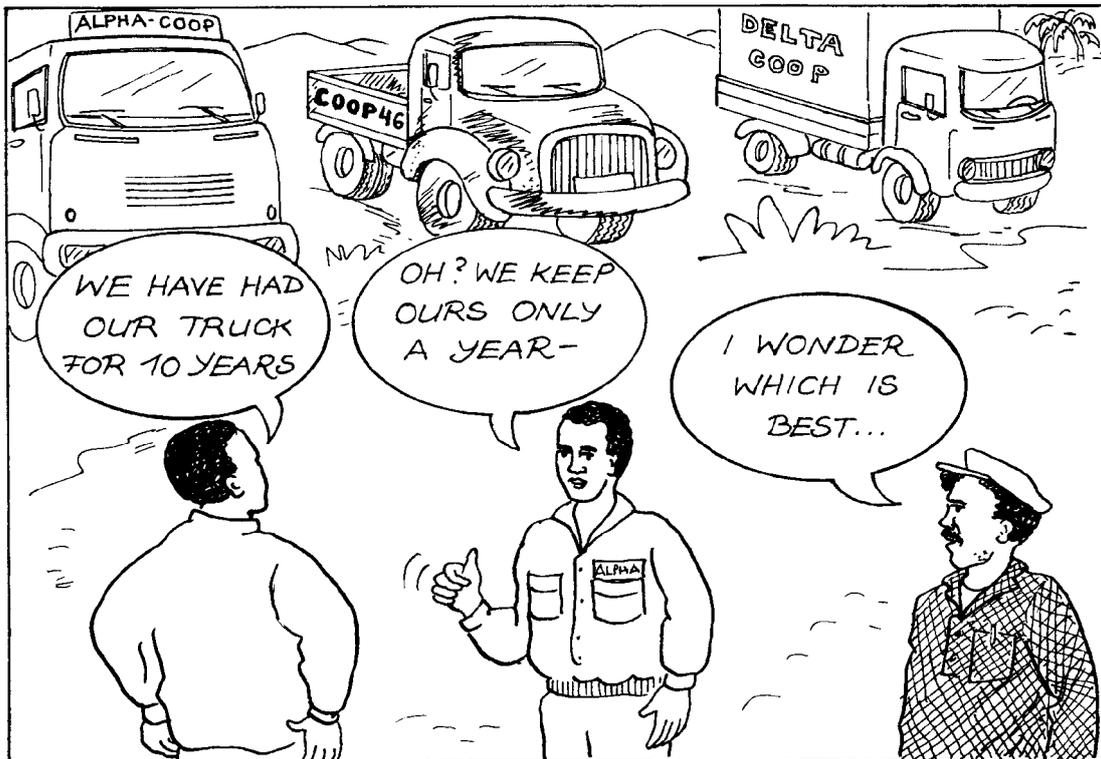


Transport
A Self Study Guide for Members and Staff of Agricultural Cooperatives

LESSON EIGHT: Replacing vehicles



Objective: To explore the question of vehicle replacement and how to make the decision of whether to keep or replace a vehicle.



How do you decide when to replace a vehicle? Do you:

- a. only replace a vehicle when it is totally wrecked or will not go any more?
- b. replace vehicles on a regular basis, after one or more years, regardless of their condition at the time?
- c. assess the situation every year and decide on the basis of likely costs and benefits?

The last method is best, but most complex. It requires some estimates, calculations and judgement; it is not an "automatic" decision like the other two.

You will need information about the possible new vehicle:

- What will it cost?
- What payment terms can be arranged?
- How much fuel will it use?

You must estimate:

- how much it will cost to maintain and
- how much it would be worth if you sold it after one or more years.

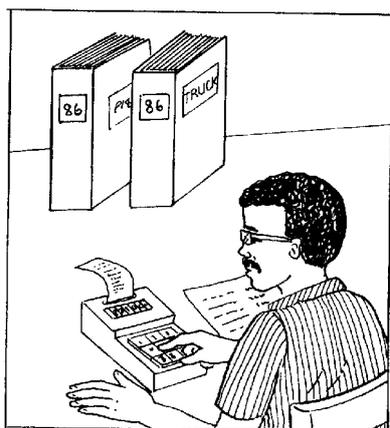
Your supplier (and your own and others' experience) can help you here. We have already discussed (in lesson 2) how to collect information about new vehicles.

You also need information about the old vehicle:

- What could it be sold for now?
- What has it cost to maintain it so far?

You will have to estimate:

- how much it will cost to maintain in the future;
- how much fuel it will use;
- how much more likely it is to break down than a new vehicle;
- when in the future you think you will decide to replace it; and
- how much you will be able to sell it for when you do replace it.



If your maintenance records and fuel records have been kept as suggested in this study guide, you will have no difficulty in finding out what has happened in the past or in estimating for the future.

Your information might be presented like this.

	Keep old vehicle	Buy new vehicle
Initial payment		T\$ 7,000
Annual payments (3 years)		T\$ 5,000
Maintenance charges per year	T\$ 2,000	T\$ 1,000
Fuel charged per year (@50 cents per litre)	T\$ 6,000 (12,000 litres)	T\$ 4,000 (8,000 litres)
Resale value after four more years	T\$ 1,000	T\$ 10,000

(Note that there is no need to include all the costs, but only those which would be likely to be significantly different in each case.)

You can then work out the cost of each vehicle over four years and subtract what it would be worth at the end.

	Cost	+ Maintenance	+ Fuel	- Resale value	= Total
Old vehicle	0	+ 8,000	+ 24,000	- 1,000	= 31,000
New vehicle	22,000	+ 4,000	+ 16,000	- 10,000	= 32,000

Faced with this choice, what would you do? Are there any other important factors that have not been considered?

Clearly an old vehicle is more likely to break down than a new one. You must decide whether the cost of breakdowns (and of not having the vehicle at these times) will be more or less than T\$1,000 over the four-year period. Most managers would probably decide to buy the new vehicle, if the difference were this small.

It is important to remember that vehicle replacement decisions, like all management decisions, cannot be made purely on the basis of calculations. You must use your own judgement with the figures to guide you.