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L. Lalle

Ronald D. K.

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$$\begin{aligned} & ( \quad ) \quad . ( \quad ) \\ & \quad \quad \quad ( \quad ) \\ & \quad \quad \quad : \end{aligned}$$

$$QK = K.rk + R + D \quad ( )$$

$$\begin{array}{cccc} & & QK & \\ D & rk & R & K \end{array}$$

(ROE)

$$\begin{aligned} & . ( \quad ) \quad ( \quad ) \\ & \quad \quad \quad : \\ & \quad \quad \quad ( \quad ) \\ & = \end{aligned}$$

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M. Ward

Rate of Equity

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NPV

ROE

(NPV )

(IRR )

$$NPV = \sum_{t=1}^n \frac{(B_t - C_t)}{(1+i)^t}$$

( )

(NPV)

t i

C<sub>t</sub> B<sub>t</sub>  
n t

*NPV > 0*

*NPV = 0*

*NPV < 0*

NPV

(IRR)

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Net Present Value

Internal Rate of Return

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Planning Horizon

Study Period

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$$IRR = r^*$$

$$IRR < r^*$$

NPV

IRR

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$$NPV(\%r) = 0 \quad ( )$$

(r)

IRR

(IRR)

:

$$NPV = \sum_{t=1}^n \frac{(B_t - C_t)}{(1+r)^t} = 0 \quad ( )$$

(r\*)

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Cash flow table

IRR > r\*

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(ROE)

(ROE)			( )
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(ROE)

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ROE

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%

IRR	NPV	
( )	( )	( )
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NPV <sup>1</sup>

NPV % IRR  
% / IRR

NPV  
% / IRR  
IRR NPV

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( )

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% NPV

NPV

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(IRR)

(NPV)

( )

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## Economic evaluation of trout farm fisheries in Ilam province

I. Saleh<sup>\*1</sup>, H. Salami<sup>1</sup> and R. Shamsedinvari<sup>2</sup>

<sup>1</sup> Associate prof, Department of Agricultural Economics, University of Tehran, I. R. Iran

<sup>3</sup> Former graduate student of Agricultural Management, I. R. Iran

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### Abstract

Since there are suitable natural conditions in Ilam province including various rivers and springs with enough water supply, farm fisheries could play an important role in meeting food requirements in the region. The objective of this study is to evaluate the profitability of trout farm fisheries using profitability and economic indicators. Data of all farm fisheries were collected through questionnaire. The indicators include rate of equity (ROE), net present value (NPV) and internal rate of return (IRR). The results of comparison of ROE with the average profit rate of investment deposit indicate that 41.37 percent of farm fisheries were economically justified. The results of calculation of NPV and IRR show that farms with a capacity over 15 tones were profitable. Based on this finding, it is recommended to utilize economies of scale through establishing large scale farms.

**Keywords:** Trout farm fisheries, Evaluation indicators, Economic justification, Ilam province