

DAIRY MILK PRODUCTION IN THE NORTH OF VIETNAM: A CASE STUDY IN MOC CHAU

Bui Thi Nga^(a) MA, Tran Huu Cuong^(b) PHD. Assoc Prof, Philippe Lebailly^(c)
PHD. Prof



(a) Student, University of Liège, Belgium, Email: hieu0306@gmail.com; btnga@hua.edu.vn Phone: +84 936 942 232

(b) Faculty of Accounting and Business Management, Hanoi University of Agriculture, Vietnam

(c) Gembloux Agro Bio Tech, University of Liège, Belgium

Content of presentation

1. Context
2. Objectives and Methodology
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4. Conclusion and recommendation



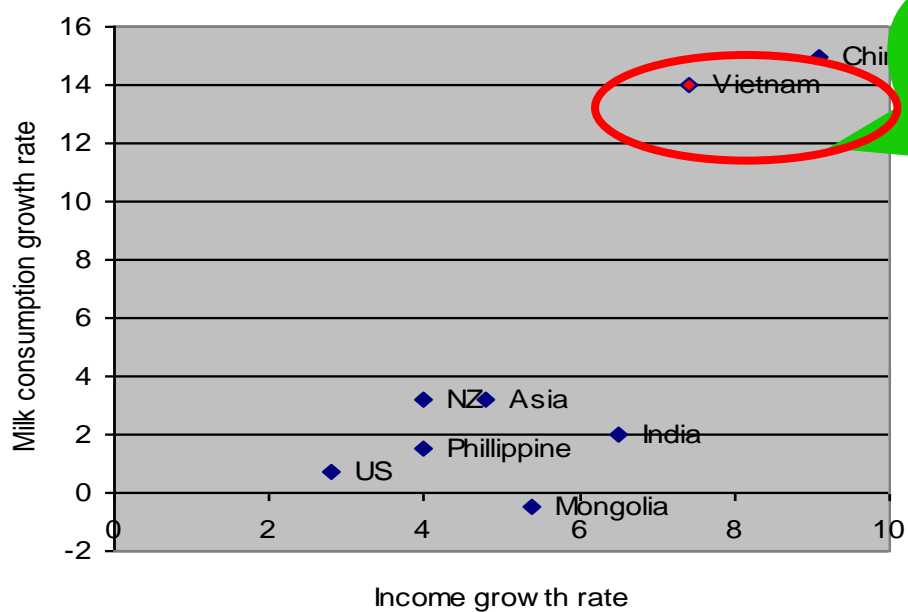
1. Context



- ▶ Dairy is becoming important in VN:
 - Customers: nutrition and health;
 - Producers: employment, stable income, utilised fodder and agricultural by-products.

- ▶ Milk production could not satisfy the rapidly increase in milk consumption →
 - VN imported a large quantity of milk
 - Depend on foreigners
 - Distortion of market, fluctuated price
 - Farmers' vulnerable

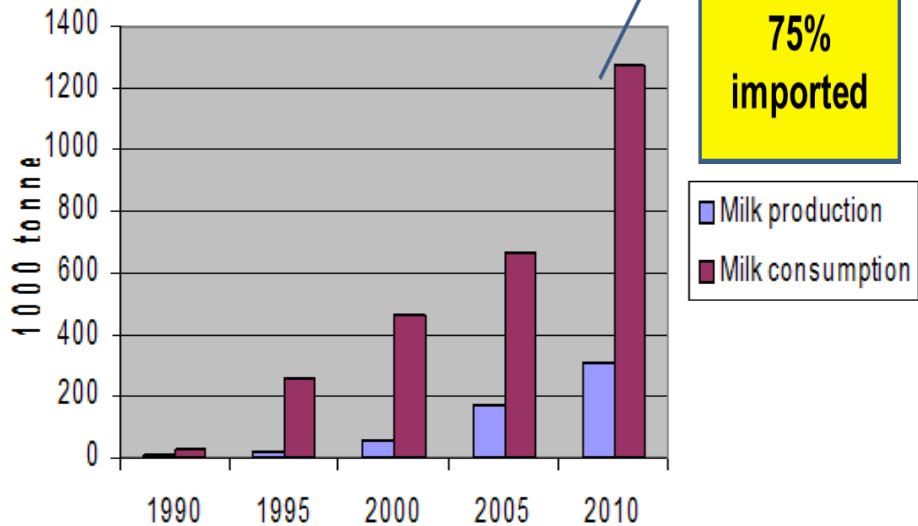




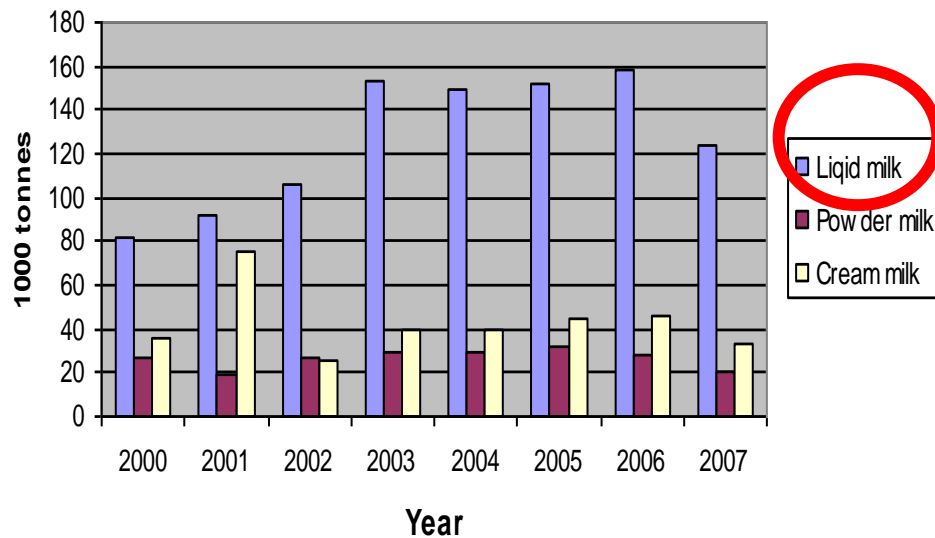
Potential for milk production

Increase quickly in milk consumption, liquid milk is preferred

Milk production vs consumption



Milk consumption in Vietnam



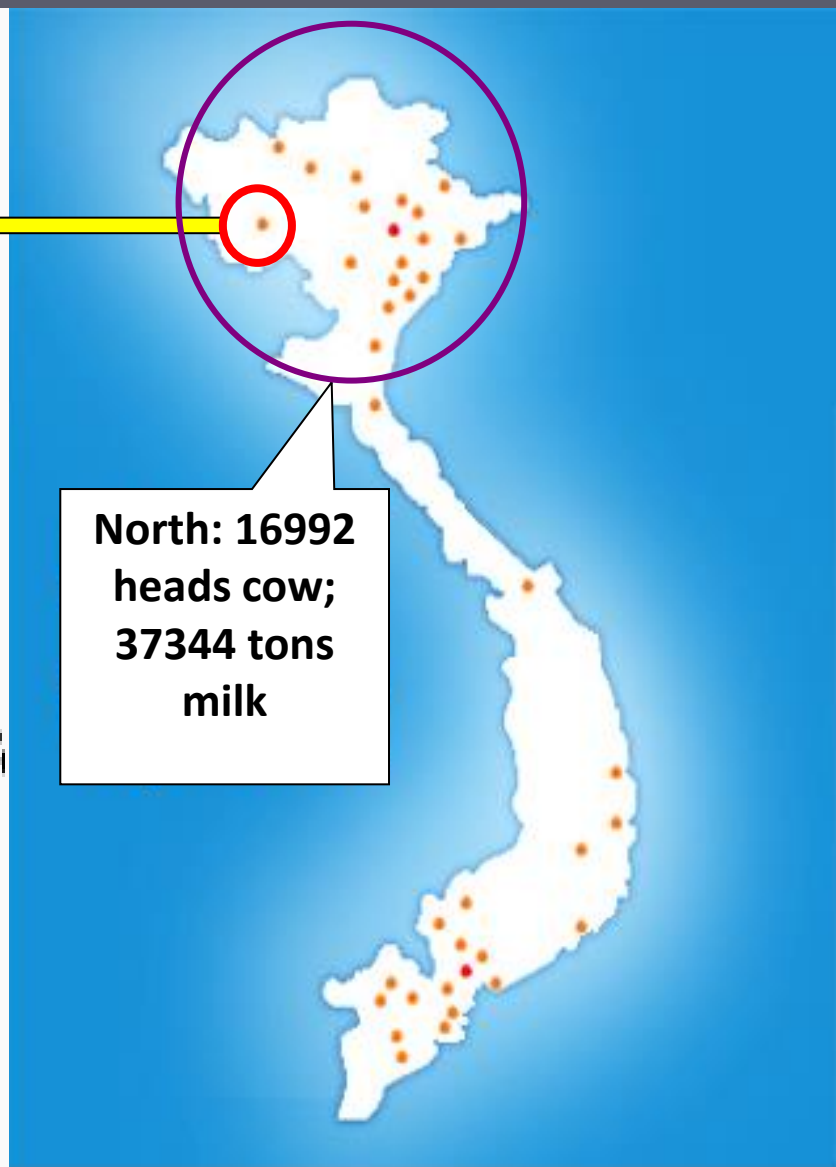
2. OBJECTIVE and METHODOLOGY

Objective

- ▶ Aims to analyze the milk yield, milk income, operating cost, margins, and profitability of dairy farms to see how the dairy farmers operate their farms and by what way they can improve their performance

Methodology

- ▶ *Study site: Sonla province, Vietnam*
- ▶ *Data collection: 50 dairy farms through 6 field trips during 2010-2012*

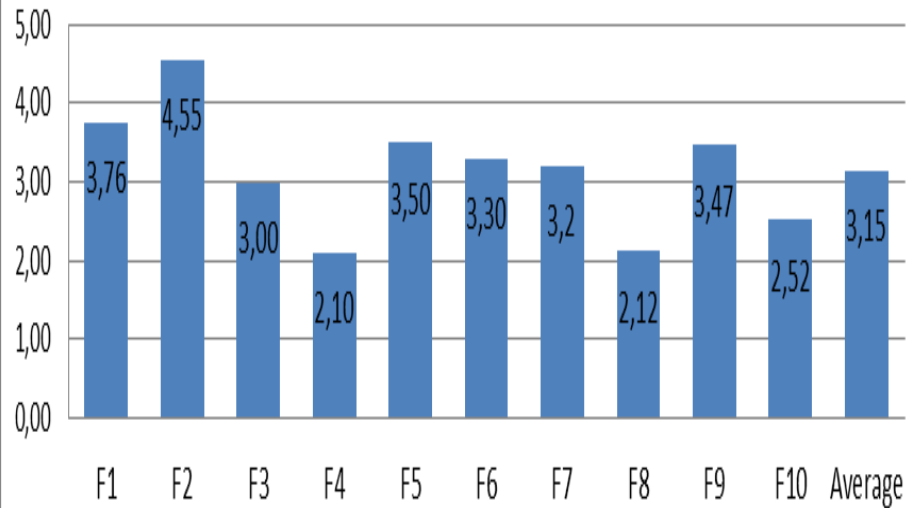


Major information of the surveyed farm

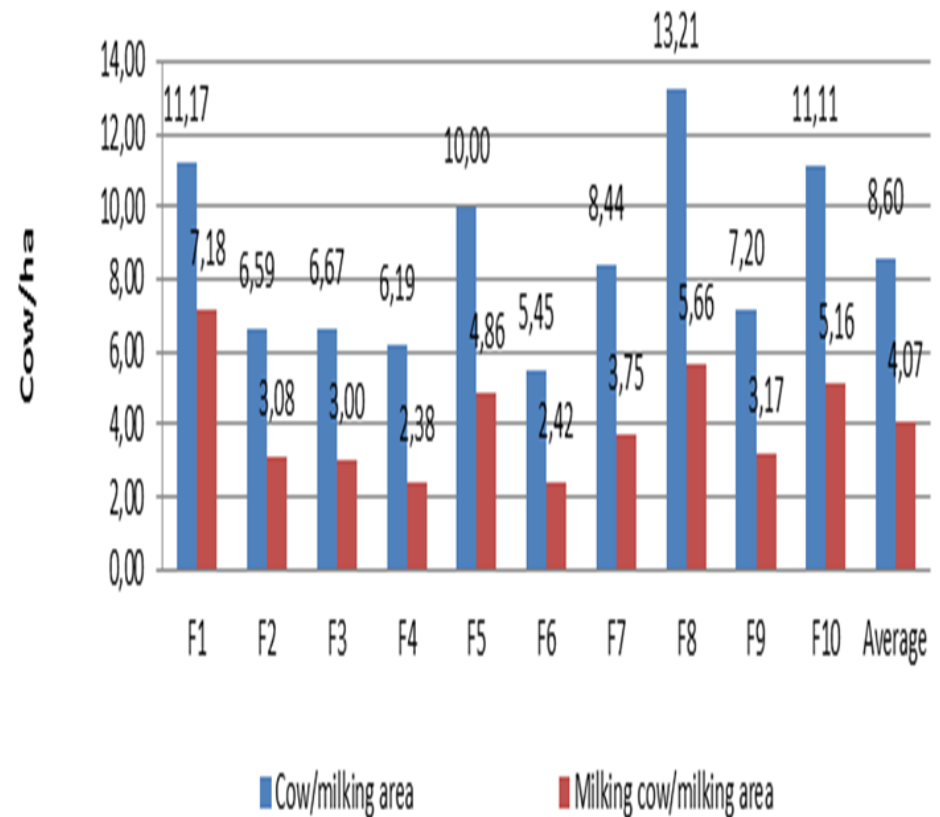
| | Units | Total | Data and information | | |
|---------------------------------|-------------|---------------|----------------------|----------------|----------------|
| | | | Average /farm | Max /farm | Min/ farm |
| Land Owned | Ha | 114.5 | 2.289(±0.15) | 5.55 | 0.77 |
| Cow | Head | 651 | 13.02 | 35 | 2 |
| Milk production | Ton/year | 2023 | 40.46(±3.65) | 124 | 7 |
| - per ha | Ton/ha/year | | 17.55(±1.1) | 38.4 | 5.4 |
| - Daily capacity | Kg/cow/day | | 21.2(±0.5) | 27 | 17 |
| Labor | | | | | |
| Full time employees | Person | 31 | 1.15(±0.04) | 2 | 0 |
| Family working labor | Person/farm | | 2.7(±0.08) | 4 | 1 |
| Milking system | description | Machine +hand | Milking machine | Machine + hand | Machine + hand |
| Times of milking per day | Times | 2 | | 3 | |
| Inter-calving period | Days | | 427 | 518 | 368 |
| Dry period | Days | 60 | | | |
| Breeding | Method | Artificial | | | |
| Cow culling rate | % | 25.8 | | | |

Milk production: limited land, high density

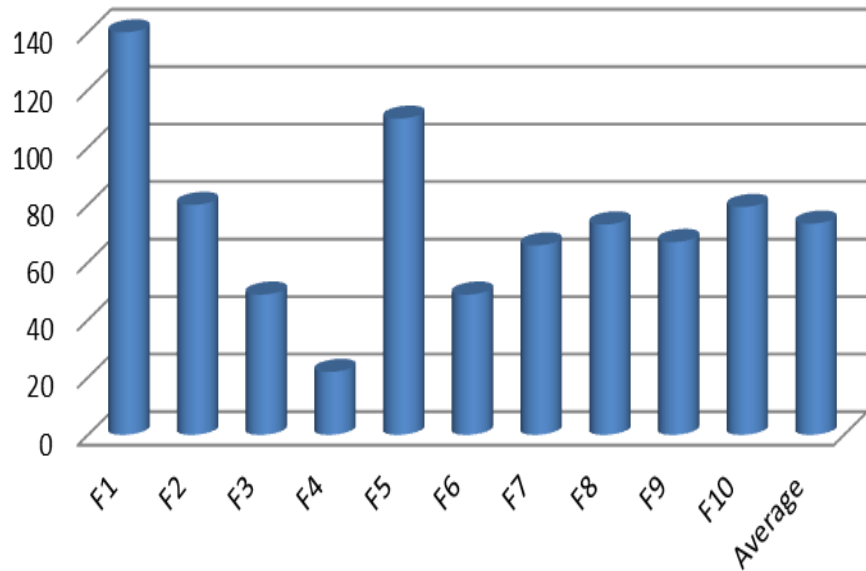
Milking area (ha)



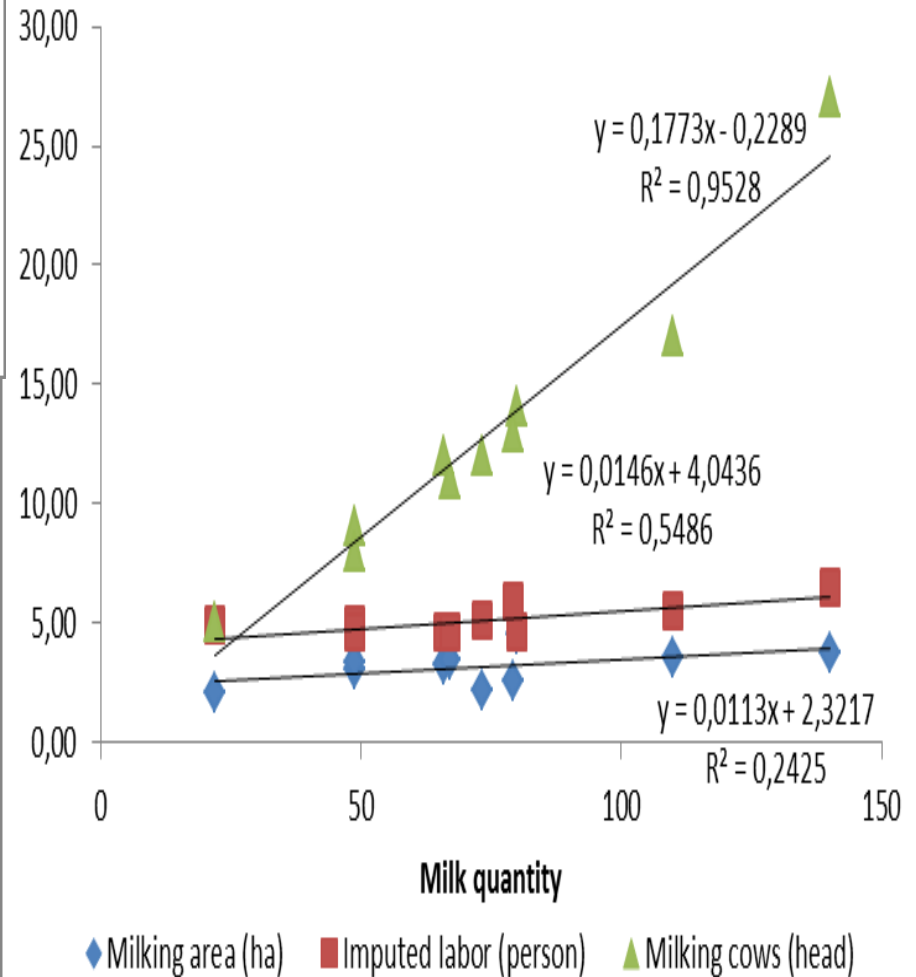
Stocking rate



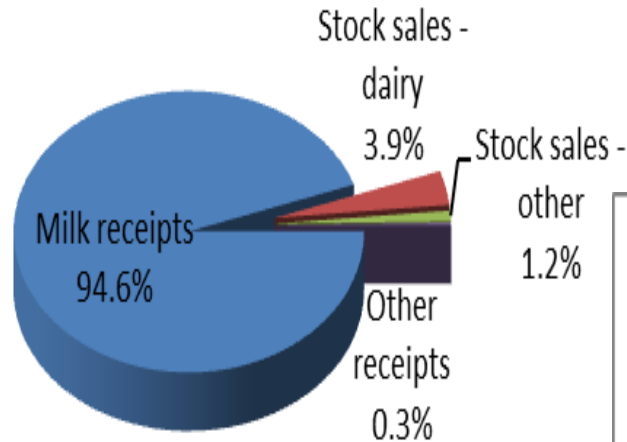
Milk production



Factors of production vs. Milk production

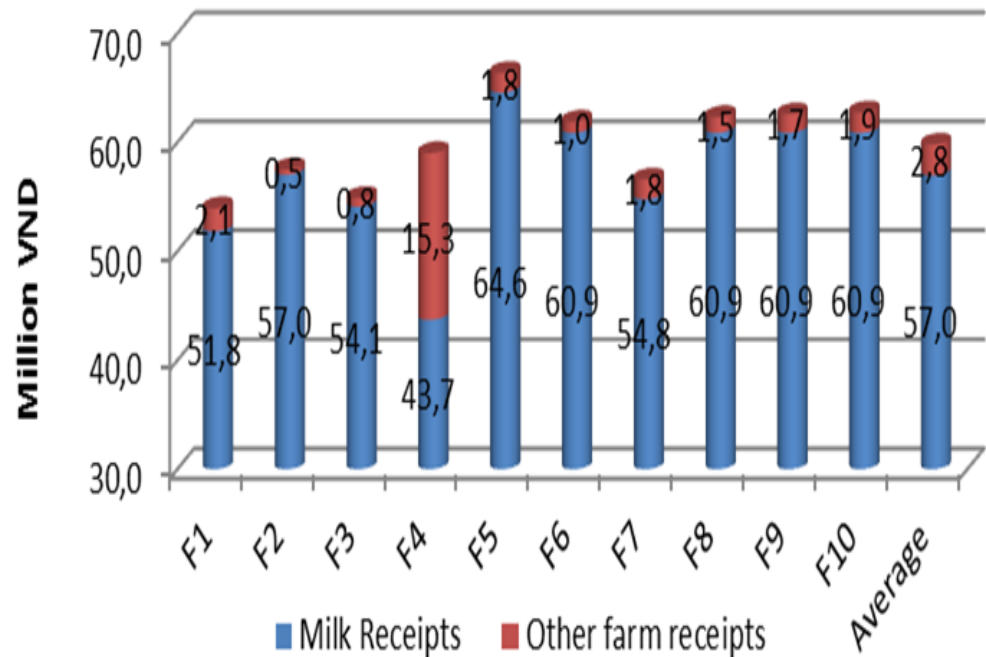


Component of farm income per kg milk

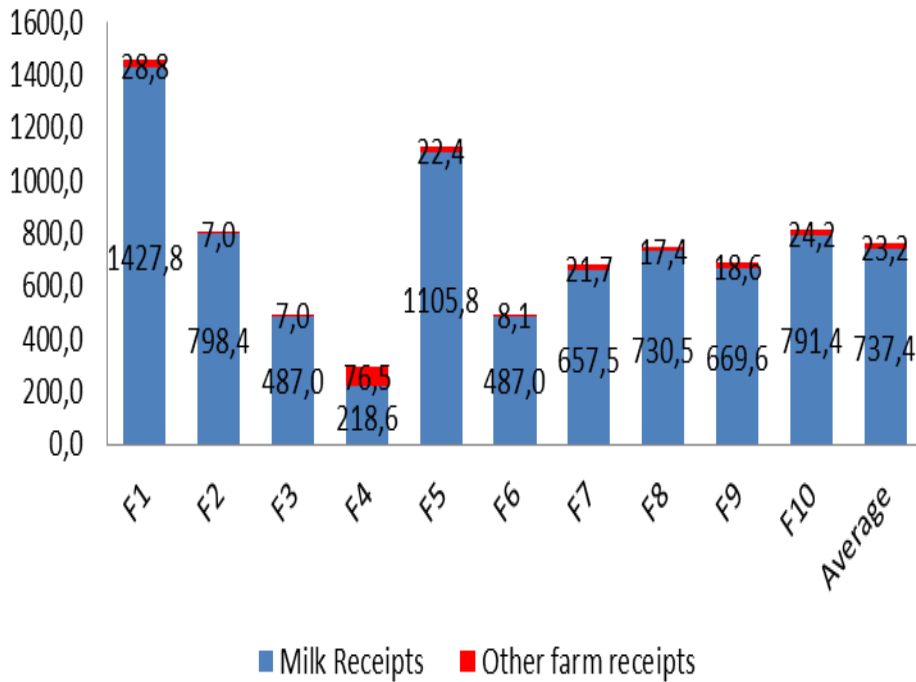


Income of farms: from milk receipts

Farm income per cow

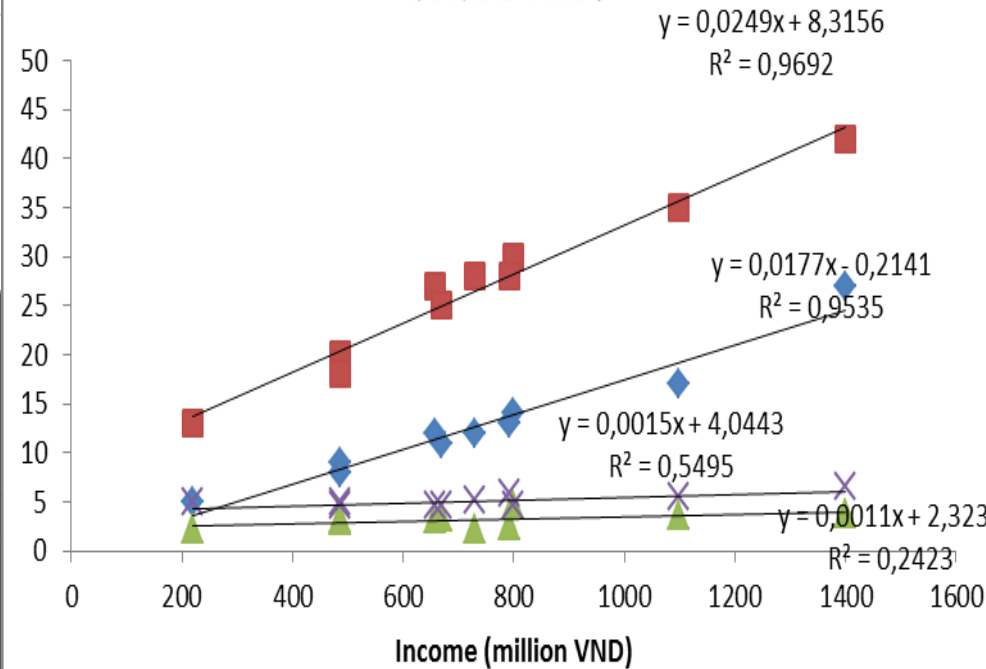


Total Farm income



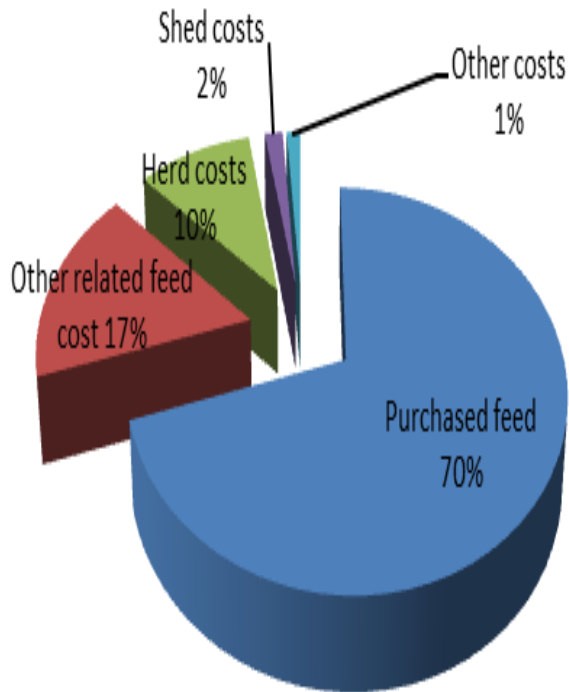
...and varies from farm to farms

Chart Title



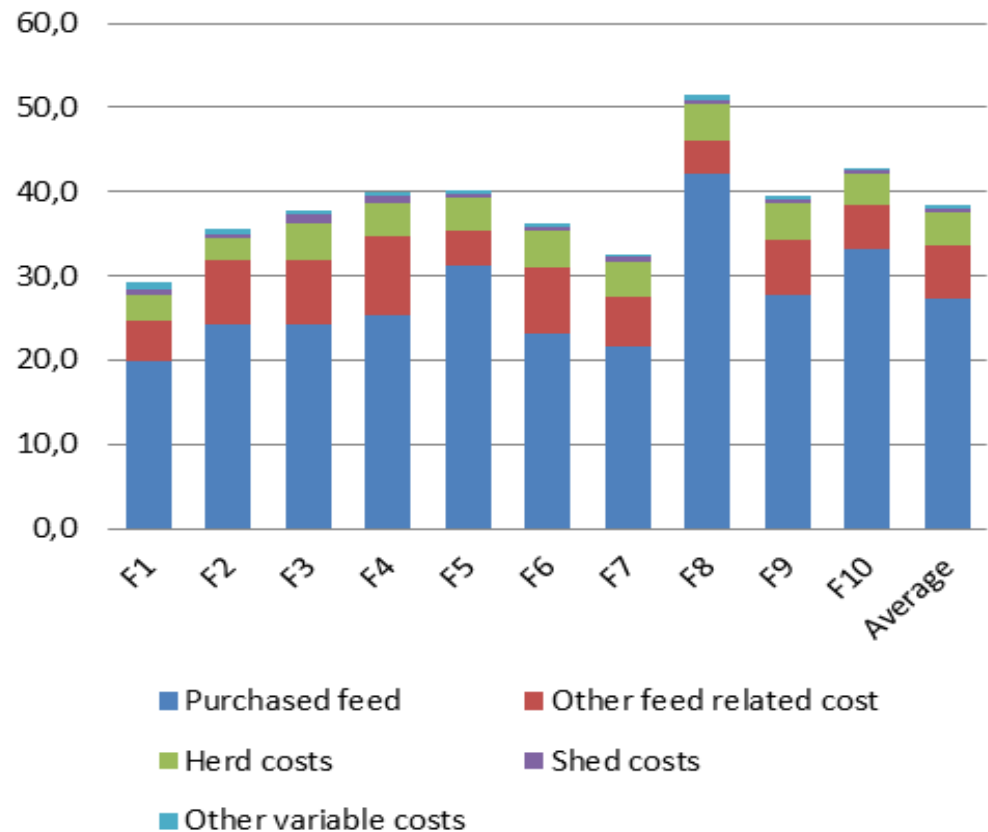
- ◆ Milking cows (head)
- Herd size (head)
- ▲ Milking area (ha)
- × Imputed labor (person)

Average operating costs in 1kg milk



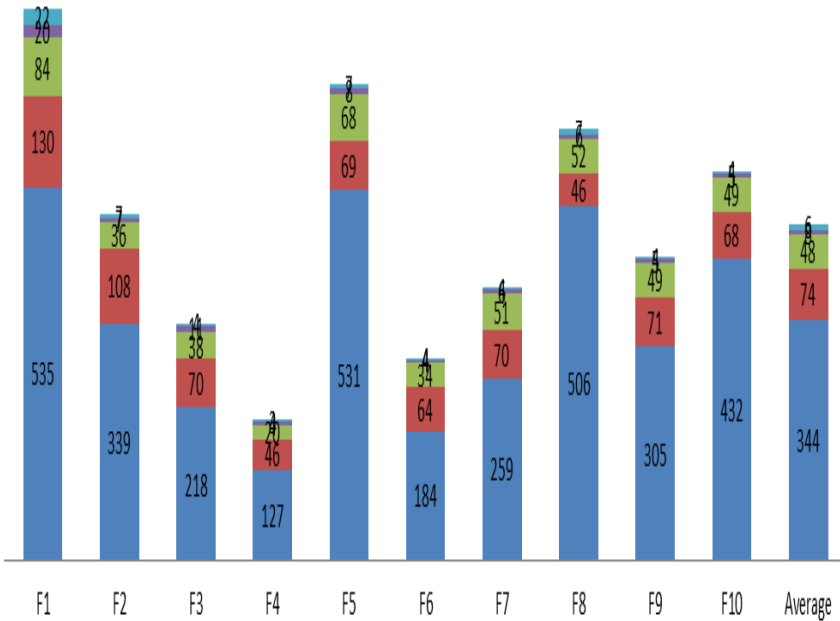
Production cost is high, especially purchased feed

Operating costs per cow (million VND)



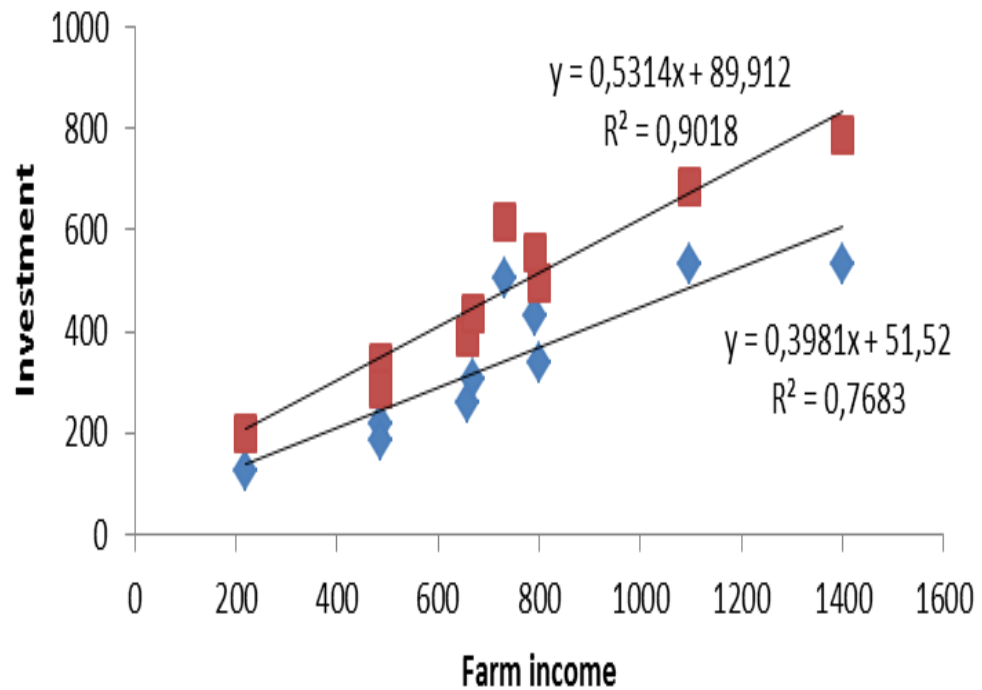
Total farm operating costs (million VND)

■ Purchased feed costs
 ■ Other feed related costs
 ■ Herd Costs
 ■ Shed Costs
 ■ Other variable costs



The higher the investment is, the higher the income is ?

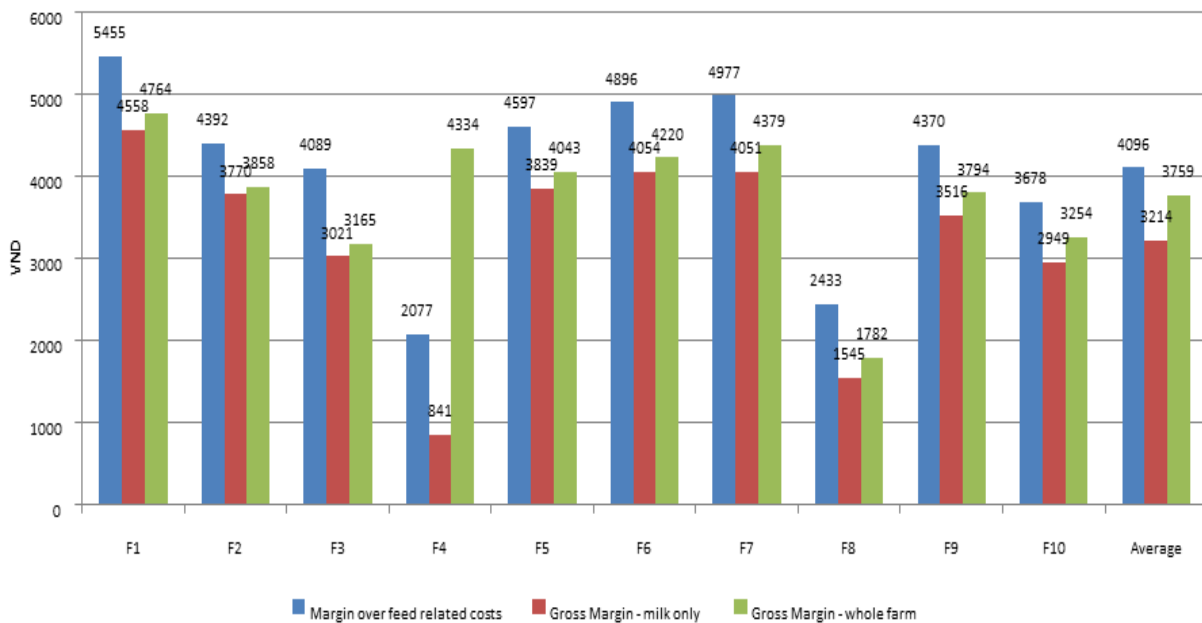
Invest vs income



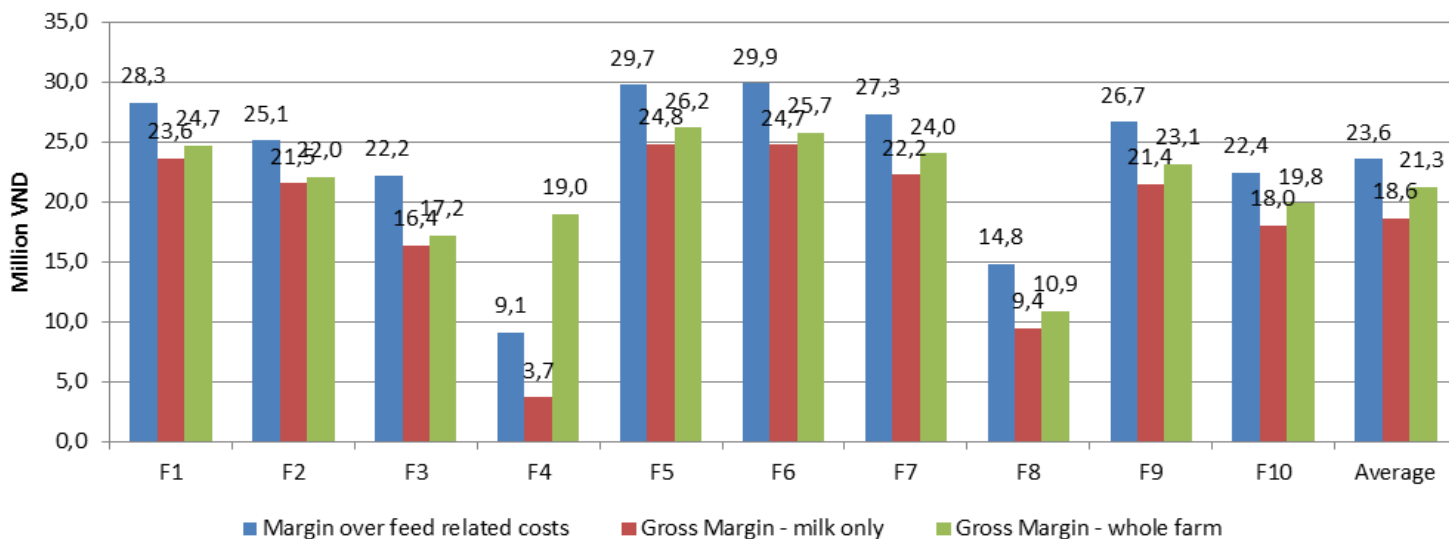
◆ Feed Related costs
 ■ Total Variable Costs

Farm margins differ from farm to the others

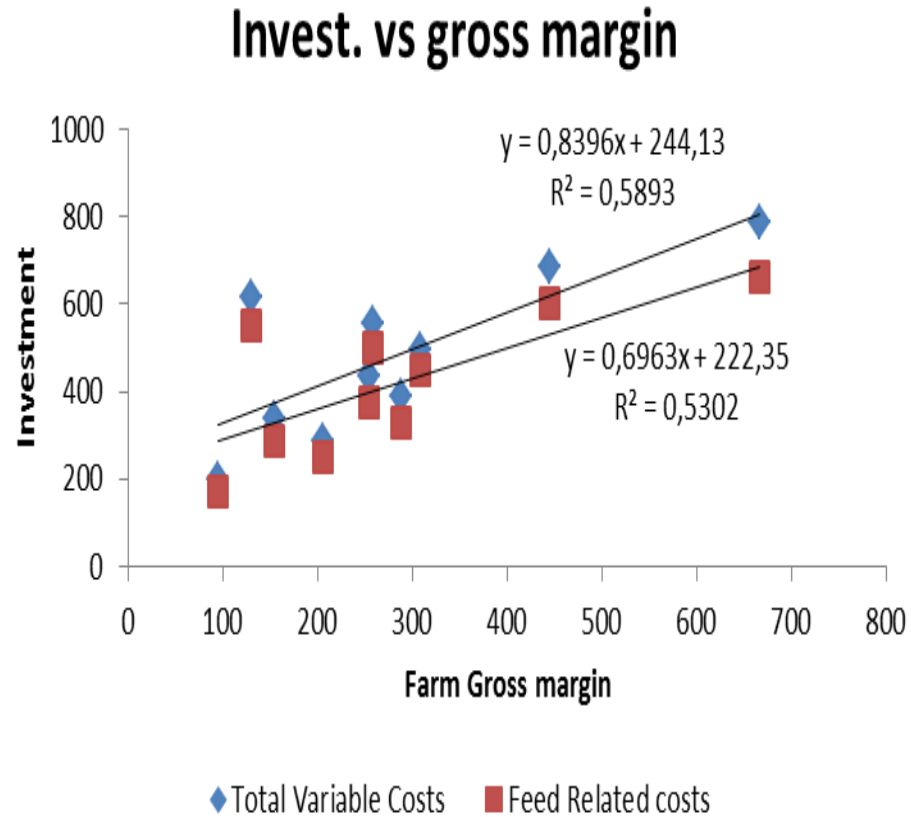
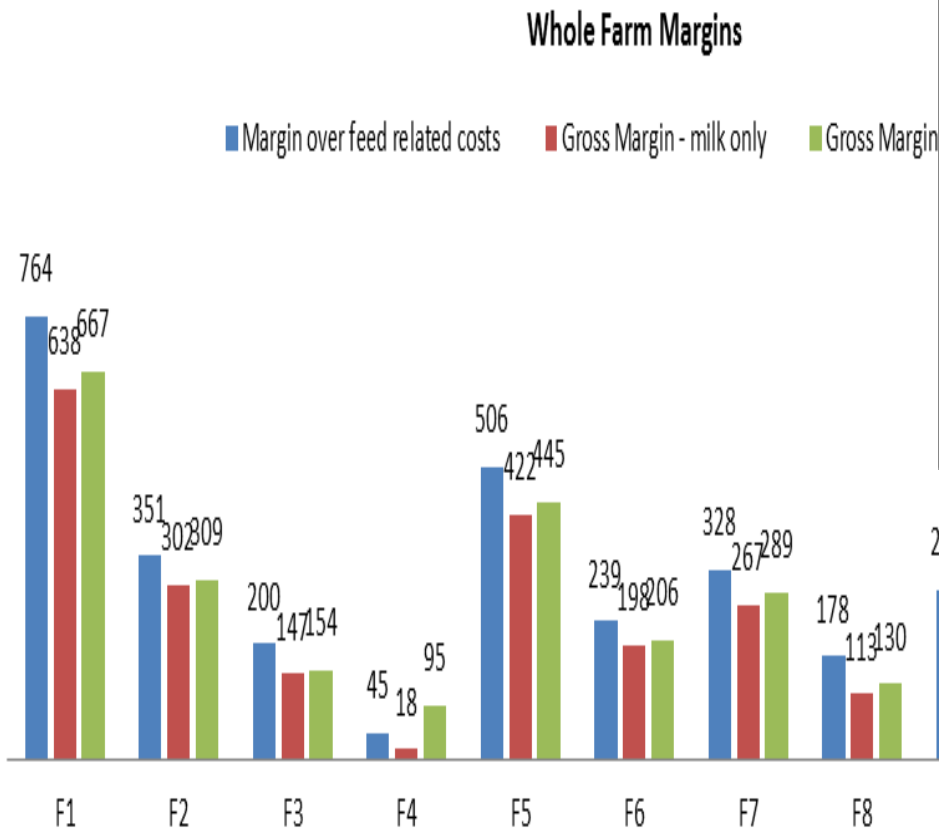
Farm margins per kg milk



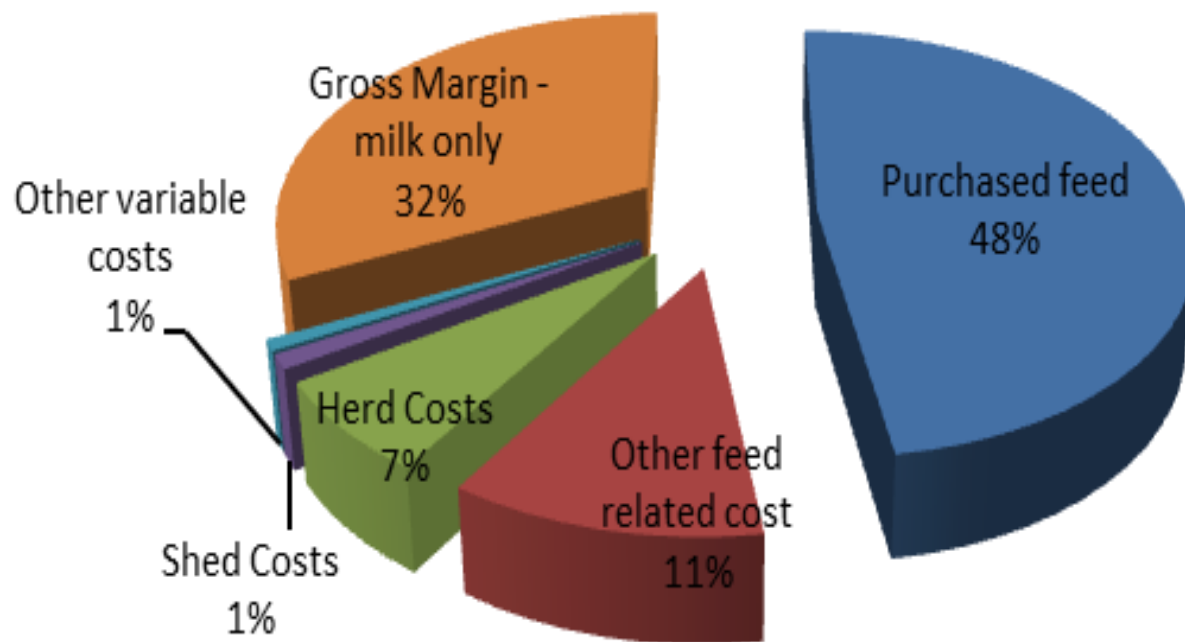
Margins per cow



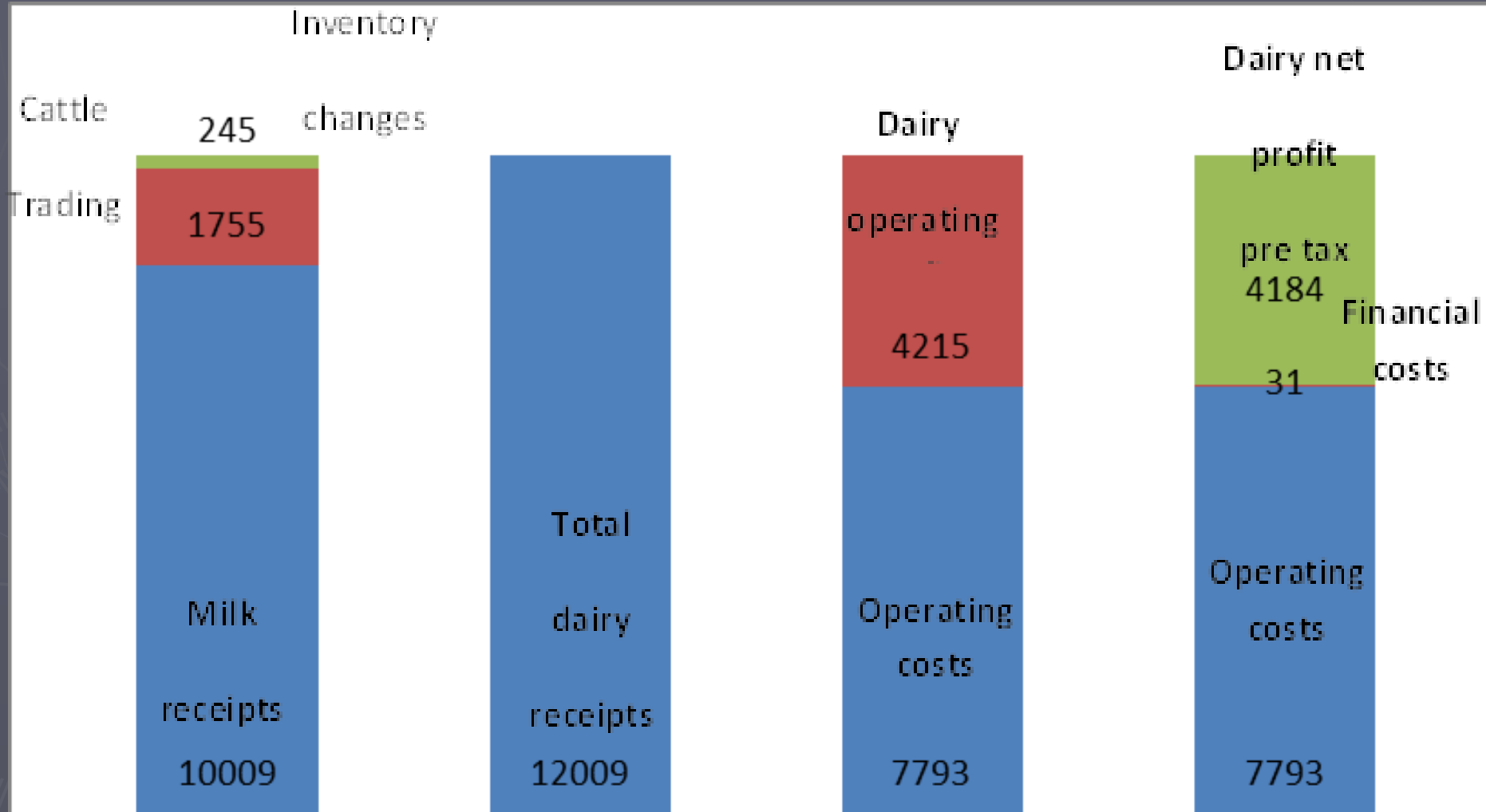
And depend on investment?



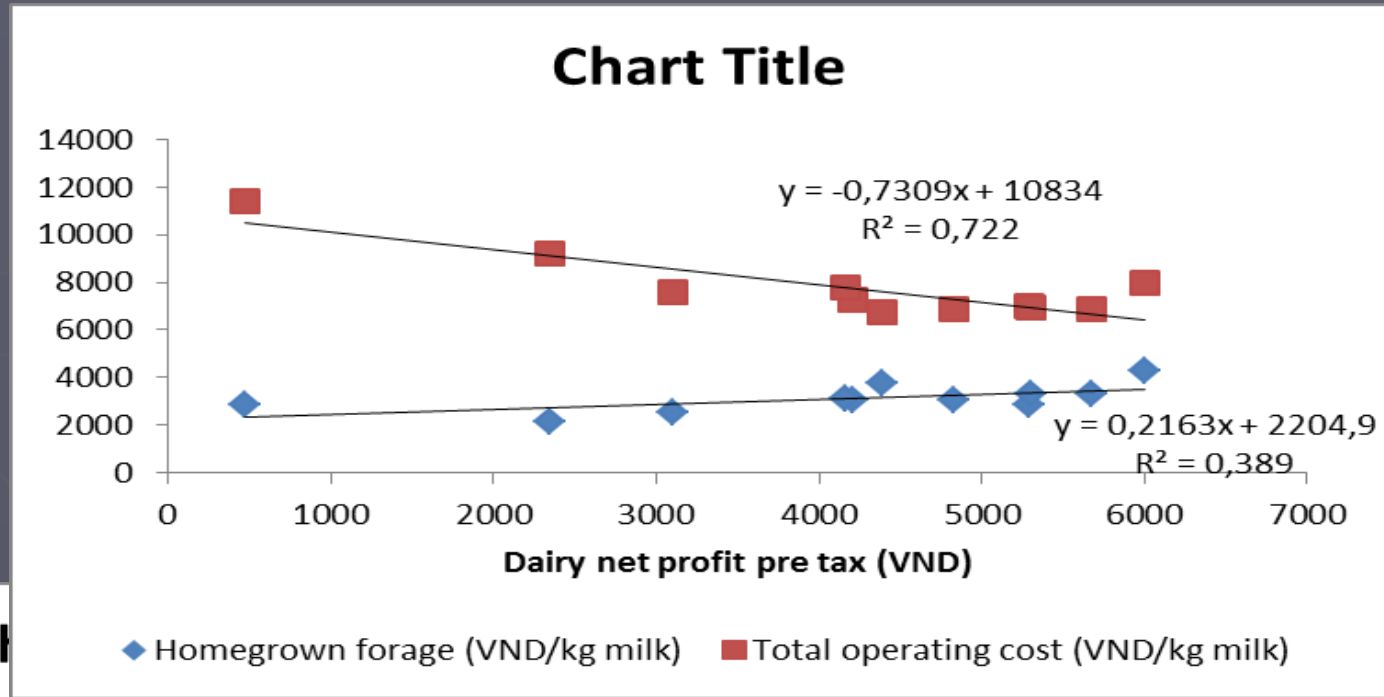
Average milk receipts compositions



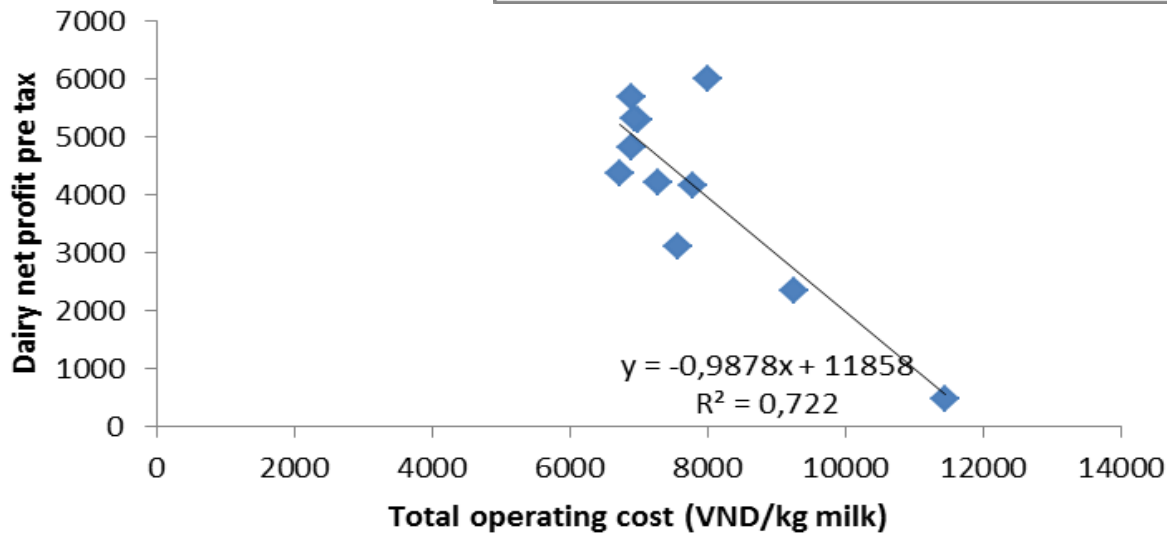
Farm profit



Dairy net profit

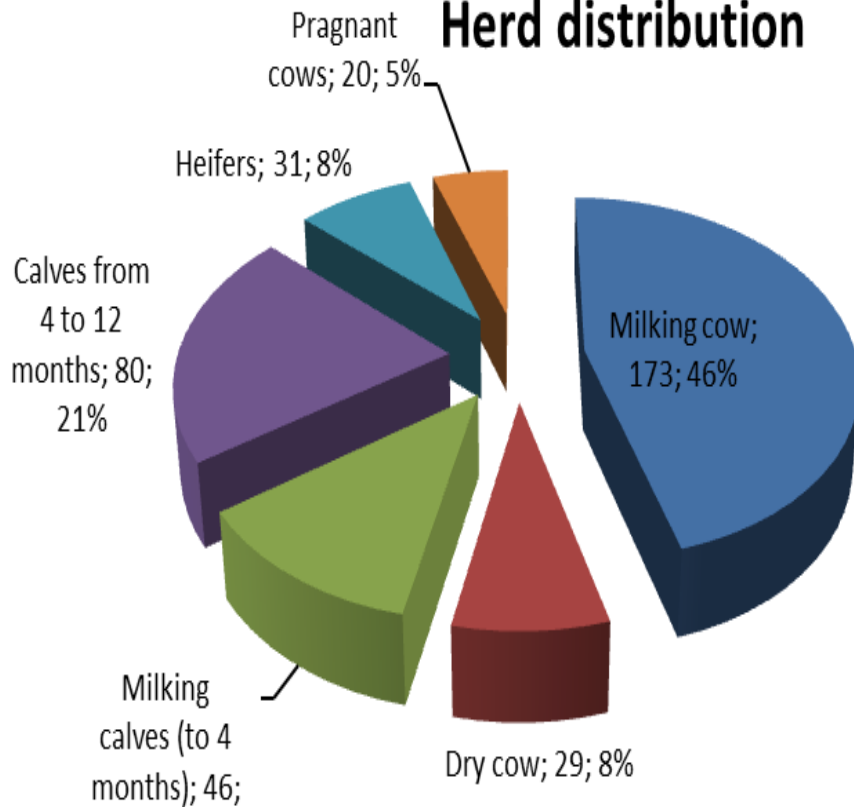


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Technical indicators

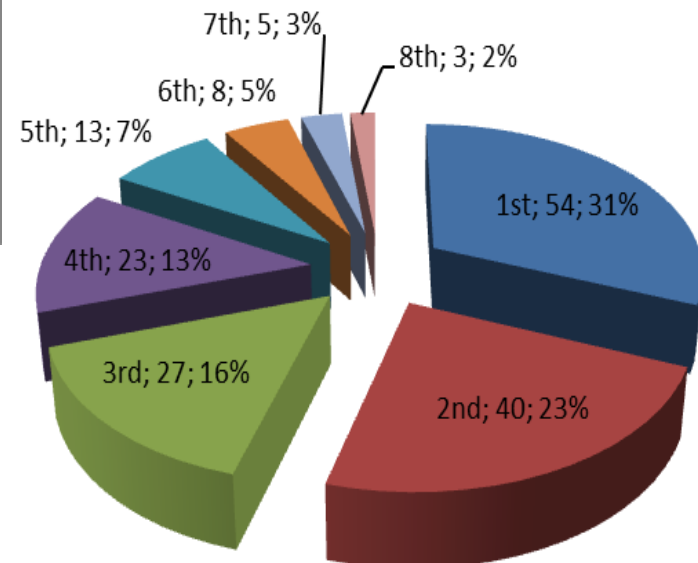
Herd distribution



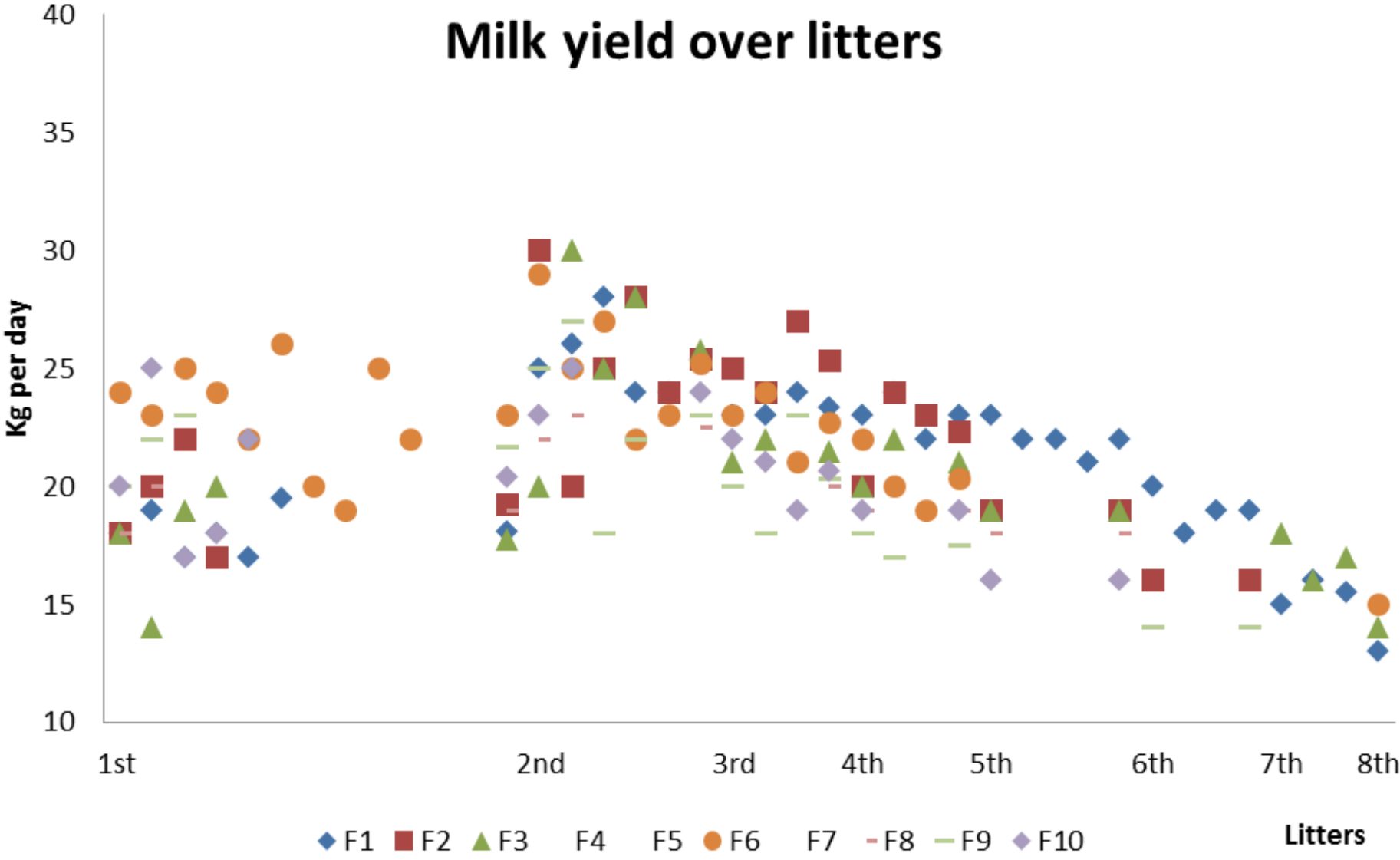
Management of herd

- Classification
- Separate
- Different in feeding

Distribution of cow over litters

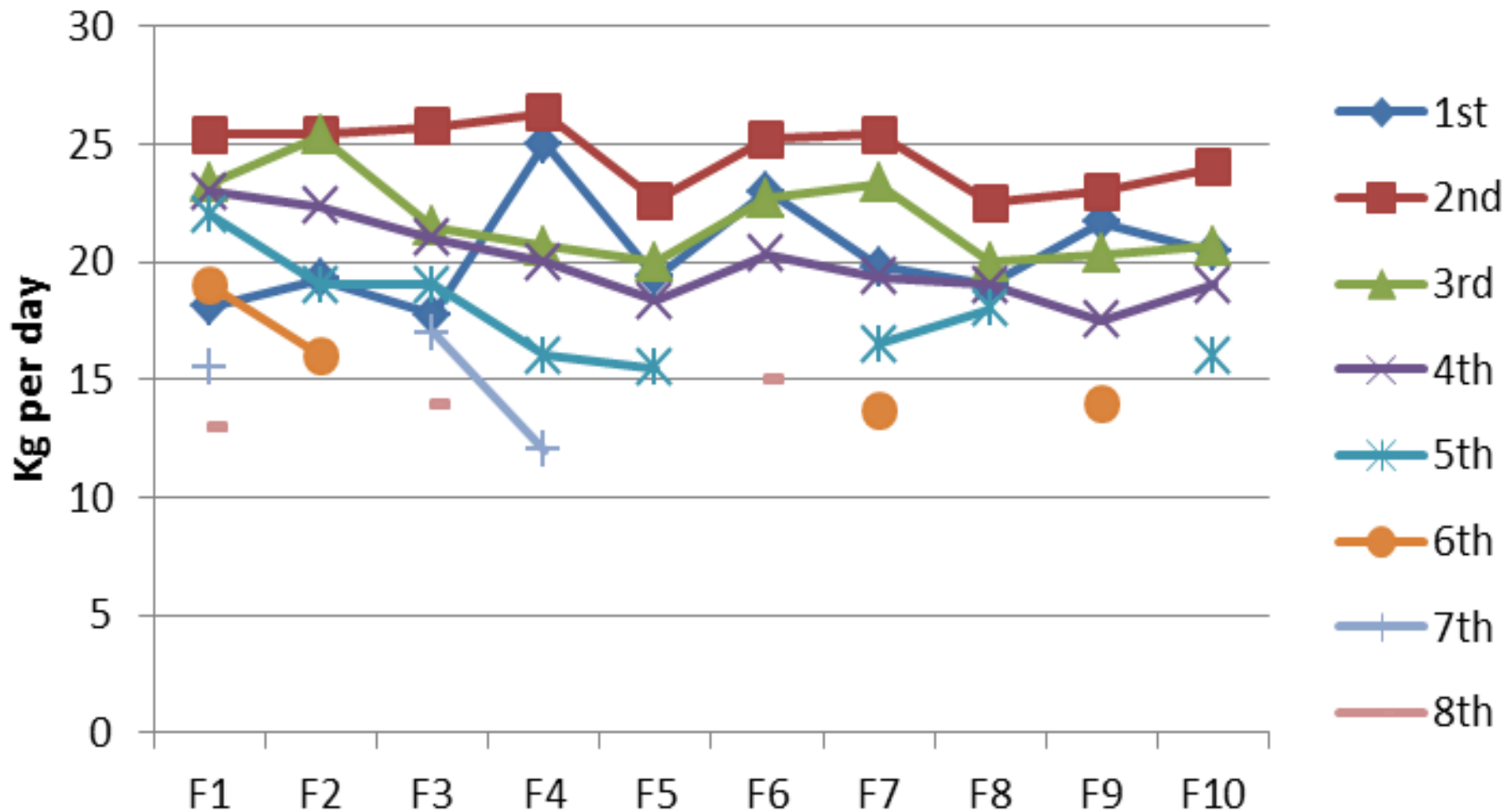


Pay attention to high yield cows



Concentrate more on diet and ration

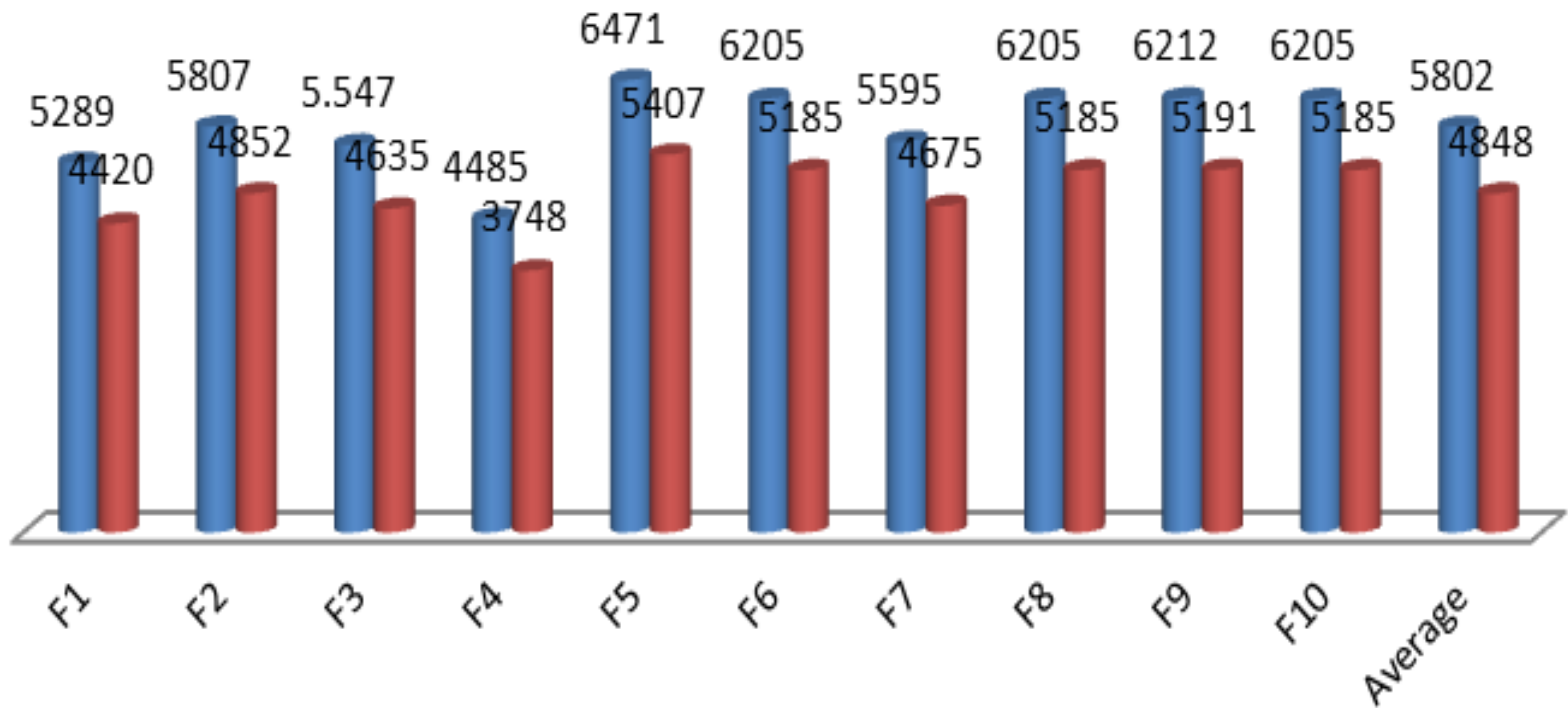
Average milk productivity over litters



Milk production

Milk production per cow

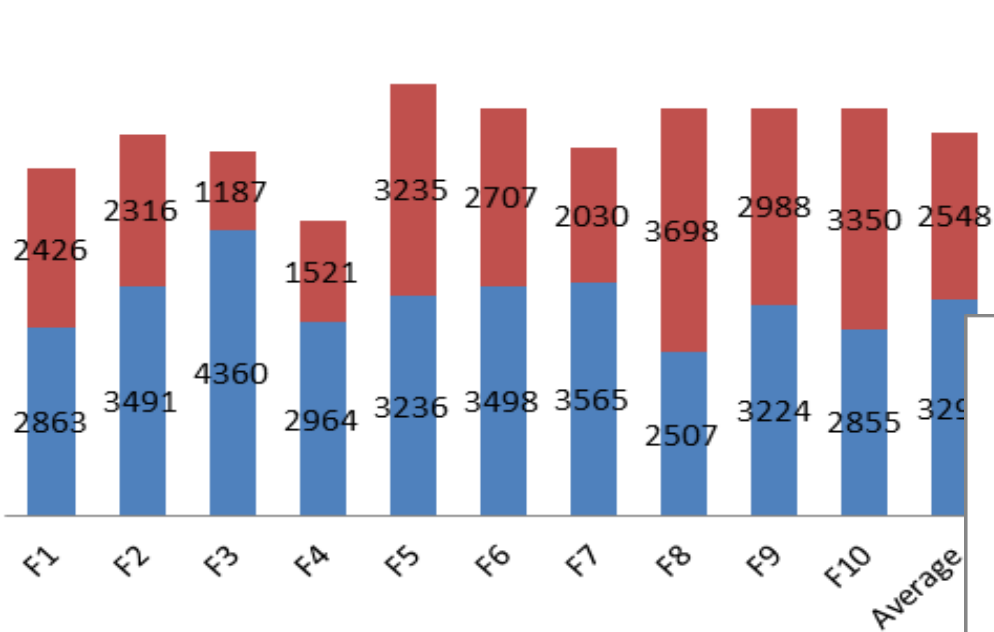
- Milk production per cow per annum (kg)
- Milk production per cow per lactation of 305 days (kg)



Managing diet

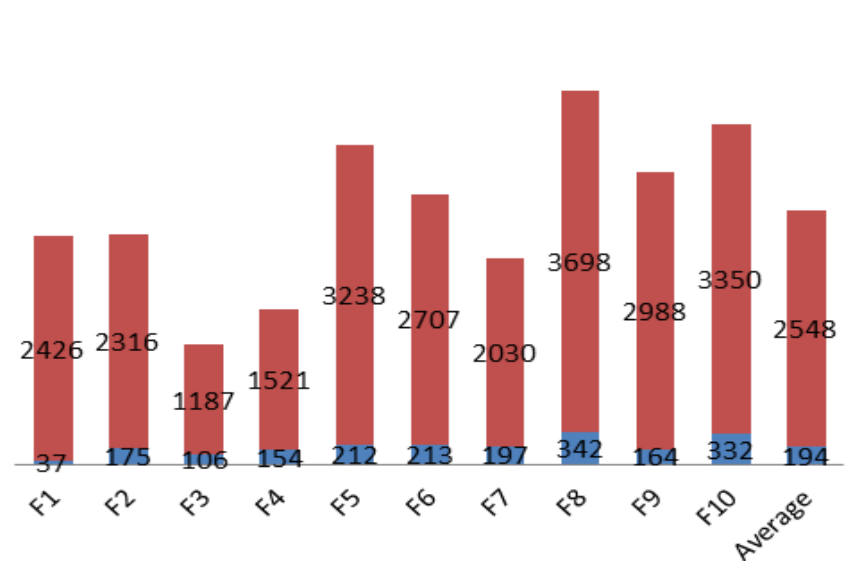
Milk from feed (kg/cow)

■ Milk from forages ■ Milk from concentrates

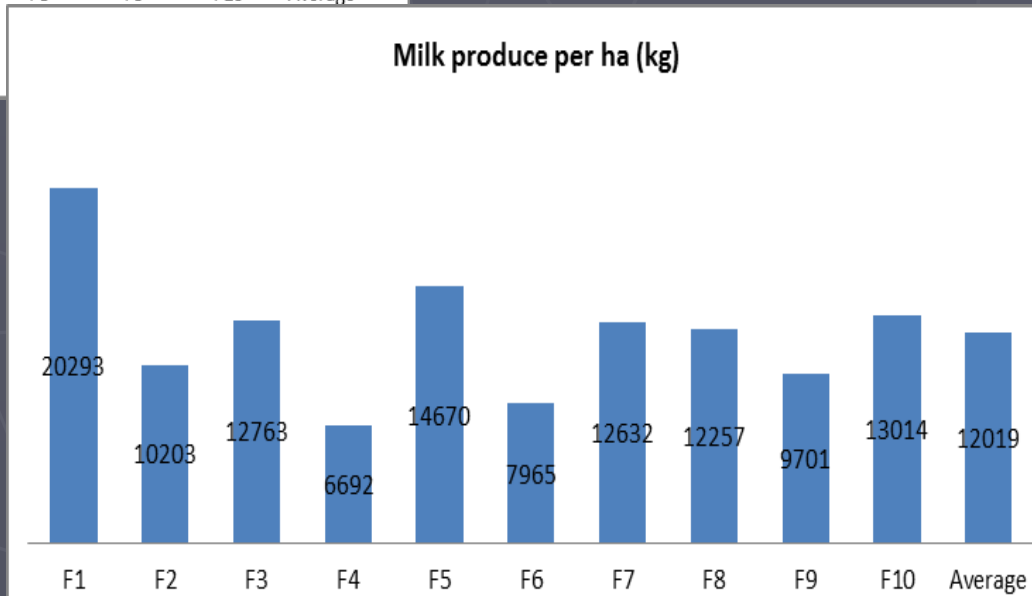
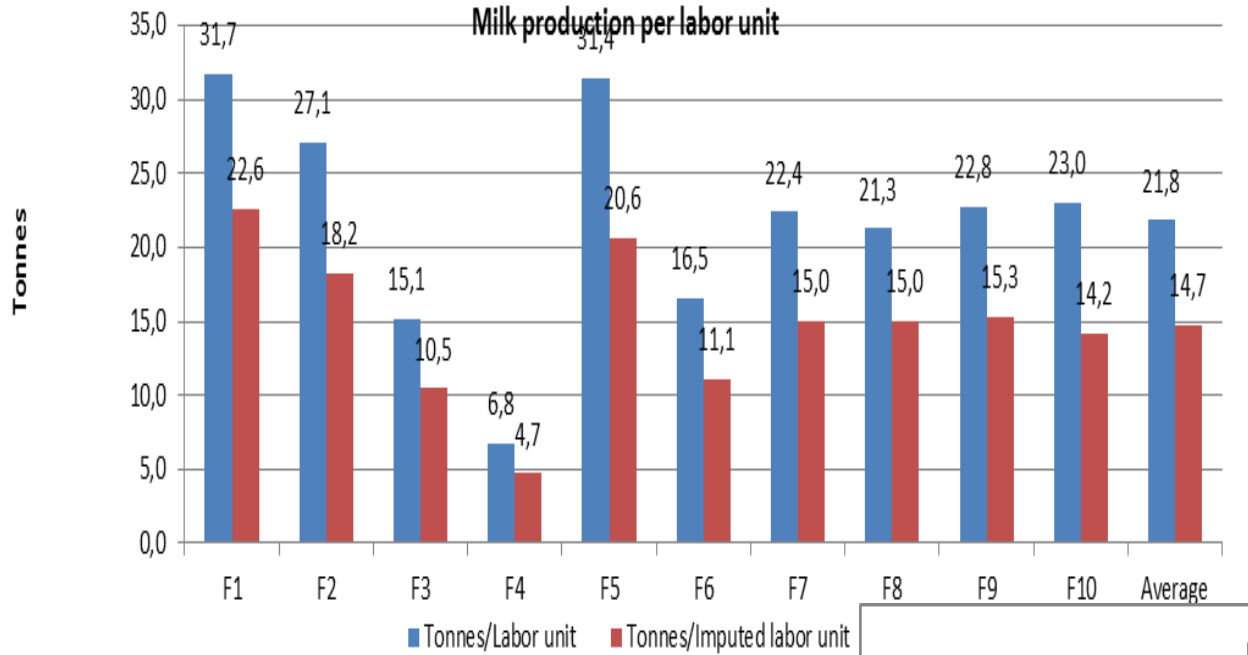


Milk from purchased feed (kg/cow)

■ Purchased forage ■ Purchased concentrates



Labor and land productivity



Conclusions

- ▶ Stocking rate, milk yield and income were rather high but varied largely from this farm to others.
- ▶ Cost control in farm was not good → dairy margin was not high. Purchased feed cost was too high.
- ▶ Homegrown feed: small part of cost but produced large amount of milk; while purchased feed: large proportion of cost but produced less milk quantity.
- ▶ Experience, labor, and herd size were the major factors that increased economic performance in farms.

Recommendation

- ▶ Farmers had better pay more attention to decision-making → more effectiveness
 - Choose the suitable herd size based on their real factors of production
 - Cost control, reduce purchased feed, increase homegrown feed
 - Develop skills and technique of milk production.
 - Should not concentrate too much on the herd size and quantity of milk production, but on the quality of herd and milk.
- ▶ Support from the scientists and government to increase farmers' skills and living standard.