

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

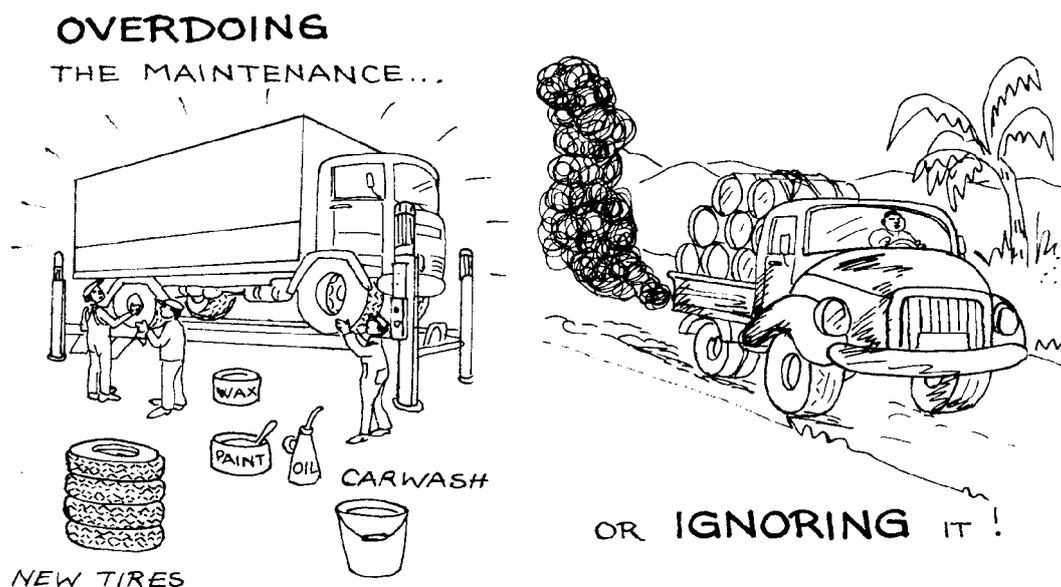
LESSON SIX: Maintenance and Fuel



Objective: To explain the importance of vehicle maintenance and fuel recording, and to examine the pros and cons of a cooperative having its own maintenance facilities.

What happens if you neglect the maintenance of your vehicles? They will break down, sooner or later, leaving you at least temporarily without transport.

Suppose you give your vehicles excessively good service - you keep them in the garage for a full day's service every week, change tyres every 5,000 km and so on. Would that be all right? Well, some breakdowns might be eliminated, but such maintenance would itself be costly, and with the vehicles off the road so much you would still be left often without transport.



Like all other management jobs, vehicle maintenance is a balancing act; you have to find the right point between extremes. There are both technical and economic aspects to consider here. The aims of maintenance are:

- to ensure that vehicles are safe;
- to minimize breakdowns and time off the road;
- to control and reduce costs;
- to maximize economic vehicle life.

There are two types of maintenance:

- **planned** maintenance - this includes the daily check by the driver and the regular garage inspections and servicing; and
- **emergency** maintenance - the repairs necessary when something breaks down.

Owning maintenance facilities

We saw earlier that there are good reasons both for and against a society owning its own transport. The objective is not to own the vehicles, but to provide the transport service. It is the same with maintenance. You can have your own garage and mechanics, or have maintenance provided by outside firms.

Which is best? There are advantages and disadvantages to both systems. Let us listen to a manager with positive experience in providing maintenance within his co-operative:

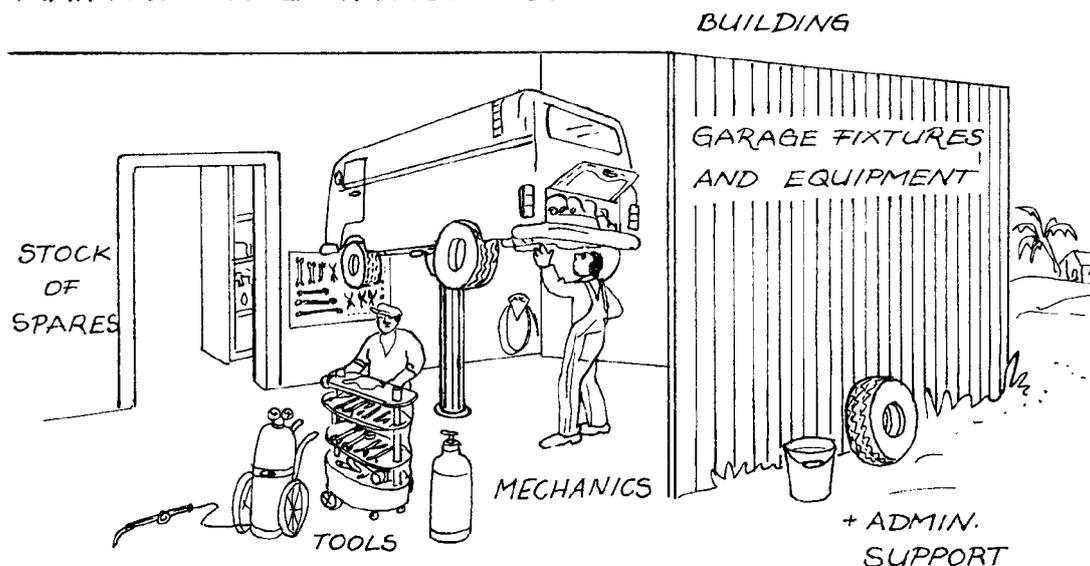
- "We can keep close control on our trucks. The service is available on-site as needed. As soon as something happens we can check on and repair it. Our mechanic knows our trucks very well. He knows what spare parts we need and we can stock these. Our drivers share the work with the mechanic as necessary. We probably have lower maintenance costs than many other societies."

But another manager had largely negative experience with his own maintenance facilities:

- "I think we have lost money on our own maintenance. We have three different makes of trucks, all new to our staff, which creates problems. For major repairs they always refer to the agents in town. We have spent a lot of money on tools and spare parts; now it looks like many tools have disappeared and the parts will never be used here. I don't know what to do with the garage staff."

Obviously, there are many matters to consider before you decide whether or not to set up your own maintenance facilities: the number of vehicles you have; how complicated they are; how much money you can invest in buildings, equipment and spare parts; whether you can find a qualified mechanic. Your decision, in any case, is not permanent. You must periodically re-evaluate it. Even if you have had your own facilities for some years already, you must remain open to the possibility of changing over to an outside supplier, if this should prove better and cheaper.

MAINTENANCE FACILITIES:



The costs of maintenance are, of course, of decisive importance. You can never come to the right decision if you do not know the maintenance costs for each vehicle. For this, you require records.

Maintenance records

When a mechanic performs planned, regular service on a vehicle, he works systematically, checking a large number of parts and functions. To be sure that he does not forget anything he follows the special service instructions issued by the manufacturer in the form of a service book or a service card. This is like a check-list where he can tick off every job done. It is important that these manufacturer's instructions are observed carefully.

To monitor services and repairs and what they cost, records must be kept for each vehicle. Whether the work is done in your society or outside, you must have records on:

- planned service intervals, when the last was done and when the next is due;
- any defects discovered and repaired;
- any parts substituted;
- the costs of all material and parts used;
- the cost of the labour (if the work was done by your own staff you must know how much time they took for it).

Maintenance costs

Your maintenance records will enable you to ascertain the total annual maintenance costs of each vehicle. These should include any costs you may have had for a workshop building and equipment and the time spent on maintenance. It is easy to forget the time the manager or a supervisor uses to organise and supervise maintenance work.

All this information is necessary for your management decisions. You need it to:

- assess whether the staff is taking good care of the vehicles;
- calculate the total cost of a vehicle and how much to charge for the use of it;
- decide whether or not to retain a particular vehicle (high costs may indicate that it is time to dispose of it);
- decide whether you should change your system of maintenance (from your own to external services, or vice versa).

Fuel

Fuel is vital to your transport operations. It accounts for a large part of your transport costs. It is easily stolen or misused (by unauthorized or unnecessary trips). The fuel consumption of individual vehicles must be monitored. You must have an effective system for the issuing of fuel.

Your system will depend on local conditions, whether you have your own tank and pump on the premises, and so on. In any case, you must design it so that the questions on the following page can be clearly answered.

For fuel issued on your premises:

- i. Who is responsible for issuing fuel to individual vehicles (the driver or someone else)?
- ii. Is fuel available at any time or only during limited hours?
- iii. How is the amount of fuel issued, recorded at the pump and in the vehicle?
- iv. How is the volume of fuel in the tank checked? How often and by whom?
- v. Who is responsible for ordering fuel from the supplier?
- vi. How is total fuel issued compared with individual issues and the contents of the tank, so that any possible "leakage" is discovered?

For fuel bought on the road:

- i. Are drivers permitted to buy only from nominated suppliers or anywhere?
- ii. How do the drivers pay for the fuel?
- iii. How are fuel purchases recorded by the drivers?
- iv. Who checks the fuel consumption of each vehicle? How is it done? How often?



- Can you suggest ways to improve the vehicle maintenance and fuel systems in your co-operative?