

## Assessment of environmental impacts

Good forest management should include assessing the possible environmental and social impacts of forestry activities. For information about assessing and monitoring social impacts, see briefing note 3.

Environmental impacts may be:

**direct impacts** such as removal of trees because of road building, or an effect on insects and birds by chemical pesticides, or

**indirect impacts** such as increased access to the forest by illegal hunters (poachers) as a result of better access along logging roads;

**positive impacts** (e.g. a greater diversity of bird species because of a new structure of the forest), or

**negative impacts** (e.g. pollution of a source of drinking water by chemicals).

The assessment of environmental impacts will need to:

- Find out what the likely impacts are, and how significant they could be.
- Evaluate what level of impact is acceptable.
- Provide solutions for how negative impacts can be kept to these acceptable levels.

### Keep it simple

FSC is clear that the scale of an impact assessment should be appropriate to the scale of the operation. So if your operation is small, or has a very low level intensity of harvesting, then your assessment should also be relatively simple.

For a very simple forest operation a large part of the environmental impact assessment may involve just ‘thinking ahead’ about the way things should be done. It may actually help to think negatively!! In other words, “what might have a negative impact?” or “what could go wrong?”. When you’ve anticipated what those things might be it is easier to see how to avoid them happening. For example, when building a road your experience might tell you that a road might lead to lots of run-off, and erosion along the side of the road in heavy rain, washing away soil. By thinking of this you can identify what needs to be done, and ensure that the road is built with appropriate drainage.

### Consult others

If you don’t have the resources to do specific studies, and/or your operation is particularly small, or of low intensity, asking the opinion of others may be a very significant part of your assessment. You should consult with people who are familiar with your type of forest, and the action you are thinking of taking (e.g. road building), about the likely impacts, and the best way to minimize any negative impacts. Useful people to contact include professional foresters who work in your region, and local biologists or ecologists who may be able to provide advice about the best way to minimize the impact on the natural environment. It is not usually appropriate to rely *only* on the opinion of the contractors who are being hired to do the work (e.g. felling or road building), as they may have a vested interest in the work being done in a particular way.

An **Environmental Impact Assessment (EIA)** is an assessment of the possible impacts – positive or negative – that a proposed activity or operation may have on the natural environment. The purpose of the assessment is to ensure that the forest managers consider environmental impacts and use the results of the assessment to make any necessary changes to their plans, if any possible negative impacts are found.

### Relevant parts of the FSC Principles and Criteria

#### Principle 6: Environmental Impact

FSC requires that an assessment of environmental impacts is carried out, and incorporated into the management plan. The assessment should take account of landscape level impacts, as well as on-site impacts of processing, and assessments need to be done *before* any site-disturbing activities take place. It is emphasised that this assessment should be appropriate to the scale and intensity of forest management and the uniqueness of the affected resources (summarized from criterion 6.1).

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Consider looking at the following 2 types of impacts:

- 1 General impact of the whole forest operation.
- 2 Impacts of specific operations that are likely to have environmentally damaging effects.

Remember the important thing is to find out whether any negative impacts could occur, *before they happen*, and be able to modify your plans in order to reduce any possible negative impacts.

## 1. General impact of the whole forest operation

What is the overall, long-term impact of what you are planning?

This level of assessment is important if you are planning a new operation (e.g. small plantations or woodlots for an outgrowers scheme). It is also important for groups of forest operations, especially if they are located close together (and therefore resemble a single forest), to consider this level of impact. It is less useful for small / low intensity forestry operations that are already underway.

This sort of assessment should consider the total change to the forest ecosystem, on regeneration and water management, and the forest's capacity to support biodiversity.

**An example:** *a lot of very small woodlots on the sides of a river valley could have a very major impact (positive or negative) on water provision downstream. Before making radical changes to the management or extraction, the woodlot owners and the group manager should consider the downstream consequences.*

## 2. Specific assessments of direct and indirect impact

This sort of assessment is about making sure specific operations don't have environmentally damaging effects. Some common actions that can have significant impacts, even on small scale or low intensity operations include:

- felling (how and when the trees are brought down)
- skid trails (how and where the logs are brought out of the forest)
- road building (how and where you build roads)
- application of chemicals (e.g. pesticides, herbicides)
- planting (especially of exotic species)
- construction (e.g. processing plants, sawmills, storage, accommodation)
- waste disposal (how and where waste is removed – this includes the waste products of sawmills, and particularly the disposal of containers of fuel, oil, and chemicals).

For small and low intensity operations, a big part of assessing the environmental impact of day-to-day operations is about common sense: it's about thinking about the consequences of your actions before you do something. However if you are going to carry out a new action, or intervene in a new area, you may need to carry out a more formal assessment.

## Making Changes

**Take action:** take the time to carefully assess negative impacts of operations. But don't stop there! Take action to minimize or eliminate the impacts. If you identify possible problems, you will need to change the way you do the activity. E.g. changing the way you apply chemicals, or fell trees.

An EIA for small or low intensity operations is not about writing a report labelled "EIA" and filing it away, it's about anticipating problems and preventing them. This will involve making decisions about the way you carry out your forest operations (e.g. you might decide to change your harvesting plan to build fewer skid trails if you're worried about damaging a rare forest).

You may also need to influence other people. If your operation relies on external contractors for some forestry activities (e.g. felling and extraction, or road building), then discuss with them your concerns about the environmental impacts of their work. You will need to give them clear instructions about the impacts you want to avoid, and agree with them how they can best do this.

**For example:** *An operation uses contractors for harvesting and agrees that all waste will be removed (anticipating a possible negative impact from used fuel containers left in the forest).*

## Monitoring

Don't forget that if you've identified some possible impacts (and maybe made some changes to your management to minimize or eliminate the impact ) you will need to check later what happened **in practice**. In other words you will need to monitor the actual impacts that you were concerned about.

### more information

There is more information on monitoring in Briefing Note No. 5 (Simple Monitoring Methods), and Briefing Note No. 4 (High Conservation Values and Biodiversity)