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Backyard fish farming

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	^a Cage culture	^b Pond culture
Capital outlay	P 148,500	184,475
Operating cost	P 138,500	174,475
Stocking density	3,000 / 6-unit cage	5,000 / ha
Size at stocking	5-7 cm	5-7 cm
Size at harvest	450 g	450 g
Culture period	8-10 months	5-6
Total yield	1,175 kg	1,755 kg
Survival	87%	78%
Gross revenue	P 305,370	456,300
Net profit	P 101,965	176,335
Return on investment	67%	96%
Payback period	1.46 yr	1.04 yr

Data from ^aBaliao 1997 and SEAFDEC/AQD 1998.

TILAPIA The culture of tilapia in brackishwater ponds is highly profitable. A cost-and-return analysis of this culture method show that the net income may be as high as 69% of total expenditure. On the other hand, the cage culture of tilapia shows that the return-on-investment is 189% from an investment capital of P 309,433.

	^a Cage culture	^b Pond culture
Capital outlay	P 309,430	94,594
Operating cost	P 295,215	84,000
Stocking density	16,200 pcs	20,000
Size at stocking	3-5 g	3-5 g
Size at harvest	350 g	250 g
Culture period	4 months	4-5
Total yield	4,820 kg	4,000 kg
Survival	85%	80%
Gross revenue	P 578,340	160,000
Net profit	P 268,900	65,400
Return on investment	189%	69%
Payback period	-	-

Data from ^aTumonong 1995 and ^bDureza 1997.

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Backyard fish farming

By **AP Surtida**

If you live near a river, reservoir or bay, you can fence off a natural sheltered inlet and grow fishes or crabs. Make sure though that you comply with the legal requirements (like a permit) in your locality.

The pen is usually made of low-cost bamboo. The area of the pen will depend on the contour of the land like the small farm in Indonesia shown on Figure 1. Here's how to construct a pen:

- 1 Drive bamboo poles at least 20 cm into the pond bottom. Make sure the top of the fence is no less than 1 m above the highest water level.
- 2 Weave a fine mesh net into the bamboo fence to prevent fish from escaping. Use enough net to cover the fence from top to bottom.
- 3 At the bottom of the pen, dig a small pond and narrow channel to make fish harvest easy (Figure 2). Fish could also settle in this area when water level is low. The small pond and channel should gradually slope from 25 cm to about 50 cm-1m deep. The width depends on the width of the fenced bay.
- 4 After constructing the fence, small pond and channel, wait for the water to rise. Inquire from the local fishing agency when a high water level will occur, or consult a calendar with a predicted tide table.

When the water level rises, check the fence and nets for holes where fish could escape. If you wish to stock carps or tilapias, remove predatory species such as snakehead and catfish. A 10 x 50 m or 500 m² pen system is sufficient for 5,000 fingerlings sized 5-10 g.

To grow common carp and Nile tilapia together, stock one common carp and one Nile tilapia for every 2m². A pen measuring 100 x 50 m or 5,000 m² is sufficient to grow 2,500 common carp and 2,500 Nile tilapia.

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