Determining the capital requirements for an agribusiness.

ANSWERS

EXERCISE 1

Mark and Sally are considering a 310-cow venture on a farm recently converted from dry stock. They live on a farm where Mark is the herd manager for a 600-cow herd, while Sally works in town as a veterinary nurse.

What factors should they take into account when setting goals for their future? (Both long and short term)

- What are the costs of shifting to new position.

- Is Sally able to still travel to work in town?

- What finance or capital will be needed?

- Do they need to borrow money to do this?

- What will the job entail?

- Is this a progression forward for Mark and Sally?

- Will this be a viable business option for Sally and Mark?

- What production is the farm doing?

- What are the current farm expenses?

EXERCISE 2

What resources might Mark and Sally require for their 310-cow venture?

Market value of high breeding worth stock;

Cows $1,800

In-calf heifers $1,600

Rising 1yr heifers $ 800

They currently have: They Require:

Vehicle 1 $30,000 80 hp tractor = $ 45,000

Vehicle 2 $15,000 Calf feeding equipment = $ 2,000

Boat $28,000 Assorted plant = $ 15,000

ATV/sundry $14,000 Mower = $ 10,000

Caravan on site at beach $35,000

Savings $165,000

NZ airport shares $18,000

45 heifer calves $36,000 285 cows @ $1,800 = $513,000

25 in-calf heifers $40,000

(Stock grazed away.)

Total: $381,000 Total: = $585,000

Mark has completed an ITO Production Management course through Dairy Training, and has a farming background.

EXERCISE 3

Establish Mark and Sally’s current equity position.

Assets = $381,000

Liabilities - $0

Equity = $381,000

Current equity as a percentage of their total assets:

Equity = $381,000

Total assets ÷ $381,000 x 100 = 100% equity.

EXERCISE 4

(Using the values of stock and plant from Exercise 2).

a). Mark and Sally have decided that they want to retain at least 40-50% equity in their business, with their private vehicle and caravan not included in calculations.

With this in mind they have made the following decisions;

* Sell their shares
* Sell the boat
* Trade the smaller vehicle for a second hand utility of the same value.
* Keep the caravan. (They value the time with family at the beach)
* Retain their 45 yearlings and 25 in-calf heifers. (Buy no extra yearlings.)
* Contribute all their savings

They have estimated that they will require an overdraft facility of $12,000 to cover seasonal needs in the 1st year.

Answer: With their private vehicle and caravan not included in calculations.

They currently have: 310 cow venture:

Vehicle 1 $30,000

Vehicle 2 $15,000 Vehicle – now utility $ 15,000

Boat $28,000

ATV/sundry $14,000 ATV/sundry $ 14,000

Caravan on site at beach $35,000

Savings $165,000 Savings $211,000

NZ airport shares $18,000

45 heifer calves $36,000 45 heifer calves $ 36,000

25 in-calf heifers $40,000 25 in-calf heifers $ 40,000

Total: $381,000 Total: $316,000

Mark and Sally will need a term loan of: $269,000.

Show working:

Required assets of 310 farm = $585,000 – predicted assets of $316,000 = $269,000

Liabilities

Term loan = $269,000

Overdraft facility + $ 12,000

Total = $281,000

Assets = $316,000

Liabilities - $281,000

Equity = $ 35,000

Equity as a percentage of their total assets:

Equity = $ 35,000

Total assets ÷ $316,000 x 100 = 11% equity.

Decision:

Therefore, with their private vehicle and caravan not included in calculations, Mark and Sally are below their equity required of 40-50%.

Answer: With their private vehicle and caravan included in calculations.

Assets would be $381,000 and they would need a term loan of $204,000.

Liabilities

Term loan = $204,000

Overdraft facility + $ 12,000

Total = $216,000

Assets = $381,000

Liabilities - $216,000

Equity = $165,000

Equity as a percentage of their total assets:

Equity = $165,000

Total assets ÷ $381,000 x 100 = 43% equity.

Decision:

However, if they use their private vehicle and caravan in the calculations, Mark and Sally are within their equity range of 40-50%.

b). Calculate the borrowing required. Calculate the annual cost of borrowing, if terms are 9.5% for 5 yrs.

$216,000 x 0.095 = $20,520 per year