

AN ASSESSMENT ON ECONOMIC EFFICIENCY OF BUFFALO PRODUCTION WITH SEMI-GRAZING SYSTEM IN HAU GIANG PROVINCE

Doan Duc Vu

Buffalo is a popular animal in many countries around the world. In Vietnam, buffalo has long time been associated with the life of farmers. However, because of the plowing demand and grass lands reduced, the population of buffalo gradually decreased, especially in the Mekong River Delta. There were many studies indicated that buffalo has body weight higher than that of cattle and buffalo is suited to live in water areas. It is necessary to develop buffalo herd towards producing meat by semi-grazing system in the Mekong River Delta region in general and in Hau Giang province particularly.

The study was carried out from 2009 to 2011 at Long My and Vi Thuy districts, Hau Giang province in order to assess the economic efficiency of semi-grazing system in buffalo production for directing the development trend in the future.

Methodology:

- Building 10 demonstration farms with semi-grazing system compared with 10 control farms with grazing system.
- Fattening up male buffaloes of 16-month old with about 280 kg body weight in a period of 2-3 month feeding with commercial concentrates during fattening period. Housing area is 6m²/buffalo.
- Monitoring economic-technical criteria in the farms.

The economic efficiency was calculated as following:

Expenses:

- § Housing construction costs: VND300,000/m² with depreciation time of 5 years.
- § Depreciation for animals: 1 female reproductive buffalo is VND20,000,000; 1 buffalo bull is VND30,000,000; with depreciation time of 8 years.
- § Employees: 1 worker takes care 15 buffaloes with salary of VND3,000,000/month.
- § Supplemental feeds (green grasses and rice straw): VND1,000,000/ton of DM;
- § Veterinary drugs: VND100,000/buffalo/year
- § Banking rate: 16%/year for loan of buying reproductive female and bull buffaloes.
- § Other expenses: VND50,000 VND/farm/year.

Revenue:

- § From buffalo calf: VND2,500,000/calf
- § From meat selling: VND38,200/ kg live-weight
- § From manures: VND500,000/ton.
- § From land plowing: VND170,000/day.

CONCLUSIONS

The study results showed that advanced technique application to the buffalo production improved productive performances of buffaloes, as a result increasing farmer's profits.

Since the plowing demand and grass lands decreased, the conversion of buffalo husbandry for meat production purpose in a semi-grazing system in Hau Giang Province particularly and in the Mekong River Delta in general, was suitable and efficient solution.

Table 1. Economic efficiency of buffalo production with semi-grazing system

(VND .000)

No.	Items	Model households	Control households
A	Expenses		
1	Housing depreciation	1,836	864
2	Animal depreciation	8,125	5,000
3	Banking rate	10,400	6,400
4	Workers salary	11,869	5,840
5	Supplemental feeds	3,723	0
6	Veterinary drugs	510	240
7	Other expenses (cheap materials, electricity, water..)	255	120
	Total expenses	37,697	19,715
B	Revenues		
1	From buffalo calf	5,025	2,294
2	From weight gained	14,773	3,478
3	From manures	9,308	2,190
4	From the land preparation	24,939	15,232
	Total revenues	54,045	23,193
C	Profits: Average on one farm	16,348	3,478
	On one reproductive and bull buffaloes	5,637	2,045

Keeping buffaloes in house

Grazing buffaloes on pasture