI CENTRE DURING 1975-76
 (State Central Collaboration)

Location of the pond : Kulia Farm, Kalyani, Dist. Nadia (West Bengal)

Area of the pond : 0.23 ha.

| Item of inputs | Quantity/ha (Kg) | Actual quantity applied (Kg) | Average Rate(Rs) | Expenditure (Rs) |
|-------------------|--------------------------------------|------------------------------|------------------|------------------|
| Mahua Oil Cake | 250 ppm | 525 | 4400/q | 231.00 |
| Ammonium Sulphate | 270.0 | 62.10 | 60.00/q | 37.26 |
| Phosphate | 175.0 | 40.25 | 41.40/q | 16.66 |
| Potash | — | — | — | — |
| Cowdung | 14,313 | 3292 | 1.50/q | 49.38 |
| Lime | 360.9 | 83 | 43.30/q | 35.94 |
| Fingerlings | 5000 nos/ha C2.5: R2:M2: Sc 1.5:Cc 2 | | | Rs. 433.00 |
| Oil Cake | 6496.1 | 1494.10 | 80.00/q | 1195.28 |
| Rice bran | 5942.2 | 1366.70 | 25.00/q | 341.67 |
| Fish meal | 482.6 | 111.00 | 198.00/q | 219.78 |
| Diesel (Approx) | — | — | — | 100.00 |
| | | | Total | Rs.2659.97 |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Average wt. attained (g) | Total weight harvested (Kg) |
|--------------------------------|-----------------|----------------------------|--------------------------|-----------------------------|
| Catla | 86 | 13 | 479.4 | 124.68 |
| Rohu | 62 | 13 | 595.8 | 106.65 |
| Mrigal | 52 | 13 | 555.2 | 137.70 |
| Silver carp | 305 | 13 | 1352.5 | 238.05 |
| Common carp | 80 | 13 | 874.7 | 152.20 |
| Common carp (bred in the pond) | — | — | 384.7 | 21.15 |
| | | | Total | 780.43 Kg |

Total fish harvested : 780.40 Kg
 Gross production : 3393 Kg/ha/13 months
 Net production : 2844 Kg/ha/13 months
 *Cost of production per Kg. of fish Rs.3.40

*Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of repairs & maintenance.

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED
 AT KRISHNAGAR CENTRE FOR OPERATIONAL RESEARCH
 PROJECT (1973-1974)

Location of the Pond : Anjana Fish Farm - P.O. Shaktinagar
 Dist. Nadia (West Bengal)

Area of the Pond : Pond No. Reservoir - III - 1.93 ha

| Items of inputs | Quantity/ha | Actual quantity applied (Kg) | Purchased @ C. (Rs) | Expenditure (Rs) |
|--|-------------|---------------------------------|---------------------|------------------|
| Mahua oil cake | 250 ppm | 7125 | 25.00/quintal | 1781.25 |
| Lime | 810 Kg | 1565 | 16.00/quintal | 262.40 |
| Cowdung | 11923 Kg | 23010 | 30.00/Ton | 690.30 |
| Ammonium Sulphate | 270 Kg | 521.4 | 57.70/Quintal | 300.85 |
| Single Super Phosphate | 100 Kg | 193.2 | 41.94/Quintal | 081.15 |
| Muriate of Potash | 25 Kg | 46.8 | 50.73/Quintal | 23.65 |
| Fingerlings @ 6000/ha | | | | 2398.80 |
| Supplementary Feeding done @ 1-2% of Body weight | | | | |
| Mustard oil cake | 3587 | 6924 | 93.56/Quintal | 6466.32 |
| Rice Bran | 2891 | 5580 | 48.61/Quintal | 2691.45 |
| Other expenditure | - | - | - | 1084.44 |
| | | | Total Cultural Cost | 15780.61 |

Growth of Fishes

| Species | Initial Weight (gms) | Period of Rearing (months) | Average weight attained (gms) | Total Weight Harvested (Kg) |
|--------------|----------------------|----------------------------|-------------------------------|-----------------------------|
| CATLA | Ist Stocking 52.5 | 13 months | 1379 | 1773.72 |
| | IIInd Stocking 23.0 | 8 months | 0571 | |
| | IIIInd Stocking 28.0 | 4 months | 0407 | |
| ROHU | Ist Stocking 22.8 | 13 months | 0942 | 1537.50 |
| | IIInd Stocking 16.2 | 4 months | 0393 | |
| MRIGAL | Ist Stocking 23.6 | 13 months | 0733 | 1974.10 |
| | IIInd Stocking 13.0 | 8 months | - | |
| | IIIInd Stocking 15.8 | 4 months | 0471 | |
| SILVER CARP | Ist Stocking 47.8 | 13 months | 3307 | 1441.70 |
| | IIInd Stocking 08.0 | 8 months | 1106 | |
| GRASS CARP | Ist Stocking 08.0 | 13 months | 2489 | 0477.45 |
| | IIInd Stocking 18.0 | 8 months | 0388 | |
| Common Carp | 07.7 | 13 months | 0550 | 0930.20 |
| Misc. Fishes | - | - | - | 040.85 |
| | | | Total Fish Harvested | 8175.50 |

Gross Production - 4236 Kg/ha/13 months

Net Production - 4062 Kg/ha/13months

Cost of production per Kg of fish - 1.93

Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of Hydrilla & Napier grass cost of Netting, cost of repairs and maintenance.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
(I.C.A.R)

Case study-41

BARRACKPORE, WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT KRISHNANAGAR
CENTRE FOR OPERATIONAL RESEARCH PROJECT. 1973-74

Location of the pond : Anjana Fish Farm, P.O. Shaktinagar,
Dist. Nadia(West Bengal)

Area : Pond No. Reservoir-II-1.48 ha.

| Items of inputs | Quantity/ ha | Actual quantity applied | Purchased at the rate of | Expenditure (Rs.) |
|-----------------|-----------------|-------------------------------|--------------------------------|----------------------|
| | | (kg.) | (Rs.) | |

| | 1 | 2 | 3 | 4 | 5 |
|---------------------------|----------|---|---------------|---------|---|
| Mahua oil-cake | 250 ppm | 3375.00 | 25.00 Quintal | 843.75 | |
| Lime | 500 kg | 740.00 | 16.00 " | 118.40 | |
| Cowdung | 12311 kg | 18220.00 | 30.00 / Ton | 546.60 | |
| Ammonium Sulphate | 294 kg | 454.60 | 57.70 quintal | 250.75 | |
| Single Super phosphate | 112 kg | 165.00 | 41.94 / " | 069.30 | |
| Muriate of Potash | 26 kg | 038.70 | 50.73 / " | 019.55 | |
| Fingerlings @ 5,600/ha. | | C I.9: R I.4: M I.6: Sc.2.4: Cc.2.7. | | 1538.94 | |

Supplementary feeding done @ 1-2% of body weight.

| | | | | |
|-------------------|---------|---------------------|---------------|---------|
| Mustard oil-cake | 2290 kg | 3390.00 | 93.56/quintal | 3101.35 |
| Rice-bran | 2932 kg | 4340.00 | 48.61 / " | 2106.00 |
| Other Expenditure | | | | 0818.69 |
| | | Total cultural cost | | 9473.83 |

Growth of fishes:

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg.) |
|------------------------|----------------------|----------------------------------|----------------------------|------------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| Catla | 1st stocking 28.0 | 12 months | 583.5 | 1321.05 |
| | 2nd " 28.0 | 6 months | 525.0 | |
| Rohu | 1st Stocking 16.6 | 12 months | 1065.0 | 0803.15 |
| | 2nd stocking 03.5 | 5 months | 281.0 | |
| Mrigal | 1st stocking 25.0 | 12 months | 2145.0 | 2052.03 |
| | 2nd stocking 09.0 | 5 months | 459.0 | |
| Silver carp | 02.0 | 5 months | 606.0 | 1274.55 |
| Common carp | 12.75 | 12 months | 390.0 | 788.15 |
| Misc Fishes | | | | 109.10 |
| Total fishes Harvested | | | | 6348.03 |
| Gross production | | | | 4290 kg/ha/yr |
| Net Production | | | | 4143 kg/ha/yr |

Production cost per kg. of fish Rs.1.49

Does not include rental value of pond, wages & salaries, interest on working capital, depreciation of farm equipment cost of Hydrilla & Napier grass, cost of netting, cost of repairs & maintenance

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE Case study-42
(I.C.A.R.)

BARRACKPORE, WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT
KRISHNAGANJ CENTRE FOR OPERATIONAL RESEARCH PROJECT

DURING 1973-74.

Location of the pond : Anjana Fish Farm, P.C. Shaktinagar
Dist. Nadia.

Area : Pond No. Reservoir-I- 2.15 ha.

| Items of inputs | Quantity/ ha | Actual quantity applied (kg) | purchased @ (Rs.) | Expenditure (Rs.) |
|---|-----------------|---------------------------------------|----------------------|----------------------|
| 1 | 2 | 3 | 4 | 5 |
| Mahua oil-cake | 250 ppm | 250.00 | 25.00/quintal | 237.50 |
| Lime | 500 kg | 1075.00 | 16.00/quintal | 172.00 |
| Cowdung | 13572 kg | 29180.00 | 30.00/Ton | 875.40 |
| Ammonium sulphate | 225 kg | 484.00 | 57.70/Q | 279.27 |
| Single superphosphate | 36 kg | 184.90 | 41.94/Q | 1.077.66 |
| Muriate of potash | 20 kg | 43.50 | 50.73/Q | 1.022.07 |
| fingerlings @ 6000/ha. C-2.4:R1.5; M-2.5; Cc 3.6 | | | | 2437.24 |
| Supplementary feeding done @ 1-2% of body wt. | | | | |
| Mustard oil-cake | 2138 kg | 4593.00 | 93.56/quint. | 4301.22 |
| Rice bran | 2113.0 nos | 4544.00 | 48.61/quint | 2208.90 |
| Other expenditure | | | | 1256.37 |
| | | | Total cultural cost | 11867.63. |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total Wt. harvested (kg) |
|----------------------|--------------------|----------------------------------|----------------------------|--------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| Catla | Ist stocking | 27.3 | 12 | 689 |
| | 2nd stocking | 28.0 | 4 | 200 |
| Rohu | Ist stocking | 20.0 | 12 | 777 |
| | 2nd stocking | 15.0 | 4 | 255 |
| Mrigal | Ist stocking | 30.0 | 1 | 1103 |
| | 2nd stocking | 14.0 | 4 | 375 |
| Common carp | Ist stocking | 08.4 | | 241 |
| | 2nd stocking | - | | 1022.75 |
| Misc. Fishes | | | | 337.2 |
| Total fish harvested | | | | 5708.65 |
| Gross production | | | | 2654 kg/ha/yr |
| Net Production | | | | 2514 kg/ha/yr |

* Production cost per kg of fish Rs.2,08

* Does not include rental value of pond, wages and salaries, interest on working capital, depreciation of farm equipment, cost of Hydrilla & Napier grass, cost of netting, cost of repairs & maintenance.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE

Case study-43

(I.C.A.R.)

BARRACKPORE, WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT NILGANJ CENTRE

DURING 1973-74

Location of the pond : Nilganj, Dist. 24-Parganas (within the campus of the Jute Agricultural Research Institute, West Bengal.)

Area : 0.32 ha.

| Items of inputs | Quantity/ ha | Actual quantity applied | Purchased rate of (kg) | Expenditure (Rs.) |
|---------------------------|-----------------|---|------------------------------|----------------------|
| 1 | 2 | 3 | 4 | 5 |
| Mahua oil-cake | 250 ppm | 1500 | 24.50/q | 367.50 |
| Lime | 200 kg | 70 | 35.0/q | 24.50 |
| Cowdung | 5000 kg | 1580 | 10.0/q | 15.00 |
| Amm. sulphate | 470 kg | 151.3 | 60.0/q | 90.78 |
| Single super phosphate | 275 kg | 88.5 | 42.0/q | 37.17 |
| Muriate of potash | 47 kg | 14.58 | 53.0/q | 7.72 |
| Fingerlings | 6600 nos/ha | C 1.0:R 3.0:M 1.25: Sc 2.5:Ge 1.0:Cc 1.25 | 249.60 | |

Supplementary feeding
done @ 1-2% of body weight

| | | | | |
|------------------|----------|------|----------|-------------|
| Mustard oil-cake | 4938 kg | 1581 | 107.61/q | 1701.36 |
| Rice bran | 5000 kg | 1601 | 23.56/q | 377.22 |
| Hydrilla | 14687 kg | 4700 | 5.0/q | 235.00 |
| Napier grass | 2531 kg | 1450 | 3.0/q | 43.50 |
| Netting | - | - | - | 400.00 |
| | | | | Rs. 3549.35 |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|-----------------------|--------------------|----------------------------------|----------------------------|-----------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| Catla | 36.7 | 12 | 1420 | 304.5 |
| Rohu | 31.0 | 12 | 850 | 420.6 |
| Mrigal | 21.6 | 12 | 1000 | 225.0 |
| Silver carp | 2.6 | 8 | 920 | 465.8 |
| Grass carp | 4.5 | 8 | 500 | 89.9 |
| Common carp | 3.2 | 12 | 400 | 91.4 |
| Assorted (by angling) | - | - | - | 84.0 |
| | | | | 1681.2 Kg. |

| | | |
|--|----------|---------------|
| Total quantity of fish harvested | - | 1681.2 kg |
| Gross production | - | 5253 kg/ha/yr |
| Net production | - | 5142 kg/ha/yr |
| Expenditure for production of per kg fish- | Rs. 2.11 | |

Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of maintenance.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
(I.C.A.R.)

BARRACKPORE, WEST BENGAL

Case study-44

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT
HARISHCHANDRAPUR CENTRE UNDER CIFRI/IDRC PROJECT ON RURAL
AQUACULTURE DURING 1975-76

Location of the pond : Harishchandrapur, Malda (West Bengal)
Name : Dalua
Area : 0.3/ha.

| Items of inputs | Quantity/ ha | Actual quantity at the applied rate of (kg) | Purchased quantity at the applied rate of (Rs.) | Expenditure (Rs.) |
|---|-----------------|--|--|----------------------|
| 1 | 2 | 3 | 4 | 5 |
| Mahua oil-cake | 250 ppm | 1050.00 | Rs. 40.50/QT | Rs. 425.25 |
| Lime | | 62.00 | Rs. 33.60/QT | Rs. 20.83 |
| Cowdung | | 200.00 | Rs. 5.00/QT | Rs. 10.00 |
| Amm. sulphate | | 11.250 | Rs. 929.00/T | 10.46 |
| Single super phosphate | | 6.250 | Rs. 994.00/T | 6.25 |
| Muriate of potash compost | 100.00 kg | 30.00 | Rs. 4.00 | 1.20 |
| Fingerlings | 5000 nos/ha | CI:R2 : M2 : Sc 3:Gc 0.5 Cc 1.5 | Total nos stocked 1468 | Rs. 276.50 |
| Suppl. feeding done @ 1-4% of body weight | | | | |
| Mustard oil cake | | 415.797 | Rs. 97.00/QT | 403.32 |
| Rice bran | | 490.933 | Rs. 50.00/QT | 245.50 |
| Aq. weed | | | | |
| Terr. weed | | 8780 | | |
| Netting | | | | 524.27 |
| Labour | | | Total expendt. | 1923.58 |

Growth of fishes

| Species | Initial wt. (g) | Period of breeding (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|----------------------------------|--------------------|-----------------------------------|----------------------------|-----------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| Catla | 3.8 | 6 | 169.2 | 20.580 |
| Rohu | 3.3 | 8 | 318.4 | 88.060 |
| Mrigal | 2.1 | 8 | 181.5 | 50.180 |
| Silver carp | 4.7 | 8½ | 1023.5 | 337.220 |
| Grass carp | 18.9 | 7 | 1023.5 | 30.650 |
| Common carp | 5.9 | 1 | 107.5 | 20.330 |
| Assorted (by angling) nil | | | | |
| Total quantity of fish harvested | | | | 547.020 |

Production/ha/period 1823.3/ha/8months

Expenditure for production of per kg of fish Rs.3.52

Does not include rental value, wages & salaries, inputted cost of owner management/labour, interest on working capital, depreciation of farm equipment, cost of terrestrial weeds cost of repairs & maintenance.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE

(I.C.A.R.)

Case study-45

BARRACKPORE, WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT
HARISHCHANDRAPUR UNDER CIFRI/LRC PROJECT ON RURAL

AQUACULTURE DURING 1975-76

Location of the pond : Harischandrapur, Malda(West Bengal)
 Name : BARIPICHANERPUKUR
 Area : 0.11 ha

| Items of input | Quantity/ ha | Actual quantity applied (kg) | Produced at the rate of (Rs.) | Expenditure (Rs.) |
|--|-----------------|--|--|----------------------|
| 1 | 2 | 3 | 4 | 5 |
| Mahua oil cake | 250 ppm | 259.00 | 40.50/QT | 104.90 |
| Lime | - | 13.00 | 33.60/QT | 4.36 |
| Cow dung | - | 210.00 | 5.00/QT | 10.50 |
| Amm. sulphate | - | 4.170 | 929.00/Ton | 3.87 |
| Single super phosphate | - | 2.250 | 994.00/Ton | 2.25 |
| Muriate of potash | - | - | - | - |
| Compost | 100 kg | 11.00 | 4.00/QT | 0.44 |
| Fingerlings | 5000 nos/ha | C1 R2 M2 Sc3 Gc05 Cc1'5 Nos stocked | 562 | 54.99 |
| Suppl. feeding done at the rate 1-4% of body wt. | | | | |
| Mustard oil cake | - | 180.931 | 97.00/QT | 175.50 |
| Rice bran | - | 210.277 | 50.00/QT | 105.00 |
| Aq. weed | - | 7860.00 | | |
| Terr. weed | - | | | |
| Netting | | | | |
| Labour | | To 1 | | 192.25 |
| | | Total expenditure | | 654.06 |

Growth of fishes

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg.) |
|----------------------------------|--------------------|----------------------------------|----------------------------|------------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| Catla | 5.6 | 6 | 391.8 | 19.980 |
| Rohu | 21.3 | 8 | 624.0 | 37.460 |
| Mrigal | 4.5 | 8 | 122.4 | 10.520 |
| Silver carp | 4.7 | 6 | 659.0 | 58.000 |
| Grass carp | 242.5 | 8 | 2512.5 | 24.520 |
| Common carp | 25.5 | 7 | 1264.7 | 84.740 |
| Assorted(by angling) | Nil | | | |
| Total quantity of fish harvested | | | | 235.220 |
| Gross production/ha/period | | | | 2138.2/ha/7 ¹ /2 M. |

* Expenditure for production of per kg of fish : Rs.2.78

* Does not include rental value wages and salaries, inputed cost of owner management/ labour, interest on working capital, depreciation of farm equipment, cost of terrestrial weeds, cost of repairs and maintenance.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE

(I.C.A.R.)

Case study-46

BARRACKPORE, WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT
HARISHCHANDRAPUR CENTRE UNDER CIFRI/IDRC PROJECT ON RURAL
AQUACULTURE DURING 1975-76

Location of the pond : Harishchandrapur, Malda (West Bengal)
 Name : Talpukur
 Area : 0.13/ha

| Items of input | Quantity/ ha | Actual quantity applied (kg.) | Purchased @ Rs. | Expenditure (Rs.) |
|---------------------------|-----------------|--|-----------------------|----------------------|
| 1 | 2 | 3 | 4 | 5 |
| Mahua oil-cake | 250 ppm | 518.00 | Rs. 40.50/QT | Rs. 209.49 |
| Lime | | 24.00 | Rs. 33.60/QT | Rs. 8.06 |
| Cowdung | | Nil | Rs. 5.00/QT | Nil |
| Amm. sulphate | | 4.330 | Rs. 929.00/T | Rs. 4.02 |
| Single super phosphate | | 2.670 | Rs. 994.00/T | Rs. 2.07 |
| Muriate of potash | | | | |
| Compost | 100 kg | 13.00 | Rs. 4.00 | Rs. 0.52 |
| Fingerlings : | 5000 nos/ha | C1:R2:M2:Sc3:Gc0.5 Cc1.5 | Total Nos.stocked 675 | Rs. 75.69 |

Supplementary feeding
done @1-4% of body wt.

| | | | |
|------------------|---------|---------------|------------------------------|
| Mustard oil-cake | 141.500 | Rs. 97.00/Q.T | Rs. 137.31 |
| Rice bran | 173.165 | Rs. 50.00/Q.T | Rs. 86.50 |
| Aq. weed | | | |
| Terr. weed | 3396 | | |
| Netting | | | |
| Labour | | | Rs. 218.20 |
| | | | Total expenditure Rs. 742.76 |

Growth of fishes

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested(kg) |
|----------------------------------|--------------------|----------------------------------|----------------------------|-------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| Catla | 6.0 | 6 | 254.3 | 12.200 |
| Rohu | 3.5 | 8 1/2 | 271.9 | 30.180 |
| Mrigal | 8.7 | 3 1/2 | 166.0 | 19.380 |
| Silver carp | 11.2 | 7 | 253.3 | 108.940 |
| Grass carp | 16.8 | 3 7 | 806.4 | 20.160 |
| Common carp | 21.6 | 7 1/2 | 680.0 | 64.680 |
| Assorted (by angling) | Nil | | | |
| Total quantity of fish harvested | | | | 255.540 |
| Gross production/ha/period | | | | 1965.400/7 1/2 months |

Expenditure for production of per kg of fish Rs. 2.91

Does not include rental value, wages & salaries, imputed cost of owner management/labour, interest on working capital, depreciation of farm equipment, cost of terrestrial weeds, cost of repairs & maintenance.

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(I.C.A.R.)

BARRACKPORE, WEST BENGAL.

Case study-47

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT
HARISHCHANDRAPUR CENTRE CIFRI/IDRC PROJECT ON RURAL
AQUACULTURE DURING 1975-76

Location of the pond : Harishchandrapur, Malda (West Bengal)
 Name : Puratangoalbari Pukur
 Area : 0.32 ha

| Items of input | Quantity/ ha | Actual quantity applied (kg.) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
|--|-----------------|--|---|----------------------|
| 1 | 2 | 3 | 4 | 5 |
| Mahua oil-cake | 250 ppm | 840.00 | Rs. 40.50/QT | Rs. 340.20 |
| Lime | | 24.00 | Rs. 33.60/QTR | Rs. 8.06 |
| Cowdung | | | | |
| Amm. sulphate | 450.00 kg | 12.00 | Rs. 929.00/TRs. | 11.16 |
| Single super phosphate | 250.00 kg | 6.70 | Rs. 994.00/T | Rs. 6.70 |
| Murate of potash | | | | |
| Compost | 100.00 kg. | 32.00 | Rs. 4.00 | Rs. 1.28 |
| Fingerlings | 5000 nos/ha | C1:R2 M2:Sc3: Gc 0.5 Cc 1.5 | Total nos stocked 1640 | Rs. 163.60 |
| Supplementary feeding done @ 1-4% of body weight | | | | |
| Mustard oil-cake | | 289.280 | Rs. 97.00/QT | Rs. 280.60 |
| Rice bran | | 451.390 | Rs. 50.00/QT | Rs. 225.60 |
| Aq. weed | | | | |
| Terr. weed | | 1670 | | |
| Netting | | | | |
| Labour | | | | Rs. 558.25. |
| | | | Total expenditure | Rs. 1595.45 |

Growth of fishes

| Species | Initial wt. (g) | Period of rearing (months) | Av. st. attained | Total weight harvested (%) |
|----------------------------------|--------------------|----------------------------------|---------------------|-------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| Catla | 3.7 | 4 | 260.8 | 14.200 |
| Rohu | 3.6 | 5 | 127.8 | 38.480 |
| Mrigal | 2.1 | 6 | 119.8 | 19.170 |
| Silver carp | 4.7 | 5 | 442.8 | 164.720 |
| Grass carp | - | - | - | - |
| Common carp | 7.8 | 7 | 994.1 | 131.020 |
| Assorted (by angling) Nil | | | | |
| Total quantity of fish harvested | | | | 367.590 |
| Gross production/ha/period | | | | 1148.70/ha/5 month |

* Expenditure for production of per kg of fish Rs. 4.33

* Does not include rental value, wages and salaries, input cost of owner management/labour, interest on working capital, depreciation of farm equipment, cost of terrestrial weeds, cost of repairs and maintenance.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE

(I.C.A.R.)

Case study-48

BARRACKPORE, WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT
HARISHCHANDRAPUR CENTRE UNDER CIFRI/IDRC PROJECT ON RURAL
AQUACULTURE DURING 1975-76

Location of the pond : Harishchandrapur, Malda (West Bengal)
 Name : Dharmastambha
 Area : 0.36 ha.

| Item of inputs | Quantity/ ha | Actual quantity applied (kg) | Purchased @ Rs. | Expenditure Rs. |
|---------------------------|-----------------|---------------------------------------|--------------------|--------------------|
| 1 | 2 | 3 | 4 | 5 |
| Mahua oil-cake | 250 ppm | 1422.000 | 40.50/QT | 575.91 |
| Lime | | 27.000 | 33.60/QT | 9.07 |
| Cowdung | | 360.000 | 5.00/QT | 18.00 |
| Amm. sulphate | | 13.500 | 929.00/QT | 12.55 |
| Single super phosphate | | 7.500 | 994.00/T | 7.50 |
| Murate of potash | | | | . |
| Compost | 100 kg | 36.000 | 4.00/QT | 1.44 |
| Fingerlings | 5000 nos/ha | C1 R2: M2 Sc3 Gc 05 Cc 15 | | |
| | | Total nos stocked : 1767 | | 181.35 |

Supplementary feeding
done @ 1-4% of body
weight.

| | | | |
|------------------|-----------|-----------|---------|
| Mustard oil-cake | 509.665 | 97.00/QT | 494.37 |
| Rice bran | 588.095 | 50.00/QT | 294.00 |
| Aq. weed | 10016.000 | | |
| Terr. weed | - | - | - |
| Netting | - | - | - |
| Labour | | | 629.12 |
| | | Total Rs. | 2223.31 |

Growth of fishes

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg.) |
|----------------------------------|--------------------|----------------------------------|----------------------------|------------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| Catla | 7.2 | 6 | 202.7 | 28.780 |
| Rohu | 1.8 | 7 | 298.8 | 74.080 |
| Mrigal | 1.8 | 8 | 287.1 | 44.720 |
| Silver carp | 13.8 | 8 | 1148.5 | 484.560 |
| Grass carp | 18.6 | 6 | 1966.1 | 68.980 |
| Common carp | 4.3 | 1 | 145.0 | 37.300 |
| Assorted(by angling) Nil | | | | |
| Total quantity of fish harvested | | | | 738.420 |
| Gross production/ha/period | 2051.4 kg/ha | 6 1/2 months | | |

Expenditure for production of per kg of fish Rs. 3.02

Does not include rental value, wages & salaries, imputed cost of owner management/labour, interest on working capital, depreciation of farm equipment, cost of aquatic weeds, cost of repairs & maintenance.

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Case study-49

BARRACKPORE, WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT
HARISHCHANDRAPUR CENTRE UNDER CIFRI/IDRC PROJECT ON RURAL
AQUACULTURE DURING 1975-76

Location of the pond : Harishchandrapur, Malda (West Bengal)
Name : Nalpukur
Area : 0.37 ha

| Item of inputs | Quantity/ ha | Actual quantity applied (kg) | Purchased @ Rs. | Expenditure Rs. |
|---|-----------------|--|--------------------|--------------------|
| 1 | 2 | 3 | 4 | 5 |
| Mahua oil-cake | 250 ppm | 1387.500 | 40.50/Q | 561.94 |
| Lime | | 27.500 | 33.60/Q | 9.24 |
| Cowdung | | 370.000 | 5.00/Q | 18.50 |
| Amm. sulphate | 450 kg | 13.920 | 929.00/T | 12.95 |
| Single super phosphate | 250 kg | 7.670 | 994.00/T | 7.67 |
| Muriate of potash | - | - | - | - |
| Compost | 100 kg | 37.000 | 4.00/Q | 1.48 |
| Fingerlings | 5000nos/ha | C1:R2:M2:Sc3:Gc0.5 Cc1.5 Nos stocked | 1447 | 186.34 |
| Suppl. feeding done @ 1-4% of body wt. | | | | |
| Mustard oil-cake | | 183.537 | 97.00/Q | 178.93 |
| Rice bran | | 335.350 | 50.00/Q | 167.50 |
| Aq. weed | | 10442.000 | | |
| Terr. weed | - | - | - | - |
| Netting | - | - | - | - |
| Labour | - | - | - | 646.60 |
| | | | Total Rs. 1791.15 | |

Growth of fishes

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained harvested(g) | Total weight harvested(g) |
|-------------------------------|--------------------|----------------------------------|-------------------------------------|------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| Catla | 3.5 | 6 | 355.6 | 42.280 |
| Rohu | 1.8 | 7 | 165.6 | 41.040 |
| Mrigal | 1.8 | 7 | 214.6 | 61.960 |
| Silver carp. | 1.8 | 7 | 464.5 | 224.640 |
| Grass carp | 12.4 | 6 | 1158.2 | 45.140 |
| Common carp | 7.8 | 1½ | 150.0 | 43.480 |
| Assorted(by angling) | Nil | | | |
| Total quantity fish harvested | | | | 458.540 |

Production/ha/period 1240.0 kg/ha/7 months

- * Expenditure for production of per kg. of fish Rs. 3.91
- * Does not include rental value, wages & salaries, imputed cost of owner management/labour, interest on working capital, depreciation of farm equipment, cost of aquatic weeds cost of repairs & maintenance.

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BARRACKPORE, WEST BENGAL

Case study-50

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT
HARISHCHANDRAPUR CENTRE UNDER CIFRI/IDRC PROJECT ON RURAL
AQUACULTURE DURING 1975-76

Location of the pond : Harishchandrapur, Malda(West Bengal)

Name : Gopal pukur

Area : 0.22 ha

| Item of inputs | Quantity/ ha | Actual quantity applied (kg.) | Purchased @ Rs. | Expenditure Rs. |
|---|-----------------|--|------------------------|--------------------|
| 1 | 2 | 3 | 4 | 5 |
| Mahua oil-cake | - | - | - | - |
| Lime | | 105.000 | 33.60/Q | 35.28 |
| Cowdung | | 760.000 | 5.00/Q | 38.00 |
| Amm. sulphate | | 8.250 | 929.00/T | 7.67 |
| Single Super Phosphate phosphate | | 4.600 | 994.00/T | 4.60 |
| Muriate of potash | -- | - | - | - |
| Compost | 100 kg | 22 | 4.00/Q | 0.88 |
| Fingerlings | 5000 nos/ha | C1:R2:M2:Sc3: Gc0.5: Cc1.5 | Total nos stocked 1156 | 210.85 |
| Suppl. feeding done @ 1-4% of body wt. | | | | |
| Mustard oil-cake | | 506.215 | 97.00/Q | 491.02 |
| Rice bran | | 571.315 | 50.00/Q | 285.50 |
| Aq. weed | | 3079.000 | | |
| Terr. weed | -- | - | - | - |
| Netting | -- | - | - | - |
| Labour | -- | - | - | 525.76 |

Growth of fishes

| Species | Initial wt (g) | Period of rearing (months) | Av. wt. attained | Total weight harvested(Rs.) |
|----------------------------------|-------------------|----------------------------------|---------------------|--------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| Catla | 4.6 | 6 1/2 | 550.9 | 19.620 |
| Rohu | 1.8 | 7 | 370.0 | 31.480 |
| Mrigal | 3.1 | 8 | 163.2 | 24.860 |
| Silver carp | 11.3 | 8 | 696.3 | 122.960 |
| Grass carp | - | 11 | 1861.1 | 72.800 |
| Common carp | - | 11 | 1049.4 | 226.880 |
| Assorted (by angling) Nil | | | | |
| Total quantity of fish harvested | | | | 498.600 |
| Gross production/ha/period | 2266.4 | kg/ha/8 months | | |

* Expenditure for production of per Kg. of fish Rs. 3.20

* Does not include rental value, wages & salaries, imputed cost of owner management/labour, interest on working capital, depreciation of farm equipment, cost of aquatic weeds, cost of repairs and maintenance.

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Case study-51

BARRACKPORE, WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT
HARISHCHANDRAPUR CENTRE UNDER CIFRI/IDRC PROJECT ON RURAL
AQUACULTURE DURING 1975-76

Location of the pond : Harishchandrapur, Malda(West Bengal)
 Name : Bunglowpukur
 Area : 0.3 ha

| Item of inputs | Quantity/ ha | Actual quantity applied(kg) | Purchased @ Rs. | Expenditure Rs. |
|---------------------------|-----------------|-----------------------------------|--------------------|--------------------|
| 1 | 2 | 3 | 4 | 5 |
| Mahua oil-cake | 250 ppm | 900.000 | 40.50/Q | 364.50 |
| Lime | | 22.500 | 33.60/Q | 7.60 |
| Cowdung | | 700.000 | 5.00 | 35.00 |
| Amm. sulphate | 450 | 11.250 | 929.00 | 10.46 |
| Single super phosphate | 250 | 6.250 | 994.00 | 6.25 |
| Muriate of potash | - | - | - | - |
| Compost | 100 | 30.000 | | 1.20 |
| Fingerlings | 5000 nos/ha | C1 :R2:M2: Sc3: Gc0.5: Cc1.5 | | |
| | | Total nos stocked 1518 | | 151.25 |

Suppl. feeding done
@ 1-4% of body wt.

| | | | |
|-------------------|-----------|---------|-------------|
| Mustard oil-cake | 486.995 | 97.00/Q | 472.39 |
| Rice bran | 545.905 | 50.00/Q | 273.00 |
| Aq. weed | 13112.000 | | |
| Terr. weed | | | |
| Netting | | | |
| Labour | | | 524.27 |
| Total expenditure | | | Rs. 1845.92 |

Growth of fishes

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested(kg.) |
|----------------------------------|--------------------|----------------------------------|----------------------------|--------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| Catla | 7.5 | 8 | 1203.0 | 37.390 |
| Rohu | 20.5 | 8 | 589.1 | 108.200 |
| Mrigal | 1.8 | 8 | 228.8 | 24.220 |
| Silver carp | 4.7 | 8 | 935.4 | 285.320 |
| Grass Carp | 18.6 | 7/2 | 1348.3 | 87.300 |
| Common Carp (by angling) | 6.4 | Nil | 185.0 | 6.200 |
| Total quantity of fish harvested | | | | 548.630 |

Gross production/ha/period 1829.0 kg./ha/8 months

- * Expenditure for production of per kg.of fish:Rs.3.35.
- * Does not include rental value, wages & salaries, imputed cost of owner management/labour, interest on working capital, depreciation of farm equipment, cost of aquatic weeds, cost of repairs and maintenance.

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Case study-52

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT
 HARISHCHANDRAPUR CENTRE UNDER CIFRI/IDRC PROJECT ON RURAL
 AQUACULTURE DURING 1975-76

Location of the pond : Harishchandrapur, Malda(West Bengal)
 Name : Barirpaser-pukur
 Area : 0.10 ha.

| Items of input | Quantity/ ha | Actual quantity applied (kg.) | Purchased @ (Rs.) | Expenditure (Rs.) |
|---------------------------|-----------------|--|----------------------|----------------------|
| 1 | 2 | 3 | 4 | 5 |
| Mahua oil-cake | 250 ppm | 296.00 | Rs. 40.50/Q | 119.88 |
| Lime | | 22.60 | Rs. 33.60/Q | 7.59 |
| Cowdung | | 200.00 | Rs. 5.00/Q | 10.00 |
| Amm. sulphate | | 3.750 | Rs. 929.00/Q | 3.45 |
| Single super phosphate | | 2.090 | Rs. 994.00/Q | 2.09 |
| Muriate of potash | | | | |
| Compost | 100 kg | 10.00 | Rs. 4.00/Q | 0.40 |
| Fingerlings | 5000 nos/ha | C1:R2: M2:Sc3:Gc 0.5 :Cc 1.5 | | |
| | | Total nos stocked: | 437 | 50.25 |

Supplementary feeding done
 @ 1-4% of body weight.

| | | | |
|------------------|---------|---------------|--------|
| Mustard oil-cake | 233.185 | Rs. 97.00/QT | 226.18 |
| Rice bran | | | |
| Aq. weed | 240.635 | Rs. 50.00/QT | 142.50 |
| Terr. weed | 7720.00 | | |
| Netting | | | |
| Labour | | | 174.75 |
| | | Total expndt. | 737.09 |

Growth of fishes

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained | Total weight harvested (wt) |
|----------------------------------|--------------------|----------------------------------|---------------------|--------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| Catla | 10.6 | 8 | 727.2 | 40.200 |
| Rohu | 21.5 | 9 | 668.7 | 66.580 |
| Mrigal | 3.1 | 8 | 182.0 | 8.920 |
| Silver carp | 4.7 | 7 | 725.0 | 87.460 |
| Glass carp | 244.2 | 7 | 2051.0 | 20.520 |
| Common carp | 17.0 | 8 | 983.6 | 55.520 |
| Assorted (by angling) | Nil | | | |
| Total quantity of fish harvested | | | | 279.200 |
| Gross production/ha/period | | | | 2792.0/ha/8 months |

*Expenditure for production of per kg of fish : Rs. 2.64

*Does not include rental value, wages & salaries, imputed cost of owner management/labour, interest on working capital, depreciation of farm equipment, cost of aquatic weeds, cost of repairs and maintenance.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
(I.C.A.R.) Case study-53

BARRACKPORE, WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT
HARISHCHANDRAPUR CENTRE UNDER CIFRI/IDRC PROJECT ON URAL
AQUACULTURE DURING 1975-76

Location of the pond : Harishchandrapur, Malda (West Bengal)
Name : Batatala
Area : 0.67 ha

| Items of input | Quantity/ ha | Actual quantity applied (g.) | Purchased @ (Rs) | Expenditure (Rs.) |
|---------------------------|-----------------|---------------------------------------|---------------------|----------------------|
| 1 | 2 | 3 | 4 | 5 |
| Mahua oil-cake | 250 ppm | 837.500 | 40.50/QT | 339.39 |
| Lime | | 50.000 | | 16.80 |
| Cowdung | | 670.000 | Rs. 5.00/QT | 33.50 |
| Amm. sulphate | 450 kg | 25.170 | 929.00/T | 23.40 |
| Single super phosphate | 250 kg | 14.000 | 994.00/T | 14.00 |
| Muriate of potash | - | - | - | - |
| Compost | 100 kg | 67.000 | 4.00/Q | 2.68 |
| Fingerlings | 5000 nos/ha | C1 R2: M2 Sc3 Gc 0.5 Cc 1,5 | | |
| | | Total nos stocked 3326 | | 321.59 |

Supplementary feeding done
@ 1-4% of body weight.

| | | | |
|------------------|-----------|-----------|---------|
| Mustard oil-cake | 520.820 | 97.00/Q | 515.59 |
| Rice bran | 561.770 | 50.00/Q | 281.00 |
| Aq. weed | 44810.000 | - | - |
| Terr. weed | - | - | - |
| Netting | - | - | - |
| Labour | - | - | 1171.90 |
| | | Total Rs. | 2719.85 |

Growth of fishes

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested(g.) |
|----------------------------------|--------------------|----------------------------------|----------------------------|-------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| Catla | 3.9 | 6 | 204.4 | 41.010 |
| Rohu | 1.8 | 7 | 170.6 | 96.560 |
| Mrigal | 1.7 | 8 | 172.5 | 38.190 |
| Silver carp | 1.8 | 9 | 353.3 | 320.980 |
| Grass carp | 173.4 | 9 | 2479.7 | 177.220 |
| Common carp | 5.2 | 1 | 101.1 | 23.360 |
| Assorted (by angling) | Nil | | | |
| Total quantity of fish harvested | | | | 696.320 |

Gross production/ha/period 1039.0 kg/ha/7 months

*Expenditure for production of per kg. of fish: Rs. 3.90

*Does not include rental value, wages & salaries, imputed cost of owner management/labour, interest on working capital, depreciation of farm equipment, cost of aquatic weeds, cost of repairs & maintenance.

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Case study-54

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT
 HARISHCHANDRAPUR CENTRE UNDER CIFRI/IDRC PROJECT ON RUTAL
 AQUACULTURE DURING 1975-76

Location of the pond : Harishchandrapur, Malda (West Bengal)
 Name : Hatkhola-pukur.
 Area : 0.64 ha.

| Item of inputs | Quantity/ ha | Actual quantity applied (g.) | Purchased @ Rs. | Expenditure Rs. |
|---|-----------------|---------------------------------------|--------------------|--------------------|
| 1 | 2 | 3 | 4 | 5 |
| Mahua oil-cake | 250 ppm | 2400 | Rs. 40.50/Q | Rs. 972.00 |
| Lime | | 100 | Rs. 33.60/Q | Rs. 33.60 |
| Cowdung | | 640 | Rs. 5.00/Q | Rs. 32.00 |
| Amm. sulphate | 450 | | 24.00 Rs. 929.00/T | Rs. 22.32 |
| Single super phosphate | 250 | | 13.330Rs. 994.00/T | Rs. 13.33 |
| Muriate of potash | | | | |
| Compost | 100 | 64.0 | Rs. 4.00/Q | Rs. 2.54 |
| Fingerlings | 5000 nos/ha | C1:R2:M2:Sc3:gc0.5:Cc1.5 | | |
| | | Total nos stocked 3120 | | Rs. 322.40 |
| Supplementary feeding done @ 1-4% of body weight | | | | |
| Mustard oil cake | | 1003.405 | Rs. 97.00/QT | Rs. 973.30 |
| Rice bran | | 1338.805 | Rs. 50.00/QT | Rs. 669.40 |
| Aq. weed | | | | |
| Terr. weed | | 29646 | | |
| Netting | | | | |
| Labour | | | | Rs. 1119.46 |
| | | | Total ExpnDt, | Rs. 4160.35 |

Growth of fishes

| Species | Initial wt (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested(kg.) |
|----------------------------------|-------------------|----------------------------------|----------------------------|--------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| Catla | 19.9 | 7 | 647.2 | 159.800 |
| Rohu | 9.1 | 7 | 208.8 | 91.140 |
| Mrigal | 3.1 | 6 1/2 | 76.0 | 29.520 |
| Silver carp | 4.9 | 7 | 506.6 | 303.740 |
| Grass carp | 342.7 | 7 1/2 | 1461.0 | 85.720 |
| Common carp | 6.0 | 8 | 890 | 179.520 |
| Assorted (by angling). Nil | | | | |
| Total quantity of fish harvested | | | | 849.440 |
| Gross production/ha/period | | | | 1327.2 kg/7 1/2 months |

- * Expenditure for production of per kg of fish Rs. 4.89
- * Does not include rental value, wages & salaries, imputed cost of owner management/labour, interest on working capital, depreciation of farm equipment, cost of terrestrial weeds, cost of repairs & maintenance.

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Case study-55

BARACKPORE, WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT
 HARISHCHANDRAPUR CENTRE UNDER CIFRI/IDRC PROJECT ON RURAL
 AQUACULTURE DURING 1975-76

Location of the pond : Harishchandrapur, Malda (West Bengal)
 Name : Debisagar
 Area : 0.2 ha.

| Item of inputs | Quantity/ ha | Actual quantity applied (kg.) | Purchased @ Rs. | Expenditure (Rs.) |
|---|-----------------|--|--------------------|----------------------|
| 1 | 2 | 3 | 4 | 5 |
| Mahua oil-cake | 250 ppm | 775.00 | Rs. 40.50 | Rs. 313.88 |
| Lime | | 46.00 | Rs. 33.60 | Rs. 15.45 |
| Cowdung | | 280.00 | Rs. 5.00 | Rs. 14.00 |
| Amm. sulphate | 450.00 | 7.50 | Rs. 929.00/T | Rs. 6.98 |
| Single super phosphate | 250.00 | 4.170 | Rs. 994.00/T | Rs. 4.17 |
| Muriate of potash | | | | |
| Compost | 100 | 20.00 | Rs. 4.00 | Rs. 0.80 |
| Fingerlings | 5000 nos/ha | C1:R2:M2:Sr3:Gc0.5:Cc1.5 | | |
| | | Total nos stocked 1658 | | Rs. 102.25 |
| Supplementary feeding done @ 1-4% of body weight | | | | |
| Mustard oil cake | | 275.927 | Rs. 97.00/Q | Rs. 267.72 |
| Rice bran | | 398.777 | Rs. 50.00/Q | Rs. 199.50 |
| Aq. weed | | 7020.00kg. | | |
| Terr. weed | | | | |
| Netting | | | | |
| Labour | | | | Rs. 349.50 |
| | | Total Expndt. | | Rs. 1274.25 |

Growth of fishes

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested(kg.) |
|----------------------------------|--------------------|----------------------------------|----------------------------|--------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| Catla | 19.8 | 6 | 425.6 | 48.430 |
| Rohu | 18.2 | 7 | 444.7 | 76.940 |
| Mrigal | 4.9 | 6 | 120.1 | 12.950 |
| Silver carp | 4.8 | 5 | 498.3 | 93.680 |
| Grass carp | 392.0 | 5 | 1420.9 | 31.260 |
| Common carp | 12.9 | 6 | 613.3 | 76.430 |
| Assorted (by angling) | | | | |
| Total quantity of fish harvested | | | | 339.690 |
| Gross production/ha/period | | | | 1698.5 kg/7 months |

* Expenditure for production of per kg of fish Rs. 3.75

* Does not include rental value, wages & salaries, imputed cost of owner management/ labour, interest on working capital, depreciation of farm equipment, cost of terrestrial weeds, cost of repairs & maintenance.

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Case study-56

BARACKPORE, WEST BENGAL.

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT
HARISHCHANDRA CENTRE UNDER CIFRI/IDRC PROJECT ON RURAL
AQUACULTURE DURING 1975-76Location of the pond : Harishchandrapur, Malda(West Bengal)
Name : Malikunda
Area : 0.2 ha

| Item of inputs | Quantity/ ha | Actual quantity applied (kg.) | Purchased @ Rs. | Expenditure Rs. |
|---|-----------------|--|------------------------|--------------------|
| 1 | 2 | 3 | 4 | 5 |
| Mahua oil-cake | 250 ppm | 325.000 | 40.50/Q | 131.62 |
| Lime | | 50.000 | 33.60/Q | 16.80 |
| Cowdung | | | | |
| Amm. sulphate | 450 kg/yr | 7.500 | 929.00/T | 6.97 |
| Single super phosphate | 250 kg/yr | 4.200 | 994.00/T | 4.20 |
| Muriate of potash | | | | |
| Compost | 100 kg | 20.000 | | 0.80 |
| Fingerlings | 5000 nos/ha. | C1:R2:M2:Sc3:Gc 0.5:Cc1.5 | Total nos stocked 1000 | 99.50 |
| Suppl. feeding done @ 1-4% of body wt. | | | | |
| Mustard oil_cake | | 73.195 | 97.00/Q | 70.99 |
| Rice bran | | 124.795 | 50.00/Q | 62.50 |
| Aq. weed | | 1460.000 | | |
| Terr. weed | | | | |
| Netting | | | | |
| Labour | | | | 208.20 |
| | | | Total Exp. | 601.58 |

Growth of fishes

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg.) |
|----------------------------------|--------------------|----------------------------------|----------------------------|------------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| Catla | - | - | - | - |
| Rohu | 20.5 | 5 | 286.8 | 51.340 |
| Mrigal | 1.8 | 6 | 52.3 | 7.220 |
| Silver carp | 4.7 | 6 | 321.4 | 66.540 |
| Grass carp | - | - | - | - |
| Common carp | - | - | - | - |
| Assorted (by angling) Nil | | | | |
| Total quantity of fish harvested | | | | 125.100 |
| Gross production/ha/period | | | 625.5 kg/ha/5 months | |

* Expenditure for production of per kg. of fish Rs.4.80/kg.

* Does not include rental value, wages & salaries, imputed cost of owner management/labour, interest on working capital, depreciation of farm equipment, cost of aquatic weeds, cost of repairs & maintenance.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE

(I.C.A.R.)

Case study-57

BANKTOPORE, WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT
HARISHCHANDRAPUR CENTRE UNDER CIFRI/IDRC PROJECT ON RURAL
AQUACULTURE DURING 1975-76Location of the pond : Harishchandrapur, Malda(West Bengal)
Name : Bhandari
Area : 0.31 ha

| Item of inputs | Quantity/ ha | Actual quantity applied (kg.) | Purchased @ Rs. | Expenditure Rs. |
|--|-----------------|--|--------------------|--------------------|
| 1 | 2 | 3 | 4 | 5 |
| Mahua oil cake | 250 ppm | 930.000 | 40.50/Q | 376.65 |
| Lime | | 46.000 | 33.60/Q | 15.45 |
| Cowdung | | | | |
| Amm. sulphate | 450 | 11.630 | 929.00/T | 10.81 |
| Single super phosphate | 250 | 6.500 | 994.00/T | 6.50 |
| Muriate of potash | | | | |
| Compost | 100 | 31.000 | 4.00/Q | 1.24 |
| Fingerlings: | 5000 nos/ha | C1:R2:M2:Sc3:Gc 0.5:Cc 1.5 | | |
| | | Total nos stocked 1447 | | 154.15 |
| Suppl. feeding done @ 1-4% of body weight | | | | |
| Mustard oil-cake | | 183.537 | 97.00/Q | 178.03 |
| Rice bran | | 203.142 | 50.00/Q | 101.50 |
| Aq. weed | | 6364.000 | | |
| Terr. weed | | | | |
| Netting | | | | |
| Labour | | | | 541.75 |
| | | Total | Rs. | 1386.08 |

Growth of fishes

| Species | Initial wt. | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested(kg.) |
|----------------------------------|---------------------|----------------------------------|----------------------------|--------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| Catla | 3.6 | 6 | 167.6 | 25.100 |
| Rohu | 4.5 | 6½ | 141.5 | 42.440 |
| Mrigal | 6.7 | 6½ | 90.8 | 33.800 |
| Silver carp | 11.2 | 4 | 544.7 | 155.560 |
| Grass carp | 18.2 | 5½ | 868.5 | 33.080 |
| Common carp | 22.0 | 6 | 521.7 | 62.380 |
| Assorted(by angling) Nil | | | | |
| Total quantity of fish harvested | | | | 352.360 |
| Gross production/ha/period | 1136.8 kg/6½ months | | | |

- * Expenditure for production of per kg. of fish. Rs. 3.93
 * Does not include rental value, wages & salaries, imputed cost of owner management/labour, interest on working capital, depreciation of farm equipment, cost of aquatic weed, cost of repairs & maintenance.

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(I.C.A.R.)

Case study-58

BARRACKPORE, WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT
HARISHCHANDRAPUR CENTRE UNDER CIFRI/IDRC PROJECT ON RURAL
AQUACULTURE DURING 1975-76

Location of the pond : Harishchandrapur (West Bengal)
 Name : Madhahazra
 Area : 0.34 ha

| Item of inputs | Quantity/ ha | Actual quantity applied (g.) | Purchased @ Rs. | Expenditure Rs. |
|---|-----------------|---------------------------------------|--------------------|--------------------|
| 1 | 2 | 3 | 4 | 5 |
| Mahua oil-cake | 250 ppm | 1105.000 | 40.50/QT | 447.52 |
| Lime | | 25.500 | 33.60/QT | 8.40 |
| Cowdung | | 340.000 | 5.00/QT | 17.00 |
| Amm. sulphate | 450 kg | 12.900 | 929.00/T | 12.00 |
| Single super phosphate | 250 kg | 7.800 | 994.00/T | 7.80 |
| Muriate of potash | | | | |
| Compost | 100 kg | 34.000 | 4.00/QT | 1.36 |
| Fingerlings : | 5000 nos/ha | C1 : R2 : M2 : Sc3 : Gc 0.5 Cc 1.5 | | |
| | | Total nos stocked 1658 | | 207.10 |
| Supplementary feeding done @ 1-4% of body weight | | | | |
| Mustard oil-cake | | 283.050 | 97.00/QT | 274.51 |
| Rice bran | | 299.850 | 50.00/QT | 150.00 |
| Aq. weed | | 9 | | |
| Terr. weed | | | | |
| Netting | | | | |
| Labour | | | | 593.20 |
| | | | Total Rs. 1718.89 | |

Growth of fishes

| Species | Initial wt. (g) | Period of rearing (months) | Av. Wt. attained (g) | Total weight harvested((kg.)) |
|----------------------------------|--------------------|----------------------------------|----------------------------|----------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| Catla | 3.6 | 6 | 446.900 | 34.860 |
| Rohu | 1.8 | 7 | 220.600 | 63.540 |
| Mrigal | 1.8 | 7 | 193.300 | 38.420 |
| Silver carp | 1.8 | 7 | 366.300 | 173.240 |
| Grass carp | 18.6 | 7 | 1408.400 | 26.160 |
| Common carp | 7.4 | 1 1/2 | 210.500 | 46.650 |
| Assorted (by angling) Nil | | | | |
| Total quantity of fish harvested | | | | 382.870 |
| Gross production/ha/period | 1126.0 kg/ha | 7 months | | |

* Expenditure for production of per kg. of fish Rs. 4.49

* Does not include rental value, wages & salaries, imputed cost of owner management/labour, interest on working capital, depreciation of farm equipment, cost of aquatic weeds, cost of repairs & maintenance.

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(I.C.A.R.)

Case study-59

BARRACKPORE, WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT
HANSPUKUR-BISHNUPUR DURING 1975-76.Location of the pond : Pond No.1 (Basarat Ali Sardar)
Amgachhia(West Bengal)

Area : 0.12 ha

(Private C.I.F.R.I./I.D.R.C. Collaboration)

| Items of inputs | Quantity (kg) ha | Actual quantity applied | Purchased at the rate of | Expenditure (Rs.) |
|--|---------------------|------------------------------------|--------------------------------|----------------------|
| Mahua oil-cake | | 134 Kg | 0.41/kg | 54.94 |
| Lime | | 30 Kg | 0.32/kg | 9.60 |
| Cowdung | | | | |
| Amm. sulphate | | 14 Kg | 0.99/kg | 13.86 |
| Single super phosphate | | 7 Kg | 0.92/kg | 6.44 |
| Muriate of potash | | | | |
| Fingerlings | 5000 fingerlings/ha | (C3:R2.5:M1.5:Sc1:Gc.0.5 Cc1.5) | | |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Mustard oil-cake | 74.090 | | 0.97/kg | 71.86 |
| Groundnut oil-cake | | | | |
| Rice bran | 101.190 | | 0.50/kg | 50.59 |
| Aquatic weeds | | | | |
| Terrestrial weeds | | Quantity not noted | | |
| Labour charges | | | | 396 |
| | | | | 603.29 |

Growth of fishes:

| Species | Initial wt. | Period of rearing (months) | Av.wt. (g) | Total weight attained harvested(kg) |
|---|-------------|----------------------------------|---------------|---|
| Catla | | | | |
| Rohu | | | | |
| Mrigal | | 2 months | | 16 kg * |
| Silver carp | | | | |
| Grass carp | | | | |
| Common carp | | | | |
| Miscellaneous | | | | |
| Total quantity of fish harvested | | | | 16 kg * |
| Gross production | x | | | |
| Net production | x | | | |
| Expenditure for production of per kg fish | x | | | |

Remarks : 2.4 lakh induced-bred catla spawn stocked on 11.8.75 and 17,900 fry harvested between 7th to 30th Sept.75 and 800 fingerlings on 17th Oct.75 whence composite fish culture was initiated. There was a sudden mortality in the pond and 16kg of fish were harvested by the pond-owner and sold.

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Case study-60

BARRACKPRE : WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT
HANSPUKUR-BISHNUPUR DURING 1975-76

Location of the pond : Pond 2(Hafizuddin Sardar)
Amgachhia (West Bengal)

Area : 0.05 ha

(Private C.I.F.R.I./I.D.R.C. Collaboration)

| Items of inputs | Quantity (kg) ha | Actual quantity applied | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
|---|---------------------|-------------------------------|---|----------------------|
| 1 | 2 | 3 | 4 | 5 |
| Mahua oil-cake | | 38 kg | Same as in | 15.58 |
| Lime | | 12 kg | No. 1 | 3.84 |
| Cowdung | | | nil | |
| Amm. sulphate | | 2.1 kg | -do- | 2.08 |
| Single super phosphate | | 1.1 kg | -do- | 1.01 |
| Muriate of potash fingerlings | | - | (5000 fingerlings/ha : C3, R 2.5, M.1.5, Sc.1, Gc.0.5, Cc.1.5) | |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Mustard oil-cake | | 43.3 kg | -do- | 42.00 |
| Groundnut oil cake | | 52.6 kg | -do- | 26.30 |
| Rice bran | | | | |
| Aquatic weeds | | | Not recorded | |
| Terrestrial weeds | | | | |
| Labour charges | | | ----- | 165.00 |
| Growth of fishes : | | | | Rs. 255.81 |

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|---------------|--------------------|----------------------------------|----------------------------|-----------------------------------|
| Catla | Residual stock) | | 570 | 8.000 (+34.7 kg fingerlings) |
| Rohu | Not stocked | | - | - |
| Mrigal | 1.4 | | 92 | 1.550 |
| Silver carp | 1.8 | 6 months | 510 | 2.100 |
| Grass carp | 13 | | 560 | 4.500 |
| Common carp | Not stocked | - | - | - |
| Miscellaneous | - | | | 0.250 |
| | | | | 51.100 |

Total quantity of fish harvested

Gross production 822 kg/ha/8 months

Net production 812 kg/ha/8 months of
production per kg of fish: Rs. 6.22

Cost does not include rental, imputed cost of owner labour, interest
on working capital, cost of fish seed, cost of repairs and
maintenance, depreciation of firm equipment, cost of weeds.

Remarks : 1.6 lakh induced-bred catla spawn stocked on 11.8.75
and 34.7 kg of fingerlings were harvested between 9th September
and 17th October 1975. Composite Fish Culture initiated in
October 1975 and final harvesting done in April 1976. Total
rearing period from spawn stage to final harvesting is 8 months.

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BARRACKPORE, WEST BENGAL

CASE STUDY NO. 61

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT HANSPUKUR - BISHNUPUR DURING 1975-76

Location of the Pond : Pond No.3 (Ahmed Ali Sardar), Amgachhia (West Bengal)

Area : 0.1 ha

(Private C.I.F.R.I./I.D.R.C. collaboration)

| Items of inputs | Quantity(Kg)/ ha | Actual quantity applied (No.) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
|--|------------------|---|--------------------------------|-------------------|
| Mahua oil-cake | | 222.0 Kg | Same as in №.1 | 91.02 |
| Lime | | 30.0 Kg | -do- | 9.60 |
| Cowdung | | | | |
| Amm. sulphate | | 10.0 Kg | -do- | 9.90 |
| Single super phosphate | | 5.0 Kg | -do- | 4.60 |
| Muriate of potash | | | | |
| Fingerlings | | 5000 fingerlings/ha (C 3; R 2.5; M.1.5; Sc.1; Gc.0.5; GC.1.5) | | |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Mustard oil-cake | | 116.6 Kg | -do- | 113.10 |
| Groundnut oil cake | | | | |
| Rice bran | | 132.6 Kg | -do- | 66.30 |
| Aquatic weeds | | | Not recorded | |
| Terrestrial weeds | | | | |
| Labour charges | | | | 330.00 |
| | | | | Rs.624.52 |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (Kg) |
|-------------------------------------|----------------------|----------------------------|----------------------|------------------------------|
| Catla | 77.5 | 8 months | 660 | 74.7 |
| Rohu (Residual stock) | " | " | 425 | 292.9 (+ 3.1 Kg fingerlings) |
| Mrigal | 1.4 | " | 330 | 19.7 |
| Silver carp | 1.8 | " | 1025 | 4.4 |
| Grass carp | 12.4 | " | 1100 | 13.8 |
| Common carp | Not stocked | | | |
| Miscellaneous | | | | |
| Total quantity of fish harvested | | | | 408.6 |
| Gross production | 4086 Kg/ha/10 months | | | |
| Net production | 3965 Kg/ha/10 months | | | |
| * Cost of production per Kg of fish | | | | Rs. 1.52 |

Remarks : 3.5 lakh induced-bred rohu spawn from Cuttack stocked on 11.8.75 and 3.1 Kg fingerlings harvested on 9.9.75. Heavy mortality of fingerlings occurred during netting due to a sudden heavy shower. The total period of rearing from spawn to final harvesting is 10 months.

* Does not include rental, imputed cost of owner labour, interest on working capital, cost of fish seed, cost of repairs and maintenance, depreciation of farm equipment, cost of weeds.

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BARRACKPORE, WEST BENGAL

CASE STUDY NO. 62

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT HANSPUKUR - BISHNUPUR DURING 1975-76

Location of the Pond : Pond No.4 (Arzoo Rahaman), Amgachhia (West Bengal)
Area : 0.4 ha
(Private C.I.F.R.I./I.D.R.C. collaboration)

| Items of inputs | Quantity (kg)/ha | Actual quantity applied (No.) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
|--|------------------|--|--------------------------------|-------------------|
| Mahua oil-cake | | 110.0 Kg | Same as in No.1 | 45.10 |
| Lime | | 14.0 Kg | -do- | 4.48 |
| Cowdung | | | | |
| Amm. sulphate | | 2.1 Kg | -do- | 2.08 |
| Single super phosphate | | 1.1 Kg | -do- | 1.01 |
| Muriate of potash | | | | |
| Fingerlings | | 5000 fingerlings/ha (C.3; R.2.5; M.1.5; Sc.1; Gc.0.5; Cc.1.5) | | |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Mustard oil-cake | | 47.3 Kg | 0.97/Kg | 45.88 |
| Groundnut oil cake | | | | |
| Rice bran | | 55.1 Kg | 0.50/Kg | 27.55 |
| Aquatic weeds | | Quantity not recorded | | |
| Terrestrial weeds | | | | |
| Labour charges | | | | 132.00 |
| | | | Rs. | 258.10 |

Growth of fishes :

| Species | Initial wt. | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (Kg) |
|-------------------------------------|------------------------|----------------------------|----------------------|-----------------------------|
| Catla | 77.5 | 8 months | 520 | 29.5 |
| Rohu | 1.7 | " | 210 | 7.8 |
| Mrigal (Residual stock) | | " | 60 | 51.9 (+ 7.4 Kg fingerlings) |
| Silver carp | 1.8 | " | 900 | 11.3 |
| Grass carp | 12.4 | " | 1600 | 9.4 |
| Common carp | Not stocked | | | |
| Miscellaneous | | | | |
| Total quantity of fish harvested | | | | 117.3 |
| Gross production | 2932.5 Kg/ha/10 months | | | |
| Net production | 2810 Kg/ha/10 months | | | |
| * Cost of production per Kg of fish | | | Rs. 2.20 | |

Remarks : 1 lakh induced-bred mrigal spawn from Cuttack stocked on 11.8.75 and 7.4 Kg fingerlings harvested between 24th Sept. and 8th Oct., 1975 along with 625 gm Channa punctatus (25 Nos.). Total rearing period from spawn stage to final harvesting is 10 months.

* Does not include rental, imputed cost of owner labour, interest on working capital, cost of fish seed, cost of repairs and maintenance, depreciation of farm equipment, cost of weeds.

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CASE STUDY NO. 63

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT HANSPUKUR - BISHNUPUR CENTRE DURING 1975-76

Location of the Pond : Pond No.5 (Mukutar Ali Shaikh), Amgachhia (West Bengal)
Area : 0.02 ha
(Private C.I.F.R.I./I.D.R.C. collaboration)

| Items of inputs | Quantity(Kg)/ha | Actual quantity applied (No) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
|--|-----------------|---|--------------------------------|-------------------|
| Mahua oil-cake | | 50.0 Kg | 41/- per qnt. | 20.50 |
| Lime | | 8.0 Kg | 32/- " | 2.56 |
| Cowdung | | | | |
| Amm. sulphate | | 2.4 Kg | 99/- " | 2.37 |
| Single super phosphate | | 1.4 Kg | 92/- " | 1.29 |
| Muriate of potash | | | | |
| Fingerlings | | 5000, fingerlings/ha (C.3; R.2.5; M.1.5; So.1; Gc.0.5; Cc.1.5) | | |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Mustard oil-cake | | 41.8 Kg | 97/- " | 40.55 |
| Groundnut oil cake | | | | |
| Rice bran | | 49.5 Kg | 50/- " | 24.75 |
| Aquatic weeds | | | Quantity not recorded | |
| Terrestrial weeds | | | | |
| Labour charges | | | | 132.00 |
| | | | Rs. 224.02 | |

Growth of fishes :

| Species | Initial wt. | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (Kg) |
|----------------------------------|----------------------|----------------------------|----------------------|-----------------------------|
| Catla | 77.5 | 8 months | - | - |
| Rohu (Residual stock) | " | " | - | (+ 5.4 Kg rohu fingerlings) |
| Mrigal | 1.4 | " | - | 20.0 |
| Silver carp | 1.8 | " | - | |
| Grass carp | 12.4 | " | - | |
| Common carp | Not stocked | | | |
| Miscellaneous | | | | |
| Total quantity of fish harvested | | | | 25.4 |
| Gross production | 1270 Kg/ha/10 months | | | |
| Net production | 1254 Kg/ha/10 months | | | |

* Cost of production per Kg of fish Rs. 8.81
 Remarks : 20,000 induced-bred rohu spawn was stocked on 8.8.75 and 5.4 Kg fingerlings harvested on 6.10.75. The final harvesting was done by the pond-owner himself and the quantity harvested informed. Total rearing period from spawn stage to final harvesting is 10 months.

* Does not include rental, imputed cost of owner labour, interest on working capital, cost of fish seed, cost of repairs and maintenance, depreciation of farm equipment, cost of weeds.

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 BARRACKPORE, WEST BENGAL

CASE STUDY NO. 64

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT HANSPUKUR-BISHNUPUR
 CENTRE DURING 1975-76

Location of the Pond : Pond No.6 (Gazi Abdul Mannan), Amgachhia (West Bengal)
 Area : 0.06 ha
 (Private C.I.F.R.I./I.D.R.C. Collaboration)

| Items of inputs | Quantity (Kg)/ha | Actual quantity applied (No.) | Purchased at the rate of (Rs./Quintal) | Expenditure (Rs.) |
|--|------------------|--|--|-------------------|
| Mahua oil-cake | | 70 Kg | 41.70 | 28.70 |
| Lime | | 20 Kg | 32.00 | 6.40 |
| Cowdung | | ----- | ----- | ----- |
| Amm. sulphate | | 5 Kg | 99.00 | 4.95 |
| Single super phosphate | | 3.3 Kg | 92.00 | 3.04 |
| Muriate of potash | | ----- | ----- | ----- |
| Fingerlings | | 5000 fingerlings/ha (C.3; R.2.5; M.1.5; Sc.1; Gc.0.5; Cc.1.5) | | |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Mustard oil-cake | 1 | 125.6 Kg | 97.00 | 121.83 |
| Groundnut oil cake | 1 | | | |
| Rice bran | | 122.6 Kg | 50.00 | 61.30 |
| Aquatic weeds | 1 | Not recorded | | |
| Terrestrial weeds | 1 | | | |
| Fish meal (Trash fish) | | 167.2 Kg | 90.00 | 150.48 |
| Labour charges | | | | 198.00 |
| | | | Total | 574.70 |

Growth of fishes :

| Species | Initial wt. | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (Kg) |
|----------------------------------|-------------|----------------------------|----------------------|-----------------------------|
| Catla | 9.8 | 9 months | 540 | 44.4 |
| Rohu | 7.0 | " | 530 | 39.8 |
| Mrigal | 3.1 | " | 325 | 14.5 |
| Silver carp | 1.8 | " | 670 | 12.1 |
| Grass carp | 12.4 | " | 1720 | 15.7 |
| Common carp | Not stocked | | | |
| Miscellaneous | | | | |
| Magur | 8.5 | 4½ months | 80 | 60.0 |
| Total quantity of fish harvested | | | | 186.5 |

Gross production 3108.3 Kg/ha/9 months

Net production 2935.0 Kg/ha/9 months

* Cost of production per Kg of fish Rs. 3.08

Remarks : 80,000 induced-bred rohu spawn from Cuttack was stocked on 8.8.75 and complete mortality recorded due to pollution by jute-retted water. Composite fish culture was initiated in Oct. 1975 and magur introduced on Feb. 1, 1976.

* Does not include rental, imputed cost of owner labour, interest on working capital, cost of fish seed, cost of repairs and maintenance, depreciation of farm equipment, cost of weeds.

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CASE STUDY - 65

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT HANSPUKUR-BISHNUPUR CENTRE DURING 1975-76

Location of the pond : No. 7 (Gazi Ahad Ali), Amgachhia (West Bengal)

Area : 0.08 ha

(Private C.I.F.R.I./I.D.R.C. collaboration)

| Items of inputs | Quantity (Kg)/ha | Actual quantity applied (No.) | Purchased at the rate of (Rs./Quintal) | Expenditure (Rs.) |
|--|------------------|--|--|-------------------|
| Mahua oil-cake | | 80 Kg | 41.00 | 32.80 |
| Lime | | 20 Kg | 32.00 | 6.40 |
| Cowdung | | | | |
| Amm. sulphate | | 5 Kg | 99.00 | 4.95 |
| Single super phosphate | | 3.3 Kg | 92.00 | 3.00 |
| Muriate of potash | | | | |
| Fingerlings | | 5000 fingerlings/ha (C.3; R.2.5; M.1.5; Sc.1; Gc.0.5; Cc.1.5) | | |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Mustard oil-cake | 113.7 Kg | | 97.00 | 110.29 |
| Groundnut oil cake | | | | |
| Rice bran | 126.8 Kg | | 50.00 | 63.40 |
| Aquatic weeds | | Not recorded | | |
| Terrestrial weeds | | | | |
| Labour charges | | | | 264.00 |
| | | | | Rs. 484.84 |

Growth of fishes :

| Species | Initial wt. (gm) | Period of rearing (months) | Av.wt. attained (g) | Total weight harvested (Kg) |
|-------------------------------------|------------------|----------------------------|---------------------|------------------------------|
| Catla | 20.4 | 8 months | 750 | 78.5 |
| Rohu (Residual stock) | " " | | 390 | 111.7 (+ 4.1 Kg fingerlings) |
| Mrigal | 1.4 | " " | 315 | 12.4 |
| Silver carp | 1.8 | " " | 750 | 19.6 |
| Grass carp | 12.4 | " " | 825 | 22.1 |
| Common carp | Not stocked | | | |
| Miscellaneous | | | | |
| Total quantity of fish harvested | | | | 248.4 Kg |
| Gross production | | 3,105 Kg/ha/10 months | | |
| Net production | | 3,070 Kg/ha/10 months | | |
| * Cost of production per Kg of fish | | | | Rs. 1.95 |

Remarks : 95,000 induced-bred rohu spawn stocked on 8.8.75 and 4.1 Kg fingerlings harvested on 3.10.75 whence composite fish culture was also initiated. Total rearing period from spawn to final harvesting is 10 months.

* Does not include rental, imputed cost of owner labour, interest on working capital, cost of fish seed, cost of repairs and maintenance, depreciation of farm equipment, cost of weeds.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
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CASE STUDY - 66

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT HANSPUKUR-BISHNUPUR
 DURING 1975-76

Location of the Pond : Pond No.8 (Gazi Abdul Zalil), Amgachhia (West Bengal)

Area : 0.07 ha
 (Private C.I.F.R.I./I.D.R.C. collaboration)

| Items of inputs | Qunatity (Kg)/ha | Actual quan- tity applied (No.) | Purchased at the rate of (Rs./Quintal) | Expenditure (Rs.) |
|--|------------------|--|---|----------------------|
| Mahua oil-cake | | 75 Kg | 41.00 | 30.75 |
| Lime | | 20 Kg | 32.00 | 6.40 |
| Cowdung | | | nil | |
| Amm. sulphate | | 3.5 Kg | 99.00 | 3.46 |
| Single super phosphate | | 1.8 Kg | 92.00 | 1.65 |
| Muriate of potash | | | nil | |
| Fingerlings | | 5000 fingerlings/ha (C.3; R.2.5; M.1.5; Sc.1; Gc.0.5; Co.1.5) | | |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Mustard oil-cake | | 82.4 Kg | 97.00 | 19.92 |
| Groundnut oil cake | | | | |
| Rice bran | | 90.1 Kg | 50.00 | 45.05 |
| Aquatic weeds | | | | |
| Terrestrial weeds | | Not recorded | | |
| Labour charges | | | | 231.00 |
| | | | Rs. | 338.23 |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained | Total weight harvested (kg) |
|------------------------------|--------------------|---------------------------------|---------------------|-----------------------------------|
| Catla | 20.4 | 8 months | 411 | 33.95 |
| Rohu (Residual stock) | | " " | 101 | 6.6 +(33.6 Kg fingerlings) |
| Mrigal | 3.2 | " " | 240 | 7.75 |
| Silver carp | 1.8 | " " | 500 | 4.9 |
| Grass carp | 12.4 | " " | 409 | 2.6 |
| Common carp (Residual stock) | | " " | 660 | 21.2 |
| Miscellaneous | | | | |

Total quantity of fish harvested 110.60

Gross production 1580 Kg/ha/10 months

Net production 1543 Kg/ha/10 months

* Cost of production per Kg of fish Rs. 3.06

Remarks : 500 common carp spawn from Kalyani and 2 lakh induced-bred rohu spawn from Cuttack was stocked on 28.7.75 and 11.8.75 respectively and 33.6 Kg fingerlings harvested in Oct. 75. Composite fish culture was then initiated. The total rearing period from spawn stocking to final harvesting is 10 months.

* Does not include rental, imputed cost of owner labour, interest on working capital, cost of fish seed, cost of repairs and maintenance, depreciation of farm equipment, cost of weeds.

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BARRACKPORE, WEST BENGAL

CASE STUDY - 67

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT HANSPUKUR-BISHNUPUR
CENTRE DURING 1975-76

Location of the Pond : Pond No.9 (Gazi Abdul Rashid), Amgachhia (West Bengal)
Area : 0.02 ha
(Private C.I.F.R.I./I.D.R.C. collaboration)

| Items of inputs | Quantity (kg)/ ha | Actual quan- tity applied (No.) | Purchased at the rate of (Rs./Quintal) | Expenditure (Rs.) |
|--|----------------------|--|---|----------------------|
| Mahua oil-cake | | 30 Kg | 41.00 | 12.30 |
| Lime | | 6 Kg | 32.00 | 1.92 |
| Cowdung | | | nil | ----- |
| Amm. sulphate | | 1.8 Kg | 99.00 | 1.78 |
| Single super phosphate | | 0.8 Kg | 92.00 | 0.73 |
| Muriate of potash | | | nil | ----- |
| Fingerlings | | 5000 fingerlings/ha (C.3; R.2.5; M.1.5; Gc.0.5; Cc.1.5) | | |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Mustard oil-cake | | 48.4 | 97.00 | 46.94 |
| Groundnut oil cake | | | | |
| Rice bran | | 56.1 | 50.00 | 28.05 |
| Aquatic weeds | | | not recorded | |
| Terrestrial weeds | | | | |
| Labour charges | | | | 66.00 |
| | | | | Rs. 157.72 |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|-------------------------------------|---------------------|----------------------------------|----------------------------|-----------------------------------|
| Catla | 20.4 | 8 months | 690 | 3.3 |
| Rohu (Residual stock) | " " | | 170 | 6.0 (+ 1.9 Kg finger- lings) |
| Mrigal | 3.2 | " " | 490 | 5.8 |
| Silver carp | 1.8 | " " | nil | nil |
| Grass carp | 12.4 | " " | 330 | 1.8 |
| Common carp | not stocked | | | |
| Miscellaneous | | | | |
| Total quantity of fish harvested | | | | 19.6 |
| Gross production | 980 kg/ha/10 months | | | |
| Net production | 945 kg/ha/10 months | | | |
| * Cost of production per Kg of fish | | | | Rs. 8.04 |

Remarks : 40,000 induced-bred rohu spawn from Cuttack was stocked on 11.8.75 and only 1.9 Kg fingerlings harvested in Oct.'75 and composite fish culture initiated. Total rearing period from spawn stocking to final harvesting is 10 months.

* Does not include rental, imputed cost of owner labour, interest on working capital, cost of fish seed, cost of repairs and maintenance, depreciation of farm equipment, cost of weeds.

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CASE STUDY - 68

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT HANSPUKUR-BISHNUPUR CENTRE DURING 1975-76

Location of the Pond : Pond No.10 (Gazi Abdul Rashid), Amgachhia (W. Bengal)
Area : 0.02 ha
(Private C.I.F.R.I./I.D.R.C. collaboration)

| Items of inputs | Quantity (Kg)/ ha | Actual quantity applied (Ns) | Purchased at the rate of (Rs./Quintal) | Expenditure (Rs.) |
|--|---------------------|---|--|-------------------|
| Mahua oil-cake | 25 Kg | 41.00 | 10.25 | |
| Lime | 6 Kg | 32.00 | 1.92 | |
| Cowdung | | nil | | |
| Amm. sulphate | 1.8 Kg | 99.00 | 1.78 | |
| Single super phosphate | 0.8 Kg | 92.00 | 0.74 | |
| Muriate of potash | | nil | | |
| Fingerlings | 5000 fingerlings/ha | (C3; R 2.5; M 1.5; Sc 1; Gc 0.5; CC 1.5) | | |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Mustard oil-cake | 44.5 Kg | 97.00 | 43.17 | |
| Groundnut oil cake | | | | |
| Rice bran | 52.2 Kg | 50.00 | 26.10 | |
| Aquatic weeds | | Not recorded | | |
| Terrestrial weeds | | | | |
| Labour charges | | | 66.00 | |
| | | | Rs. 149.96 | |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (Kg) |
|----------------------------------|----------------------|----------------------------|----------------------|-----------------------------|
| Catla | 20.4 | 9 months | 460 | 7.2 |
| Rohu (From spawn) | " " | " " | 300 | 21.8 |
| Mrigal | 3.2 | " " | 700 | 11.0 |
| Silver carp | 1.8 | " " | 1100 | 1.1 |
| Grass carp | 12.4 | " " | 633 | 2.0 |
| Common carp | Not stocked | | | |
| Miscellaneous | | | | |
| Total quantity of fish harvested | | | | 43.1 |
| Gross production | 2155 Kg/ha/11 months | | | |
| Net production | 2120 Kg/ha/11 months | | | |

* Cost of production per Kg of fish Rs. 3.48

Remarks : 40,000 induced-bred rohu spawn from Cuttack stocked on 11.8.75 and composite fish culture was initiated without harvesting fry/fingerlings in Oct. '75. Total period of rearing from spawn stage to final harvesting is 11 months.

* Does not include rental, imputed cost of owner labour, interest on working capital, cost of fish seed, cost of repairs and maintenance, depreciation of farm equipment, cost of weeds.

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CASE STUDY - 69

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT HANSPUKUR-BISHNUPUR CENTRE DURING 1975-76

Location of the Pond : Pond No.11 (Gazi Mahammed Ali), Amgachhia (West Bengal)
 Area : 0.02 ha
 (Private C.I.F.R.I./I.D.R.C. collaboration)

| Items of inputs | quantity (Kg)/ha | Actual quantity applied (Ns) | Purchased at the rate of (Rs./Quintal) | Expenditure (Rs.) |
|--|--|------------------------------|--|-------------------|
| Mahua oil-cake | 75 Kg | 41.00 | 30.75 | |
| Lime | 6 Kg | 32.00 | 1.92 | |
| Cowdung | | nil | | |
| Amm. sulphate | 2.5 Kg | 99.00 | 2.47 | |
| Single super phosphate | 1.6 Kg | 92.00 | 1.47 | |
| Muriate of potash | | nil | | |
| Fingerlings | 5000/ha (C.3; R.2.5; M.1.5; Sc.1; Sc.0.5; Cc. 1.5) | | | |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Mustard oil-cake | 36.8 Kg | 97.00 | 35.70 | |
| Groundnut oil cake | | | | |
| Rice bran | 44.6 | 50.00 | 22.30 | |
| Actual weeds | | not recorded | | |
| Terrestrial weeds | | | | |
| Labour charges | | | 66.00 | |
| | | | Total Rs.160.61 | |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (Kg) |
|----------------------------------|-----------------|----------------------------|----------------------|-----------------------------|
| Catla | 20.4 | 6 months | 230 | 7.6 |
| Rohu (Residual stock) | " " | " " | 160 | 7.0 |
| Mrigal | 3.2 | " " | - | Nil |
| Silver carp | 1.8 | " " | 350 | 0.7 |
| Grass carp | 12.4 | " " | - | Nil |
| Common carp | Not stocked | | | |
| Miscellaneous | | | | |
| Total quantity of fish harvested | | | | 15.3 Kg |

Gross production 765 Kg/ha/8 months
 Net production 740 Kg/ha/8 months

* Cost of production per Kg of fish Rs. 10.50

Remarks : 25,000 induced-bred rohu spawn stocked on 8.8.75 and composite fish culture initiated in October '75 without harvesting fry/fingerlings. The total rearing period from spawn stage to final harvesting is 8 months.

* Does not include rental, imputed cost of owner labour, interest on working capital, cost of fish seed, cost of repairs and maintenance, depreciation of farm equipment, cost of weeds.

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CASE STUDY - 70

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT HANSPUKUR-BISHNUPUR CENTRE DURING 1975-76

Location of the Pond : Pond No.12 (Samad Ali Gazi), Amgachhia (West Bengal)
Area : 0.06 ha
(Private C.I.F.R.I./I.D.R.C. collaboration)

| Items of inputs | Quantity (Kg)/ha | Actual quantity applied (No) | Purchased at the rate of (Rs./Quintal) | Expenditure (Rs.) |
|--|--|------------------------------|--|-------------------|
| Mahua oil-cake | 75 Kg | | 41.00 | 30.75 |
| Lime | 20 Kg | | 32.00 | 6.40 |
| Cowdung | | | nil | |
| Amm. sulphate | 3.5 Kg | | 99.00 | 3.46 |
| Single super phosphate | 1.8 Kg | | 92.00 | 1.66 |
| Muriate of potash | | | nil | |
| Fingerlings | 5000/ha (C.3; R.2.5; M.1.5; Sc.1; Go.0.5; Co. 1.5) | | | |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Mustard oil-cake | 69.1 Kg | | 97.00 | 67.03 |
| Groundnut oil cake | | | | |
| Rice bran | 80.6 Kg | | 50.00 | 40.30 |
| Aquatic weeds | | Not recorded | | |
| Terrestrial weeds | | | | |
| Labour charges | | | | 198.00 |
| | | | Total Rs. | 347.60 |

Growth of fishes :

| Species | Initial wt. | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (Kg) |
|----------------------------------|-------------|----------------------------|----------------------|------------------------------|
| Catla | 20.4 | 7/2 months | 533 | 27.7 |
| Rohu (Residual stock) | | " " | 100 | 108.8 +(30.8 Kg fingerlings) |
| Mrigal | 3.2 | " " | 120 | 3.2 |
| Silver carp | 1.8 | " " | 460 | 10.7 |
| Grass carp | 12.4 | " " | 833 | 12.8 |
| Common carp | Not stocked | | | |
| Miscellaneous | | | | |
| Total quantity of fish harvested | | | | 194.0 |

Gross production 1940 Kg/ha/91/2 months

Net production 1918 Kg/ha/91/2 months

* Cost of production per Kg of fish Rs. 1.79

Remarks : 2 lakh induced-bred rohu spawn from Cuttack stocked on 11.8.75. and 30.8 Kg fingerlings harvested in Oct. '75 and composite fish culture initiated. Total rearing period from spawn stage to final harvesting is 91/2 months.

* Does not include rental, imputed cost of owner labour, interest on working capital, cost of fish seed, cost of repairs and maintenance, depreciation of farm equipment, cost of weeds.

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT HANSPUKUR-BIHSNUPUR CENTRE DURING 1975-76

Location of the Pond : Pond No.13 (Phono Gazi), Amgachhia (West Bengal)

Area : 0.05 ha

(Private I.C.I.F.R.I./I.D.R.C. collaboration)

| Items of inputs | Quantity (kg)/ha | Actual quantity applied (kg) | Purchased at the rate of (Rs./Quintal) | Expenditure (Rs.) |
|--|--|------------------------------|--|-------------------|
| Mahua oil-cake | 00.00 | 90 Kg | 41.00 | 36.90 |
| Lime | 00.00 | 18 Kg | 32.00 | 5.76 |
| Cowdung | | | nil | |
| Amm. sulphate | | 2.4 Kg | 99.00 | 2.37 |
| Single super phosphate | | 1.6 Kg | 92.00 | 1.47 |
| Muriate of potash | | | nil | |
| Fingerlings | 5000/ha (C.3; R.2.5; M.1.5; Sc.1; Gc.0.5; Co. 1.5) | | | |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Mustard oil-cake | 00.00 | 50.8 | 97.00 | 49.27 |
| Groundnut oil cake | 00.00 | | | |
| Rice bran | 00.00 | 60.5 | 50.00 | 30.25 |
| Aquatic weeds | 00.00 | | | |
| Terrestrial weeds | 00.00 | Not recorded | | |
| Labour charges | | | | 165.00 |
| | | | Total Rs.291.02 | |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|----------------------------------|-----------------|----------------------------|----------------------|-------------------------------|
| Catla | 20.4 | 7½ months | 800 | 0.8 |
| Rohu | 1.7 | " " | 157 | 10.3 |
| Mrigal (Residual stock) | | " " | 54 | 119.1 (+ 43.5 Kg fingerlings) |
| Silver carp | 1.8 | " " | 328 | 5.8 |
| Gross carp | 12.4 | " " | 940 | 6.3 |
| Common carp | 0.0 | Not stocked | | |
| Miscellaneous | | | | |
| Total quantity of fish harvested | | | | 187.8 |

Gross production 3756 Kg/ha/9½ months

Net production 3720 Kg/ha/9½ months

* Cost of production per Kg of fish Rs. 1.55

Remarks : 50,000 induced-bred mrigal spawn from Cuttack stocked on 8.8.75 and 43.5 Kg fingerlings harvested between Oct. & Nov. '75.

Composite fish culture initiated in Oct. '75. Total rearing period from spawn stage to final harvesting is 9½ months.

* Does not include rental, imputed cost of owner labour, interest on working capital, cost of fish seed, cost of repairs and maintenance, depreciation of farm equipment, cost of weeds.

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CASE STUDY - 72

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT HANSPUKUR-BIHSNUPUR CENTRE DURING 1975-76

Location of the Pond : Pond No.14 (Alauddin Gazi), Amgachhia (West Bengal)
 Area : 0.06 ha
 (Private C.I.F.R.I./I.D.R.C collaboration)

| Items of inputs | Quantity (kg)/ha | Actual quantity applied (kg) | Purchased at the rate of (Rs./Quintal) | Expenditure (Rs.) |
|--|---|------------------------------|--|-------------------|
| Mahua oil-cake | 55 Kg | 41.00 | 22.55 | |
| Lime | 14 Kg | 32.00 | 4.48 | |
| Cowdung | | nil | | |
| Amm. sulphate | 2.9 Kg | 99.00 | 2.87 | |
| Single super phosphate | 1.8 Kg | 92.00 | 1.65 | |
| Muriate of potash | | nil | | |
| Fingerlings | 5000/ha (C.3; R.2.5; M.1.5; Sc.1; Gc.0.5; Cc.1.5) | | | |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Mustard oil-cake | 61.4 Kg | 97.00 | 59.55 | |
| Groundnut oil cake | | | | |
| Rice bran | 71.1 Kg | 50.00 | 35.55 | |
| Aquatic weeds | Not recorded | | | |
| Terrestrial weeds | | | | |
| Labour charges | | | 198.00 | |
| | | | Total Rs. 324.65 | |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (Kg) |
|----------------------------------|-----------------|----------------------------|------------------------------|-----------------------------|
| Catla | 20.4 | 8 months | 740 | 46.0 |
| Rohu | 1.7 | " " | 150 | 3.6 |
| Mrigal (Residual stock) | " " | 70 | 65.7 (+ 25.9 Kg fingerlings) | |
| Silver carp | 1.8 | " " | 420 | 8.0 |
| Grass carp | 12.4 | " " | 860 | 7.0 |
| Common carp | Not stocked | | | |
| Miscellaneous | | | | |
| Total quantity of fish harvested | | | | 156.2 Kg |

Gross production 2630.3 Kg/ha/10 months

Net production 2568.3 Kg/ha/10 months

* Cost of production per Kg of fish Rs. 2.07

Remarks : 70,000 induced-bred mrigal spawn from Cuttack stocked on 8.8.75 and 25.9 Kg fingerlings harvested in Sept. & Oct. '75. Composite fish culture was initiated in Oct. '75. Total rearing period from spawn stage to final harvesting is 10 months.

* Does not include rental, imputed cost of owner labour, interest on working capital, cost of fish seed, cost of repairs and maintenance, depreciation of farm equipment, cost of weeds.

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CASE STUDY - 73

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT HANSPUKUR-BIHSNUPUR CENTRE DURING 1975-76

Location of the Pond : Pond No.15 (Nazir Ali Sheikh), Amgachhia (West Bengal)
 Area : 0.03 ha
 (Private C.I.F.R.I./I.D.R.C collaboration)

| Items of inputs | Quantity (Kg)/ha | Actual quantity applied (No.) | Purchased at the rate of (Rs./Quintal) | Expenditure (Rs.) |
|--|---|-------------------------------|--|-------------------|
| Mahua oil-cake | 50 Kg | 41.00 | 24.60 | |
| Lime | 9 Kg | 32.00 | 2.88 | |
| Cowdung | | nil | | |
| Amm. sulphate | 2.6 Kg | 99.00 | 2.57 | |
| Single super phosphate | 1.6 Kg | 92.00 | 1.47 | |
| Muriate of potash | | nil | | |
| Fingerlings | 5000/ha (C.3; R.2.5; M.1.5; S.1; G.0.5; C. 1.5) | | | |
| Supplementary feeding done @ 1-2% of body weight | | | nil | |
| Mustard oil-cake | 38.7 Kg | 97.00 | 37.53 | |
| Groundnut oil cake | | | | |
| Rice bran | 28.1 Kg | 50.00 | 14.05 | |
| Aquatic weeds | | | | |
| Terrestrial weeds | Not recorded | | | |
| Labour charges | | | 99.00 | |
| | | Total Rs. 182.10 | | |

Growth of fishes :

| Species | Initial wt. | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (Kg) |
|----------------------------------|-------------|----------------------------|----------------------|-----------------------------|
| Catla | 20.4 | 7 months | 412 | 13.3 |
| Rohu (Residual stock) | " " | | 400 | 18.1 (+ 3.0 Kg fingerling) |
| Mrigal | 1.7 | " " | 200 | 3.1 |
| Silver carp | 1.8 | " " | 750 | 3.5 |
| Grass carp | 12.4 | " " | 601 | 3.1 |
| Common carp | Not stocked | | | |
| Miscellaneous | | | | |
| Total quantity of fish harvested | | | | 44.1 |

Gross production 1470 Kg/ha/9½ months

Net production 1437 Kg/ha/9½ months

* Cost of production per Kg of fish Rs. 4.12

Remarks : 30,000 induced-bred rohu spawn from Cuttack stocked on 8.8.75.

Only 3 Kg fingerlings harvested in Oct. '75 and composite fish culture initiated. Total rearing period from spawn stage to final harvesting 9½ months.

* Does not include rental, imputed cost of owner labour, interest on working capital cost of fish seed, cost of repairs and maintenance, depreciation of farm equipment, cost of weeds.

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CASE STUDY - 74

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT HANSPUKUR-BIHSNUPUR CENTRE DURING 1975-76

Location of the Pond : Pond No.16 (Ansar Ali Naskar), Amgachhia (West Bengal)
 Area : 0.04 ha
 (Private C.I.F.R.I./I.D.R.C. collaboration)

| Items of inputs | Quantity (Kg)/ha | Actual quantity applied (No.) | Purchased at the rate of (Rs./Quintal) | Expenditure (Rs.) |
|--|------------------|---|--|-------------------|
| Mahua oil-cake | | 120 Kg | 41.00 | 49.20 |
| Lime | | 16 Kg | 32.00 | 5.12 |
| Cowdung | | | nil | ----- |
| Amm. sulphate | | 2.1 Kg | 99.00 | 2.07 |
| Single super phosphate | | 1.1 Kg | 92.00 | 1.01 |
| Muriate of potash | | | nil | ----- |
| Fingerlings | 5000/ha | (C.3; R.2.5; M.1.5; Sc.1; Ge.0.5; Cc.1.5) | | |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Mustard oil-cake | | 52.0 Kg | 97.00 | 50.44 |
| Ground oil cake | | | | |
| Rice bran | | 60.0 Kg | 50.00 | 30.00 |
| Aquatic weeds | | Nor recorded | | |
| Terrestrial weeds | | | | |
| Labour charges | | | | 132.00 |
| | | | Total Rs. | 269.84 |

Growth of fishes :

| Species | Initial wt. (g) | Prepared of rearing (months) | Av. wt. attained (g) | Total weight harvested (Kg) |
|----------------------------------|-----------------|------------------------------|----------------------|-----------------------------|
| Catla | 77.5 | 9 months | 2033 | 21.7 |
| Rohu | 1.7 | " " | 300 | 7.6 |
| Mrigal (Residual stock) | | " " | 20 | 57.2 (+ 19 Kg fingerlings) |
| Silver carp | 1.8 | " " | nil | nil |
| Grass carp | 12.4 | " " | 701 | 8.3 |
| Common carp | Not stocked | | | |
| Miscellaneous | | | | |
| Total quantity of fish harvested | | | | 113.8 |

Gross production 2845 Kg/ha/11 months

Net production 2723 Kg/ha/11 months

* Cost of production per Kg of fish Rs. 2.37

Remarks : 1.2 lakh induced-bred mrigal spawn from Cuttack stocked on 11.8.75, fingerlings harvested partially in Oct. '75 and composite fish culture initiated. Total rearing period from spawn stage to final harvesting is 11 months.

* Does not include rental, imputed cost of owner labour, interest on working capital, cost of fish seed, cost of repairs and maintenance, depreciation of farm equipment, cost of weeds.

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CASE STUDY - 75

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT HANSPUKUR-BIHSNUPUR
 CENTRE DURING 1975-76

Location of the Pond : Pond No.17 (Ahmed Ali Sheikh), Amgachhia (W. Bengal)

Area : 0.02 ha
 (Private C.I.F.R.I./I.D.R.C. collaboration)

| Items of inputs | Quantity (kg)/ha | Actual quantity applied (kg) | Purchased at the rate of (Rs./Quintal) | Expenditure (Rs.) |
|--|------------------|---|--|-------------------|
| Mahua oil-cake | | 60 Kg | 41.00 | 24.60 |
| Lime | | 8 Kg | 32.00 | 2.56 |
| Cowdung | | | nil | |
| Amm. sulphate | | 2.4 Kg | 99.00 | 2.37 |
| Single super phosphate | | 1.4 Kg | 92.00 | 1.28 |
| Muriate of potash | | | nil | |
| Fingerlings | | 5000/ha (C.3; R.2.5; M.1.5; Sc.1; Gc.0.5; Co.1.5) | | |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Mustard oil-cake | | 48.0 Kg | 97.00 | 49.56 |
| Groundnut oil cake | | | | |
| Rice bran | | 55.7 Kg | 50.00 | 28.85 |
| Aquatic weeds | | Nor recorded | | |
| Terrestrial weeds | | | | |
| Labour charges | | | | 66.00 |
| | | | Total | Rs. 175.22 |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (Kg) |
|-------------------------------------|---------------------|----------------------------|----------------------|-----------------------------|
| Catla | 20.4 | 8 months | nil | nil |
| Rohu (Residual stock) | " " | " " | 105 | 2.3 (+ 7 Kg fingerlings) |
| Mrigal | 1.7 | " " | 180 | 0.9 |
| Silver carp | 1.8 | " " | 750 | 3.8 |
| Grass carp | 12.4 | " " | nil | nil |
| Common carp | Not stocked | | | |
| Miscellaneous | | | | |
| Total quantity of fish harvested | | | | 14.0 |
| Gross production | 700 Kg/ha/10 months | | | |
| Net production | 675 Kg/ha/10 months | | | |
| * Cost of production per Kg of fish | | | | Rs. 12.51 |

Remarks : 30,000 induced-bred rohu spawn from Cuttack stocked on 8.8.75. 7 Kg fingerlings harvested in Oct. '75 and composite fish culture initiated. Total rearing period from spawn stage to final harvesting is 10 months.

* Does not include rental, imputed cost of owner labour, interest on working capital, cost of fish seed, cost of repairs and maintenance, depreciation of farm equipment, cost of weeds.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
(I.C.A.R)
BARRACKPORE, WEST BENGAL

CASE STUDY - 76

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT HANSPUKUR-BISHNUPUR CENTRE DURING 1975-76

Location of the Pond : Pond No.18 (Shanti), Shiksha Sangha, Bishnupur

Area : 0.45 ha

(Private C.I.F.R.I./I.D.R.C. collaboration)

| Items of inputs | Quantity (Kg)/ ha | Actual quan- tity applied (No.) | Purchased at the rate of (Rs./Quintal) | Expenditure (Rs.) |
|--|---|---------------------------------------|---|----------------------|
| Mahua oil-cake | 2500/ha-m | 1998.0 | 41.00 | 819.18 |
| Lime | 300 | 86.0 | 32.00 | 27.52 |
| Cowdung | 10000 | 6900.0 | 5.00/tanne | 34.50 |
| Amm. sulphate | 450 | 117.0 | 99.00 | 115.83 |
| Single super phosphate | 250 | 58.5 | 92.00 | 53.82 |
| Muriate of potash | ----- | nil ----- | | |
| Fingerlings | 5000/ha (C.1; R.2; M.1.5; Sc. 2.5; Gc.1; Cc. 2) | | | 240.64 |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Mustard oil-cake | | 1892.0 | 97.00 | 1835.25 |
| Groundnut oil cake | | | | |
| Rice bran | | 2379.5 | 50.00 | 1189.75 |
| Aquatic weeds | | 10190.0 | - | - |
| Terrestrial weeds | | 2150.0 | - | - |
| Labour charges | | | | 1489.09 |
| | | | Rs. | 5805.58 |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (Kg) |
|----------------------------------|--------------------|---------------------------------------|----------------------------|-----------------------------------|
| Catla | 5.6 | 10 ¹ / ₂ months | 1800 | 366.1 |
| Rohu | 8.5 | " " | 750 | 325.2 |
| Mrigal | 7.3 | " " | 800 | 262.3 |
| Silver carp | 37.9 | " " | 2000 | 934.2 |
| Grass carp | 32.0 | " " | 2100 | 253.7 |
| Common carp | 11.3 | " " | 750 | 180.5 |
| Miscellaneous | | | | |
| Total quantity of fish harvested | | | | 2322.0 |

Gross production 5160.2 Kg/ha/10¹/₂ months

Net production 5100.4 Kg/ha/10¹/₂ months

* Cost of production per Kg of fish Rs. 2.50

Remarks : Cost of fingerlings has been computed at rates fixed by Govt. of West Bengal (Indian major carp + common carp @ Rs.30/- and exotic carps @ Rs.250/- per 1000 fingerlings respectively).

* Does not include rental, imputed cost of owner labour, interest on working capital, cost of fish seed, cost of repairs and maintenance, depreciation of farm equipment, cost of weeds.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
 (I.C.A.R)
 BARRACKPORE, WEST BENGAL

CASE STUDY - 77

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT HANSPUKUR-BISHNUPUR CENTRE DURING 1975-76

Location of the Pond : Pond No.19 (Surprabha), Bhasa

Area : 0.20 ha

(Private C.I.F.R.I./I.D.R.C. collaboration)

| Items of inputs | Quantity(Kg)/ha | Actual quantity applied (Ns) | Purchased at the rate of (Rs.) | Expenditure (Rs./Quintal) |
|--|-----------------|---|--------------------------------|---------------------------|
| Mahua oil-cake | 2500 Kg/ha-m | Not applied | - | - |
| Lime | 300 " | 60 | 32.00 | 19.20 |
| Cowdung | 10000 " | 2000 | 5.00/tonne | 10.00 |
| Amm. sulphate | 450 " | 52 | 99.00 | 51.48 |
| Single super phosphate | 250 " | 26 | 92.00 | 23.92 |
| Muriate of potash | ----- | nil ----- | | |
| Fingerlings | 5000 Ns. | 1000 Ns. (C.10; R.20; M.15; Sc. 25; Gc.10; Cc. 20) | * | 107.00 |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Mustard oil-cake | 720 | 85.00 | 97.00 | 698.40 |
| Groundnut oil cake | | | | |
| Rice bran | 1106 | 50.00 | | 553.00 |
| Aquatic weeds | 4218 | - | | - |
| Terrestrial weeds | 1538 | - | | - |
| Labour charges | | | | 661.99 |
| | | | Rs. 2124.99 | |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (Kg) |
|----------------------------------|------------------------|----------------------------|----------------------|-----------------------------|
| Catla | 6.0 | 11 months | 680 | 48.6 |
| Rohu | 10.0 | " " | 450 | 51.0 |
| Mrigal | 9.5 | " " | 400 | 31.9 |
| Silver carp | 38.0 | " " | 1250 | 142.5 |
| Grass carp | 32.0 | " " | 1200 | 102.1 |
| Common carp | 3.5 | " " | 700 | 45.9 |
| Miscellaneous | - | - | - | 11.8 |
| Total quantity of fish harvested | | | | 433.8 |
| Gross production | 3263.5 Kg/ha/11 months | | ** | 219.0 |
| Net production | 3170 Kg/ha/11 months | | Total | 1652.8 |

* Cost of production per Kg of fish Rs. 3.25

Remarks : * Cost of fingerlings has been computed at Rs.30/- and Rs.250/- per 1000 fingerlings for Indian major carps + common carp and exotic carps respectively.

** Since the pond could not be harvested completely, the survival of bottom feeders was estimated at 75% and based on average wt. attained by each species the remaining crop was calculated and is added on to the harvested fish.

* Does not include rental, imputed cost of owner labour, interest on working capital, cost of fish seed, cost of repairs and maintenance, depreciation of farm equipment, cost of weeds.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
 (I.C.A.R.)
 BARRACKPORE, WEST BENGAL

CASE STUDY - 78

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT HANSPUKUR-BISHNUPUR CENTRE DURING 1975-76

Location of the Pond : Pond No.20 (IIMC Pukur), Indian Institute of Management Calcutta, Jokha

Area : 1.2 ha

(IIMC, C.I.F.R.I./I.D.R.C. collaboration)

| Items of inputs | Quantity (Kg)/ha | Actual quantity applied (Nos.) | Purchased at the rate of (Rs./Quintal) | Expenditure (Rs.) |
|--|------------------|--------------------------------|--|-------------------|
| Mahua oil-cake | 2500 Kg/ha-m | 15000 | 41.00 | 6075.00 |
| Lime | 300 Kg | 360 | 32.00 | 115.20 |
| Cowdung | 15000 Kg | 16000 | 5.00/tonne | 80.00 |
| Amm. sulphate | 450 Kg | 325 | 99.00 | 321.75 |
| Single super phosphate | 250 Kg | 162.5 | 92.00 | 149.50 |
| Muriate of potash | | | | |
| Fingerlings | 5000 Nos. | 6000 Nos. | * | 642.00 |
| Supplementary feeding done @ 1.2% of body weight | | | | |
| Mustard oil-cake | | 3600.0 | 97.00) | 3583.38 |
| Groundnut oil-cake | - | 107.5 | 85.00) | |
| Rice bran | -- | 5204.5 | 50.00 | 2602.25 |
| Aquatic weeds | -- | 12343.0 | - | |
| Terrestrial weeds | -- | 12395.0 | - | |
| Labour charges | | | | 3971.98 |
| | | | | Rs. 17541.06 |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|----------------------------------|-----------------|----------------------------|----------------------|-----------------------------|
| Catla | 3.9 | 10 months | 1700 | 353.1 |
| Rohu | 3.0 | " " | 850 | 97.2 |
| Mrigal | 6.9 | " " | - | - |
| Silver carp | 32.5 | " " | 1850 | 1207.5 |
| Grass carp | 30.1 | " " | 1650 | 647.4 |
| Common carp | 3.5 | | 1000 | 9.3 |
| Miscellaneous | | | | |
| Total quantity of fish harvested | | | | 2314.5 |

Gross production **

Net production **

* Cost of production per Kg of fish Rs. 7.58

Remarks : * Cost of fingerlings has been estimated at rates fixed by Govt. of West Bengal (Rs.30/- for Indian major carps + common carp and Rs.250/- only for exotic carp fingerlings).

** Only partial harvesting has been done and the rearing is being continued for the second year with further stocking.

* Does not include rental, imputed cost of owner labour, interest on working capital, cost of fish seed, cost of repairs and maintenance, depreciation of farm equipment, cost of weeds.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
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CASE STUDY - 79

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT HANSPUKUR-BISHNUPUR CENTRE DURING 1975-76.

Location of the Pond : Pond No.21 (Ghoshpukur), Hanspukur

Area : 0.34 ha

(Private C.I.F.R.I./I.D.R.C. collaboration)

| Items of inputs | Quantity (kg)/ha | Actual quantity applied (kg) | Purchased at the rate of (Rs./Quintal) | Expenditure (Rs.) |
|--|------------------|------------------------------|--|-------------------|
| Mahua oil-cake | 2500/ha-m | 1554 | 41.00 | 637.14 |
| Lime | 300 | 129 | 32.00 | 41.28 |
| Cowdung | 20,000 | 6000 | 5.00/tonne | 30.00 |
| Amm. sulphate | 450 | 78 | 99.00 | 77.22 |
| Single super phosphate | 250 | 45.5 | 92.00 | 41.86 |
| Muriate of potash | | | | |
| Fingerlings | 5000 Nos. | 1700 Nos. | * | 181.00 |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Mustard oil-cake | | 167.5 | 85.00 | 1674.00 |
| Groundnut oil-cake | | 1579.0 | 97.00 | |
| Rice bran | | 2080.0 | 50.00 | 1040.00 |
| Aquatic weeds | | 10588.0 | - | - |
| Terrestrial weeds | | 2973.0 | - | - |
| Labour charges | | | | 1122.00 |
| | | | Rs. | 4844.50 |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|----------------------------------|-----------------|----------------------------|----------------------|-----------------------------|
| Catla | 5.6 | 12 months | 1530 | 289.7 |
| Rohu | 7.3 | " " | 730 | 166.6 |
| Mrigal | 7.8 | " " | 620 | 151.0 |
| Silver carp | 37.9 | " " | 1820 | 760.2 |
| Grass carp | 32.0 | " " | 1950 | 329.8 |
| Common carp | 4.1 | " " | 970 | 258.9 |
| Miscellaneous | | | | 95.0 |
| Total quantity of fish harvested | | | | 2051.3 |

Gross production 6033.2 Kg/ha/12 months

Net production 5949.4 Kg/ha/12 months

* Cost of production per kg of fish Rs. 2.36

Remarks : * Cost of fingerlings : Rs.30/- per 1000 for Indian major carps + common carp Rs.250/- per 1000 fingerlings for exotic carps.

* Does not include rental, imputed cost of owner labour, interest on working capital, cost of fish seed, cost of repairs and maintenance, depreciation of farm equipment, cost of weeds.

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 BARRACKPORE, WEST BENGAL

CASE STUDY - 80

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT HANSPUKUR-BIGHNUPUR
 CENTRE DURING 1975-76

Location of the Pond : Pond No.22 (Patrapukur), Amgachhia

Area : 0.25 ha

(Private C.I.F.R.I./I.D.R.C. collaboration)

| Items of inputs | Quantity (kg)/ha | Actual quantity applied (kg) | Purchased at the rate of (Rs./Quintal) | Expenditure (Rs.) |
|--|------------------|------------------------------|--|-------------------|
| Mahua oil-cake | 2500/ha-m | 962 | 41.00 | 389.61 |
| Lime | 300 | 135 | 32.00 | 43.20 |
| Cowdung | 15000 | 4000 | 100/tonne | 20.00 |
| Amm. sulphate | 450 | 68.8 | 99.00 | 68.33 |
| Single super phosphate | 250 | 27.5 | 92.00 | 25.38 |
| Muriate of potash | | | | |
| Fingerlings | 5000 Nos. | 1250 Nos. | * | 133.64 |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Mustard oil-cake | | 1018.3 | 85.00 | 863.05 |
| Groundnut oil-cake | | | 97.00 | 981.03 |
| Rice bran | | 1344.8 | 50.00 | 672.40 |
| Aquatic weeds | | 6620.0 | - | - |
| Terrestrial weeds | | 2680.0 | - | - |
| Labour charges | | | | 827.49 |
| | | | | Rs.3161.08 |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing, (months) | Av. wt. attained. (g) | Total weight harvested (Kg) |
|----------------------------------|-----------------|-----------------------------|-----------------------|-----------------------------|
| Catla | 4.4 | 10 months | 1470 | 186.9 |
| Rohu | 12.8 | " " | 920 | 143.3 |
| Mrigal | 7.5 | " " | 658 | 115.5 |
| Silver carp | 44.8 | " " | 1700 | 338.8 |
| Grass carp | 14.0 | " " | 2450 | 204.3 |
| Common carp | 3.5 | " " | 1100 | 174.5 |
| Miscellaneous | | | | 5.0 |
| Total quantity of fish harvested | | | | 1168.3 |

Gross production 4672.0 Kg/ha/10 months
 Net production 4608.0 Kg/ha/10 months

* Cost of production per Kg of fish Rs. 2.71

Remarks : * Cost of fingerlings has been estimated based on the rates of the Govt. of West Bengal (Rs.30/- per 1000 fingerlings of Indian major carps + common carp and Rs. 250/- per 1000 fingerlings of exotic carps).

* Does not include rental, imputed cost of owner labour, interest on working capital, cost of fish seed, cost of repairs and maintenance, depreciation of farm equipment, cost of weeds.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
 (I.C.A.R.)
 BARRACKPORE, WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT HANSPUKUR-
BISHNUPUR CENTRE DURING 1975-76

Location of the Pond : Pond No. 23 (Asha), Shiksha Sangha, Bishnupur

Area : 0.47 ha

(Private C.I.F.R.I./I.D.R.C. collaboration)

| Items of inputs | Quantity (kg)/ha | Actual quantity applied (No.) | Purchased rate of (Rs./Quintal) | Expenditure (Rs.) |
|--|------------------|-------------------------------|---------------------------------|-------------------|
| Mahua oil-cake | 2500/ha-m | 2368.0 | 41.00 | 959.04 |
| Lime | 300 | 165.0 | 32.00 | 52.80 |
| Cowdung | 15000 | 6940.0 | 5.00/tonne | 34.70 |
| Amm. sulphate | 450 | 130.0 | 99.00 | 128.70 |
| Single super phosphate | 250 | 65.0 | 92.00 | 59.80 |
| Muriate of potash | | | | |
| Fingerlings | 5000 | 2350 Nos. | * | 251.34 |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Mustard oil-cake } Groundnut oil cake } | | 1846.0 | 85.00 } 97.00 } | 1772.98 |
| Rice bran | | 2360.0 | 50.00 | 1180.00 |
| Aquatic weeds | | 9885.0 | - | - |
| Terrestrial weeds | | 2200.0 | | |
| Labour charges | | | | 1551.00 |
| | | | | Rs. 5990.36 |

Growth of fishes:

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|---------------|-----------------|----------------------------|----------------------|-----------------------------|
| Catla | 5.6 | 1 1/2 months | 2100 | 386.0 |
| Rohu | 13.5 | " " | 1200 | 427.0 |
| Mrigal | 7.3 | " " | 900 | 167.2 |
| Silver carp | 38.2 | " " | 2500 | 426.1 |
| Grass carp | 31.9 | " " | 2830 | 304.5 |
| Common carp | 50.4 | " " | 800 | 193.5 |
| Miscellaneous | | | | 23.3 |
| | | | | 1927.6 |

Total quantity of fish harvested

Gross production 4101.3 kg/ha/1 1/2 months

Net production 3981.1 kg/ha/1 1/2 months

Cost of production of per kg fish

Rs. 3.11

Remarks : * Cost of fingerlings has been estimated at the rates fixed by Govt. of West Bengal (Rs. 30/- for Indian major carps + common carp and Rs. 250/- for exotic carps/1000 fingerlings).

* Does not include rental, imputed cost of owner labour, interest on working capital, cost of fish seed, cost of repairs and maintenance, depreciation of farm equipment, cost of weeds.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
 (I.C.A.R.)
 BARRACKPORE : WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT
 HANSPUKUR-BISHNUPUR CENTRE DURING 1975-76

Location of the Pond : Pond No. 24 (Hadapukur), Bishnupur

Area : 0.50 ha

(Private C.I.F.R.I./I.D.R.C. collaboration)

| Items of inputs | Quantity (kg)/ha | Actual quantity applied (No.) | Purchased at the rate of (Rs. /Quintal) | Expenditure (Rs.) |
|--|---------------------|--|--|----------------------|
| Mahua oil-cake | 2500/ha-m | Not applied | - | - |
| Lime | 300 | 150.0 | 32.0 | 48.00 |
| Cowdung | 15000 | 6000.0 | 5.0/tonne | 30.00 |
| Amm. sulphate | 450 | 162.0 | 99.00 | 160.38 |
| Single super phosphate | 250 | 65.0 | 92.00 | 59.80 |
| Muriate of potash | | | | |
| Fingerlings | 5000 Nos. | 2500 Nos. | * | 267.50 |
| Supplementary feed- ing done @ 1-2% of body weight | | | | |
| Mustard oil cake | - | 2146.3 | 85.00 | 2065.78 |
| Groundnut oil cake | - | | 97.00 | |
| Rice bran | | 2875.0 | 50.00 | 1437.50 |
| Aquatic weeds | - | 3130.0 | - | - |
| Terrestrial weeds | | 4060.0 | - | - |
| Labour charges | - | - | - | 1654.99 |
| | | | Rs. 5723.95 | |

Growth of fishes:

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|---------------|--------------------|----------------------------------|----------------------------|-----------------------------------|
| Catla | 5.8 | 12 months | 960 | 52.1 |
| Rohu | 7.1 | " " | 690 | 161.9 |
| Mrigal | 8.0 | " " | 450 | 2.7 |
| Silver carp | 38.1 | " " | 1280 | 699.9 |
| Grass carp | 32.0 | " " | 1320 | 247.2 |
| Common carp | 3.5 | " " | 1000 | 1.0 |
| Miscellaneous | | | | 1164.8 |

Total quantity of fish harvested 1164.8

Gross production 3763.2 kg/ha/12 months

Net production 3680.0 kg/ha/12 months

Cost of production of per kg fish Rs. 3.04

Remarks : Estimated production of remaining fishes is . 716.8 kg. Harvested without application of mohua oil cake. Cost of production has been estimated on the figure of actual harvesting plus estimated crop remaining unharvested. Cost of fingerlings : Rs. 30/- per 1000 fingerlings for Indian major carps + common carp and Rs. 250/- per 1000 fingerlings for exotic carps.

* Does not include rental, imputed cost of labour, interest on working capital, cost of fish seed, cost of repairs and maintenance, depreciation of farm equipment, cost of weeds.

COST STUDY OF COMPOSITE FISH CULTURE CONDUCTED AT ULUBARI FISH
SEED FARM, GAUHATI BY THE STATE FISHERIES DEPARTMENT, ASSAM
DURING 1974-75

Location of the Pond : Ulubari Gauhati, Dist. Kamrup (Within the campus of Ulubari Fish Seed Farm).

Area : 0.40 hectare

| (State Government) | | | | |
|-----------------------------------|-----------------|---------------------------------------|--------------------------------------|----------------------|
| Items of inputs | Quantity/ ha | Actual quantity applied (kg) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
| Dewatering (oil and lubricant) | | | | 200.00 |
| Lime | 1300 kg | 520 kg | 22.50/q. | 117.00 |
| Cowdung | 29,500 kg | 11,800 kg | 10.00/q | 472.00 |
| Urea | 100 kg | 40 kg | 200.00/q | 80.00 |
| Super phosphate | 357.5 kg | 143 kg | 200.00/q | 286.00 |
| Muriate of potash | 55 kg. | 22 kg | 200.00/q | 44.00 |
| Fingerling | 5750 nos-C- | 17.35% | - | 115.00 |
| | Sc- | 17.35% | | |
| | R- | 26.10% | | |
| | M- | 19.80% | | |
| | Cc- | 6.35% | | |
| | Gc- | 13.05% | | |
| Supplementary feeding | | | | |
| Mustard oil cake | 1125 kg | 450 kg | 120.00/q | 540.00 |
| Rice bran | 1125 kg | 450 kg | 80.00/q | 360.00 |
| Hydrilla | 12,500 kg | 5,000 kg | - | - |
| Netting | - | - | - | 150.00 |
| | | | | Rs. 2,364.00 |

Growth of fishes:

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|-------------|--------------------|----------------------------------|----------------------------|--------------------------------|
| Catla | 13.5 | 12 | 321 | 125.75 |
| Silver carp | 94.05 | 12 | 1150 | 334.70 |
| Rohu | 2.12 | 12 | 233 | 119.90 |
| Mrigal | 5.0 | 12 | 505 | 153.50 |
| Common carp | 169.24 | 12 | 291 | 155.10 |
| Grass carp | 2.3 | 12 | 603 | 67.50 |
| | | | | 956.45 |

Total quantity of fish harvested 956.45 kg

Gross production 2391.12 kg/ha/yr

Net production 2211.38 kg/ha/yr

Expenditure for production of per kg fish Rs. 2.47

Remarks : * Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of repairs & maintenance, cost of hydrilla

ALL INDIA COORDINATED RESEARCH PROJECT ON COMPOSITE FISH CULTURE AND
 FISH SEED PRODUCTION
 CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
 Sub-centre : GAUHATI (Assam)
 (State central collaboration)

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT GAUHATI(ASSAM)
 CENTRE DURING 1975-76

Location of the Pond : Ulubari fish farm, Gauhati, Dist. Kamrup, Assam.

Pond Number : RP-3.

Area : 0.25 ha

| Items of inputs | Quantity(kg)/ ha | Actual quantity applied (kg) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
|------------------------|---|---------------------------------------|--------------------------------------|----------------------|
| Lime | 1000 | 250 | 21.40/q | 53.50 |
| Cowdung | 20000 | 5000 | 4.00/q | 200.00 |
| Amm.sulphate | 450 | 20.25 | 1.00/kg | 20.25 |
| Single super phosphate | 250 | 62.50 | 2.00/kg | 125.00 |
| Urea | 200 | 45.0 | 2.00/kg | 90.00 |
| Mu. of potash | 40 | 9.0 | 1.25/kg | 11.25 |
| Fingerlings | 6000 | 1500 | 50.00/1000 | 75.00 |
| | C 2.0: R 1.5: M 3.0: Sc 0.5: Gc 1.0: Cc 2.0 | | | |

Supplementary feeding done @ 1-4% of body weight

| | | | | |
|--|-------|--------|----------|-------------|
| Rice bran | 6140 | 1535 | 75.00/q | 1151.25 |
| Mustard oil cake | 5700 | 1425 | 120.00/q | 1710.00 |
| <u>Hydrilla</u> | 5410 | 1325.5 | 2.50/q | 35.00 |
| Dol grass | 21710 | 5427.5 | - | - |
| (<u>Oryza sativa</u> Var. <u>fatua</u>) | | | | |
| Netting | - | - | - | 400.00 |
| Dewatering cost | - | - | - | 150.00 |
| | | | | Rs. 4021.25 |

Growth of fishes:

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|-----------------------|--------------------|----------------------------------|------------------------------|-------------------------------------|
| Catla (1st stocked) | 87.0 | 12 | 666.5 | 126.65 |
| Catla (IIInd stocked) | 3.2 | 8.5 | 204.0 | 20.00 |
| Rohu (Ist stocked) | 35.0 | 12 | 788.6 | 34.70 |
| Rohu (IIInd stocked) | 2.4 | 8.5 | 256.8 | 37.50 |
| Mrigal .. | 42.5 | 12 | 539.3 | 200.65 |
| Silver carp .. | 20.0 | 12 | 2440.0 | 183.00 |
| Grass carp .. | 15.0 | 12 | 2562.0 | 158.85 |
| Common carp .. | 23.7 | 12 | 583.6 | 167.50 |
| Miscellaneous. | - | - | - | 4.00 |
| | | | | 932.85 |

Total quantity of fish harvested - 932.85 kg

Gross production - 3731.4 kg/ha/yr

Net production - 3534.24 kg/ha/yr

*

Expenditure for production of per kg fish - Rs. 4.31

Total estimated receipt for 932.85 kg of fishes @ Rs. 8.00/kg - Rs. 7462.80

* Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of dol grass, cost of repairs & maintenance.

ALL INDIA COORDINATED RESEARCH PROJECT ON COMPOSITE FISH CULTURE AND
FISH SEED PRODUCTION
CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
Sub-centre : GAUHATI (Assam)

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT GAUHATI (ASSAM)
CENTRE DURING 1975-76

Location of the Pond : Ulubari Fish farm, Gauhati, Dist. Kamrup, Assam.
Pond Number : RP-4.
Area : 0.25 ha.

| Items of inputs | Quantity(kg)/ha | Actual quantity applied | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
|---|-----------------|-------------------------|--------------------------------|-------------------|
| Lime | 1000 | 250 | 21.40/q | 53.50 |
| Cowdung | 20000 | 5000 | 4.00/q | 200.00 |
| Amm. sulphate | 450 | 22.5 | 1.00/kg | 22.50 |
| Urea | 200 | 45.0 | 2.00/kg | 90.00 |
| Single super phosphate | 250 | 68.75 | 2.00/kg | 137.50 |
| Mu. of potash | 40 | 10.0 | 1.25/kg | 12.50 |
| Fingerlings | 6000 nos | 1500 nos | 50.00/1000 | 75.00 |
| C 2.0: R 1.5: M 3.0: Sc 1.0: Gc 0.5: Cc 2.0 | | | | |
| Supplementary feeding done @ 1-4% of body weight. | | | | |
| Rice bran | 6456 | 1614 | 75.00/q | 1190.50 |
| Mustard oil cake | 5680 | 1420 | 120.00/q | 1704.00 |
| <u>Hydrilla</u> | 5045 | 1261.25 | 2.50/q | 32.50 |
| Dol grass | 16860 | 4215 | - | - |
| Netting | - | - | - | 400.00 |
| Dewatering cost | - | - | - | 150.00 |
| | | | Rs. 4068.00 | |

Growth of fishes:

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|-----------------------|-----------------|----------------------------|----------------------|-----------------------------|
| Catla (Ist stocked) | 87.0 | 12 | 748.2 | 109.25 |
| Catla (IIInd stocked) | 3.2 | 8.5 | 201.4 | 20.75 |
| Rohu (Ist stocked) | 35.0 | 12 | 736.1 | 53.00 |
| Rohu (iInd Stocked) | 2.4 | 8.5 | 274.7 | 25.00 |
| Mrigal .. | 42.5 | 12 | 517.7 | 222.10 |
| Silver carp .. | 20.0 | 12 | 2319.4 | 250.50 |
| Grass carp :: | 15.0 | 12 | 2573.3 | 182.85 |
| Common carp :: | 23.7 | 12 | 615.3 | 152.00 |
| Miscellaneous .. | - | - | - | 5.50 |
| | | | | <u>1020.95</u> |

| | |
|---|--------------------|
| Total quantity of fish harvested | - 1020.95 kg |
| Gross production | - 4083.80 kg/ha/yr |
| Net production | - 3896.28 kg/ha/yr |
| * Expenditure for production of per kg fish | - Rs. 3.98 |
| Total estimated receipt for 1020.95 kg of fishes @ 8.00/kg | - Rs. 8167.60 |
| Total spawn produced | - 20.499 catch |
| * Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of dol grass, cost of repairs and maintenance. | |

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
(I.C.A.R.)
BARRACKPORE, WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT BHAVANISAGAR
CENTRE DURING 1972

Expt. No. I (State-Central collaboration) Pond No.I

Location of the Pond : Bhavanisagar, Coimbatore Dist., Tamil Nadu.
Area : 0.1 ha

| Items of inputs | Quantity (kg)/ ha | Actual Quantity applied (kg) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
|---|----------------------|---|--------------------------------------|----------------------|
| Mahua oil cake | - | - | - | - |
| Lime | 500 | 50.0 | 18.0/q | 9.00 |
| Cowdung | 3000 | 1500.0 | 7.0/T | 10.50 |
| Ammonium sulphate | 450 | 18.0 | 61.0/Q | 11.00 |
| Single super phosphate | 250 | 10.0 | 44.0/q | 4.40 |
| Muriata of potash | 40 | 1.6 | 54.0/q | 0.85 |
| Fingerlings | 4000 nos. | C 1.94; R 1.49; M 1.54 Sc 0.89; Gc 0.15; Cc 3.95 | 20.00 | |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Ground nut oil cake | 350 | 35.0 | 67.0/q | 23.45 |
| Rice bran | 350 | 35.0 | 16.0/q | 5.60 |
| Hydrilla | - | - | - | - |
| Netting | - | - | - | - |
| | | | Rs. 84.80 | |

Growth of fishes:

| Species | Initial wt. | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|-------------|-------------|----------------------------------|----------------------------|-----------------------------------|
| Catla | 55.8 | 2½ | 145.5 | 13.9 |
| Rohu | 328.0 | " | 491.3 | 14.8 |
| Mrigal | 160.0 | " | 385.2 | 11.2 |
| Silver carp | 362.6 | " | 771.2 | 25.4 |
| Grass carp | 362.6 | " | 450.0 | 2.2 |
| Common carp | 70.0 | " | 305.1 | 47.0 |
| | | | | 114.5 |

Total quantity of fish harvested - 114.5 kg
Gross production - 1145 kg/ha/2½ months
* Cost of production per kg of fish - 0.74 ps

* Does not include rental value, wages & salaries interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting, cost of weeds.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
 (I.C.A.R.)
 BARRACKPORE, WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT BHAVANISAGAR
 CENTRE DURING 1972

(State-Central collaboration)

Location of the Pond : Bhavanisagar, Coimbatore Dist., Tamil Nadu.
 Area : 0.1 ha

Expt. No. I

Pond No. II

| Items of inputs | Quantity(kg)/ ha | Actual quantity applied | Purchased at the rate (kg) | Expenditure (Rs.) | Expenditure (Rs.) |
|--|---------------------|-------------------------------|----------------------------------|----------------------|----------------------|
| Mahua oil cake | - | - | - | - | - |
| Lime | 500 | 50.0 | 18.00/q | 9.00 | |
| Cowdung | 3000 | 1500.0 | 7.00/T | 10.50 | |
| Amm. sulphate | 450 | 18.0 | 61.00/q | 11.00 | |
| Single super phosphate | 250 | 10.0 | 44.00/q | 4.40 | |
| Muriate of potash | 40 | 1.6 | 54.00/q | 0.85 | |
| Fingerlings | 2500 nos | C 1.14: M 2.44 : Gc 6.52 | | 12.50 | |
| Supplementary feeding done @ 1-2% of the body weight | | | | | |
| Groundnut oil cake | 350 | 35.0 | 67.00/q | 23.45 | |
| Rice bran | 350 | 35.0 | 16.00/q | 5.60 | |
| Hydrilla | | | | | |
| Napier grass | - | - | - | - | |
| Netting | - | - | - | - | |
| | | | | | Rs. 77.30 |

Growth of fishes:

| Species | Initial wt. | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (g) |
|-------------|----------------|----------------------------------|----------------------------|----------------------------------|
| Catla | 39.6 | 2 1/2 | 345.2 | 8.6 |
| Rohu | - | " | - | - |
| Mrigal | 12.3 | | 172.8 | 10.2 |
| Silver carp | - | | - | - |
| Grass carp | - | | - | - |
| Common carp | 9.2 | | 204.0 | 30.8 |
| Others | - | | - | - |
| | | | | 49.6 |

Total quantity of fish harvested - 49.6 Kg
 Gross production - 496 kg/ha/2 1/2 months

* Cost of production per kg of fish - Rs. 1.55

* Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting.

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 BARRACKPORE, WEST BENGAL

(State-Central collaboration)

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT BHAVANISAGAR
 CENTRE DURING 1973

Expt. No.II

Pond No. I

Location of the Pond : Bhavanisagar, Coimbatore Dist., Tamil Nadu.

Area : 0.1 ha

| Items of inputs | Quantity (kg)/ha | Actual quantity applied (kg) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
|--|------------------|-------------------------------------|--------------------------------|-------------------|
| Mahua oil cake | - | - | - | - |
| Lime | 500 | 50 | 18.00/q | 9.00 |
| Cowdung | 3000 | 800 | 10.00/T | 8.00 |
| Amm. sulphate | 450 | 45 | 61.00/q | 28.35 |
| Single super phosphate | 250 | 25 | 44.00/q | 11.50 |
| Muriate of Potash | 40 | 4 | 54.00/q | 2.25 |
| Fingerlings | 5000 nos/ha | C 1.98: Sc 2.2: Gc 1.66: Cc 4.16 | - | 21.67 |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Groundnut oil cake | 3560 | 356 | 142.00/q | 505.50 |
| Rice bran | 4520 | 452 | 22.00/q | 99.40 |
| Hydrilla Napier grass | - | - | - | - |
| Netting | - | - | - | - |
| | | | Rs. 685.67 | |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|-------------|--------------------|-------------------------------|-------------------------|--------------------------------|
| Catla | 134.3 | 10.5 | 486.7 | 28.2 |
| Rohu | - | " | - | - |
| Mrigal | - | " | - | - |
| Silver carp | 265.2 | " | 1055.3 | 98.2 |
| Grass carp | 58.0 | " | 649.6 | 16.9 |
| Common carp | 200.4 | " | 620.3 | 104.2 |
| Others | - | " | - | 13.5 |
| | | | 261.0 | |

| | |
|-----------------------------------|----------------------------|
| Total quantity of fish harvested | - 261.0 kg |
| Gross production | - 2610 kg/ha/10 1/2 months |
| Net production | - 2081.6 kg/ha/yr |
| Cost of production per kg of fish | - Rs. 2.63 ps |

* Does not include rental value, wages & salaries interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting, cost of weeds.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
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COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT BHAVANISAGAR
 DURING 1973

(State-Central collaboration)

Location of the Pond : Bhavanisagar, Coimbatore Dist., Tamil Nadu.

Area : 0.1 ha

Expt. No. II

Pond No. II

| Items of inputs | Quantity (kg)/ ha | Actual quantity applied (kg) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
|------------------------|----------------------|---------------------------------------|---|----------------------|
| Mahua oil cake | - | - | - | - |
| Lime | 500 | 50 | 18.00/q | 9.00 |
| Cowdung | 3000 | 800 | 10.00/T | 8.00 |
| Amm. sulphate | 450 | 45 | 61.00/q | 28.35 |
| Single super phosphate | 250 | 25 | 44.00/q | 11.50 |
| Muriate of potash | 40 | 4 | 54.00/q | 2.25 |
| Fingerlings | 5000 nos. | C 2.24: Sc 2.38: M 2.0 : Cc 3.38 | | 21.43 |

Supplementary feeding done @ 1-2% of the body weight

| | | | | |
|--------------------|------|-----|----------|--------|
| Groundnut oil cake | 3260 | 326 | 142.00/q | 462.70 |
| Rice bran | 4340 | 434 | 22.00/q | 95.50 |
| Hydrilla | | | | |
| Napier grass | - | - | - | - |
| Netting | - | - | - | - |
| | | | | 638.73 |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|-------------|--------------------|----------------------------------|----------------------------|-----------------------------------|
| Catla | 180.0 | 10 1/2 | 843.7 | 9.3 |
| Rohu | - | " | - | - |
| Mrigal | 107.4 | " | 740.8 | 71.9 |
| Silver carp | 257.0 | " | 854.3 | 97.4 |
| Grass carp | - | " | - | - |
| Common carp | 129.0 | " | 941.7 | 112.8 |
| Others | - | " | - | 1.0 |
| | | | | 292.4 |

Total quantity of fish harvested - 292.4 kg
 Gross production - 2924 kg/ha/10 1/2 months
 Net production - 2881.6 kg/ha/yr

* Expenditure of production per kg of fish Rs. 2.18

* Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting

CASE STUDY - 90

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COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT BHAVANISAGAR
DURING 1973

(State central collaboration)

Location of the Pond : Bhavanisagar, Coimbatore Dist., Tamil Nadu
Area : 0.1 ha

Expt. No. II

Pond No. III

| Items of inputs | Quantity (kg)/ ha | Actual quantity applied (kg) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
|--|----------------------|---------------------------------------|---|----------------------|
| Mahua oil cake | - | - | - | - |
| Lime | 500.0 | 50 | 18.00/q | 9.00 |
| Cowdung | 3000.0 | 800 | 10.00/T | 8.00 |
| Amm. sulphate | 720.0 | 72 | 61.00/q | 45.35 |
| Single super phosphate | 400.0 | 40 | 44.00/q | 18.40 |
| Muriate of potash | 64.0 | 6.4 | 54.00/q | 3.60 |
| Fingerlings | 5000 nos. | C 1.6 : Sc 2.04: M 2.0 : Cc 4.36 | | 19.30 |
| Supplementary feeding done @ 1-2% of the body weight | | | | |
| Groundnut oil cake | 3680 | 368 | 142.00/q | 522.90 |
| Rice bran | 5250 | 525 | 22.00/q | 115.50 |
| Hydrilla | - | - | - | - |
| Napier grass | - | - | - | - |
| Netting | - | - | - | - |
| | | | | <u>742.05</u> |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|-------------|--------------------|----------------------------------|----------------------------|-----------------------------------|
| Catla | 214.2 | 10 | 1042.3 | 43.2 |
| Rohu | - | - | - | - |
| Mrigal | 107.2 | - | 1065.8 | 90.6 |
| Silver carp | 407.1 | - | 1671.4 | 38.0 |
| Grass carp | - | - | - | - |
| Common carp | 336.3 | - | 814.3 | 118.8 |
| Others | - | - | - | 1.0 |
| | | | | <u>291.6</u> |

Total quantity of fish harvested - 291.6 kg
Gross production - 2916 kg/ha/10 months
Net production - 27312 kg/ha/yr

* Expenditure of production per kg of fish Rs. 2.54

* Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting.

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BARRACKPORE, WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT BHAVANISAGAR
DURING 1973

(State Central collaboration)

Location of the Pond : Bhavanisagar, Coimbatore Dist., Tamil Nadu.
Area : 0.1 ha

| Expt. No. II | | Pond No. IV | | |
|--|----------------------|-------------------------------------|--------------------------------------|----------------------|
| Items of inputs | Quantity (kg)/ ha | Actual quantity applied (kg) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
| Mahua oil cake | - | - | - | - |
| Lime | 500 | 50 | 18/q | 9.00 |
| Cowdung | 3000 | 800 | 10/T | 8.00 |
| Amm. sulphate | 450 | 45 | 61/q | 28.35 |
| Single super phosphate | 250 | 25 | 44/q | 11.50 |
| Muriate of potash | 40 | 4 | 54/q | 2.25 |
| Fingerlings | 5000 nos. | C 2.84 : R 1.5 : M 1.5 : Gc 4.16 | | 17.18 |
| Supplementary feeding done @ 1-2% of the body weight | | | | |
| Groundnut oil cake | 3840 | 384 | 142/q | 545.10 |
| Rice bran | 5570 | 557 | 22/q | 122.50 |
| Hydrilla | - | - | - | - |
| Napier grass | - | - | - | - |
| Netting | - | - | - | - |
| | | | | 743.88 |

Growth of fishes:

| Species | Initial weight (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|-------------|-----------------------|-------------------------------|-------------------------|--------------------------------|
| Catla | 136.7 | 10/2 | 521.5 | 74.0 |
| Rohu | 214.2 | - | 1047.3 | 77.3 |
| Mrigal | 180.4 | - | 1034.9 | 77.6 |
| Silver carp | - | - | - | - |
| Grass carp | - | - | - | - |
| Common carp | 177.1 | - | 617.7 | 120.0 |
| Others | - | - | - | 1.0 |
| | | | | 349.9 |

Total quantity of fish harvested
Gross production

- 350 kg
- 3500 kg/ha/10/2 months

* Cost of production per kg fish

- Rs. 2.12

* Does not include rental value, wages and salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
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 BARRACKPORE, WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT BHAVANISAGAR
 DURING 1973

(State Central collaboration)

Location of the Pond : Bhavanisager, Coimbatore Dist., Tamil Nadu.

Area : 0.1 ha

| Expt. No. II | Pond No. V | | | |
|--|------------------|--------------------------------|--------------------------------|-------------------|
| Items of inputs | Quantity (kg)/ha | Actual quantity applied (kg) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
| Mahua oil cake | - | - | - | - |
| Lime | 500 | 50 | 18/q | 9.00 |
| Cowdung | 3000 | 600 | 10/T | 8.00 |
| Amm. sulphate | 765 | 76.5 | 61/q | 48.20 |
| Single super phosphate | 425 | 42.5 | 44/q | 19.55 |
| Muriate of potash | 68 | 6.8 | 54/q | 3.80 |
| Fingerlings | 5000 nos | C 2.4: R 1.5: M 1.5: Cc 4.6 | | 17.30 |
| Supplementary feeding done @ 1-2% of the body weight | | | | |
| Groundnut oil cake | 4100 | 410 | 142/q | 582.20 |
| Rice bran | 6050 | 605 | 22/q | 133.20 |
| Hydrilla | - | - | - | - |
| Napier grass | - | - | - | - |
| Netting | - | - | - | - |
| | | | | 821.25 |

Growth of fishes :

| Species | Initial weight (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|-------------|--------------------|----------------------------|----------------------|-----------------------------|
| Catla | 4.7 | 13 | 521.1 | 55.7 |
| Rohu | 126.4 | | 1760.3 | 132.0 |
| Mrigal | 42.5 | | 916.3 | 57.7 |
| Silver carp | - | | - | - |
| Grass carp | - | | - | - |
| Common carp | 18.7 | | 513.5 | 74.4 |
| Others | - | | - | - |
| | | | | 319.8 |

| | | |
|----------------------------------|---|----------------------|
| Total quantity of fish harvested | - | 319.8 kg |
| Gross production | - | 3198 kg/ha/13 months |
| Net production | - | 2987.4 kg/ha/yr |
| Cost of production per kg fish | - | Rs. 2.57 |

* Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
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COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT BHAVANISAGAR
 DURING 1974-75

Location of the pond : Bhavanisagar, Coimbatore Dist., Tamil Nadu.

Area : 0.1 ha

| Expt. No. III | Pond No. I | | | |
|--|---------------------|--|---|----------------------|
| Items of inputs | Quantity(kg)/ ha | Actual quantity applied (kg) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
| Mahua oil cake | - | - | - | - |
| Lime | 500 | 50 | 20/q | 10.00 |
| Cowdung | 7500 | 710 | 10/T | 7.10 |
| Amm. sulphate | 450 | 27 | 100/q | 27.00 |
| Single super phosphate | 250 | 23.5 | 100/q | 23.50 |
| Muriate of potash | 40 | 2.9 | 140/q | 4.00 |
| Fingerlings | 6000 Nos | C 3.66; Sc 1.34; R 1.0; M 1.5; Cc 2.5 | | 53.00 |
| Supplementary feeding done @ 1-2% of the body weight | | | | |
| Groundnut oil cake | 2130 | 213 | 150/q | 319.50 |
| Rice bran | 4080 | 408 | 30/q | 122.40 |
| Hydrilla | | | | - |
| Napier grass | - | - | - | - |
| Netting | - | - | - | - |
| | | | | 566.50 |

Growth of fishes:

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|-------------|--------------------|----------------------------------|----------------------------|-----------------------------------|
| Catla | 5.4 | 12 | 154.1 | 19.7 |
| Rohu | 4.1 | | 419.4 | 24.3 |
| Mrigal | 25.0 | | 577.8 | 52.0 |
| Silver carp | 8.7 | | 778.8 | 45.9 |
| Grass carp | - | | - | - |
| Common carp | 26.6 | | 568.0 | 78.4 |
| Others | - | | - | 13.7 |
| | | | | 234.0 |

Total quantity of fish harvested - 234 kg
 Gross production - 2340 kg/ha/yr
 Net production - 2256 kg/ha/yr

* Expenditure of production per kg of fish Rs. 2.42

* Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of repairs & maintenance, cost of netting.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
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COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT BHAVANISAGAR
 DURING 1974-75

Location of the pond : Bhavanisagar, Coimbatore Dist., Tamil Nadu.

| Area | | Expt. No. III | Pond No. II | |
|--|-----------------|-------------------------------|--------------------------------|-------------------|
| Items of inputs | Quantity(kg)/ha | Actual quantity applied (kg) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
| Mahua oil cake | - | - | - | - |
| Lime | 500 | 50 | 20/q | 10.00 |
| Cowdung | 7500 | 710 | 10/T | 7.10 |
| Amm. sulphate | 450 | 27 | 100/q | 27.00 |
| Single super phosphate | 250 | 23.5 | 100/q | 23.50 |
| Muriate of potash | .40 | 2.9 | 140/q | 4.00 |
| Fingerlings | 6000 Nos. | C 3 : R 1 : M 1.5 : Cc 4.5 | | 37.80 |
| Supplementary feeding done @ 1-2% of the body weight | | | | |
| Ground-nut oil cake | 2330 | 233 | 140/q | 349.50 |
| Rice bran | 4400 | 440 | 30/q | 132.00 |
| Hydrilla | - | - | - | - |
| Napier grass | - | - | - | - |
| Netting | - | - | - | - |
| | | | | 590.90 |

Growth of fishes:

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|-------------|--------------------|-------------------------------|-------------------------|--------------------------------|
| Catla | 5.2 | 12 | 333.8 | 50.0 |
| Rohu | 4.1 | | 660.5 | 21.1 |
| Mrigal | 22.2 | | 762.2 | 64.8 |
| Silver carp | - | - | - | - |
| Grass carp | - | - | - | - |
| Common carp | 34.2 | | 423.0 | 110.4 |
| Others | - | | - | 1.4 |
| | | | | 247.7 |

Total quantity of fish harvested - 247.7 kg
 Gross production - 2477 kg/ha/yr
 Net production - 2353 kg/ha/yr

* Expenditure of production per kg of fish Rs. 2.38

* Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of repairs & maintenance, cost of netting.

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COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT BHAVANISAGAR
DURING 1974-75

(State Central collaboration)

Location of the pond : Bhavanisagar, Coimbatore Dist., Tamil Nadu.
Area : 0.1 ha

| Items of inputs | Quantity (kg)/ ha | Expt. No. | III | Pond No. | III |
|--|----------------------|--------------------------------|--|----------|-------|
| | | Actual quantity applied | Purchased at the rate of (kg) | (Rs.) | (Rs.) |
| Mahua oil cake | - | - | - | - | - |
| Lime | 500 | 50 | 20/q | 10.00 | |
| Cowdung | 7500 | 710 | 10/T | 7.10 | |
| Amm. sulphate | 450 | 27 | 100/q | 27.00 | |
| Single super phosphate | 250 | 23.5 | 100/q | 23.50 | |
| Muriate of potash | 40.7 | 2.9 | 140/q | 4.00 | |
| Fingerlings | 6000 Nos. | C 2.5: R 1.5: M 3.0: Cc 3.0 | | 38.40 | |
| Supplementary feeding done @ 1-2% of the body weight | | | | | |
| Groundnut oil cake | 2320 | 232 | 150/q | 348.00 | |
| Rice bran | 4500 | 450 | 30/q | 135.00 | |
| Hydrilla | - | - | - | - | |
| Napier grass | - | - | - | - | |
| Netting | - | - | - | - | |
| | | | | 593.00 | |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|-------------|--------------------|----------------------------------|----------------------------|-----------------------------------|
| Catla | 5.0 | 12 | 367.4 | 47.4 |
| Rohu | 6.7 | - | 613.2 | 28.2 |
| Mrigal | 18.0 | - | 599.0 | 99.5 |
| Silver carp | - | - | - | - |
| Grass carp | - | - | - | - |
| Common carp | 20.8 | - | 598.0 | 100.3 |
| Others | - | - | - | 2.2 |
| | | | | 277.6 |

Total quantity of fish harvested - 277.6 kg
Gross production - 2776 kg/ha/yr
Net production - 2692.1 kg/ha/yr

* Cost of production per kg of fish -- Rs. 2.14

* Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
 (I.C.A.R.)
 BARRACKPORE, WEST BENGAL

CASE STUDY - 96

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT BHAVANISAGAR
 DURING 1974-75

Location of the Pond : Bhavanisagar, Coimbatore Dist., Tamil Nadu.

Area : 0.1 ha

Expt. No. III Pond No. IV

| Items of inputs | Quantity(kg)/ha | Actual quantity applied (kg) | Purchased rate of (Rs.) | Expenditure (Rs.) |
|--|-----------------|------------------------------|-------------------------|-------------------|
| Mahua oil cake | - | - | - | - |
| Lime | 500 | 50 | 20/q | 10.00 |
| Cowdung | 7500 | 710 | 10/T | 7.10 |
| Amm. sulphate | 450 | 27 | 100/q | 27.00 |
| Single super phosphate | 250 | 23.5 | 100/q | 23.50 |
| Muriate of potash | 40 | 2.9 | 140/q | 4.00 |
| Fingerlings | 6000 Nos. | C 2.5: R 0.5 : M 3.0: Cc 4.0 | | 37.20 |
| Supplementary feeding done @ 1-2% of the body weight | | | | |
| Groundnut oil cake | 2130 | 213 | 150/q | 319.50 |
| Rice bran | 4460 | 446 | 30/q | 133.80 |
| Hydrilla | | | | |
| Napier grass | - | - | - | - |
| Netting | - | - | - | - |
| | | | | 562.10 |

Growth of fishes:

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|-------------|--------------------|-------------------------------|-------------------------|--------------------------------|
| Catla | 5.3 | 12 | 282.2 | 35.8 |
| Rohu | 8.3 | | 654.5 | 19.6 |
| Mrigal | 23.6 | | 526.0 | 91.0 |
| Silver carp | - | | - | - |
| Grass carp | - | | - | - |
| Common carp | 26.2 | | 387.7 | 94.4 |
| Others | | | | 6.7 |
| | | | | 247.5 |

Total quantity of fish harvested - 247.5 kg
 Gross production - 2475 kg/ha/yr
 Net production - 2661 kg/ha/yr

* Cost of production per kg of fish - Rs. 2.27

* Does not include rental value, wages and salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
 (I.C.A.R.)
 BARRACKPORE, WEST BENGAL

CASE STUDY - 97

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT BHAVANISAGAR
 DURING 1974-75

(State/Central collaboration)

Location of the pond : Bhavanisagar, Coimbatore Dist., Tamil Nadu.

Area : 0.1 ha

Expt. No. III Pond No. V

| Items of inputs | Quantity(kg)/ha | Actual quantity applied (kg) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
|--|-------------------------------|------------------------------|--------------------------------|-------------------|
| Mahua oil cake | - | - | - | - |
| Lime | - | - | - | - |
| Cowdung | 7500 | 710 | 10/T | 7.10 |
| Amm. sulphate | 450 | 27 | 100/q | 27.00 |
| Single super phosphate | 250 | 23.5 | 100/q | 23.50 |
| Muriate of potash | 40 | 2.9 | 140/q | 4.00 |
| Fingerlings | 6000 nos. C 2.5: M 3.0: E 4.5 | | | 36.60 |
| Supplementary feeding done @ 1-3% of the body weight | | | | |
| Groundnut oil cake | 2220 | 222 | 150/q | 333.00 |
| Rice bran | 4420 | 442 | 30/q | 132.60 |
| Hydrilla | - | - | - | - |
| Napier grass | - | - | - | - |
| Netting | - | - | - | - |
| | | | | 563.80 |

Growth of fishes:

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|-------------|-----------------|----------------------------|----------------------|-----------------------------|
| Catla | 4.0 | 12 | 343.1 | 47.3 |
| Rohu | - | - | - | - |
| Mrigal | 19.4 | - | 619.8 | 104.7 |
| Silver carp | - | - | - | - |
| Grass carp | - | - | - | - |
| Common carp | 33.3 | - | 400.0 | 92.3 |
| Others | - | - | - | 5.0 |
| | | | | 249.3 |

Total quantity of fish harvested = 249.3 kg

Gross production = 2493 kg/ha/yr

Net production = 2363.6 kg/ha/yr

* Cost of production per kg of fish = Rs. 2.26

* Does not include rental value, wages and salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
(I.C.A.R.)
BARRACKPORE, WEST BENGAL

CASE STUDY - 98

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT BHAVANISAGAR
DURING 1975-76

(State/Central collaboration)

Location of the pond : Bhavanisagar, Coimbatore Dist., Tamil Nadu

| Area | | Expt. No. IV | | Pond No. III |
|--|-------------------|--|--------------------------------|-------------------|
| Items of inputs | Quantity (kg)/ ha | Actual quantity applied | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
| Mahua oil cake | - | - | - | - |
| Lime | - | - | - | - |
| Cowdung | 25000 | 2440 | 10/T | 24.40 |
| Amm. sulphate | 250 | 23.800 | 100/q | 23.80 |
| Single super phosphate | 250 | 26.720 | 100/q | 26.72 |
| Muriate of potash | 40 | 3.800 | 140/q | 5.30 |
| Urea | 100 | 9.870 | 200/q | 20.00 |
| Fingerlings | 6000 Nos. | C 1.5: Sc 3.5: Gc 1.5: M 2.0 : Cc 1.5 | | 79.80 |
| Supplementary feeding done @ 1-3% of the body weight | | | | |
| Groundnut oil cake | 3065 | 306 | 150/q | 459.75 |
| Rice bran | 5200 | 520 | 32/q | 166.40 |
| Hydrilla | - | - | - | - |
| Napier grass | 18,930 | 1893 | - | - |
| Netting | - | - | - | - |
| | | | | 806.17 |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|-------------|-----------------|----------------------------|----------------------|-----------------------------|
| Catla | 164.00 | 12 | 301.3 | 28.4 |
| Rohu | - | - | - | - |
| Mrigal | 50.0 | - | 599.7 | 67.7 |
| Silver carp | 18.5 | - | 475.6 | 92.8 |
| Grass carp | 19.4 | - | 487.1 | 40.0 |
| Common carp | 25.0 | - | 959.8 | 83.0 |
| Others | - | - | - | 11.2 |
| | | | | 323.1 |

Total quantity of fish harvested = 323.1 kg

Gross production = 3231 kg/ha/yr

Net production = 2923 kg/ha/yr

* Cost of production per kg of fish = Rs. 2.50

* Does not include rental, wages and salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting, cost of hydrilla and napier grass.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
(I.C.A.R.)
BARRACKPORE, WEST BENGAL

CASE STUDY - 99

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT BHAVANISAGAR
DURING 1975-76

(State/Central collaboration)

| Location of the Pond : | Bhavanisagar, Coimbatore Dist., Tamil Nadu. | | | |
|--|---|--|--------------------------------|-------------------|
| Area : | 0.1 ha | Expt. No. IV | Pond No. IV | |
| Items of inputs | Quantity(kg)/ha | Actual quantity applied | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
| Mahua oil cake | - | - | - | - |
| Lime | - | - | - | - |
| Cowdung | 25000 | 2440 | 10/T | 24.40 |
| Amm. sulphate | 250 | 23.800 | 100/q | 23.80 |
| Single super phosphate | 250 | 26.720 | 100/q | 26.72 |
| Muriate of potash | 40 | 3.800 | 140/q | 5.30 |
| Urea | 100 | 9.870 | 200/q | 20.00 |
| Fingerlings | 6000 Nos. | C 1.5 : Sc 3.5 : Gc 1.5 : M 2.0 : Cc 1.5 | | 79.80 |
| Supplementary feeding done @ 1-2% of the body weight | | | | |
| Groundnut oil cake | 2957 | 295.7 | 150/q | 446.55 |
| Rice bran | 4846 | 484.6 | 32/q | 155.10 |
| Hydrilla | | | | - |
| Napier grass | 21050 | 2105 | - | - |
| Netting | - | - | - | - |
| | | | | 781.67 |

Growth of fishes:

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|-------------|--------------------|-------------------------------|-------------------------|--------------------------------|
| Catla | 50.00 | 12 | 254.7 | 14.8 |
| Rohu | - | - | - | - |
| Mrigal | 55.6 | - | 512.8 | 62.2 |
| Silver carp | 21.4 | - | 472.5 | 83.9 |
| Grass carp | 16.6 | - | 824.6 | 34.1 |
| Common carp | 25.5 | - | 807.0 | 72.5 |
| Others | - | - | - | 14.3 |
| | | | | 281.8 |

Total quantity of fish harvested = 281.8 kg

Gross production = 2818 kg/ha/yr

Net production = 2618 kg/ha/yr

* Cost of production per kg of fish = Rs. 2.77

* Does not include rental, wages and salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting, cost of hydrilla and napier grass.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
(I.C.A.R.)
BARRACKPORE, WEST BENGAL

CASE STUDY - 100

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT BHAVANISAGAR
DURING 1975-76

(State/Central collaboration)

| Items of inputs | Quantity(kg)/ ha | Actual quantity applied (kg) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
|--|---------------------|--|---|----------------------|
| Mahua oil cake | - | - | - | - |
| Lime | - | - | - | - |
| Cowdung | 25000 | 2440 | 10/T | 24.40 |
| Amm. sulphate | 250 | 23.800 | 100/q | 23.80 |
| Single super phosphate | 250 | 26.720 | 100/q | 26.72 |
| Muriate of potash | 40 | 3.800 | 140/q | 5.30 |
| Urea | 100 | 9.870 | 200/q | 20.00 |
| Fingerlings | 6000 Nos. | C 1.5: Sc 3.5: Gc 1.5: M 2.0;Cc 1.5 | | 79.80 |
| Supplementary feeding done @ 1-2% of the body weight | | | | |
| Groundnut oil cake | 2881 | 288.1 | 150/q | 432.15 |
| Rice bran | 4812 | 481.2 | 32/q | 154.00 |
| Hydrilla | | | | |
| Napier grass | 19015 | 1901.5 | - | - |
| Netting | - | - | - | - |
| | | | | <u>766.17</u> |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|-------------|--------------------|----------------------------------|----------------------------|-----------------------------------|
| Catla | 50.0 | 12 | 203.5 | 14.6 |
| Rohu | - | | - | - |
| Mrigal | 56.0 | | 567.7 | 64.2 |
| Silver carp | 23.8 | | 441.1 | 93.8 |
| Grass carp | 11.1 | | 455.8 | 33.0 |
| Common carp | 27.0 | | 841.1 | 76.0 |
| Others | - | | - | 16.2 |
| | | | | <u>297.8</u> |

Total quantity of fish harvested = 297.8 kg
 Gross production = 2978 kg/ha/yr
 Net production = 2782.0 kg/ha/yr

Cost of production per kg of fish = Rs. 2.57

Does not include rental, wages and salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting, cost of hydrilla and napier grass.
 (During 1975-76, 21.69 lakh of fish seed was produced from Bhavanisagar centre).

ALL INDIA COORDINATED RESEARCH PROJECT ON COMPOSITE FISH CULTURE AND
FISH SEED PRODUCTION

(C.I.F.R.I.)

Sub-centre : Sunkesula (Andhra Pradesh)

(State/Central collaboration)

Location of the Pond : Sunkesula Fish Farm, Kurunool District, A.P.

Area of the pond : 0.1 ha (Pond No. I.) Date of stocking : 17-1-72.

Experiment No. I : Date of conclusion : 29-10-72

Duration : One year.

| Items of inputs | Quantity(kg)/ ha | Actual quantity applied (kg) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
|--|---------------------|---------------------------------------|---|----------------------|
| Urea | 180.0 | 18.0 | 99.00/q | 17.82 |
| Superphosphate | 225.0 | 22.5 | 40.89/q | 9.20 |
| Muriate of potash | 229.5 | 2.25 | 100.00/q | 2.25 |
| Cattle dung | 4860.0 | 486.00 | 6.59/q | 32.00 |
| Rice bran | 2500.0 | 250.00 | 46.13/q | 115.33 |
| Groundnut oil cake | 1983.0 | 198.30 | 58.82/q | 116.64 |
| Lime | 200.0 | 20.00 | 21.25/q | 4.25 |
| Supplementary feeding done @ 1-2% of the body weight | | | | |
| Fingerlings | 5000/ha | C 4 : R 3.0 : M 3.0 | | 21.25 |
| | | | | 318.74 |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|---------|--------------------|----------------------------------|----------------------------|-----------------------------------|
| Catla | 7.5 | 9 | 500.00 | 16.0 |
| Rohu | 13.3 | 9 | 473.67 | 10.3 |
| Mrigal | 6.6 | 9 | 291.67 | 17.8 |
| | | | | 44.1 |

Total quantity of fish harvested = 44.1 kg
 Gross production = 441.0 kg/ha/9 months
 Net production = 396 kg/ha/9 months

* Expenditure for production of per kg of fish = Rs. 7.23

* Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of repairs & maintenance, cost of netting.

ALL INDIA COORDINATED RESEARCH PROJECT ON COMPOSITE FISH CULTURE AND
FISH SEED PRODUCTION

Sub-centre : Sunkesula (Andhra Pradesh)
(State/Central collaboration)

Location of the Pond : Sunkesula Fish Farm, Kurnool District, A.P.
Area of the Pond : 0.2 ha (Pond No. II) Date of stocking : 25-2-72
Experiment No. I : Date of conclusions : 29-10-72
Duration : One year.

| Items of inputs | Quantity(kg)/ ha | Actual quantity applied (kg) | Purchased at the rate of (Rs.) | Expenditure |
|--|---|---------------------------------------|---|-------------|
| Urea | 180.0 | 36.0 | 99.00/q | 35.64 |
| Superphosphate | 225.0 | 45.0 | 40.89/q | 18.40 |
| Muriate of potash | 22.5 | 4.5 | 100.00/q | 4.50 |
| Cattle dung | 4685.0 | 937.0 | 6.83/q | 64.00 |
| Rice bran | 2500.0 | 500.0 | 46.13/q | 230.66 |
| Groundnut oil cake | 1981.5 | 396.3 | 58.86/q | 233.27 |
| Lime | 200.0 | 40.0 | 21.25/q | 8.50 |
| Hydrilla, napier grass | 17500.0 | 3500.0 | - | - |
| etc. | | | | |
| Supplementary feeding @ of 1-2% of the body weight | | | | |
| Fingerlings | 5000/ha C 3.15: R 3.0: M 1.25: Cc 1.25 Gc 1.0: Gourami 0.35, | | | 52.19 |
| | | | | 647.16 |

Growth of fishes:

| Species | Initial wt. (g) | Period of rearing (months) | Avg. wt. attained (g) | Total weight harvested (kg) |
|-------------|--------------------|----------------------------------|-----------------------------|-----------------------------------|
| Catla | 5.0 | 8 | 194.37 | 55.0 |
| Rohu | 6.6 | 8 | 340.91 | 90.0 |
| Mrigal | 6.0 | 8 | 515.85 | 58.0 |
| Grass carp | 3.0 | 8 | 458.75 | 39.0 |
| Common carp | Less than 1 gram | 8 | 640.00 | 80.0 |
| Gourami | 20.0 | 8 | 110.00 | 2.75 |
| | | | | 324.75 |

Total quantity of fish harvested = 324.75 kg
Gross production = 1624 kg/ha/8 months or
2436 kg/ha/yr
Net production = 1595 kg/ha/8 months or
2392.5 kg/ha/yr.

* Expenditure for production of fish per kg = Rs. 1.99 ps.

* Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of repairs & maintenance, cost of netting, cost of Hydrilla & napier grass.

ALL INDIA COORDINATED RESEARCH PROJECT ON COMPOSITE FISH CULTURE AND
FISH SEED PRODUCTION
(C.I.F.R.I.)

Sub-centre : Sunkesula (Andhra Pradesh)
(State/Central collaboration)

Location of the Pond : Sunkesula Fish Farm, Kurnool District., A.P.
Area of the pond : 0.15 ha (Pond I) Date of stocking: 8-3-1973
Experiment No. II. : Date of conclusion: 22-3-1974
Duration : One year

| Items of inputs | Quantity(kg)/ha | Actual quantity applied (kg) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
|--|---|------------------------------|--------------------------------|-------------------|
| Urea | 220 | 33.0 | 109.00/q | 35.97 |
| Single super phosphate | 275 | 41.25 | 44.78/q | 18.47 |
| Muriate of potash | 23.4 | 3.50 | 100.00/q | 3.50 |
| Cattle dung | 6034.0 | 905.00 | 8.00 | 72.40 |
| Rice bran | 2947.0 | 442.00 | 72.00/q | 318.25 |
| Groundnut oil cake | 3117.0 | 467.50 | 146.00/q | 682.55 |
| Supplementary feeding done @ 1-2% of the body weight | | | | |
| Fingerlings | 5742/ha, C 2.59: R 2.59: M 0.86: Cc 2.59 : Sc 1.37 | | | 28.13 |
| | | | | 1159.27 |

Growth of fishes:

| Special | Initial weight (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|---|--------------------|----------------------------|----------------------|-----------------------------|
| Catla | 13.33 | 12 | 485.7 | 85.0 |
| Rohu | 13.33 | 12 | 442.7 | 99.6 |
| Mrigal | 20.00 | 12 | 504.0 | 12.6 |
| Silver carp | 23.30 | 81 days | 208.6 | 12.1 |
| Common carp | 26.70 | 12 | 386.6 | 87.0 |
| Common carp juveniles from natural breeding | | | - | 45.5 |
| | | | | 341.8 |

Total quantity of fish harvested = 341.8 kg
Gross production = 2255.8 kg/ha/yr
Net production = 2145.8 kg/ha/yr

* Expenditure for production of per kg of fish : Rs. 3.39

* Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of maintenance and repairs, cost of netting.

ALL INDIA COORDINATED RESEARCH PROJECT ON COMPOSITE FISH CULTURE AND
FISH SEED PRODUCTION

(C.I.F.R.I.)

Sub-centre : Sunkesula (Andhra Pradesh)

(State/Central collaboration)

Location of the pond : Sunkesula Fish Farm, Kurnool District, A.P.

Area of the pond : 0.2 ha (Pond No.II) Date of stocking: 2.6.1973

Experiment No. II : Date of conclusion: 3.6.1974.

Duration : One year.

| Items of inputs | Quantity(kg)/ ha | Actual quantity applied (kg) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
|--|---------------------|---------------------------------------|---|----------------------|
| Single superphosphate | 300.0 | 60.0 | 46.00/q | 27.60 |
| Muriate of potash | 24.5 | 4.9 | 100.00/q | 4.90 |
| Ammonium sulfate | 450.0 | 90.0 | 56.00/q | 50.40 |
| Cattle dung | 5175.0 | 1035.0 | 8.00/q | 82.80 |
| Rice bran | 2800.0 | 560.0 | 72.55/q | 406.25 |
| Ground nut oil cake | 2487.5 | 497.5 | 144.55/q | 719.09 |
| Supplementary feeding done @ 1.2% of the body weight | | | | |
| Fingerlings | 5870/ha | C 2.84: R 3.07: M 1.02: Co 3.07 | | 39.40 |
| | | | | 1330.44 |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|--|--------------------|----------------------------------|----------------------------|-----------------------------------|
| Catla | 11.0 | 12 | 358.2 | 78.1 |
| Rohu | 22.7 | 12 | 516.0 | 173.9 |
| Mrigal | 33.3 | 12 | 929.9 | 99.5 |
| Common carp | 23.6 | 12 | 273.8 | 98.6 |
| Juveniles of common carp from natural breeding | | | | 70.3 |
| | | | | 520.4 |

Total quantity of fishes harvested = 520.4 kg

Gross production = 2602.0 kg/ha/yr

Net production = 2480.0 kg/ha/yr

*Expenditure for production of per kg of fish : Rs. 2.56

5 lakhs of common carp fry produced and handed over to the State Fisheries, Department.

* Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting.

ALL INDIA COORDINATED RESEARCH PROJECT ON COMPOSITE FISH CULTURE AND
FISH SEED PRODUCTION

(C.I.F.R.I.)

CASE STUDY - 105

Sub-centre : Badampudi (Andhra Pradesh)

(State/Central collaboration)

Location of the pond : Badampudi Fish Farm, West Godavari District., A.P.
Area of the pond : 0.12 ha (Pond No. III) Date of stocking : 16/17.12.74
Experiment No. III : Date of conclusion: 17.12.75
Duration : One year

| Items of inputs | Quantity (kg)/ ha | Actual quantity applied (kg) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
|--|----------------------|---------------------------------------|---|----------------------|
| Lime | 581.00 | 70.00 | 50.00/q | 35.00 |
| Cattle dung | 10790.00 | 1300.00 | 8.00/q | 104.00 |
| Ammonium sulphate | 149.40 | 18.00 | 93.77/q | 16.88 |
| Single superphosphate | 199.20 | 24.00 | 110.00/q | 26.40 |
| Urea | 104.58 | 12.60 | 109.44/q | 13.79 |
| Muriate of potash | 35.86 | 4.32 | 123.37/q | 5.33 |
| Fingerlings | 6000 nos./ha | C1.0:R 0.5:M1.0:Sc 2.0:Gc 2.5:Cc 3.0 | | 42.52 |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Groundnut oil cake | 2291.70 | 275.00 | 111.38/q | 306.30 |
| Rice bran | 2808.30 | 337.00 | 96.38/q | 324.80 |
| Hydrilla | 134500.00 | 16140.00 | - | - |
| | | | Total | 875.02 |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|-------------|--------------------|----------------------------------|----------------------------|-----------------------------------|
| Catla | 9.0 | 12 | 520.8 | 25.00 |
| Rohu | 10.8 | 12 | 770.3 | 41.60 |
| Mrigal | 10.4 | 12 | 1043.0 | 54.25 |
| Silver carp | 15.7 | 12 | 936.9 | 100.25 |
| Grass carp | 6.9 | 12 | 2125.0 | 140.25 |
| Common carp | 6.9 | 12 | 1536.5 | 63.00 |
| | | | Total | 424.35 |

Total quantity of fish harvested = 424.35 kg

Gross production = 3536.25 kg/ha/yr

Net production = 3480.80 kg/ha/yr

* Expenditure for production of per kg of fish = Rs. 2.06

* Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting, cost of hydrilla.

ALL INDIA COORDINATED RESEARCH PROJECT ON COMPOSITE FISH CULTURE AND
FISH SEED PRODUCTION

(C.I.F.R.I.)

Sub-centre: Badampudi (Andhra Pradesh)
(State/Central collaboration)

Location of the pond : Badampudi Fish Farm, West Godavari District, A.P.
 Area of the pond : 0.12 ha (Pond No. IV) Date of stocking: 16/17.12.74
 Experiment No. III : Date of conclusion: 17.12.1975
 Duration : One year.

| Items of inputs | Quantity (kg)/ha | Actual quantity applied (kg) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
|--|---|---------------------------------------|---|----------------------|
| Lime | 500.00 | 60.00 | 50.00/q | 30.00 |
| Cattle dung | 16250.00 | 1950.00 | 8.00/q | 156.00 |
| Ammonium sulphate | 149.40 | 18.00 | 93.77/q | 16.88 |
| Single superphosphate | 225.00 | 27.00 | 110.00/q | 29.70 |
| Urea | 104.58 | 12.60 | 109.44/q | 13.79 |
| Muriate of potash | 40.00 | 4.80 | 123.54/q | 5.93 |
| Fingerlings | 6000 nos/ha, C 1.0:R 0.5: M 1.0: Sc 2.0: Gc 2.5 : Gc 3.0 | | | 42.52 |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Groundnut oil cake | 2291.70 | 275.00 | 111.38/q | 306.30 |
| Rice bran | 2808.30 | 337.00 | 96.38/q | 324.80 |
| Hydrilla grass | 134500.00 | 16140.00 | - | - |
| | | | Total | 925.92 |

Growth of fishes

| Species | Initial weight (g) | Period of rearing (months) | Av. weight attained (g) | Total weight harvested (kg) |
|-------------|--------------------------|----------------------------------|-------------------------------|-----------------------------------|
| Catla | 9.0 | 12 | 547.9 | 25.75 |
| Rohu | 11.7 | 12 | 891.9 | 33.00 |
| Mrigel | 11.1 | 12 | 903.9 | 57.85 |
| Silver carp | 12.2 | 12 | 1247.9 | 149.75 |
| Grass carp | 8.3 | 12 | 1935.5 | 174.20 |
| Common carp | 5.7 | 12 | 711.8 | 60.50 |
| | | | Total | 501.05 |

Total quantity of fish harvested = 501.05 kg
 Gross production = 4175.40 kg/ha/yr
 Net production = 4123.30 kg/ha/yr

* Expenditure for production of per kg fish = Rs. 1.85

* Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting, cost of hydrilla.

ALL INDIA COORDINATED RESEARCH PROJECT ON COMPOSITE FISH CULTURE AND
FISH SEED PRODUCTION
(C.I.F.R.I.)

Sub-centre : Badampudi (Andhra Pradesh)
(State/Central collaboration)

Location of the pond : Badampudi Fish Farm, West Godavari District, A.P.
Area of the pond : 0.24 ha (Pond No.II) Date of stocking: 4/28.1.1975
Experiment No. III : Date of conclusion: 4.1.1976
Duration : One year.

| Items of inputs | Quantity (kg)/ha | Actual quantity applied (kg) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
|--|---------------------|--|---|----------------------|
| Lime | 200.00 | 48.00 | 50.00/q | 24.00 |
| Cattle dung | 10000.00 | 2400.00 | 8.00/q | 192.00 |
| Ammonium sulphate | 234.16 | 56.20 | 93.67/q | 52.66 |
| Single superphosphate | 300.00 | 72.00 | 110.00/q | 79.20 |
| Urea | 120.00 | 28.80 | 107.90/q | 31.09 |
| Muriate of potash | 52.16 | 12.52 | 123.40/q | 15.45 |
| Fingerlings | 6000 nos./ha | C 2.9: R 2.0: M 1.5: Cc 2.5: Sc 1.1 | | 59.02 |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Groundnut oil cake | 2271.00 | 545.00 | 111.39/q | 607.07 |
| Rice bran | 2813.00 | 675.00 | 96.38/q | 650.57 |
| | | | Total | 1711.06 |

Growth of fishes :

| Species | Initial weight (g) | Period of rearing (months) | Av. weight attained (g) | Total weight harvested (kg) |
|-------------|--------------------------|----------------------------------|-------------------------------|-----------------------------------|
| Catla | 18.7 | 12 | 290.4 | 42.40 |
| Rohu | 7.1 | 12 | 302.3 | 79.10 |
| Mrigal | 12.0 | 12 | 645.9 | 118.20 |
| Cyprinus | 4.0 | 12 | 1391.3 | 96.00 |
| Silver carp | 18.0 | 11.2 | 943.2 | 103.75 |
| | | | Total | 439.45 |

Total quantity of fish harvested = 439.45 kg
Gross production = 1832.50 kg/ha/yr
Net production = 1763.00 kg/ha/yr

* Expenditure for production of per kg fish = Rs. 3.90

* Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting.

ALL INDIA COORDINATED RESEARCH PROJECT ON COMPOSITE FISH CULTURE AND
FISH SEED PRODUCTION
(C.I.F.R.I.)

Sub-centre : Badampudi (Andhra Pradesh)
(State/Central collaboration)

Location of the pond : Badampudi Fish Farm, West Godavari District, A.P.
Area of the pond : 0.24 ha (Pond I) Date of stocking : 4.1.75
Experiment No. III : Date of conclusion : 4.1.76
Duration : One year

| Items of inputs | Quantity (kg)/ha | Actual quantity applied | Purchased at the rate of (kg) | Expenditure (Rs.) |
|-----------------------|---------------------|-------------------------------|--|----------------------|
| Lime | 500.00 | 120.00 | 50.00/q | 60.00 |
| Cattle dung | 16,250.00 | 3900.00 | 8.00/q | 312.00 |
| Ammonium sulphate | 241.08 | 57.40 | 93.67/q | 53.75 |
| Single superphosphate | 300.00 | 72.00 | 110.00/q | 79.20 |
| Urea | 120.00 | 28.80 | 107.90/q | 31.08 |
| Muriate of potash | 52.16 | 12.52 | 123.40/q | 15.45 |
| Fingerlings | 6000 Nos. | C 4.0:R 2.0:M 1.5: Cc 2.5 | | 51.12 |

Supplementary feeding done at the rate of 1-2% of body weight

| | | | | |
|--------------------|---------|--------|----------|---------|
| Groundnut oil cake | 2271.00 | 545.00 | 111.39/q | 607.08 |
| Rice bran | 2813.00 | 675.00 | 96.38/q | 650.58 |
| | | | | 1860.26 |

Growth of fishes :

| Species | Initial weight (g) | Period of rearing (months) | Av. weight attained (g) | Total weight harvested (kg) |
|----------|--------------------------|----------------------------------|-------------------------------|-----------------------------------|
| Catla | 8.8 | 12 | 387.8 | 124.10 |
| Rohu | 11.8 | 12 | 510.8 | 144.55 |
| Mrigal | 11.1 | 12 | 662.0 | 143.65 |
| Cyprinus | 4.5 | 12 | 1926.8 | 79.00 |

(Misc. species of 19 kg obtained in harvesting added to
the production) 510.30

Total quantity of fish harvested = 510.30 kg
Gross production = 2126.25 kg/ha/yr
Net production = 2075.75 kg/ha/yr.

* Expenditure for production of per kg fish = Rs. 3.65

* Does not include rental value, wages and salaries, interest on
working capital, depreciation of farm equipment, cost of repairs
and maintenance, cost of netting.

FISHERIES DEPARTMENT, GOVERNMENT OF PONDICHERRY
 COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT GOVERNMENT
 FISH FARM, YANAM DURING 75-76

Location of the pond : Govt. Fish Farm, Yanam Commune
 (Union Territory of Pondicherry)

Area : 0.3 ha

| Items of input | Quantity (kg)/ha | Actual quantity applied (kg) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
|--|------------------|------------------------------|--------------------------------|-------------------|
| Cowdung | 1000 | 300 | Collected departmentally | Nil |
| Fingerlings | - | 3100 | - | 107.25 |
| Supplementary feed @ 1.2% of body weight | | | | |
| Rice bran | - | 262 | 0.65/kg | 170.00 |
| Oil-cake | - | 30 | 1.70/kg | 51.00 |
| | | | | 328.25 |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|---------|-----------------|----------------------------|----------------------|-----------------------------|
| Catla | 35 | 6 | 400 | 40 |
| Rohu | 20 | 6 | 100 | 50 |
| Mrigal | 20 | 6 | 100 | 40 |
| Labeo | 15 | 6 | 100 | 40 |
| | | | | 170 |

Total quantity of fish harvested = 170 kg
 Gross production = 567 kg/ha/6 months

* Cost of production per kg of fish = Rs. 1.93

* Does not include rental, wages and salaries, interest on working capital, depreciation of farm equipment, cost of netting.

CASE STUDY - 110

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
(I.C.A.R.)
BARRACKPORE, WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT POONA CENTRE
DURING 1972

(State/Central collaboration)

Location of the pond : Hadapsar fish farm, Poona (Maharashtra)

Area : 0.31 ha (Pond - I Expt. - I)

| Items of inputs | Quantity (kg)/ha | Actual quantity applied (kg) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
|--|------------------|------------------------------|--|--|
| Lime | 500 | 162.5 | 42.00/q | 68.25 |
| Cowdung | 6,452 | 2,000.0 | 3.50/q | 70.00 |
| Amm. sulphate | 277 | 85.8 | 63.00/q | 54.05 |
| Single superphosphate | 207 | 64.0 | 40.00/q | 25.60 |
| Muriate of potash | 34 | 10.4 | 60.00/q | 6.24 |
| Fingerlings | 5,210 nos/ha | 1,615nos | C 1.0: R 3.0: M 1.24:Cal 0.31: Cc 1.24:Sc 2.48: Gc 0.73 | 97.68 (Cost includes only of Indian carps & Com. carp). |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Groundnut oil cake | 2,516 | 780.0 | 80.00/q | 624.00 |
| Rice bran | 2,290 | 710.0 | 30.00/q | 213.00 |
| Weeds | 13,510 | 4,188.0 | 2.00/q | 84.00 |
| Toxicide | - | - | - | 5.00 |
| Netting | | not included | | |
| | | | | 1,247.82 |

Growth of fishes:

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) |
|-------------|-----------------|----------------------------|----------------------|-----------------------------|
| Catla | 55.0 | 8 | 556 | 59.92 |
| Rohu | 24.0 | 8 | 211 | 91.06 |
| Mrigal | 9.5 | 8 | 443 | 88.51 |
| Calbasu | 14.0 | 8 | 198.2 | 9.32 |
| Common carp | 11.3 | 8 | 833.6 | 157.65 |
| Silver carp | 6.9 | 8 | 578.0 | 203.48 |
| Grass carp | 29.6 | 8 | 774.5 | 85.19 |
| | | | | 695.13 |

Total quantity of fish harvested = 695.13 kg
 Gross production = 2242.4 kg/ha/8 months
 Net production = 3210 kg/ha/year

* Cost of production per kg of fish = Rs. 1.80

* Does not include rental, wages and salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
 (I.C.A.R.)
 BARRACKPORE : WEST BENGAL

CASE
 STUDY-111

COST STRUCTURE OF COMPOSITE FISH CULTURE CON-
 DUCTED AT POONA CENTRE DURING 1973
 (Pond-2, Expt-1)
 (State Central Collaboration)

Location of the pond : Hadapsar fish farm, poona (Maharashtra)

Area : 0.31 ha

| Items of inputs | Quantity/ha | Actual quantity applied (Kg) | Purchased at the rate of (Rs) | Ex- ture (Rs) |
|---|-------------|------------------------------|-------------------------------|------------------|
| Lime | 524 Kg | 162.5 | 41.00/q | 66.63 |
| Cowdung | 3629 Kg | 1125.0 | 3.50/q | 39.37 |
| Single super phosphate | 284 Kg | 88.0 | 45.00/q | 39.60 |
| Muriate of potash | 46 Kg | 14.3 | 60.00/q | 8.58 |
| Urea | 222.5 Kg | 7.0 | 100.00/q | 7.00 |
| Suphala | 203 Kg | 63.0 | 95.00/q | 59.35 |
| Fingerlings | 5000 nos/ha | 1550 nos | C 1.3:R 1.5: | 124.21 |
| Supplementary feeding done @ 1-2% body weight | | | M 2.0:Cc 5.2 | |
| Groundnut oil cake | 5413 Kg | 1678.0 | 140.00/q | 2349.20 |
| Wheat bran | 555 Kg | 172.0 | 40.00/q | 68.80 |
| Weeds | - | - | - | Nil |
| Toxicide | - | - | - | 5.00 |
| Netting | - | Not included | - | - |
| | | | Total - | Rs.2768.24 |

Growth of fishes:

| Species | Initial weight (g) | Period of rearing (months) | Average weight attained (g) | Total weight harvested (Kg) |
|-------------|--------------------|----------------------------|-----------------------------|-----------------------------|
| Catla | 22 | 8 | 1486.6 | 151.63 |
| Rohu | 28 | 8 | 389.7 | 90.81 |
| Mrigal | 12 | 8 | 407.2 | 132.76 |
| Common carp | 32 | 8 | 435.4 | 320.44 |
| | | | Total - | 695.64 |

Total quantity of fish harvested = 695.64 Kg
 Gross production = 2244 Kg/ha/8 months

- * Cost of production per Kg of fish - Rs.3.98
- * Does not include rental, wages and salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting.

EST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT POONA CENTRE
DURING 1972

Pond III (Expt-I)

(State Central Collaboration)

Location of the pond : Hadapsar Fish Farm, Poona, (Maharashtra)

Area : 0.31 ha

| Items of inputs | Quantity/ha | Actual quantity applied (kg) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
|---|--------------|------------------------------|---|-------------------|
| lime | 500 kg | 162.5 | 42.00/q | 68.25 |
| cowdung | 6,452 kg | 2,000.0 | 3.50/q | 70.00 |
| mm. sulphate | 277 kg | 85.8 | 63.00/q | 54.05 |
| single super phosphate | 207 kg | 64.0 | 40.00/q | 25.60 |
| uriate of potash | 34 kg | 10.4 | 60.00/q | 6.24 |
| fingerlings | 5,210 nos/ha | 1,615 nos | | 97.68 |
| | | | C1.0:R 3.0:M 1.24:Cal 0.31:(Cost Cc 1.24:Sc 2.48:Gc 0.73 includes only of Indian carps & Common carp) | |
| supplementary feeding done 1-2% of body weight | | | | |
| roundnut oil cake | 2,420 kg | 750.0 | 80.00/q | 600.00 |
| rice bran | 2,258 kg | 700.0 | 30.00/q | 210.00 |
| seeds | 13,194 kg | 4,090.0 | 2.00/q | 82.00 |
| oxicide | | | | Nil |
| netting | | not included | | |
| | | | Total Rs. | 1,213.62 |

Growth of fishes :

| Species | Initial Wt. (g) | Period of rearing (months) | Av. Wt. attained (g) | Total weight harvested (g) |
|-------------|-----------------|----------------------------|----------------------|----------------------------|
| catla | 55.0 | 8 | 464.7 | 50.59 |
| chu | 24.0 | " | 254.5 | 98.77 |
| rigal | 9.5 | " | 342.2 | 36.23 |
| albasu | 14.0 | " | 268.0 | 13.46 |
| common carp | 11.3 | " | 799.0 | 123.04 |
| silver carp | 6.9 | " | 792.1 | 225.28 |
| rass carp | 29.6 | " | 1,158.0 | 134.42 |
| | | | | 681.79 |

Total quantity of fish harvested - 681.79 kg

Gross production - 2199.3 kg/ha/8 months

Cost of production per kg of fish - Rs. 1.78

Does not include rental, wages and salaries, interest on working capital depreciation of farm equipment, cost of repairs and maintenance, cost of netting.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
 (I.C.A.R)
 BARRACKPORE : WEST BENGAL

Case
 study-113

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT POONA CENTRE
DURING 1973

(Pond -4, Expt -I)

(State Central Collaboration)

Location of the pond : Hadapsar fish farm, poona.(Maharashtra)

Area : 0.31 ha

| Items of inputs | Quantity/ ha | Actual quantity applied (Kg) | Purchased at the rate of (Rs.) | Expendi- ture.(Rs.) |
|---|-----------------|---------------------------------------|---|------------------------|
| Lime | 524 Kg | 162.5 | 41.00/q | 66.63 |
| Cowdung | 3,629 Kg | 1,125.0 | 3.50/q | 39.37 |
| Single super phosphate | 232 Kg | 72.0 | 45.00/q | 32.40 |
| Muriate of potash | 38 Kg | 11.8 | 60.00/q | 7.08 |
| Urea | 22.5 Kg | 7.0 | 100.00/q | 7.00 |
| Suphala | 106 Kg | 33.0 | 95.00/q | 31.35 |
| Fingerlings | 5,000 nos/ha | 1,550 nos | 4.00/R 1.0: | 135.34 |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Groundnut oil cake | 6,994 Kg | 2,168.0 | 140.00/q | 3,035.20 |
| Wheat bran | 129 Kg | 40.0 | 40.00/q | 16.00 |
| Weeds | - | - | - | Nil |
| Toxicide | - | - | - | Nil |
| Netting | - | Not included | | |
| | | | Total | Rs.3,370.37 |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av.wt. attained (g) | Total weight harvested (Kg) |
|-------------|--------------------|----------------------------------|---------------------------|-----------------------------------|
| Catla | 27 | 8 | 430.8 | 214.11 |
| Rohu | 29 | " | 368.8 | 102.16 |
| Mrigal | 17 | " | 691.4 | 170.77 |
| Common carp | 94 | " | 555.0 | 298.63 |
| | | | Total | 785.67 |

Total quantity of fish harvested - 785.67 Kg
 Gross production - 2534 Kg/ha/8 months

*Cost of production per Kg of fish - Rs.4.29

*Does not include rental, wages and salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE CASE STUDY-114
 (I.C.A.R.)
 BARRACKPORE : WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT POONA CENTRE DURING 1973
 (POND-I, EXPT-II)

(STATE CENTRAL COLLABORATION)

Location of the pond : Hadapsar fish farm, Poona (Maharashtra)

Area : 0.31 ha

| Items of inputs | Quantity/ ha | Actual quantity applied (Kg) | Purchased at the rate of (Rs) | Expendi- ture (Rs) |
|---|-----------------|--|--|--|
| Lime | 524 Kg | 162.5 | 41.00/q | 66.63 |
| Cowdung | 4435 Kg | 1375.0 | 3.50/q | 48.13 |
| Single super phosphate | 284 Kg | 88.0 | 45.00/q | 39.60 |
| Muriate of potash | 46 Kg | 14.3 | 60.00/q | 8.58 |
| Urse a | 22 Kg | 7.0 | 100.00/q | 7.00 |
| Suphala | 203 Kg | 63.0 | 95.00/q | 59.85 |
| Fingerlings | 5000 nos/ha | 1551 nos C 1.0:R 1.0:M 1.0: Cc 1.5:Sc 3.0:Gc 1.5 | | 70.71 (excluding the cost of silver carp and grass carp) |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Groundnut oil cake | 8652 Kg | 2682.0 | 140.00/q | 3754.80 |
| Wheat bran | 839 Kg | 260.0 | 40.00/q | 104.00 |
| W e a d s | 53258 Kg | 16510.0 | 2.30/q | 379.50 |
| Toxicide | | | | 5.00 |
| Netting | | not included | | |
| | | | Total - | Rs.4543.80 |

Growth of fishes:

| Species | Initial Weight (g) | Period of rearing (months) | Average weight attained (g) | Total weight harvested (Kg) |
|-------------|--------------------------|----------------------------------|--------------------------------------|--------------------------------------|
| Catla | 44 | 10 | 705.5 | 85.38 |
| Rohu | 31 | 10 | 558.8 | 105.18 |
| Mrigal | 18 | 10 | 750.8 | 102.86 |
| Common carp | 35 | 10 | 753.3 | 275.47 |
| Silver carp | 71 | 10 | 951.2 | 433.74 |
| Grass carp | 51 | 10 | 1722.2 | 346.8 |
| | | | | Rs.1350.81 |

Total quantity of fish harvested - 1350.80 Kg

Gross Production - 4357 Kg/ha/10 months

* Cost of production per Kg of fish - Rs.3.36

* Does not include rental, wages and salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
 (I.C.A.R)
 BARRACKPORE : WEST BENGAL

CASE
 STUDY-115

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT POONA
CENTRE DURING 1973

(Pond-3, Expt-II)

(State Central Collaboration)

Location of the Pond : Hadapsar Fish Farm, Poona (Maharashtra)
 Area : 0.31 ha

| Items of inputs | Quantity/ha | Actual quantity applied (kg) | Purchased at the rate of (Rs) | Expenditure (Rs) |
|--|-------------|--|--|------------------|
| Lime | 524 kg | 162.5 | 41.00/q | 66.63 |
| Cowdung | 4,033 kg | 1,250.0 | 3.50/q | 43.75 |
| Single super phosphate | 284 kg | 88.0 | 45.00/q | 39.60 |
| Muriate of potash | 46 kg | 14.3 | 60.00/q | 8.58 |
| Urea | 22.5 kg | 7.0 | 100.00/q | 7.00 |
| Suphala | 203 kg | 63.0 | 95.00/q | 59.85 |
| Fingerlings | 5000 nos/ha | 1,551 nos | | 76.41 |
| | | C 1.0:R 1.0:M 1.0: Cc 3.1:Sc 2.4:Gc 1.5 | (excluding the cost of silver carp & grass carp) | |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Groundnut oil cake | 8,574 kg | 2,658.0 | 140.00/q | 3,721.20 |
| Wheat bran | 839 kg | 260.0 | 40.00/q | 104.00 |
| Weeds | | 15,982.0 | 2.30/q | 370.00 |
| Toxicide | | — | — | Nil |
| Netting | | not included | | |
| | | | Total Rs. | <u>4,497.02</u> |

Growth of fishes :

| Species | Initial Wt. (g) | Period of rearing, (months), | Av. Wt. attained (g) | Total weight harvested (Kg) |
|-------------|--------------------|---------------------------------|-------------------------|--------------------------------|
| Catla | 33 | 9 | 833.9 | 76.72 |
| Rohu | 32 | " | 626.4 | 88.32 |
| Mrigal | 39 | " | 914.4 | 120.70 |
| Common carp | 46 | " | 742.4 | 339.29 |
| Silver carp | 39 | " | 1,006.2 | 348.16 |
| Grass carp | 67 | " | 1,445.1 | 328.83 |
| | | | Total | <u>1,301.22</u> |

Total quantity of fish harvested - 1301.22 kg
 Gross production - 4197 kg/ha/9months

* Cost of production per Kg of fish - Rs.3.46

* Does not included rental, wages and salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
(I.C.A.R)
BARRACKPORE : WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT POONA
CENTRE DURING 1974

(Pond-I, Expt -III)

(State Central Collaboration)

Location of the pond : Hadapsar fish farm, Poona.(Maharastra)

Area : 0.31 ha

| Items of inputs | Quantity/ ha | Actual quantity applied (kg) | Purchased at the rate of (Rs) | Expenditure (Rs) |
|---|-----------------|---------------------------------------|--|---|
| Lime | 521 Kg | 161.5 | 41.00/q | 66.22 |
| Cowdung | 2,516 Kg | 780.0 | 4.50/q | 35.10 |
| Single super phosphate | 129 Kg | 40.0 | 60.00/q | 24.00 |
| Muriate of potash | 29 Kg | 9.10 | 60.00/q | 5.46 |
| Suphalal | 135 Kg | 42.0 | 126.00/q | 52.92 |
| Fingerlings | 6,000 nos/ha | 1,860 nos | | 119.04 |
| | | | C 1.0:R 1.0:M 1.0: Cc 2.5:Sc 3.0:Gc 1.5 | (Cost excludes that of silver carp and grass carp) |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Groundnut oil cake | 3,269 Kg | 1,013.5 | 160.00/q | 1,621.60 |
| Wheat bran | 2,072 Kg | 642.2 | 47.00/q | 369.00 |
| Weeds | 43,929 Kg | 13,618.0 | 80.00/q 1.67/q | 228.00 |
| Toxicide | | | | 5.00 |
| Netting | | not included | | |
| | | | Total | 2,526.34 |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Average wt. attained (g) | Total weight harvested (kg) |
|-------------|--------------------|----------------------------------|--------------------------------|-----------------------------------|
| Catla | 10.2 | 6 | 507.3 | 82.70 |
| Rohu | 10.8 | " | 371.5 | 28.23 |
| Mrigal | 21.5 | " | 642.6 | 119.53 |
| Common carp | 66.7 | " | 768.7 | 326.85 |
| Silver carp | 31.9 | " | 756.6 | 415.12 |
| Grass carp | 30.5 | " | 1,001.0 | 257.24 |
| Misc | | " | | 26.65 |
| | | | Total | 1,256.32 |

Total quantity of fish harvested

- 1256.32

Gross production

- 4053 Kg/ha/6 month

*Cost of production per Kg of fish - Rs.2.00

*Does not include rental, wages and salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance cost of netting.(During 1974, 56,682 fingerlings were produced from Poona Centre)

(I.C.A.R.)

BARRACKPORE : WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT POONA CENTRE DURING
1974-1975
(Pond-2, Expt-II)

(State-Central Collaboration)

Location of the Pond : Hadapsar fish farm, Poona (Maharashtra)

Area : 0.31 ha.

| Items of inputs | Quantity/ ha | Actual quantity applied (Kg) | Purchased at the rate of (Rs) | Expenditure (Rs) |
|--|-----------------|--|--|--|
| Lime | 521 Kg | 161.5 | 41.00/q | 66.22 |
| Cowdung | 1677 Kg | 520.0 | 4.50/q | 23.40 |
| Single super phosphate | 77 Kg | 24.0 | 60.00/q | 14.40 |
| Muriate of potash | 17 Kg | 5.2 | 60.00/q | 3.12 |
| Sulphate | 77 Kg | 24.0 | 126.00/q | 30.24 |
| Fingerlings | 6000 nos/ha | 1860 nos | | 72.54 |
| | | C 2.68:R 1.00:M 2.00: Cc 3.72:Sc 0.60 | | (Cost of rohu & mrigal finger- lings only) |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Groundnut oil cake | 3268 Kg | 1013.0 | 160.00/q | 1620.80 |
| Wheat bran | 2842 Kg | 881.0 | 47.00/q 80.00/q | 647.38 |
| Weeds | - | - | - | - |
| Toxicide | - | - | - | - |
| Netting | | not included | | |
| | | Total - | | Rs. 2478.10 |

Growth of fishes:

| Species | Initial weight (g) | Period of rearing (months) | Average weight attained (g) | Total weight harvested (Kg) |
|---------------|--------------------------|----------------------------------|--------------------------------------|--------------------------------------|
| Catla | 11.4 | 8 | 432 | 100.80 |
| Rohu | 22.0 | 8 | 286 | 51.10 |
| Mrigal | 38.8 | 8 | 402 | 130.20 |
| Common carp | 43.5 | 8 | 361 | 246.95 |
| Silver carp | 44.6 | 8 | 1527 | 163.45 |
| Miscellaneous | - | 8 | - | 70.25 |
| | | Total - | | Rs. 762.75 |

Total quantity of fish harvested - 762.75 Kg

Gross production - 2460 Kg/ha/8 months

* Cost of production per Kg of fish - Rs.3.25

* Does not include rental, wages and salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE

(I.C.A.R.)

BARRACKPORE : WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT POONA
CENTRE DURING 1975

(Pond -I, Expt -IV)

(State Central Collaboration)

Location of the pond : Hadapsar fish farm, Poona.(Maharashtra)

Area : 0.31 ha

| Items of inputs | Quantity/ ha | Actual quantity applied (Kg) | Purchased at the rate of (Rs) | Expenditure (Rs) |
|--|-----------------|---------------------------------------|---|--------------------------------------|
| Lime | 500 Kg | 155.0 | 45.00/q | 69.75 |
| Cowdung | 3,113 Kg | 965.0 | 4.50/q 5.50/q | 47.52 |
| Single super phosphate | 129 Kg | 40.0 | 112.00/q | 44.80 |
| Muriate of potash | 21 Kg | 6.5 | 60.00/q | 3.90 |
| Suphala | 97 Kg | 30.0 | 200.00/q | 60.00 |
| Fingerlings | 6,000 nos/ha | 1,860 nos | C 1.0:R 1.0:M 1.0 Cc 2.5:Sc 3.0:Gc 1.5 | 72.54 (Cost of Indian carps only) |
| Supplementary feeding done @1-2% of body weight | | | | |
| Groundnut oil-cake | 3,497 Kg | 1,074.0 | 160.00/q | 1,718.40 |
| Wheat bran | 1,987 Kg | 616.0 | 80.00/q | 492.80 |
| Weeds | 75,084 Kg | 23,276.0 | 1.64/q | 381.00 |
| Toxicide | | | | 5.00 |
| Netting | not included | | | |
| | | | Total | Rs.2,895.71 |

Growth of fishes :

| Species | Initial wt. | Period of rearing (months) | Average wt. attained (g) | Total weight harvested (kg) |
|-------------|-------------|-------------------------------|--------------------------------|--------------------------------|
| Catla | 38 | 6½ | 623.3 | 115.93 |
| Rohu | 29 | " | 564.2 | 104.95 |
| Mrigal | 28 | " | 754.9 | 138.90 |
| Common carp | 32 | " | 935.1 | 430.15 |
| Silver carp | 14 | " | 567.0 | 316.40 |
| Grass carp | 29 | " | 1,909.6 | 485.05 |
| Misc. | - | - | - | 57.00 |
| | | | Total | 1,648.38 |

Total quantity of fish harvested

- 16.48.38 Kg

Gross production

- 5317 Kg/ha/6½ months

*Cost of production per Kg of fish - Rs.1.76

*Does not include rental, wages and salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting.

(During 1975, 11,37,620 spawn were produced from Poona Centre)

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT POONA CENTRE DURING 1975-1976
(Pond-II, Expt-III)

(State Central Collaboration)

Location of the Pond : Hadapsar fish farm, Poona (Maharashtra)

Area : 0.31 ha

| Items of inputs | Quantity/ ha | Actual quantity applied (Kg) | Purchased at the rate of (Rs) | Expenditure (Rs) |
|---|-----------------|---|--|---------------------|
| Lime | 500 Kg | 155.0 | 45.00/q | 69.75 |
| Cowdung | 4,435 Kg | 1,375.0 | 4.5) } 5.5) q | 73.13 |
| Single super phosphate | 39 Kg | 12.0 | 112.00/q | 13.44 |
| Muriate of Potash | 8 Kg | 2.6 | 60.00/q | 1.56 |
| Suphala | 52 Kg | 16.0 | 200.00/q | 32.00 |
| Fingerlings | 6,000 nos/ha | 1,860 nos C 4.0:R 1.0: M 1.5:Cc 3.5 | | 276.67 |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Groundnut oil-cake | 5,942 Kg | 1,842.0 | 160.00/q } 118.00/q } 2,534.76 | |
| Wheat bran | 3,319 Kg | 1,029.0 | 35.00 } To } 80.00 } 667.01 | |
| Weeds | — | — | — | — |
| Toxicide | — | — | — | — |
| Netting | — | Not included | — | — |
| | | | Total | Rs. 3,668.32 |

Growth of fishes :

| Species | Initial wt. (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (Kg) |
|-------------|--------------------|----------------------------------|----------------------------|-----------------------------------|
| Catla | 52 | 9 3/4 | 554 | 412.100 |
| Rohu | 37 | " | 705 | 131.200 |
| Mrigal | 57 | " | 819 | 228.600 |
| Common carp | 41 | " | 715 | 465.400 |
| Misc. | — | — | — | 25.000 |
| | | | TOTAL | 1,262.300 |

Total quantity of fish harvested

1262.300 Kg

Gross Production

4072 Kg/ha/9 3/4 months

*Cost of Production per Kg of fish Rs.2.90

*Does not include rental, wages and salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting.

(During 1976, 16,28,400 spawn were produced from Poona centre)

ALL INDIA CO-ORDINATED RESEARCH PROJECT ON COMPOSITE FISH CULTURE AND FISH SEED PRODUCTION (C.I.F.R.I.)

CASE STUDY-120

Cost structure of composite fish culture conducted at Karnal centre during 1974

(State Central Collaboration)

Location of the pond - Karnal, Haryana.
Area - 0.23ha.

| Items of inputs | Actual quantity applied (kg) | Expenditure (Rs) |
|-------------------------|---------------------------------|---------------------|
| Mahua oil cake | — | — |
| Lime | — | — |
| Cowdung | 2300.00 | 57.50 |
| Amm. Sulphate | 14.35 | 8.03 |
| Single Superphosphate | 17.25 | 7.16 |
| Urea | 14.35 | 14.20 |
| Muriate of potash | 2.75 | 1.54 |
| Ground nut oil cake | 608.62 | 740.59 |
| Rice bran | 425.10 | 190.65 |
| Hydrilla X | 9158.00 | — |
| Napier grass X | — | — |
| Fingerlings (@ 4500/ha) | 920 | 76.26 |
| Water pump charges | 14½ hrs | 58.00 |
| Miscellaneous | — | 366.00 |
| Total expenditure | — | 1519.93 |

* Cost of production per Kg - Rs. 1.92

Gross production - 3448.5Kg/ha/6 months

Net production - 3127.8Kg/ha/6 months

* Does not include rental value, wages and salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of hydrilla and napier grass, cost of netting.

(During 1974 in addition to fish 71,300 of spawn and 16,888 of fingerlings were produced from Karnal Centre from 0.41/ha)

ALL INDIA CO-ORDINATED RESEARCH PROJECT ON COMPOSITE FISH
CULTURE AND FISH SEED PRODUCTION (CIFRI)

CASE STUDY-121

Cost structure of composite fish culture conducted at Karnal
centre during 1974

(State Central collaboration)

Location of the pond - Karnal, Haryana.
Area - 0.1ha.

| Items of inputs | Actual quantity applied (kg) | Expenditure (Rs) |
|----------------------------|---------------------------------|---------------------|
| Mahua oil cake | — | — |
| Lime | — | — |
| Cowdung | 1000.00 | 25.00 |
| Amm. Sulphate | 9.0 | 5.04 |
| Single Superphosphate | 15.0 | 6.75 |
| Urea | 9.0 | 8.91 |
| Muriate of potash | 2.4 | 1.34 |
| Ground nut oil cake | 442.50 | 938.33 |
| Rice bran | 311.05 | 129.26 |
| Hydrilla | 7829.00 | — |
| Napier grass | — | — |
| Fingerlings (@ 4500/ha) | 450 nos | 58.25 |
| Water pump charges | 11 hrs | 44.00 |
| Miscellaneous | — | 160.00 |
| Total fish produced | 560.4 | — |
| Total expenditure | — | 976.88 |
| *Cost of production per kg | — | 1.74 |
| Gross production | - 5603.9kg/ha/6 months | |
| Net production | - 5304.2kg/ha/6 months | |

*Does not include rental value, wages and salaries,
interest on working capital, depreciation of farm
equipment, cost of repairs and maintenance, cost
of hydrilla and napier grass, cost of netting.

ALL INDIA CO-ORDINATED RESEARCH PROJECT ON COMPOSITE FISH CULTURE
AND FISH SEED PRODUCTION (CIFRI)

CASE STUDY-122

Cost structure of composite fish culture conducted at Karnal centre during 1974

(State Central collaboration)

Location of the pond - Karnal, Haryana.
Area - 0.06ha.

| Items of inputs | Actual quantity applied (g) | Expenditure (Rs) |
|----------------------------|--------------------------------|---------------------|
| Mahua oil cake | — | — |
| Lime | — | — |
| Cowdung | 800.00 | 20.00 |
| Amm. Sulphate | 7.20 | 4.03 |
| Single Superphosphate | 12.00 | 5.40 |
| Urea | 7.20 | 7.12 |
| Muriate of Potash | 1.92 | 1.07 |
| Ground nut oil cake | 350.53 | 423.81 |
| Rice bran | 229.87 | 90.44 |
| Hydrilla | 6556.00 | — |
| Napier grass | — | — |
| Fingerlings (@ 4500/ha) | 360 nos | 46.34 |
| Water pump charges | 12½ hrs | 43.56 |
| Miscellaneous | — | 126.00 |
| Total fish produced | 471.48 | — |
| Total expenditure | — | 769.77 |
| *Cost of production per kg | — | 1.63 |
| Gross production | - 5893.5kg/ha/6 months. | |
| Net production | - 5585.7kg/ha/6 months. | |

*Does not include rental value, wages and salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of hydrilla and napier grass, cost of netting.

ALL INDIA CO-ORDINATED RESEARCH PROJECT ON COMPOSITE FISH CULTURE AND FISH SEED PRODUCTION (CIFRI)

CASE STUDY-123

Cost structure of composite fish culture conducted at Karnal centre during 1975

(State Central collaboration)

Location of the pond - Karnal, Haryana.
Area - 0.08ha.

| Items of inputs | Actual quantity applied (kg) | Expenditure (Rs) |
|-------------------------|---------------------------------|---------------------|
| Mahua oil cake | — | — |
| Lime | — | — |
| Cowdung | 1066.00 | 42.64 |
| Amm. Sulphate | 9.00 | 5.37 |
| Single Superphosphate | 16.00 | 6.72 |
| Urea | 9.60 | 19.20 |
| Muriate of Potash | 2.50 | 1.40 |
| Ground nut oil cake | 550.82 | 605.90 |
| Rice bran | 550.82 | 385.57 |
| Hydrilla | 9829.00 | — |
| Napier grass | — | — |
| Fingerlings (@ 4750/ha) | 380 nos | 11.40 |
| Water pump charges | 10 hrs | 40.00 |
| Miscellaneous | — | 40.00 |
| Total fish produced | 586.5 | — |
| Total expenditure | — | 1158.20 |

*Cost of production per kg of fish 1.97

Gross production - 7331.7kg/ha/8 months.

Net production - 7234.3kg/ha/8 months.

*Does not include rental value, wages and salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of hydrilla and napier grass, cost of netting.

ALL INDIA CO-ORDINATED RESEARCH PROJECT ON COMPOSITE FISH CULTURE
AND FISH SEED PRODUCTION (CIFRI)

CASE STUDY-124

Cost structure of composite fish culture conducted at Karnal centre during 1975

(State Central collaboration)

Location of the pond - Karnal, Haryana.

Area - 0.1ha.

| Items of inputs | Actual quantity applied (kg) | Expenditure (Rs) |
|------------------------------------|---------------------------------|---------------------|
| Mahua oil cake | — | — |
| Lime | — | — |
| Cowdung | 1320.00 | 52.80 |
| Amm. Sulphate | 12.00 | 0.72 |
| Single Superphosphate | 20.00 | 8.40 |
| Urea | 12.00 | 24.00 |
| Muriate of potash | 3.20 | 1.79 |
| Ground nut oil cake | 632.838 | 696.12 |
| Rice bran | 632.838 | 442.98 |
| Hydrilla Napier grass | 10070.00 | — |
| Fingerlings (@ 4750/ha) | 475 nos | 14.25 |
| Water pump charges | 14 hrs | 56.00 |
| Miscellaneous | — | 50.00 |
| Total fish produced | 619.00 | — |
| Total expenditure | — | 1353.06 |
| *Cost of production per kg of fish | | 2.18 |
| Gross production | ~ 6190kg/ha/8 months | |
| Net production | - 6140.6kg/ha/8 months | |

*Does not include rental value, wages and salaries interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of hydrilla and napier grass, cost of netting.

ALL INDIA CO-ORDINATED RESEARCH PROJECT ON COMPOSITE FISH CULTURE
AND FISH SEED PRODUCTION (CIFRI)

CASE STUDY-125

Cost study of composite fish culture conducted at Karnal centre
during 1975

(State Central collaboration)

Location of the pond - Karnal, Haryana.

Area - 0.23ha.

| Items of inputs | Actual quantity applied (kg) | Expenditure (Rs) |
|----------------------------|---------------------------------|---------------------|
| Mahua oil cake | — | — |
| Lime | — | — |
| Cowdung | 3067.0 | 122.68 |
| Amm. Sulphate | 27.6 | 15.45 |
| Single Superphosphate | 46.0 | 19.32 |
| Urea | 27.6 | 55.20 |
| Muriate of potash | 7.360 | 4.12 |
| Ground nut oil cake | 916.49 | 1008.13 |
| Rice bran | 916.49 | 641.54 |
| Hydrilla { | — | — |
| Napier grass } | — | — |
| Fingerlings (@ 4500/ha) | 1035 nos | 32.05 |
| Water pump charges | 19 hrs | 76.00 |
| Miscellaneous | | 100.00 |
| Total fish produced | 615.4 | — |
| Total expenditure | | 2073.49 |
| *Cost of production per kg | | 3.36 |

Gross production - 2675.6kg/ha/8 months

Net production - 2633.0kg/ha/8 months

*Does not include rental value, wages and salaries, interest on working capital, depreciation of farm equipment, cost of repairs and maintenance, cost of netting.

(During 1975, in addition of fish, 937,300 kg spawn and 32,094 fingerlings were produced from 0.41ha).

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
(ICAR) : BARRACKPORE : WEST BENGAL

CASE STUDY-126

Cost structure of composite fish culture conducted at Gujartal Fish Farm, Jaunpur during 1972-73

(State Central collaboration)

Location of pond - Gujartal Fish Farm, Jaunpur (U.P.).

Area - 0.09ha.

Pond No. - IV.

Period of rearing - 7½ months.

| Items of inputs | Quantity /ha | Actual quantity applied (kg) | Purchased at the rate of C. Rs | Expenditure (Rs) |
|--|--------------|------------------------------|--------------------------------|------------------|
| Mahua oil cake | — | — | — | — |
| Lime | 500kg | 45 | 0.27/kg | 12.15 |
| Cowdung | 6670kg | 600 | 2.59/100kg | 15.54 |
| Amm. Sulphate | 315kg | 2813 | — | — |
| Single Superphosphate | 175kg | 15.8 | — | 36.57 |
| Muriate of Potash | 28kg | 2.5 | — | — |
| Fingerlings (C ₄ :R ₃ :M ₃) | 5000kg | 45.0 | 40/1000kg | 18.00 |
| Mustard oil cake | 1715kg | 154.4 | 0.75/kg | 115.80 |
| Rice bran | 1715kg | 154.4 | 0.40/kg | 61.76 |
| Weeds | — | — | — | — |
| | | | TOTAL — | 259.82 |

Growth of fishes

| Species | Number stocked | Average initial weight (g) | Average final weight (g) | Total weight harvested fish (kg) |
|---------------|----------------|----------------------------|--------------------------|----------------------------------|
| Catla | 180 | 70.5 | 507.5 | 64.45 |
| Rohu | 135 | 4.1 | 184.7 | 24.85 |
| Mrigal | 135 | 3.0 | 423.2 | 31.35 |
| Silver carp | — | — | — | — |
| Grass carp | — | — | — | — |
| Common carp | — | — | — | — |
| Miscellaneous | — | — | — | — |
| Total | 450 | — | — | 120.65 |

Total quantity of fish harvested - 120.65kg/7½ months.

Gross production/ha - 1340kg/7½ months.

*Cost of production per kg of fish - Rs. 2.15

*Does not include rental, wages and salaries, depreciation of farm equipment, interest on working capital, cost of repairs and maintenance, cost of netting.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
(ICAR) : BARRACKPORE : WEST BENGAL

CASE STUDY-127

Cost structure of composite fish culture conducted at Gujartal Fish Farm, Jaunpur during 1972.73

(State Central collaboration)

Location of pond = Gujartal Fish Farm, Jaunpur (U.P.).
Area = 0.38ha.
Pond No. = III.
Period of rearing = 7½ months.

| Item of inputs | Quantity /ha | Actual quantity applied (kg) | Purchased at the rate of C. Rs | Expenditure (Rs) |
|------------------------|---|------------------------------|--------------------------------|------------------|
| Mahua oil cake | — | — | — | — |
| Lime | 510kg | 194 | 0.27/kg | 52.38 |
| Cowdung | 6660kg | 2531 | 2.59/100kg | 65.55 |
| Amm. Sulphate | 315kg | 119.7 | — | — |
| Single Super-phosphate | 175kg | 66.5 | — | — |
| Muriate of Potash | 28kg | 10.6 | — | — |
| Fingerlings | 5000 (C ₄ :R ₃ :M ₃) | 1900 | 40/1000 | 76.00 |
| Mustard oil cake | 1706kg | 648.15 | 0.75/kg | 486.11 |
| Rice bran | 1706kg | 648.15 | 0.40/kg | 259.26 |
| Weeds | — | — | — | — |
| | | | TOTAL | 1096.90 |

Growth of fishes

| Species | Number stocked | Average initial weight(g) | Average final weight(g) | Total weight of harvested fish (kg) |
|---------------|----------------|---------------------------|-------------------------|-------------------------------------|
| Catla | 760 | 60.13 | 337.2 | 240.98 |
| Rohu | 570 | 4.78 | 186.3 | 99.06 |
| Mrigal | 570 | 3.00 | 252.8 | 110.50 |
| Silver carp | — | — | — | — |
| Grass carp | — | — | — | — |
| Common carp | — | — | — | — |
| Miscellaneous | — | — | — | — |
| Total | 1900 | | | 204.60 |

Total quantity of fish harvested = 204.60 kg/7½ months.

Gross production/ha = 538kg/7½ months.

*Cost of production per kg of fish = Rs. 5.36

*Does not include rental, wages and salaries, depreciation of farm equipment, interest on working capital, cost of repairs and maintenance, cost of netting.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
(ICAR) : BARRACKPORE : WEST BENGAL

CASE STUDY-128

Cost structure of composite fish culture conducted at Gujartal Fish Farm, Jaunpur during 1972-73

(State Central collaboration)

Location of pond - Gujartal Fish Farm, Jaunpur (U.P.).
Area - 0.10ha.
Pond No. - II.
Period of rearing - 6½ months.

| Item of inputs | Quantity /ha | Actual quantity applied (kg) | Purchased at the rate of C. Rs. | Expenditure (Rs) |
|-----------------------|--------------|------------------------------|---|------------------|
| Mahua oil cake | | | | |
| Lime | 500kg | 50 | 0.27/kg | 13.50 |
| Cowdung | 5800kg | 580 | | |
| Amm. Sulphate | 270kg | 27 | | |
| Single Superphosphate | 150kg | 15 | | |
| Muriate of Potash | 24kg | 2.4 | | |
| Fingerlings | 5000kg | 500 | 35/1000kg (C 1.5:R 3:M 1.25: CC 1.25:SC 2:G C 1) | 17.66 |
| Mustard oil cake | 1225kg | 122.5 | 1.00/kg | 122.50 |
| Rice bran | 1225kg | 122.5 | 1.00/kg | 122.50 |
| Weeds | 62,250kg | 6225 | | |
| | | | TOTAL — | 311.81 |

Growth of fishes

| Species | Number stocked | Average initial weight (g) | Average final weight (g) | Total weight of harvested fish (kg) |
|---------------|----------------|----------------------------|--------------------------|-------------------------------------|
| Catla | 75 | 54.0 | 522.70 | 34.500 |
| Rohu | 150 | 7.7 | 196.70 | 29.500 |
| Mrigal | 62 | 3.2 | 408.60 | 13.075 |
| Silver carp | 100 | 23.7 | 983.00 | 98.300 |
| Grass carp | 50.0 | 66.0 | 1954.00 | 95.750 |
| Common carp | 63 | 19.8 | 792.00 | 49.900 |
| Miscellaneous | | | | |
| Total | 500 | | | 321.025 |

Total quantity of fish harvested - 321.03kg/6½ months.

Gross production/ha - 3210kg/7½ months.

*Cost of production per kg of fish - Rs. 0.97

*Does not include rental, wages and salaries, depreciation of farm equipment, interest on working capital, cost of repairs and maintenance, cost of netting, cost of weeds.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
(ICAR) : BARRACKPORE : WEST BENGAL

CASE STUDY-129

Cost structure of composite fish culture conducted at Gujartal Fish Farm, Jaunpur during 1972-73

(State Central collaboration)

Location of pond - Gujartal Fish Farm, Jaunpur (U.P.).
Area - 0.10ha.
Pond No. - I.
Period of rearing - 6½ months.

| Item of inputs | Quantity /ha | Actual quantity applied (kg) | Purchased at the rate of C. Rs | Expenditure (Rs) |
|-----------------------|--|------------------------------|--------------------------------|------------------|
| Mahua oil cake | — | — | — | — |
| Lime | 500 | 50 | 0.27/kg | 13.50 |
| Cowdung | 5800 | 580 | — | — |
| Amm. Sulphate | 270 | 27 | — | — |
| Single Superphosphate | 150 | 15 | — | — |
| Muriate of Potash | 24 | 2.4 | — | — |
| Fingerlings | 5000 (C 1.5:R 3:M 1.25:CC 1.25:SC 2:GC 1) | 500 | 35/1000kg | 17.66 |
| Mustard oil cake | 1225 | 122.5 | 1.00/kg | 122.50 |
| Rice bran | 1225 | 122.5 | 1.00/kg | 122.50 |
| Weeds | 56700 | 5670 | TOTAL — | 311.81 |

Growth of fishes

| Species | Number stocked | Average initial wt.(g) | Average final wt.(g) | Total weight of harvested fish (kg) |
|---------------|----------------|------------------------|----------------------|-------------------------------------|
| Catla | 75 | 54.0 | 412.7 | 27.65 |
| Rohu | 150 | 7.7 | 157.5 | 23.15 |
| Mrigal | 62 | 3.3 | 303.0 | 10.60 |
| Silver carp | 100 | 23.7 | 762.0 | 76.20 |
| Grass carp | 50 | 66.0 | 1666.3 | 81.65 |
| Common carp | 63 | 19.8 | 819.6 | 50.00 |
| Miscellaneous | — | — | — | — |
| Total | 500 | — | TOTAL — | 269.25 |

Total quantity of fish harvested - 269.25kg/6 months.

Gross production - 2692.50kg/ha/6 months.

*Cost of production per kg of fish - Rs. 1.16

*Does not include rental, wages and salaries, depreciation of farm equipment, interest on working capital, cost of repairs and maintenance, cost of netting, cost of weeds.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
(ICAR) : BARRACKPORE : WEST BENGAL

CASE STUDY-130

Cost structure of composite fish culture conducted at Gujartal Fish Farm, Jaunpur during 1973-74

(State Central collaboration)

Location of pond - Gujartal Fish Farm, Jaunpur (U.P.).
Area - 0.10ha.
Pond No. - VIII.
Period of rearing - 12 months.

| Item of inputs | Quantity /ha | Actual quantity applied | Purchased at the rate of C Rs | Expenditure (Rs) |
|-----------------------|----------------------------------|-------------------------|-------------------------------|------------------|
| Mahua oil cake | 700kg | 70 | 1.00/kg | 70.00 |
| Lime | 200kg | 20 | 0.27/kg | 5.40 |
| Cowdung | 10070kg | 1007 | — | — |
| Amm. Sulphate | 540kg | 54 | — | — |
| Single Superphosphate | 300kg | 30 | — | 65.10 |
| Muriate of Potash | 49kg | 4.9 | — | — |
| Fingerlings | 5000kg (C 4:R 2:M 1.5:CC 2.5) | 500 | — | 27.50 |
| Mustard oil cake | 6090kg | 609 | 0.75/kg | 456.75 |
| Rice bran | 5140kg | 514 | 0.50/kg | 257.00 |
| Weeds | — | — | — | — |
| | | | TOTAL — | 881.75 |

Growth of fishes

| Species | Number stocked | Average initial weight (g) | Average final weight (g) | Total weight of harvested fish |
|---------------|----------------|----------------------------|--------------------------|--------------------------------|
| Catla | 200 | 11 | 634 | 80.00 |
| Rohu | 100 | 8.5 | 447 | 38.50 |
| Mrigal | 75 | 8.0 | 620 | 43.40 |
| Silver carp | — | — | — | — |
| Grass carp | — | — | — | — |
| Common carp | 125 | 10.0 | 728 | 83.10 |
| Miscellaneous | — | — | — | 1.60 |
| Total | 500 | | | 246.60 |

Total quantity of fish harvested - 246.6kg/12 months.

Gross production/ha - 2466kg/12 months.

*Cost of production per kg of fish - Rs. 3.58

*Does not arise rental, wages and salaries, depreciation of farm equipment, interest on working capital, cost of repairs and maintenance, cost of netting.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
 (I.C.A.R.)
 BARRACKPORE, WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT GUJARTAL FISH FARM, JAUNPUR DURING 1973-74

(State/Central collaboration)

Location of pond : Gujartal Fish Farm, Jaunpur (U.P.)
 Area : 0.10 Pond No. VII Period of rearing: 12 months

| Item of input | Quantity (kg)/ha | Actual quantity applied (kg) | Purchased at the rate of Rs. (Rs.) | Expenditure |
|-----------------------|------------------|--------------------------------|------------------------------------|-------------|
| Mahua oil cake | 700 | 70 | 1.00/kg | 70.00 |
| Lime | 200 | 20 | 0.27/kg | 5.40 |
| Cowdung | 9230 | 923 | -) | |
| Ammonium sulphate | 538 | 53.8 | -) | |
| Single superphosphate | 359 | 35.9 | -) | 70.12 |
| Muriate of potash | 48 | 4.8 | -) | |
| Fingerlings | 5000 | 500 | - | 27.50 |
| | | (C 4 : R 2 : M 1.5 : Cc 2.5) | | |
| Mustard oil cake | 6988 | 698.8 | 0.75/kg | 524.10 |
| Rice bran | 5135 | 513.5 | 0.50/kg | 256.75 |
| Weeds | - | - | - | - |
| | | | | 953.87 |

Growth of fishes :

| Species | Number stocked | Av. initial weight (g) | Av. Final weight(g) | Total weight of harvested fish (kg) |
|-------------|----------------|------------------------|---------------------|-------------------------------------|
| Catla | 200 | 11.0 | 556 | 83.45 |
| Rohu | 100 | 8.5 | 458 | 34.50 |
| Mrigal | 75 | 8.0 | 681 | 50.40 |
| Silver carp | - | - | - | - |
| Grass carp | - | - | - | - |
| Common carp | 125 | 10.0 | 726 | 88.65 |
| | | | | 257.00 |

Total quantity of fish harvested = 257 kg/12 months

Gross production/ha = 2570 kg/12 months

* Cost of production per kg of fish = Rs.3.71

* Does not include rental, wages and salaries depreciation of farm equipment, interest on working capital, cost of repairs and maintenance, cost of netting.

**CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
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BARRACKPORE, WEST BENGAL**

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT GUJARTAL FISH FARM, JAUNPUR DURING 1973-74

(State/Central collaboration)

Location of pond : Gujartal Fish Farm, Jaunpur (U.P.)

Area : 0.25 ha Pond No. VI Period of rearing: 12 months

| Item of inputs | Quantity (kg)/ha | Actual quantity applied | Purchased at the rate of (kg) | Expenditure (Rs.) |
|-----------------------|--|-------------------------------|--|----------------------|
| Mahua oil cake | - | - | - | 175.00 |
| Lime | 200 | 50 | 0.27/kg | 13.50 |
| Cowdung | 10068 | 2517 |) | |
| Amm. sulphate | 540 | 135 |) | |
| Single superphosphate | 300 | 75 |) | 167.76 |
| Muriate of potash | 45 | 11 |) | |
| Fingerlings | 5000 nos | 1250 |) | |
| | (C 1 : R 1.5 : M 1 : Cc 2.5 : Sc 2.5 : Gc 1.3) | | | |
| Mustard oil-cake | 6145 | 1536 | 0.80/kg | 1228.80 |
| Rice bran | 2710 | 677 | 0.19/kg | 128.63 |
| Cattle feed | 100 | 25 | 0.75/kg | 18.75 |
| Weeds | 74016 | 18504 | - | - |
| | | | | |
| | | | | 1732.44 |

Growth of fishes :

| Species | Number stocked | Average initial wt. (g) | Av. final weight (g) | Total weight harvested (kg) |
|---------------|-------------------|-------------------------------|----------------------------|-----------------------------------|
| Catla | 125 | 8.4 | 797 | 66.15 |
| Rohu | 190 | 6.5 | 365 | 69.35 |
| Mrigal | 125 | 5.6 | 677 | 84.65 |
| Silver carp | 313 | 21.8 | 1223 | 366.95 |
| Grass carp | 187 | 60.24 | 1678 | 261.90 |
| Common carp | 312 | 11.2 | 763 | 281.25 |
| Miscellaneous | - | - | - | 7.25 |
| | | | | |
| | | | | 1074.50 |

Total quantity of fish harvested = 1074.50 kg/12 months
Gross production/ha = 4298 kg/12 months

* Cost of production per kg of fish = Rs. 1.61

* Does not include rental, wages and salaries, depreciation of farm equipment, interest on working capital, cost of repairs and maintenance, cost of netting, cost of weeds.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
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 BARRACKPORE, WEST BENGAL

CASE STUDY -133

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT GUJARTAL FISH FARM,
 JAUNPUR DURING 1973-74

(State/Central collaboration)

Location of pond : Gujartal Fish Farm, Jaunpur (U.P.)
 Area : 0.25 ha Pond No. V Period of rearing: 12 mont

| Item of inputs | Quantity (kg)/ha | Actual quantity applied (kg) | Purchased at the rate of Rs. (Rs.) | Expenditure |
|-----------------------|--|------------------------------|------------------------------------|-------------|
| Mahua oil cake | - | - | - | 175.00 |
| Lime | 200 | 50 | 0.27/kg | 13.50 |
| Cowdung | 10068 | 2517 | -) | |
| Amm. sulphate | 540 | 135 | -) | 167.76 |
| Single superphosphate | 300 | 75 | -) | |
| Muriate of potash | 45 | 11 | -) | |
| Fingerlings | 5000 nos | 1250 | - | 48.72 |
| | (C 1: R 1.5: M 1 : Co 2.5: Sc 2.5: Gc 1.5) | | | |
| Mustard oil cake | 6072 | 1578 | 0.80/kg | 1214.40 |
| Rice bran | 2712 | 678 | 0.19/kg | 126.79 |
| Cattle feed | 100 | 25 | 0.75/kg | 18.75 |
| Weeds | 75084 | 18771 | - | - |
| | | | | 1764.92 |

Growth of fishes:

| Species | Number stocked | Av. initial weight (g) | Av. Final weight (g) | Total weight harvested (kg) |
|---------------|----------------|------------------------|----------------------|-----------------------------|
| Catla | 125 | 8.4 | 644 | 80.50 |
| Rohu | 190 | 6.5 | 362 | 67.40 |
| Mrigal | 125 | 5.6 | 702 | 63.25 |
| Silver carp | 313 | 21.8 | 1346 | 421.45 |
| Grass carp | 187 | 60.2 | 1808 | 330.90 |
| Common carp | 312 | 11.2 | 757 | 224.35 |
| Miscellaneous | 1250 | - | | 10.53 |
| | | | | 1198.38 |

Total quantity of fish harvested = 1198.38 kg
 Gross production/ha = 4794 kg/yr

* Cost of production per kg of fish = Rs. 1.47

* Does not include rental, wages and salaries, depreciation of farm equipment, interest on working capital, cost of repairs and maintenance, cost of netting, cost of weeds.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
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 BARRACKPORE, WEST BENGAL

CASE STUDY - 134

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT GUJARTAL FISH FARM,
 JAUNPUR DURING 1974-75

(State/Central collaboration)

Location of pond : Gujartal Fish Farm; Jaunpur (U.P.)

Area : 0.25 ha Pond -XII Period of rearing : 18 months

| Item of inputs | Quantity (kg)/ha | Actual quantity applied (kg) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
|---|------------------|------------------------------|--------------------------------|-------------------|
| Mahua oil cake | - | - | - | 125.72 |
| Lime | 600 | 125 | 0.15/kg | 18.75 |
| Cowdung | 14268 | 3567 |) | |
| Amm. sulphate | 225 | 56.3 |) | |
| Urea | 143 | 35.7 |) | 341.70 |
| Single superphosphate | 370 | 92.4 |) | |
| Muriate of potash | 64 | 16.0 |) | |
| Poultry droppings | 200 | 50.0 |) | |
| Fingerlings (C 2 : R 1.5 : M 2 : Cc 3 : Sc 1.5) | 6000 nos | 1500 nos | - | 33.00 |
| Mustard oil cake | 6316 | 1579 | 0.78/kg | 1231.62 |
| Rice bran | 7960 | 1990 | 0.38/kg | 756.20 |
| Cattle feed | 804 | 200.6 | 1.16/kg | 232.70 |
| Weeds | - | - | - | |
| | | | | 2739.69 |

Growth of fishes :

| Species | Number stocked | Av. initial wt. (g) | Av. final weight (g) | Total weight harvested (kg) |
|---------------|----------------|---------------------|----------------------|-----------------------------|
| Catla | 300 | 25.6 | 378 | 188.85 |
| Rohu | 225 | 7.5 | 353 | 79.55 |
| Mrigal | 300 | 8.7 | 300 | 185.68 |
| Silver carp | 225 | 14.0 | 1006 | 226.45 |
| Grass carp | - | - | - | - |
| Common carp | 450 | 1.3 | 522 | 234.10 |
| Miscellaneous | | | | |
| | | | | 914.63 |

Total quantity of fish harvested = 914.63 kg/18 months
 Total production/ha = 3655 kg/18 months

* Cost of production per kg of fish = Rs. 3.00

* Does not include rental, wages and salaries, depreciation of farm equipment, interest on working capital, cost of repairs and maintenance, cost of netting.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
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 BARRACKPORE, WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT GUJARTAL FISH FARM, JAUNPUR DURING 1974-75

(State/Central collaboration)

Location of pond : Gujartal Fish Farm, Jaunpur (U.P.)

Area : 0.10 ha Pond No.XI Period of rearing: 18 months

| Item of inputs | Quantity (kg)/ha | Actual quantity applied (kg) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
|------------------------------|------------------|------------------------------|--------------------------------|-------------------|
| Mahua oil cake | - | - | - | 50.28 |
| Lime | 500 | 50 | 0.15/kg | 7.50 |
| Cowdung | 14270 | 1427 |) | |
| Ammonium sulphate | 225 | 22.5 |) | |
| Single superphosphate | 395 | 39.5 |) | 136.57 |
| Muriate of potash | 60 | 6.0 |) | |
| Urea | 122 | 12.2 |) | |
| Poultry dropping | 200 | 20.0 |) | |
| Mustard oil cake | 6650 | 665 | 0.78/kg | 518.70 |
| Rice bran | 7340 | 734 | 0.38/kg | 278.92 |
| Weeds | - | - | - | - |
| Cattle feed | 7260 | 72.6 | 1.16/kg | 84.21 |
| Fingerlings | 6000 | 600 | | 16.80 |
| (C 3.5: R 1.5: M 2 : Cc 3) | | | | |
| Total 1092.98 | | | | |

Growth of fishes :

| Species | Number stocked | Av. initial weight (g) | Av. Final weight (g) | Total weight harvested (kg) |
|---------------|----------------|------------------------|----------------------|-----------------------------|
| Catla | 210 | 41.4 | 922 | 193.52 |
| Rohu | 90 | 6.6 | 838 | 75.25 |
| Mrigal | 120 | 7.2 | 1351 | 162.21 |
| Silver carp | - | - | - | - |
| Grass carp | - | - | - | - |
| Common carp | 180 | 2.5 | 637 | 114.66 |
| Miscellaneous | - | - | - | - |
| Total 545.64 | | | | |

Total quantity of fish harvested = 545.64 kg/18 months
 Total production/ha = 5456 kg/18 months

*Cost of production per kg of fish = Rs. 2.00

* Does not include rental, wages and salaries, depreciation of farm equipment, interest on working capital, cost of repairs and maintenance, cost of netting.

CASE STUDY -136

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
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BARRACKPORE, WEST BENGAL

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT GUJARTAL FISH FARM, JAUNPUR DURING 1974-75

Location of pond : Gujartal Fish Farm, Jaunpur (U.P.)

Area : 0.25 ha Pond No. X Period of rearing: 18 months

| Item of inputs | Quantity (kg)/ha | Actual quantity applied (kg) | Purchased @ rate of (Rs.) | Expenditure (Rs.) |
|-----------------------|---|---------------------------------------|---------------------------------|----------------------|
| Mahua oil cake | - | - | - | - |
| Lime | 500 | 125 | 0.15/kg | |
| Cowdung | 14268 | 3567) | | |
| Ammonium sulphate | 22500 | 5625) | | |
| Urea | 143 | 35.7) | - | 337.45 |
| Single superphosphate | 395 | 98.7) | | |
| Muriate of potash | 64 | 16.0) | | |
| Poultry dropping | 200 | 50.0) | | |
| Fingerlings | 6000 | 1500 | | 21.00 |
| Stocking ratio | (C 1 : R 1 : M 1.5: Sc 2.5: Gc 1.5: Cc 2.5) | | | |
| Mustard oil cake | 6548 | 1637 | 0.78/kg | 1276.86 |
| Rice bran | 7480 | 1870 | 0.38/kg | 710.60 |
| Weeds | 92,888 | 23222 | - | - |
| Cattle feed | 121 | 303.4 | 1.06/kg | 321.60 |
| | | | Total | 2345.91 |

Growth of fishes :

| Species | Number stocked | Av. initial weight (g) | Av. final weight(g) | Total wt. harvested (kg) |
|---------------|----------------|------------------------|---------------------|--------------------------|
| Catla | 150 | 8.0 | 749 | 112.40 |
| Rohu | 150 | 8.6 | 412 | 63.40 |
| Mrigal | 225 | 6.4 | 562 | 121.56 |
| Silver carp | 375 | 16.0 | 1106 | 414.95 |
| Grass carp | 225 | 17.4 | 1700 | 447.80 |
| Common carp | 375 | 5.1 | 638 | 247.49 |
| Miscellaneous | | | | 3.25 |
| Total | 1500 | | | 1410.85 |

Total quantity of fish harvested = 1410.85 kg/18 months
Gross production/ha = 5643 kg/18 months

*Cost of production per kg of fish = Rs. 1.66

* Does not include rental, wages and salaries, depreciation of farm equipment, interest on working capital, cost of repairs and maintenance, cost of netting, cost of weeds.

CENTRAL INLAND FISHERIES RESEARCH INSTITUTE
 (I.C.A.R.)
 BARRACKPORE, WEST BENGAL

CASE STUDY - 137

COST STRUCTURE OF COMPOSITE FISH CULTURE CONDUCTED AT GUJARTAL FISH FARM, JAUNPUR DURING 1974-75
 (State/Central collaboration)

Location of pond : Gujartal Fish Farm, Jaunpur (U.P.)

Area : 0.10 Pond No.IX Period of rearing: 18 months

| Items of inputs | Quantity (kg)/ha | Actual quantity applied (kg) | Purchased at the rate of (Rs.) | Expenditure (Rs.) |
|--|------------------|------------------------------|--------------------------------|-------------------|
| Mahua oil cake | - | - | - | - |
| Lime | 500 | 50 | 0.15/kg | 7.50 |
| Cowdung | 14270 | 1427 |) | |
| Poultry dropping | 500 | 50 |) | 135.15 |
| Ammonium sulphate | 270 | 27 |) | |
| Single superphosphate | 420 | 42 |) | |
| Muriate of potash | 64 | 6.4 |) | |
| Urea | 122 | 12.2 | 14/100) | |
| Fingerlings | 6000 | 600 | | 8.40 |
| (C 1 : R 1: M 1.5: Sc 2.5: Gc 1.5: Cc 2.5) | | | | |
| Mustard oil cake | 6920 | 692 | 0.78/kg | 539.76 |
| Rice bran | 7390 | 739 | 0.38/kg | 280.82 |
| Weeds | 141330 | 14133 | - | - |
| Cattle feed | 1020 | 102 | 1.06/kg | 108.12 |
| Total 1079.75 | | | | |

Growth of fishes:

| Species | Number stocked | Av. initial weight(g) | Av. Final weight(g) | Total weight harvested (kg) |
|---------------|----------------|-----------------------|---------------------|-----------------------------|
| Catla | 60 | 6.6 | 837 | 50.20 |
| Rohu | 60 | 40.0 | 1048 | 62.88 |
| Mrigal | 90 | 6.6 | 1325 | 121.67 |
| Silver carp | 150 | 16.7 | 1802 | 270.23 |
| Grass carp | 90 | 70.4 | 1990 | 153.95 |
| Common carp | 150 | 3.7 | 862 | 129.35 |
| Miscellaneous | - | - | | |
| Total | 600 | | | 788.28 |

Total quantity of fish harvested = 788.28 kg/18 months

Gross production/ha = 7883 kg/18 months

* Cost of production per kg of fish = Rs. 1.37

* Does not include rental, wages and salaries, depreciation of farm equipment, interest on working capital, cost of repairs and maintenance, cost of netting, cost of weeds.

ALL INDIA COORDINATED RESEARCH PROJECT ON COMPOSITE FISH CULTURE AND
FISH SEED PRODUCTION
(C.I.F.R.I.)

CASE STUDY -138

COST STRUCTURE OF COMPOSITE FISH CULTURE (FIRST EXPERIMENT) CONDUCTED
AT RANCHI CENTRE DURING 1975-76

(State/Central collaboration)

Location of the Pond : Dorenda Fish Farm, Ranchi.

Area : 0.1 ha

Initial soil condition : Acidic and unproductive

| Items of inputs | Quantity (kg)/ha | Actual quantity applied (kg) | Purchased at the rate of (Rs.)/q | Expenditure (Rs.) |
|--|--------------------|--|----------------------------------|-------------------|
| Mahua oil cake | 250 | 250 | 56.90 | 142.50 |
| Lime | 7250 | 725 | 35.00 | 253.75 |
| Cowdung | 9750 | 975 | 5.00 | 48.75 |
| Amm. sulphate | 270 | 27.300 | 98.00 | 26.75 |
| Single superphosphate | 300 | 30 | 120.00 | 36.40 |
| Muriate of potash | 48 | 4.800 | 130.00 | 6.24 |
| Urea | 135 | 13.670 | 192.00 | 26.25 |
| Fingerlings | 6000 nos. | 600 (C 1.8: R 2.1: M 0.8: Sc 2.1: Gc 1.5: Cc 1.7) | | |
| Supplementary feeding done @ 1-2% of body weight | | | | |
| Mustard oil cake | 3413.750 | 341.375 | 75.00 | 256.03 |
| Rice bran | 3413.750 | 341.776 | 17.86 | 60.96 |
| Hydrilla | As per consumption | | --- | Nil |
| Diesel | - | 10 ltrs. | 1.40/l | 14.00 |
| | | | Total | 871.63 |

Growth of fishes:

| Species | Initial weight (g) | Period of rearing (months) | Av. wt. attained (g) | Total weight harvested (kg) | Percentage of recovery |
|-------------|--------------------|----------------------------|----------------------|-----------------------------|------------------------|
| Grass carp | 14.0 | 12 | 945.2 | 29.300 | 34.4 |
| Silver carp | 16.0 | 12 | 483.4 | 37.220 | 61.6 |
| Catla | 4.0 | 10 | 250.7 | 27.985 | 99.1 |
| Rohu | 14.0 | 12 | 238.2 | 18.100 | 60.8 |
| Mrigal | 10.0 | 12 | 317.5 | 11.430 | 72.0 |
| Common carp | 6.0 | 12 | 733.3 | 26.400 | 36.0 |
| | | | | 150.435 | |

Total quantity of fish harvested = 150.435 kg

Gross production = 1504.350 kg/ha/yr

Net production = 1438.871 kg/ha/yr

* Expenditure for production of per kg fish = Rs. 5.79

Note : Poor recovery due to poaching was responsible for high cost of production.

* Does not include rental value, wages & salaries, interest on working capital, depreciation of farm equipment, cost of repairs & maintenance, cost of netting, cost of hydrilla.

Abbreviations used in the text

| | | |
|----------------|---|---------------------|
| C | - | Catla |
| C _c | - | Common carp |
| G _c | - | Grass carp |
| G.N.O.C. | - | Ground nut oil cake |
| M | - | Mrigal |
| M.O.C. | - | Mustard oil cake |
| R.B. | - | Rice bran |
| R.P. | - | Rice polish |
| R | - | Rohu |
| S _c | - | Silver carp |