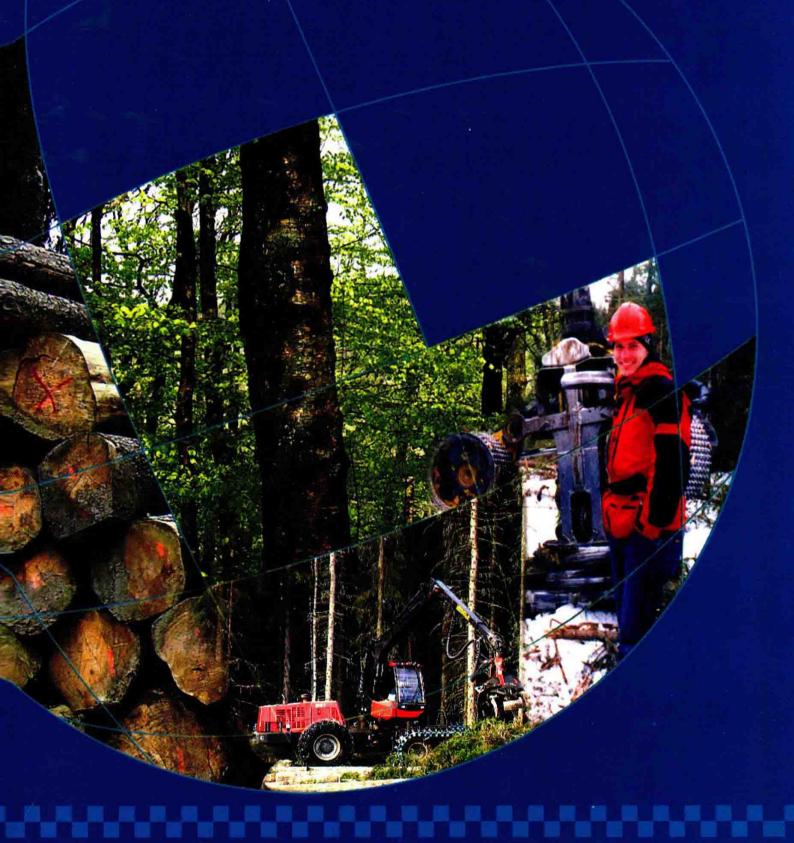
GUIDE TO GOOD PRACTICE IN CONTRACT LABOUR IN FORESTRY









GUIDE TO GOOD PRACTICE IN CONTRACT LABOUR IN FORESTRY

Report of the UNECE/FAO
Team of Specialists on Best Practices in Forest Contracting

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PREFACE

One aspect of the social pillar of sustainable forest management, which has so far received little attention at the policy level, is the forest workforce. There has been little recognition at the international level of the obvious fact that sustainable forestry requires a sustainable work force. Increasingly, forestry operations, -notably harvesting- are carried out by contractors. These are often small or very small enterprises, which therefore face major challenges in terms of occupational safety and health and economic viability as they lack a strong structure of cooperation and mutual support.

A team of specialists was set up under the integrated programme of the UNECE Timber Committee and the FAO European Forestry Commission to address this issue. This team, led by Edgar Kastenholz of ENFE, has drawn up a *Guide to Good Practice in Contract Labour in Forestry*, intended to help these contractors, and those working with them, to understand the issues, and function in a truly sustainable way. The Guide is based on European and North American conditions, but many of its suggestions are applicable elsewhere. We hope that this good practice guide will take its place alongside other good practice guides prepared by FAO and its partners as a very practical contribution towards achieving sustainable forest management.

We take this opportunity to thank the team members for their work in opening up a new field of activity and drawing attention to a range of issues which need attention, but which, as this Guide shows, may also be solved by applying basic principles and learning from the experience of others. The work was supported from the FAO staff side by Joachim Lorbach.

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SUMMARY

A MODEL FOR GOOD PRACTICE IN CONTRACT LABOUR IN FORESTRY

This guide illustrates how good practice in contract labour in forestry can be implemented. A number of examples of tools, instruments and strategies are presented. References and contact details to obtain further information complement these guidelines.

The following model is a summary of the various criteria for good practice that make up the content of this guide. It does not simply explain what the working conditions should be. Instead, it outlines framework conditions contributing to a good business environment – thereby allowing fair competition and partnerships between forestry contractors and their clients as well as among contractors themselves.

The good forestry contractor should:

- ... be <u>registered as a business</u> with the competent national or regional authority according to the regulations in force. These are based on rules recognized by the entire sector and that lay down the criteria for the registration of a business with the public authorities;
- ... have a competent and <u>qualified business management</u> that not only has the ability to take operational decisions but also to conduct a business in an entrepreneurial way. In order to do this the business management has management staff with accounting skills as well as expert knowledge of investment planning and assessment of offers;
- ... employ <u>qualified staff</u>. All employees are qualified for the tasks assigned to them. Anyone taking on new duties without adequate experience is extensively instructed and trained before starting work. Staff skills should always be up to date through further training. Employees need to be informed about and to be involved in business decisions, particularly when their own working conditions depend upon any changes in procedures and work organization;
- ... possess <u>adequate</u>, <u>well maintained equipment</u> that ensures operations are carried out as safely as possible and to a high standard of excellence;
- ... have sufficient <u>provision of capital</u> to be able to recruit and employ qualified staff on a long-term basis and to afford investments in necessary technology in spite of a fluctuating volume of orders;
- ... attain and maintain a quality management system to continually improve structures and processes. The management system documents and provides evidence that the quality of business management and performance is approved by an external supervision that is in accordance with clear standards recognized by the entire sector. Because of the quality management system the business increases in competitiveness, compared with uncertified contractors, as clients give preference to businesses possessing quality supervision;
- ... regulate health and safety at work within an <u>occupational safety management system</u> that clearly describes and documents structures and processes of cooperation with other contractors and with subcontractors. All employees of the business should participate in its implementation;
- ... conclude long-term <u>labour contracts</u> with his employees, in which working conditions and payment of a socially adequate kind and amount are laid down in a juridical way. Labour contracts are based on tariff agreements. The contractor should contribute to the content of

the tariff agreement through his participation in a forestry contractors' association;

... be supported by a national or regional forestry contractors' association that represents the interests of all forestry contractors at national or regional level towards their clients, be they large forest owners or the timber industries. It should also represent their interests towards public authorities, trade unions and various NGOs. The forestry contractor association should act in the interests of its members by influencing the formulation of laws and regulations. It should also contribute to the development of criteria for the recognition and registration of businesses and of criteria for the use of contractors in certified forest enterprises.

The good client should ...

- ... employ only <u>recognized and registered contractors</u> who comply with the sectorial criteria establishing the formal recognition of forestry contractors. The client should participate in formulating these recognition criteria through his trade association;
- ... conclude clearly written contracts with contractors specifying the scope of work and description of the quantity and quality requested and of environmental requirements;
- ... have an <u>occupational safety management system</u> in which the distribution of responsibilities and competences in matters of safety at work are organized, that contains information on supervision and sanction of infringements of operational safety rules, and that is communicated to the contractor;
- ... place <u>long-term orders</u>. Contractors in the region in which good business relations exist are informed of the planning of orders on a long-term basis, allowing them, as well, to plan staff and investments according to the expected volume of orders. The client should be interested in long-term cooperation with contractors who offer good performance and quality. He thereby utilizes the development potential of contractors in order to improve his own economic success;
- ... give preference to contractors possessing a quality management system and a certificate of good practice, because he knows that such businesses meet the criteria of forest certification better than contractors with no quality control;
- ... apply fair competition rules;
- ... communicate with the contractor frequently;
- ... pay the contractor on time.

The legislator and public authorities should ...

- ... lay down and enforce <u>laws and regulations</u> that consistently demand health protection and safety in forestry work. Laws and other regulations should agree with internationally recognized rules, particularly with the International Labour Organization (ILO) Conventions and Recommendations and the ILO Code of Practice on Safety and Health in Forestry Work (ILO, 1998);
- ... lay down and enforce <u>laws and regulations</u> that enable fair and open competition both within each country and in cross-border operations;
- ... define clear rules on <u>qualification requirements</u> for forestry contractors and their employees in cooperation with contractors' associations, forest owner organizations and industry. They should support forestry contractors' associations in harmonizing these qualification requirements with systems in other countries to enable mobility of contractors;
- ... outline minimum requirements for social benefits for the contractors and their staff;
- ... establish an administration and inspectorate to enforce these regulations and impose sanctions where necessary.

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PART A: INTRODUCTION

PURPOSE OF THIS GUIDE

The use of contractors in forestry is of increasing importance worldwide. The emergence of contracting in forestry brings not only a number of challenges for the whole forestry and wood industry sectors, challenges within the contracting enterprises themselves, but also regarding their competitive behaviour, between themselves and towards workers under contract in forest owners' enterprises.

Contractors in forestry, and in related lines of trade found in rural areas, should develop into economically and socially sustainable and sound businesses. These should be able to fulfil the standards of performance and quality not only required by their clients - forest owners and the timber industry - but also by society in an optimal manner, taking into account all national and international social and labour rules. These businesses should be able to offer and further develop viable employment opportunities for people from and in rural areas. Existing competences of contractors and employees need to be used. The qualifications necessary for future development need to be further improved. The employment situation should allow adequate income as well as socially acceptable conditions. Contractors should develop not only strategies and systems to ensure the health and safety of their employees as well as of the self-employed, but also guarantee the quality of their services. These strategies and systems are needed to ensure the ability of these businesses to survive and develop themselves within the constraints of increasing international competition. Forestry contractors equally help to create and maintain work and employment in rural areas. By this means they are making a valuable contribution to the maintenance and the improvement of the social, economic and ecological structures in rural areas.

Within the past 20 years there have been many attempts to increase understanding for the situation of forestry contractors. Based on this recent work and experience, the idea has evolved to draw up a guide to good practice in contract labour in forestry, which outlines a wide variety of examples of good practice. These are intended to foster the sustainable and viable development of contracting enterprises in forestry for the present and the future. Contract labour will be the most important source for carrying out all those operations in forestry necessary to achieve sustainable forest management and timber utilization.

SCOPE

These guidelines will mainly focus on contract labour in the region of the United Nations Economic Commission for Europe (UNECE), Europe and North America. However, it is felt that this guide is sufficiently generic to be useful for the establishment of good practices in any country, when it comes to outsourcing of labour from direct employed workforce to contractors, as is the case in most parts of the world. Although the situation and available information differ between the countries, there is a general trend indicating that the evolvement of contractors in the management of the world's forests will continue to increase.

ROLE OF PARTNERS (WHO)

These guidelines have been developed by a Team of Specialists working under a mandate of the FAO/ECE/ILO Network of Experts for the implementation of sustainable forest management. Thus this work is part of the Joint FAO European Forestry Commission and ECE Timber Committee programme of work. The team included a broad expertise, hence its members represent forestry contractors, workforce, science and public authorities, supported by FAO forestry experts.

APPROACH

In many countries and regions good examples exist for the organization and regulation of forestry contractors' operations. This guide forms a compilation of exemplary ways of proceeding – of good practices – for contract labour in forestry. This is therefore a practical guide offering help and advice for the development of decent and socially sound working conditions and fair competition. It can be of use for forestry practice, for forestry contractors, forest owners, timber industry, representatives of workers' unions and also for political decision-makers.

This guide comprises examples of relationships between forestry contractors themselves, between different contractors and mandating forest or timber industry.

DESIGN AND STRUCTURE

This guide is composed of three parts. Following this introduction, Part B will describe the roles and tasks of the various actors associated with contract labour in forestry. It includes instruments that foster good practice in contract labour.

Part C will lead through various dimensions of contracting enterprises, focusing on human resources and working conditions. Additional chapters will deal with quality management, economic viability, competition, cooperation and organization of contractors.

Each issue will be treated in a structured way, giving a description of the issue what it is, presenting, guiding principles for good practices, followed by the objectives of good practice. There will be a brief description of potential consequences of inadequate practices. Examples of good practices will be given in highlighted textboxes.

PART B: ACTORS

THE ACTORS - COOPERATION AND INTEGRATION

All actors in the forest supply chain – whether contractors, their clients in the form of industry or forest owners, the public supervision authorities, influential bodies or pressure groups, along with those offering support services – cannot be treated independently, but should be viewed as an integral whole. The actions of all actors should be coordinated to maximize the benefits within the whole supply chain.

THE TARGET GROUP - FORESTRY CONTRACTORS

Forestry contractors comprise three main actor groups: contractors (entrepreneurs), employees (often, but not predominately organized in workers unions) and subcontractors (self-employed individuals working for a main contractor). In this section, the formal requirements of contractors will be dealt with.

There are a number of formal requirements that need to be met by contractors. Many of the requirements described hereafter are already covered by national laws and international conventions, which means that the first principle common to all forestry contractors is that they must comply with all relevant national laws. Apart from that, there are further significant criteria:

- Contractors need to have the status of a formally recognized business company. This
 usually means that they must be registered by the competent national authority. The
 conditions laid down for this differ considerably from one country to another. The
 lowest common denominator of contractors seems to be that they all have to pay taxes
 and other levies.
- A qualified business management is of increasing importance for the economic and social survival of contractors.
- Implementing work safety and health protection is a basic duty of all contractors. It is
 their responsibility to ensure health and safety of employees at their place of work (ILO
 Code of practice on safety and health in forestry work, ILO, 1998).
- Contractors must be able to provide adequate equipment for the task in question.
 Minimum standards of equipment for forestry work comprises, in any case, tools and
 machines that comply with the security standards required, as well as any personal
 protective equipment necessary for the task.
- All above-mentioned demands require that contractors and their workers must be provided with an adequate income. However, the standards for what is to be considered as an adequate income do differ from one region to another.

With the present rapid development of the services sector in forestry, contractors are often competing under unequal competition conditions. The inequalities have many causes, ranging from diverging tax assessments to distinct differences in qualification and technical standards, even within the same region.

EMPLOYEES AND WORKERS' UNIONS

Even if contractors run generally small enterprises, they need qualified and motivated employees to successfully do their business. Contractors have to respect employees' rights, and employees have to fulfil their obligations towards the enterprise. Working conditions, remuneration and social security are of course subject to negotiations between employers and employees.

In the past, social dialogue in many countries has led to acceptable or even very good working conditions and fairly secure jobs. This is at least the case in traditional forestry, where workers were employed by forest owners. But the traditional social dialogue within forestry, which was based on powerful employers on one hand and on dependent employees organized in unions on the other hand, has lost its significance in many places over recent years, because the directly employed workforce has been replaced by contractors who are contracted either by the forest owner or the industry.

Apart from a few exceptions, forestry contractors are small- and medium-sized enterprises. Their employees do not always make use of their rights to organize themselves, for whatever reasons. Considering the increasing significance of contractors in forestry, it is a challenge for workers' unions to win the contractors' employees as members. The continued existence of workers' unions as socially relevant interest groups for forestry matters is of general importance, because they contribute to ensuring decent work and acceptable remuneration in forestry work, and this again is a core requirement for raising the attractiveness of this profession.

SUBCONTRACTORS

In principle, charging subcontractors with a task is not a problem in the case of (small) enterprises grouping themselves for a project, or when a contractor occasionally "takes on board" a partner for a partial order. However, this form of cooperation becomes problematical when it does not involve two equal partners, for example, when a small, weaker business is employed by the other, but is forced to work as an independent business, carrying all the risks involved in the enterprise.

Establishing subcontracting relationships with what are in fact dependent employees is contrary to the development of the forestry services sector. This applies even if in some regions it is quite customary and permissible, according to custom and the national legal provisions in force, to employ what are formally dependent employees as subcontractors. Labour-only contractors cannot be considered as businesses in the proper sense of the term; it should be one of the objectives in the development of forestry contractors to reduce this form of subcontracting.

THE CLIENTS OF CONTRACTORS - FOREST OWNERS AND THE TIMBER INDUSTRY

Clients of contractors are mainly forest owners and the timber industries. For both customers groups basically the same criteria apply, as far as contract labour is concerned. Above all, forestry contractors expect contract conditions that are fair and that guarantee subsistence. One of these conditions is grouping tasks into "package deals" rather than giving only short-term orders. For this reason it is only possible to appeal to clients to maintain long-term business relationships with contractors pointing out that both sides benefit from cooperation and reliability.

In some cases, national or regional regulations deal with selection criteria for contractors.

These lay down in a more or less binding fashion that orders may only be given to contractors who comply with respective rules for the recognition and registration as contractors.

A clear distribution of responsibilities, competences and duties is necessary, either by the definition of rules for cooperation in job contracts, or through forest owners including forestry contractors in the implementation of occupational safety and quality management systems.

As a rule, the contractors have the responsibility for ensuring lawful and social working conditions rather than the forestry enterprises as clients. There are probably only a few exceptions in some countries where there is the formal possibility of obliging forest owners to take a share of some kind of responsibility upon them.

Contracts often contain the statement that the contractor carries the responsibility for compliance with occupational safety regulations. These contracts, however, seldom contain specific information on the implementation of occupational safety measures that exceed legal obligations. Rules and operational procedures that go beyond labour contracts and address the cooperation between employees of forest estates and contractors, as well as the cooperation between several contractors working at the same site are necessary. This is of great importance not only for safety at work, but also for the quality of the results. Occupational safety management systems may act as possible frameworks for this (see section Occupational safety management systems in Part C).

Explicit statement of responsibilities in contracts could and should be used by clients to implement and control compliance with legal obligations and with quality standards throughout all contractual work. It should also be used to sanction transgressions by giving the possibility of immediate notice of termination of the contract. Nevertheless, there is a suspicion that such contract clauses serve rather to exculpate the client in the case of infringements of legal provisions than to demand and put into practice standards for good work in the field.

For this reason it seems inappropriate to regulate sound practice for contracting only in work contracts to achieve social and qualitative standards. Instead, additional measures such as the quality management systems presented below or sectorial agreements on the recognition of contractors are needed.

BEST PRACTICE 1. THE RELATIONSHIP BETWEEN A CLIENT AND A CONTRACTOR

... is always laid down in a work contract in writing. Independently of its form, such a <u>contract</u> <u>contains</u> information on the <u>kind and amount of work</u> required, as well as on the <u>amount, kind and time of payment</u>.

Besides, every contract should clearly state rights and duties of both parties and should contain information on shared responsibilities and competences. This implies that contractors must be able to provide the client with:

- · evidence of his trade recognition by the competent authorities, namely taxation authorities;
- · evidence of sufficient insurance against accidents for all employees;
- a list of all persons involved in fulfilling the order, including the necessary labour permits for foreign employees;
- · evidence of competences of those carrying out the work;
- evidence of sufficient professional liability insurance (min. US\$ 2 million).

PUBLIC AUTHORITIES / LABOUR INSPECTION

The most important duty of public authorities is to ensure compliance with national legislation and other legal provisions at work places through labour inspection, not only by control and sanction, but also through preventive and proactive action (i.e. information and training). The main focus of labour inspections should comply with the respective national regulations on occupational safety – demonstrating that safety at work is the key working condition. Labour inspections should also provide supervision authorities with information about adherence to laws and regulations, and most of all, to notify them in cases of abuse or infringements. However, labour inspections are also an opportunity for advising contractors on how to comply with legal obligations.

Labour inspection can be conducted by separate institutions, focusing on the following aspects:

- · working conditions;
- work relationships;
- safety at work and health protection.

Labour inspections can take very different forms, depending on the structure of the organization and on national legal provisions. A comprehensive view of the organization of labour supervision in more than 20 countries may be found in the ILO Working paper Approaches to labour inspection in forestry (ILO, 2000), and the Guide to labour inspection in forestry (ILO, 2005).

Labour inspection authorities worldwide have much in common. Generally, sufficient laws and regulations concerning labour inspection are in place to empower and commit supervisors to assure occupational health and safety at the workplace. While roles and responsibilities are clearly stated in the legal framework, the practical implementation is still problematic. Most labour inspections are understaffed regarding their considerable duties in forestry. Moreover, they often do not have adequate professional knowledge concerning the specific working conditions in forestry. This leads to numerous problems, the biggest being that the working places the inspectors are supposed to control are mostly in rural areas, far from their offices. To meet the requirements, these inspections should be performed on regular basis and not just occasionally when inspectors are notified of abuses or when accidents need to be dealt with and documented.

Depending on legal provisions of the country in question, supervision authorities have limited possibilities for controlling and sanctioning self-employed contractors, as labour legislation mostly relates to the situation of dependent employees. This applies to compliance with working hours as well as to wages and occupational safety. The legislation of many countries is not very specific in this respect. It may be argued that this is one of the reasons for the attractiveness of involving self-employed subcontractors.

Effective labour inspection is hardly possible in small service-providing businesses without support of forest owners and the timber industry. The legal framework for this is based on national legislation (see *ILO Code of practice on safety and health in forestry work*, ILO, 1998). Clients are encouraged to work solely with contractors who comply with all regulations. In addition, business and sectorial policies are needed to ensure that these conditions become a clear objective of forest management, too. For this reason, self-inspection can be regarded as a supplement but not as a replacement for public labour inspections, providing an effective tool to implement normative rules on the use of forestry contractors.

CERTIFICATION AND AUDITORS

Certification and its impact can be viewed as a complimentary instrument to labour inspection. Forest certification therefore considerably improves the effectiveness of regulations on social security and safety at work, and also complements supervision and sanction. Through certification, legal regulations and international social standards become part of a business commitment. This increases the chances of their implementation. As opposed to authoritative state supervision and sanction, whose limits were already critically reviewed in the foregoing section, the compliance with these rules is inspected by independent bodies. Certification furthermore requires that forest owners need to describe and document their business processes in a transparent way. This again necessitates, or indeed enhances, the introduction of quality and occupational safety management systems.

Contractors worldwide need to cope with the increasing demands of society and of the public interested in forest management, expressed by the efforts to certify sustainable forest management. By including social and labour-policy issues and problems in forest certification, there is the possibility of raising the awareness of the forestry sector concerning the labour and socio-political dimension of forest management. The implementation of social criteria of certification, for instance, gave ILO an opportunity of proposing the importance of international standards regarding the protection of employees in forest management.

Since the forest owner decides about certification of his forests, certification criteria are clearly a clients' request, whereby the forest owner binds the contractor. For this reason, forestry contractors wishing to sustain their business must conform to certification criteria.

BEST PRACTICE 2. COMMUNITY RELATIONS AND WORKERS' RIGHTS

Principle 4 of the Forest Stewardship Council (FSC)

Forest management operations shall maintain or enhance the long-term social and economic well-being of forest workers and local communities.

- The communities within, or adjacent to, the forest management area should be given opportunities for employment, training, and other services.
- 2. Forest management should meet or exceed all applicable laws and/or regulations covering health and safety of employees and their families.
- 3. The rights of workers to organize and voluntarily to negotiate with their employers shall be guaranteed as outlined in Conventions 87 and 98 of ILO.
- 4. Management planning and operations should incorporate the results of evaluations of social impact. Consultations shall be maintained with people and groups directly affected by management operations.
- 5. Appropriate mechanisms should be employed for resolving grievances and for providing fair compensation in the case of loss or damage affecting the legal or customary rights, property, resources, or livelihoods of local peoples. Measures should be taken to avoid such loss or damage.

Source: Internet homepage of FSC, www.fsc.org

The certification scheme Programme for the Endorsement of Forest Certification (PEFC), equally takes account of social criteria in the certification of forest enterprises (Best Practice 3).

BEST PRACTICE 3. SOCIAL CRITERIA OF THE PEFC SCHEME

Criterion 6: Maintenance of other socio-economic functions and conditions

The forest owner carries a comprehensive responsibility towards society as a whole, but particularly towards the employees working in his forest. These responsibilities are:

- The maintenance or creation of well qualified staff resources should be adapted to the conditions in the enterprise.
- The forestry contractors employed additionally must possess the necessary qualifications and must comply with legal regulations in force, also in relation to their own employees.
- · Preference should be given to trained forestry staff.
- · Accident prevention regulations should be complied with.
- The entire workforce should have access to adequate initial and advanced training.
- Salaries of the workforce should correspond to qualification and are based on tariff agreements in force.
- Employees should have the opportunity to participate in business operations within the legal frame.

Source: Internet homepage of PEFC: http://www.pefc.org/internet/resources/5_1177_289_file.136.pdf according to Criterion 6. Maintenance of other socio-economic functions and conditions of the Pan-European Operational Level Guidelines for Sustainable Forest Management which were completely implemented by PEFC.

INFLUENTIAL BODIES OR PRESSURE GROUPS

Three main groups of influential bodies or pressure groups are included in this section: forestry standards organizations, NGOs and the insurers that have a major role (e.g. using insurance premiums as an economic tool) in applying standards to help reduce accidents and claims.

National forestry standards organizations

The need for sustainable forest management has led to national governments playing an increasing role in establishing national forestry standards partly as a result of the widening activity (and conflict between) certification bodies, such as FSC and PEFC, and the need for independent standards without the imposition of wide-ranging international standards. The United Kingdom is a case in point, where the Forestry Commission together with industry and environmental non-governmental organizations (NGOs) produced the UK Woodland Assurance Standard (UKWAS). Several certification bodies have based their criteria for certification of woodland and forest in the United Kingdom upon this standard.

Environmental NGOs

In recent years, environmental NGOs have played a major role in imposing standards for sustainable forest management. Organizations such as the World Wide Fund for Nature (WWF), Greenpeace or various national organizations influenced public attitudes towards forestry and tried to promote with publicity campaigns the role of sustainable forest management in alleviating potential damage to forests from poor management, over-cutting and illegal logging. Such organizations reflect public attitudes and have the potential to encourage sustainable forest management practices. In the United Kingdom, for example, the development of UKWAS was only possible by the involvement of NGOs in the formulation process.

Health and safety insurers

The most important task of accident insurers is to protect employers and employees from economic consequences of an accident or occupational disease by paying the costs of cures and rehabilitation or pensions. They are mostly based on national laws or other regulations and as such vary greatly from one part of the world to another. The existence of such insurances is however a general demand, explicitly formulated for example in the *ILO Code of practice on safety and health in forestry work* (ILO, 1998).

In addition, insurers can play numerous other roles in the improvement of working conditions. These may include the prevention of accidents and other health risks. In Germany, the support and consultancy of clients is also part of the legal mandate of accident insurers. The Swiss accident insurance company SUVA launched a comprehensive long-term programme to improve safety at work in Swiss forestry (Wettmann, 1996). This example shows that accident insurers can take a leading role in the improvement of working conditions.

Accident insurers play a decisive role in the implementation of occupational safety management systems in forestry enterprises, if they go beyond passively paying insurance benefits. Accident insurers partly conduct some of the labour inspections related to safety at work (e.g. in Germany).

In any case, accident insurers need to be integrated in business and cooperation concepts in order to change working conditions in contracting businesses.

SUPPORTING ORGANIZATIONS AND HELP INSTRUMENTS

International standards organization

The International Organization for Standardization (ISO) is the world's largest developer of standards. Although ISO's principal activity is the development of technical standards, these also have important economic and social repercussions. There are two standards that are of increasing relevance in forestry: ISO 9000 quality management systems and ISO 14000 environmental management systems.

Training providers

Development of the forestry workforce in management, technical and general skills is of utmost importance for the continuing economic and professional development of the sector. Training in a range of skills is widely accepted throughout the world as a means to improve production, sustainable forest management, reduction of accidents and danger to the workforce. In recent years forestry training programmes in the European Union (EU) encouraged cooperation between training establishments and tried to improve skills levels across member states. A number of projects aim at establishing of networks between training providers, e.g. EDUFOREST (www.eduforest.org) and ENQUAFOR (www.enquafor.com). The Joint FAO/ECE/ILO Experts Network to implement sustainable forest management is another attempt to develop an international network for cooperation between training organizations.

Associations

The organization of forestry contractors in unions or associations can help to implement good practice in forestry contracting. With the increasing significance of forestry contractors these associations gain more political influence, not only at national level but also internationally.

Forestry contractor associations play an important role and are often even the initiators in activities promoting good practice presented in this guide. Activities concerned with occupational safety, qualification measures, tariff negotiations, quality management concepts

and the participation in the definition of certification criteria are some examples of achievements of forestry contractors' associations. A review of structures and activities of forestry contractors' associations was made prior to the foundation of the European Network of Forest Entrepreneurs (ENFE) (Kastenholz, 2000).

Last but not least there have been attempts to draw the attention of political decision-makers to the situation, in particular at the Third Ministerial Conference on the Protection of Forests in Europe in Lisbon, in 1998; the Fourth Ministerial Conference in Vienna in 2003; and the Fifth Ministerial Conference in Warsaw, in 2007.

Forestry contractors and the people employed in forestry are still under-represented in the forest policy debate, and forestry contractors are still hardly represented in any decision-making authorities on forest policy. Lobbying by contractors and their representatives is therefore an urgent task to be tackled in the future, so that the importance of forestry contractors is recognized in research and policy programmes.

Best practice guidelines

Best practice guidelines, such as this document, can play a major role in assisting the management element of the forestry workforce. The FAO model code of forest harvesting practice (Dykstra, 1996) ensures that guidance is available for forest harvesting systems to meet the objectives of sustainable forest management. The code is being further elaborated with a series of regional codes of practice. The first one was the Code of Practice for Forest Harvesting in Asia-Pacific, which was published in 1999 and the latest was the Code of Practice for Reduced Impact Harvesting in Tropical Moist Forests of West and Central Africa published in 2005.

PART C. GUIDELINES FOR BEST PRACTICES

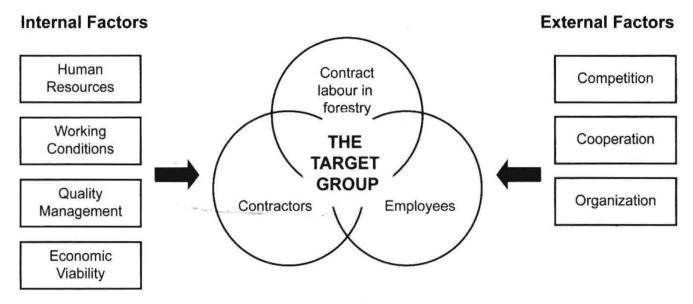


Figure 1. Schematic view of the structure of Part C of the guidelines for best practice

HUMAN RESOURCES

Management skills

What it is

Management skills are all skills and competences that enable a person to run a business. They include financial competence, as well as leadership competence, marketing, technical and operational competence. Contractors worldwide are proving that they are capable of responding to the technical and environmental demands towards forestry work. Yet they are being increasingly required to fulfil demands to adapt the running of their business, and to expand their activities to logistics in the wood supply chain.

Increasing demands from clients, be they forest owners or timber industry, are leading to greater expenses for contractors while they have to:

- adapt their technical equipment;
- acquire qualified staff;
- ensure quality service.

The basic qualifications for management tasks in the contracting sector are conferred by academic training courses for forestry managers, which exist throughout the world. In vocational training, managerial competences are still not in the focus of the syllabi. It is a fact however that people worldwide, who have not completed academic training or who have no formal qualifications in forestry at all, are offering forestry services. In spite of this, most contractors possess more or less professional experience and are technically proficient – more rarely however are they competent in tasks required in operational management.

They should have knowledge and management competences in:

- marketing and customer relations;
- calculation of investment and machine costs, as well as of tenders;

- · accounting and fiscal legislation;
- · work organization and staff management;
- · safety at work;
- identifying changing demands in forest management to adapt services accordingly.

It is also becoming increasingly important to be competent in dealing with the requirements of forest certification criteria for contractors. This leads further to the need for more or less formalized quality management.

Up to the present day there are hardly any outstanding examples concerning the qualification for management tasks. The reasons for this are the difficulties of access to qualification encountered by forestry contractors. These are:

- · lack of courses with specific subjects in managerial skills;
- cultural barriers, whereby there is lack of understanding of the necessity and benefits of qualification;
- · long distances to training institutions;
- the expected costs;
- a higher evaluation of short-time losses in income rather than of the long-term increases in productivity that could be anticipated;
- the loss of productive working hours during qualification, especially when this means that machines (with high investment costs) are idling.

Guiding principles

It is increasingly necessary for the economical and social viability of forestry contractors that they have a qualified business management. More and more management duties are imposed on contractors. The required skills have no relation to their technical competences. They range from the calculation of machine costs, and preparation of tenders, to professional accounting and office organization, and then on to staff management and work organization. The knowledge of how to document business processes in accounting is becoming of prime importance in order to fulfil formal requirements of certification processes and quality management systems – both of which are increasing in significance worldwide (see section Quality management in Part C).

Objectives

A contractor should have a competent and <u>qualified business management</u> that does not only include the ability to take operational decisions but also to lead a business in an entrepreneurial way. In order to do this the management should have marketing and accounting skills as well as a solid knowledge of investment planning and calculation of tenders.

Potential consequences of a lack of management skills

It can be observed that in many cases there is a lack of professional management skills among contractors. In these situations, a main problem of contractors seems to be that they are specialists in the technical execution of forestry work but do not consider themselves as entrepreneurs in the sense of operating managers. This is partly linked to the fact that contractors are often very small enterprises who work with little staff, respectively with members of the family.

The lack of management skills can have severe consequences on the competitiveness of an enterprise. Data obtained from a wrong or incomplete machine-cost calculation can lead to unrealistic figures in tender. An incompetent overview of the cost structure of the enterprise leads to compounded economical problems. Lack of marketing skills and incompetence in

observing, analysing and interpreting markets and market data can lead not only to problems in setting the right price for services, but also in reacting adequately to new developments in the market for products and services.

Best practice

Most of the described management skills are addressed by forestry contractors associations. The majority of national forestry contractors associations offer help or also professional services to their members, such as advice on purchasing of machines and other investments (Kastenholz, 2000). Best Practice 4 shows an example of such guidance by the Finnish forestry contractors association.

BEST PRACTICE 4. GUIDELINES AND TRAINING FOR COST CALCULATION

In Finland the contractors' association has developed a printed cost-calculation guidance and two different cost-calculation software packages specially designed for contractors. One is for beginners – very easy to use, very simple but also restricted in its features. The other one is a very complex version. It helps contractors to handle bigger contracts, make cost calculations, and also make estimates on profitability of operations. Nowadays there is also a production follow-up software available, which is based on the production data derived from harvester and forwarder on board computers.

At the beginning of 2000, the training centre in Pieksamaki, Finland, planned and arranged, together with the contractors' associations, a series of courses for contractors in all areas of operating a business. The content of the entire series of courses was:

- · cost calculation;
- · balance sheet knowledge;
- negotiation skills;
- · content of contracts;
- · legislation in forestry contracting;
- · collective agreements;
- · human resources management;
- staff administration.

For further information contact: Koneyrittäjien liitto ry, FIN, http://www.koneyrittajat.fi/

Staff development

What it is

Staff development is the systematic development of professional competence of persons working in and for an enterprise. It involves the development of competence as well as the development of key qualifications, such as technical, methodical and social competences. Staff development involves individuals as well as working teams and cooperation. Well qualified or specialized staff has better employment security in businesses providing services, especially when the enterprise in question has invested in their qualifications.

The lack of any long-term perspectives often results in a short-term staff policy. The staff is recruited when the volume of orders requires it. If no long-term orders are placed, no long-term labour contracts are concluded with employees. This is especially true for activities that do not require special qualifications (or do not seem to). One of the main tasks for the future will be to avoid such situations by a greater professionalism of the sector.

Guiding principles

Qualification works for the benefit of both employers and employees. Employees increase their employability on the labour market, employers benefit from increased productivity and more complex expertise.

The necessity of having qualified staff can already be derived from the formal requirements of safety at work (ILO Code of practice on safety and health in forestry work, ILO, 1998), which requires that anybody doing any sort of activity should be adequately trained to do it. Moreover, increasing mechanization of forestry consequently necessitates that workers acquire specialized skills.

Objectives

Every employee should be qualified for the tasks assigned to him. Any employee taking on new duties in which he has no experience should be extensively instructed and trained before starting work. Staff skills should always correspond to the state-of-the-art by further training. Employees should be involved in business decisions, at least as far as their own working conditions are affected by any changes in procedures and work organization.

Potential consequences

Throughout the world there are highly qualified contractors who use the most modern technology and have a specialized and skilled staff, whereas exactly next to them there are businesses without formal qualifications, partially doing forestry work with untrained employees. It is quite possible that the modern harvester used by a specialized contractor is running in one stand, while in the neighbouring stand of the same forest property a group of badly paid auxiliary workers is motor-manually converting timber into the same products. An important objective for the forest and timber industry as a whole should be to encourage the development of specialized and skilled workers to reduce occupational health and safety risks and abuses because of badly paid and unqualified labour.

On the other hand, there is a high fluctuation rate in forestry staff. One reason for this is the attempt by forestry workers to exchange a more or less insecure job in contractual business for more secure employment in another sector. Another reason must be the relatively low income level in forestry compared to other sectors of the economy. Staff fluctuation rates and insecure employment conditions are no doubt closely related.

Best practices

Qualification measures

There are two main kinds of qualification that need to be differentiated: There is basic training, in which elementary skills and competency in forestry work are obtained. The second kind provides additional vocational training, for example, specialization as a machine operator.

Training of chainsaw operators

Basic qualification is acquired in anything from short training courses to formal vocational training. Conditions vary greatly within Europe. Particularly countries in northern Europe, and the German-speaking countries, have formal vocational training that provides qualification for forestry work. According to United Kingdom legislation, qualification needs to be provable: Anyone performing an activity must be able to prove their ability to do so. This led to the introduction of certificates of competence for forestry workers. Forestry may only be practised by persons who possess such a "skills certificate" (Best Practice 5).

BEST PRACTICE 5. TRAINING OF FORESTRY WORKERS IN GREAT BRITAIN

The UK Forestry and Arboriculture Safety and Training Council (FASTCo)

The demand for qualification of the forestry workforce has found its expression in a directive of the national occupational safety authority, the Health and Safety Executive. This directive states that persons

- · who have just started working in forestry, or
- · who have not received adequate training for chainsaw operations, or
- who do not have sufficient experience with chainsaw operation must be trained adequately and should acquire a certificate of competence.

After completion of such training these people should be able to do their work safely and be aware of their limitations.

The state forest administration, Forest Enterprise, now consequently requires that not only employees of the state forest administration but also contractors should be subjected to this regulation. There is to be no two-class society.

FASTCo was founded in order to implement this requirement. The Council consists of representatives of employees, employers, forest owners, forestry contractors, trade associations, the forestry profession, teachers and trainers, as well as of government departments.

FASTCo:

- has developed training courses and examination criteria for certificates of competence for nearly all types of forestry work;
- is recognized by the British Government as the organization responsible for the qualification of workers in forestry and arboriculture;
- implemented its objectives in close cooperation with the national Forestry Contracting Association (FCA) UK.

NB: FASTCo as an organization has been dissolved. Its former role in the forest industry is now undertaken by LANTRA, www.lantra.org, The Sector Skills Council for the Environmental and Land-based Sector in the United Kingdom.

Source: Ramsey, E.B. and Green, M.A.E. 1996. The use of contractors to introduce and enforce certificates of competence for chain saw operators – The GB experience. In: Safety and health in forestry are feasible. Proceedings of a Joint FAO/ECE/ILO Committee Seminar, 7.-11.10. 1996, Konolfingen; Switzerland, p. 204–210.

Training of machine operators and the means of financing

An example of how a forestry contractors' association, in cooperation with trade unions, can considerably encourage training and support the financing of training is to be found in Germany, in Lower Saxony. Until recently there was no formal qualification for machine operators. For this reason machine operating skills were often acquired with training on the job, with the consequence that contractors had to invest a great deal of time and money because of reduced productivity until a machine operator mastered his job. The cooperation between the forestry workers school of Lower Saxony, the Forest Workers Trade Union, IG BAU, and the forestry contractors association of Lower Saxony (AfL Niedersachsen) developed a further training concept. This training is designed so that courses at the school alternate with practical work and training in a contracting business. This satisfies the needs of forestry contractors in an ideal way (Best Practice 6).

To facilitate access to training, the AfL together with IG BAU founded the Agriculture

and Forestry Qualification Fund (QfF), which aims to increase job security in contracting enterprises through qualification. The funding of QfF is based on a collective agreement between the trade union and the employers. The QfF, together with the forest training centres, organizes courses for contractors and their employees – covering technical as well as managerial aspects.

BEST PRACTICE 6. ADVANCED TRAINING OF MACHINE OPERATORS

The model of Lower Saxony

Starting in 2000, AfL Niedersachsen, together with the Lower Saxony forestry school of Münchehof, conducted two 16-week courses for forwarder and harvester operators. Skilled forestry workers took part in this course, together with a few who had completed other professional training. After initial aptitude tests, the course consisted of theoretical and practical sessions. Theory was taught at the forestry school, whereas practical training took place in the employing businesses, which thus had the function of proper training establishments. Already during the training course, the participants were permanently employed by the contractors. The costs for the contractors amounted to around 13 000 out of which 7 000 were direct costs for courses; the rest were direct and indirect costs for training on the job in the participating contracting enterprises.

This example shows that specific training for contractors can be offered in addition to existing basic formal training. The described initiative received financial support from a project of the EU Community initiative ADAPT and was co-financed by the Agriculture and Forestry Qualification Fund (QfF).

To summarize briefly, advanced training of contractors and their employees has the following characteristics:

- investments related to advanced training serve to secure subsistence;
- it helps to improve employability of staff;
- it needs to be targeted on key qualifications for forestry contractors.

Source: Geske, H., 2000. Maschinenführerweiterbildung nach dem Modell Niedersachsen. Presentation at the 1st European Forest Entrepreneurs' Day. In: Documentation on the 13th KWF meeting in Celle, Germany. KWF, Groß-Umstadt.

Skills certificates

The certificate for completed professional training as a skilled forestry worker certainly provides the necessary proof. Vocational training for forestry workers exists in many countries. The possibilities for such training in Europe are presented in the brochure *Professions, skills and training in forestry* (Strehlke and Moser, 1996).

Certifications of skills for forestry workers, whether or not they already possess formal education or training, have recently been developed in many countries. The advantage of such certificates is – compared to formal training – that people without qualification but possessing the necessary skills can prove it by passing a test without further training and receive a confirmation in the form of an acknowledged certificate.

In Great Britain, the qualification scheme presented as an example in Best Practice 5 aims at meeting legal requirements by the introduction of skills certificates.

In Ontario, Canada, certification standards were already developed in 1989. These are described in Best Practice 7 as an example of a method of proceeding that included the entire sector (Connors, 1996).

Another example of recognition of worker skills resulting from an industry led initiative

in the United Kingdom is the scheme that has been developed for skills assessment of forest machine operators and the issuing of certificates of competence for those skills (see Best Practice 8).

BEST PRACTICE 7. CERTIFICATION OF FORESTRY WORKERS IN ONTARIO, CANADA Professional Chainsaw Operator Training Program (PCO) of the Ontario Natural Resources Safety Association ONRSA

At the end of the 1980s, the common practice of unstructured on-the-job training of forestry workers did no longer satisfy the needs of forestry and was in part responsible for high accident rates. This led to the development of a new qualification and certification concept in Ontario. The underlying philosophy of the concept is:

Learning to do things the right way means learning to do it in a safe and healthy way.

The entire system aims at enhancing competences by advanced training. The qualification scheme for chainsaw operators is adapted to the abilities required for safe chainsaw work.

Training is organized as a three-day course comprising teaching theory, practical maintenance work in a workshop and guided practical exercises in the forest. During the course, the competences required are tested individually and in succession, and are confirmed by a certificate when the candidate satisfies the requirements.

The competences required for the PCO certificate are:

- maintenance and care of the chainsaw and of other felling implements;
- · felling;
- limbing and topping;
- stacking, measuring into log lengths and cross-cutting.

ONRSA is hoping that the Government of Ontario will declare this certificate to be a compulsory condition for the authorization to operate a chainsaw.

Source: Connors, J.J.G. 1996. Certification of forestry workers in Ontario: our experience, our challenge for the future. In: Safety and health in forestry are feasible. Proceedings of a Joint FAO/ECE/ILO Committee Seminar, 7.-11.10.1996, Konolfingen; Switzerland, p. 214-230.

BEST PRACTICE 8. CERTIFICATES OF COMPETENCE FOR FOREST MACHINE OPERATORS

Before introducing the Forestry Machine Operator Certification Programme the only nationally recognized measures of competence were the Forestry Vocational Qualifications which covered site establishment and harvesting operations. While having the benefit of being able to assess operator competence over a range of sites, these qualifications focused on the operation rather than on the type of machine being used. There has been a growing awareness that a new system was needed to assess and record an operator's competence with specific types and configurations of machines while also confirming consistent operating ability over a range of work sites.

A working group formed and led from within the industry – which included machine operators, the Health and Safety Executive, training organizations and machine manufacturers – created a machine classification system that recognized the variety of machine types and functions. Based on this system the Forestry Machine Operator Certificate of Competence is assessed and awarded by the National Proficiency Tests Council in the United Kingdom. This certification scheme evaluates machine operator competence on a particular machine type while assessing operating performance over a range of sites to ensure compliance with safety and environmental standards.

This industry led initiative was in compliance with the Management of Health and Safety at Work Regulations 1992, which were reinforced by two other key sets of regulations in 1998. A key requirement of all these regulations is that operators of machines should be trained and competent. The Certificate of Competence also satisfied the insurance companies operating in the industry, in that the industry demonstrated standard setting and self-regulating capabilities.

The Forestry Machine Operator Certification Programme was created both by and for the industry. Its implementation provided both a high quality and credible system that recognized the skills of machine operators through the awarding of nationally accredited qualifications.

Further details from: NPTC, Stoneleigh Park, Warwickshire CV8 2LG.

SOCIAL DIALOGUE

What it is

Working conditions are mainly the result of the relationship between contractors and their employees, or of the relationship between contractors and sub-contractors working for them. Social dialogue has led to acceptable or even good working conditions and fairly secure jobs in many countries. This is at least the case in traditional forestry, where the workers are employed. But the traditional social dialogue within forestry, which was based on powerful employers on one hand and on a group of dependent employees organized in unions on the other hand, has lost significance in many places over recent years. In forestry the directly employed workforce has been replaced to a large extent by self-employed contractors/entrepreneurs who work either for the forest owner or directly for the industry on a contract-by-contract basis. This is especially the case in one-man businesses, which do not join the workers' unions, nor are they represented by contractors' associations.

Forestry contractors' associations play a special role as social partners when they, together with workers' unions, set standards for working conditions through negotiations and conclusions of tariff agreements.

Guiding principles

Employees have the right to organize themselves in order to express their interests in relation to their employers. The freedom of association is an important fundamental right of

employees, settled in two legally binding ILO Conventions:

- 87 Freedom of Association and Protection of the Right to Organise, 1948
- 98 Right to Organise and Collective Bargaining, 1949

Apart from a few exceptions, forestry contractors are small- and medium-sized enterprises. Their employees do not always make use of their rights to organize themselves, for whatever reasons. Considering the increasing significance of contractors in forestry, it is necessary that workers' unions try to win the contractors' employees as members. The continued existence of workers' unions as socially relevant interest groups for forestry matters is of general importance.

There are no patent solutions to this problem. Possibly contractors' associations should take over a large part of the classic representation of the interests of dependent employees – in this case of small subcontractors and particularly self-employed contractors.

Objectives

The organization of both employers and employees in associations, respectively trade unions, should be considered as an effective way to ensure the representation of interests of both sides. This social dialogue should go beyond collective bargaining on wages and should also include mutual initiatives in the development of decent work standards and good working conditions.

Potential consequences

Although forestry contractors and their employees constitute the largest part of the entire forestry workforce worldwide, they belong to the most vulnerable group of people. One of the reasons, besides others, is that the volume of contracts, and with that the employment conditions (duration), often do not allow any long-term perspectives for planning. In the past, the classic social dialogue has led to acceptable or even good working conditions and to more or less secure jobs in many countries, at least in traditional forestry work, where forestry workers are employees of forest owners or owners' cooperatives. This dialogue is now only functioning to a limited degree. This is especially the case of very small one-man businesses that are not taken into account by workers' unions and of some labour-only contractors who are represented neither by unions nor by contractors' associations.

Problems caused by outsourcing and deregulation cannot be solved by free market processes alone. Neither can they be solved by the contractors alone. Problems need to be solved through a combined effort by the forest and timber industry as a whole – in cooperation and partnership with contractors – and using all means to counteract the abuse of workers in providing forestry services.

Lack of, or only very limited, consideration for employees makes them liable to abuse (Garland, 1997). Abuse comprises (Garland, 1997):

- · remuneration below nationally or regionally accepted standards;
- · lack of or insufficient protection by social security systems;
- lack of or insufficient social security benefits, including health insurance, holidays and paid public holidays;
- · low safety standards at the workplace;
- employees subject to part-time or seasonal employment;
- · insufficient training and controlling;
- numerous other discriminatory working conditions.

Abuse is very difficult to prove and to document. It is reasonable to assume that the less the technical difficulty of the service, the greater is the risk of situations of abuse. Workers

who only offer their personal performance and not that of a machine can more easily evade controls by supervising institutions, or can be hidden from them.

Best practice

Collective bargaining is *the* instrument of the traditional social dialogue. In some countries the best visible outcome – collective agreements – exist and demonstrate that even in a sector that tends to become more and more heterogeneous and fragmented, and which consists to a wide extent of small and micro-enterprises, collective agreements can be used as instruments for the control of decent working conditions. A related example is the German case, where a collective agreement was set into place by the German forestry contractors association, Deutscher Forstunternehmer-Verband (DFUV), and the trade union IG BAU (see Best Practice 15 in section Job security).

WORKING CONDITIONS

The principal criteria for sustainable development of forestry contractors are the conditions under which people labour. Working conditions are mainly the result of the relationships between contractors and their clients, contractors and their employees, or of the relationships between contractors and sub-contractors. The following section considers how and by what means the working conditions of dependent employees (and subcontractors and the self-employed) can and should be regulated.

Good working and living conditions for forestry contractors as presented in this guide are not simply the result of demands for socially acceptable and humane working conditions. They are equally essential pre-conditions for environmentally sound and nature-friendly forestry. Sustainable forest management can only be achieved with contractors who are economically and socially in a position to fulfil their duties and, in addition, meet all the other demands of society.

The development objectives presented in the following section, as well as the subsequent measures for their implementation, basically aim at contributing to "decent work" as demanded by ILO (ILO, 1999).

The criteria for decent work standards are:

- employment and income;
- social security, also considering employment security;
- rights of employees;
- social dialogue.

Forest and timber industry, but also society as a whole, are called upon to ensure working and competitive conditions in forestry that are generally and socially acceptable. Forestry contractors, forest owners, the timber processing and woodworking industry, public supervision authorities and workers' representatives are jointly responsible for creating the framework for the development and use of the instruments necessary for the implementation of the development objectives presented below.

Guiding principles for the improvement of working conditions

Social standards and values form the basis of the objectives that lead to good practice in the use of contractors. Despite all the regional differences in traditions, general rules exist concerning the working and employment conditions that are acknowledged worldwide. These guiding principles can be regarded as maxims of economic ethics. Most countries have them codified in their national legislation, sometimes greatly differing in nature and intensity, but similar in their meaning. Moreover, these standards are the object of international codes, framework requirements and agreements.

Based on these internationally accepted standards, a generally agreed plan for the use of contractors can be developed. The keystones for this plan should be:

- contractors are able to fulfil the standards of performance and quality required by forestry enterprises in an optimal manner;
- staff is qualified and employed by contractors in a secure employment situation, with adequate wages/income;
- all relevant protection and safety regulations are put into practice;
- social and labour rules are in force and are legally bound;
- working conditions are socially acceptable;
- natural resources are protected by an environmental and nature-friendly forest management.

The rules to be considered here are not only national or sectorial regulations, but also international standards.

Adequate wages/income

What it is

Forestry as a whole is a line of business with low-profit margins. Forestry contractors are generally the weakest link in the chain between the forest owners wanting to optimize profits from timber sales and the timber industry trying to buy its raw material as cheaply as possible. Therefore, contractors suffer the most from price fluctuations. In spite of this there are forestry businesses that flourish and others that are incapable of achieving a subsistence level, independently of regional conditions.

Guiding principles

The income levels considered as adequate differ from one region to another. Legal minimum wages are defined in some places whereas in others there are tariff agreements that have statutory effects for all concerned. The ILO Minimum Wages Fixing Convention (C 131, 1970) can be considered as a leading standard – even if it is only ratified by a few countries. The essence of the Convention is that an income must at least be sufficient to ensure the sustenance of a family.

Remuneration as well as any agreements on other working conditions should be fixed in work contracts, because a written document gives legal security – particularly to the employed. It should be a matter, of course, that contractors base their work contracts on tariff agreements wherever these generally valid tariff agreements exist.

Objectives

Wages and income earned by forestry contractors should at least meet the level of comparable physical and qualification demanding jobs in the respective region or country.

Potential consequences

Any form of undercutting wages, where the payment for forestry work lies clearly below the regular wage level in the region, radically hinders the development objectives laid down here. Contracts may be secured at short term in this manner, but it diametrically opposes the sustainable development of high-quality services.

Best practice

In Finland for instance, the contracting association and the trade unions have a long-standing cooperation and a well established set of collective agreements, which results in formalized contracts and in clear and reliable agreements on the remuneration for the employment (see Best Practice 9).

Safety and health

What it is

Safety and health protection at work is extended to consist of the entire conception of "well-being at work" (concept developed by ILO). This includes physical, moral and social well-being, and not only the non-occurrence of accidents and occupational illnesses.

Forestry work is one of the professional activities with the highest rate of risks to health and safety. In examining the underlying causes of this situation one finds a wide range of problems faced by contractors. It is obvious that safety at work and qualification are closely linked. Accordingly, qualification (in the sense of technical training) is considered together with the use of felling machinery such as single grip harvesters the most important contribution to the improvement of safety at work (see *Code of practice on safety and health in forestry work*; ILO, 1998).

Because safety at work is the result of numerous technical and organizational measures, as well as measures aimed at attitude changes, the sum of these can be looked upon as good management practice. The degree of safety at work can, in fact, be considered as an indicator of sound practice.

BEST PRACTICE 9. MACHINE OPERATOR EMPLOYMENT CONTRACT IN FINLAND Partners: Employer: Address: Phone: Employee: Residence: Address: Phone: The above partners have made the following contract: 1. Branch This contract is mainly concerning machine work in forestry. In this employment relationship we abide by the collective agreement between the Contractors Association and the Wood workers' union made to concern mechanized forest work. Mechanized forest work is defined in the 1 § of the collective agreement. As to other work the employer, being a member of the Contractors Association, abides by the mentioned collective agreement. 2. Common Responsibilities of the operator Working time system 3. Tariffs and other conditions - Tariffs - Way of payment - Personal tariff group A I II III (circle the right choice) -Personal hourly payment consists of the following parts Tariff of the group /h Additional rate (based on talents) /h Extra (based on market situation) ____ /h _ /h Total -When the work is performed for a contract rate or incentive wage, the payment is determined in the way agreed upon in item "Additional conditions". -The employer is responsible for paying the travelling costs. The starting point and ending point for determining the way to work site and back is the place of living that is mentioned in the upper part of the contract. -Otherwise we abide by the collective agreement. 4. Vacation and payment for medical leave As to annual holiday, the Annual Holidays Act and the mentioned collective agreement are abided by. Until the new collective agreement becomes effective the employer may, also after the termination of the collective agreement, obey the regulations in the Annual Holidays Act and the regulations on confinement salary mentioned in this job contract. 5. Safety at work The employee commits to obey the instructions and regulations of occupational safety and health. 6. Period of validity The contract of employment is in force starting from ____/ ___ 200__ (choose one) ____ until further notice or ____ until a date set and is ended without termination on ___/__.200___ or _ until the next specified duty is completed: _ 7. Trial period

In the employment contract a trial period of ____ months is abided by. During this time the contract can be terminated by both parties (for a maximum of four months). In a fixed-term contract of employment of less time than 8 months the trial period is half of the duration of the employment contract.

8. Termination	
When terminating this contract, the valid regulations of	of the collective agreement and the
Employment Contracts Act are abided by. As far as not agreement is abided by.	ice is concerned, the mentioned collective
9. Copies	
This contract is made in duplicate, one for each party.	
10. Additional conditions	
Place:	Date:
Employer:	Employee:
Witness:	

Guiding principles

Implementing work safety and health protection is principally the obligation of contractors, who have the responsibility for the health and safety of themselves and, in particular, of their employees at their place of work (ILO, 1998). The concept of occupational safety management will certainly increase in importance. This means that rendering the improvement of safety at work as a more or less formalized part of a comprehensive business management concept does not only consider relationships and procedures within the business but also the cooperation of contractors and their clients.

To fulfil the concept of well-being as an extended safety and health principle, two elements need to be considered:

- Various instruments should be combined: certification, monitoring and controlling, education/training, etc.
- All players should be involved: public authorities, social partners, companies, public and private insurers, etc.

Through legal regulations and international standards, enhanced by certification criteria, the concept of safety and health at work is becoming a part of the business commitment. This increases the possibilities that they will be fulfilled. In contrast to state supervision and sanctions, compliance with certification standards is controlled by independent bodies.

Objectives

Health and safety should be given the highest priority in forest operations and thus in the work of contractors. It should primarily be regulated within an <u>occupational safety management system</u> that clearly describes and documents structures and processes of cooperation with other contractors and with sub-contractors. All employees of the business should participate in the development, implementation and fulfilment of the occupational management system.

This means that the improvement of safety at work will be more or less formalized as part of the business management concept. Such a concept will not only take into account relationships and procedures within the business, but also the cooperation between contractors and their customers.

Forest certification might help to set into practice safety and health standards, because even the smallest enterprises, which are otherwise not sufficiently taken into consideration in national legislation, fall under the certification standards.

Potential consequences of low health and safety standards

The specific health risks in forestry and the continuing dramatically high accident rates lead to numerous problems in forest operations, such as injuries and loss of life, illness, absenteeism, loss of productive time and thus high costs both for contractors and the society as a whole. Long experience shows that occupational safety measures cannot be put into practice simply by issuing regulations on accident prevention and by using personal protection equipment. It needs far more effective and comprehensive action at all levels of an enterprise.

Best practices

As safety at work is the result of numerous technical and organizational measures, as well as measures aiming at attitude changes, the sum of these can be looked upon as good management practice. The degree of safety at work can in fact be considered as an indicator of sound practice.

Training and qualification are the dominating prerequisite for safety at work. Therefore all measures discussed in the section, *Staff development*, are equally applicable as the best practice to achieve safety and health in forestry work.

Occupational safety management systems

The requirement of contractors and their employees to do their work safely must be an elementary part of a comprehensive safety concept. It is furthermore necessary that occupational safety should be regarded as a management task that needs to be systematically organized and put into practice. The instrument that needs to be used by every enterprise is an occupational safety management system. It can be more or less formalized, but must at least provide information on:

- structure of the enterprise;
- responsibilities;
- working processes;
- potential hazards;
- means of hazard prevention;
- means and procedures to implement occupational safety management.

The example of an occupational safety management system in Great Britain (see Best Practice 10) shows clearly that an effective system not only concerns the service-providing business itself, but also extends to all its links, from the client to the contractor and through to subcontractors or other groups of people involved in the operation.

BEST PRACTICE 10. OCCUPATIONAL SAFETY MANAGEMENT IN GREAT BRITAIN

The occupational safety management system is based on 13 central tasks that must be taken into account in every contract. These tasks are distributed among four key functions. At the beginning of every contract, the parties must arrange in which order the contractual tasks need to be completed. They need to define the framework conditions, and each party is assigned its key part. All four key functions must be filled in each contract.

1. The landowner who controls the area on which forestry work takes place has to:

- · coordinate all health protection and safety activities that are linked to the forestry enterprise;
- · list the risks in and around the work site and transmit them to the forestry work manager;
- ensure that no health and safety risks for other people emanate from the activities on the work site.

2. The forestry work manager responsible for the forestry work conducted on the site has to:

- use the information provided by the landowner to conduct a risk analysis for the work on the given site;
- choose a competent contractor who has made adequate provisions to ensure health protection and safety;
- · specify the necessary work safety precautions and inspect the work site;
- · cooperate with the landowner;
- · supervise work safety at the work site.

3. The contractor offering forestry services has to:

- cooperate with the forestry work manager to ensure that work safety standards are complied with;
- choose competent subcontractors who have made adequate provisions to ensure health protection and safety at work;
- give guidance to the subcontractor to ensure complete implementation of health and work safety in practice.

4. The subcontractor, a person used by the forestry contractor but is not an employee, has to:

- respect all instructions for health protection and safety at work on the work site;
- · manage his own health and safety.

This concept aims at reaching consensual agreements on framework conditions between private and public bodies rather than exclusively laying things down in national laws and regulations.

An important problem was identifying and making contact with the contractors "in need". In this year alone 20 workshops were held on this topic. In order to motivate contractors to participate, 18 inspectors were appointed all over the country with the task of demonstrating "good examples".

Source: Health and Safety Executive. 2003. Managing Health and Safety in Forestry. INDG294(rev1), 9/03, C250.

Storm damage - extreme hazards require special attention

One of the most hazardous tasks in forestry is working in storm damaged forests. However, a wide set of instructions and training material on how to deal with storm damaged stands exists and is used in many countries and companies. But managing storm damage goes beyond clearing stands. It is a huge exercise for management, organization and cooperation of many actors in the operations. The EU funded project **Stodafor** (see Best Practice 11), which draws together experiences and lessons learned from storm disasters in Europe, offers technical and organizational guidance for coping with these extraordinary conditions.

Improve health and performance of machine operators

The development of guidelines on ergonomic matters for buyers and manufacturers of forest machines is the objective of the project ErgoWood (funded by the European Commission and the participating partners). The work promotes the development of safe and efficient forest machines, which are easy to use and maintain, as well as the improvement of sustainability in human resources. The project also involves developing and sharing good examples of work-crew building, work-shift scheduling, job rotation and work enlargement in logging operations.

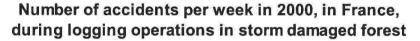
ErgoWood concludes that an impressive production has been reached in timber harvesting and indeed made the forest industry dependent on machine operators. To stay profitable, a company needs a system for early signs of operator ill health or lost motivation. Such a monitoring system also has to give guidance on how to react upon problems.

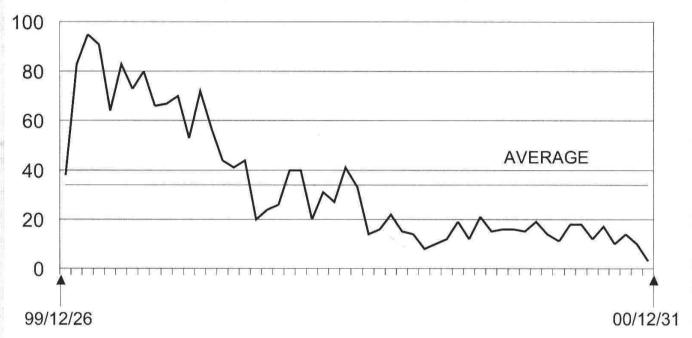
A handbook has been developed providing guidance for teams, contractors and first line managers in mechanized forest operations on improving and maintaining the operators' health, safety and well-being.

The guidance is based on research and established practices of people using forest machines. The first part describes a process for work improvement in five steps to be taken by the employer and the team; the second part presents useful tools. The focus is on the human factor, which often is difficult to grasp and easily overshadowed by technical discussions – despite that the operators are most important for the final outcome (see Best Practice 12).

BEST PRACTICE 11. THE NEED OF TRAINING, EVEN FOR PROFESSIONAL LOGGERS

When it comes to recover storm damaged forests, the observation of what happened in France after Lothar and Martin windstorms in December 1999 can be very useful to demonstrate the need of training, even for professional loggers:





Number of accidents per week in 2000, in France, during logging operations in storm damaged forests

<u>During the very first days following the windstorm</u> a terrible increase occurred in the number of accidents, concerning both professional loggers and non-professional people (firemen, army and farmers) who "cleared" roads, parks and gardens, etc. For the latter, it is clear that the lack of basic skills and expertise in working with a chainsaw is an important handicap for processing dangerous trees that require special techniques.

A few weeks after the windstorms a decrease occurred in the number of accidents and stabilization at a level just a bit higher than usual, for mainly professional loggers, more or less trained and experienced in working in storm damaged forest salvage operations. This second phase illustrates very well the fact that even professional loggers cannot properly handle the extra risks associated with damaged trees: indeed, in "normal time", they do not have the opportunity to regularly apply and practise the specific techniques and their competence in these situations.

A few months after the windstorms a new rise and fall in the number of accidents concerned mainly experienced loggers. This can be attributed to the acceptance of the operators to the danger, who, little by little, while increasing their competence in working storm-damaged forests feel more relaxed, and as a result lose concentration.

When a windstorm occurs, all kinds of pre-existing publications (safety guides, booklets, etc.) should be distributed to the professional workforce as soon as possible. This action should also be complemented by providing information for the non-professional workers, the general public.

On-site training to "refresh" logger's knowledge and competence in logging operations in storm-damaged forest is necessary. A typical training program (3–4 days) could include the identification of the different kinds of damage, the organization of the logging operations, the equipment (chainsaw, safety equipment), risk assessment and emergency procedures. Safety guides are pedagogic documents that can be used for these training sessions. In the United Kingdom, for example, specific certificates of competence based on training programmes and assessment are required for working in storm damaged forests.

Source: Pischedda D., 2004. Technical Guide on Harvesting and Conservation of Storm Damaged Timber. By the team of experts from the EU Concerted Action STODAFOR, QLK5-CT2001-00645: CTBA and FVA p.16–17.

BEST PRACTICE 12. HANDBOOK: HEALTH AND PERFORMANCE IN MECHANISED FOREST OPERATIONS

The handbook suggests a method in five steps to manage health and performance:

- Develop a policy and routines. An essential framework for operators' performance, safety and health is a policy concerning working conditions and routines for management of the human factors. The outcome of the policy should regularly be discussed within the team. The policy, the routines, the risk assessment and the action plan should be written down, enabling them to be managed.
- Assess risks. When larger changes to the activity are being planned or if work consists of an assumed risk, risk assessment should be performed. If a team meets problems of low performance, ill health, accidents or severe incidents, its causes should be investigated. Findings should be discussed within the team.
- Find solutions. The team should be involved in developing the solutions. While doing this, attention should be paid to how changes and variations are managed. Measures should be prioritized.
- Implement. Measures and solutions should be settled upon and carried out. Measures that
 cannot be fulfilled immediately should be entered into an action plan. The plan should have a
 clear scheduling, indicating priorities and responsible persons. All measures should be budgeted.
- Follow up. The results of the accomplished measures should be monitored as well as the
 fulfilment of the action plan. Key indicators should be used that verify accomplishment or the
 necessity of further actions, e.g. revisions of routines.

In a second part a number of tools have been developed as assistance. The tools are adapted to the situation at the forest workplace:

- · assessment of work organization and job satisfaction;
- · health indicators;
- · tasks for job enlargement;
- · assessment of work shift rosters;
- · costs for illness and preventive measures;
- protocol for assignments of responsibilities;
- · template for documentation of activities;
- · ergonomic and safe forest machines;
- WORX (see Best Practice 14) make strengths and weaknesses in your work conditions visible.
 The handbook is available in English, French, German, Norwegian, Polish and Swedish.

Source: Health and Performance in Mechanised Forest Operations, Sten Gellerstedt (editor), Swedish University of Agricultural Sciences, Uppsala, Sweden. 2005. http://www2.spm.slu.se/ergowood

Self-inspection

Labour inspection can contribute to the improvement of working conditions and control of compliance with laws and regulations in forestry (see Part B), but practice proves that effective supervision and sanctions are mostly difficult to implement for various reasons. This is why it is not only reasonable but also imperative for the future development of forestry contractors that the compliance with occupational safety and social regulations be controlled and encouraged at operational level. Self-inspection (auto-inspection) serves this purpose.

The instruments of self-inspection are checklists for the examination of working conditions and operational processes, concentrating on safety at work, as well as procedures to document the results of the inspection.

Auto-inspection forces contractors to proceed systematically and in accordance with the national regulations in force. A system of auto-inspection specifically adapted to the situation of forest owners and forestry contractors has been developed by the Swiss accident insurance company SUVA (see Best Practice 13).

BEST PRACTICE 13. SELF-INSPECTION OF FOREST ENTERPRISES AND CONTRACTORS

The instrument used for self-inspection of businesses is called "Business analysis: safety", which is not only a comprehensive checklist for forest enterprises (forest owners) but is also suited to use by forestry contractors. The intention of SUVA is that forest enterprises and their contractors conduct their analyses using the same criteria.

The purpose of the checklist is to identify the weaknesses of an enterprise in occupational safety and to determine measures to correct them. The methods and possible solutions are conveyed at the SUVA seminars.

These are inspected by the SUVA checklist:

Technical aspects

- · availability of working implements;
- · safety standards of working implements;
- status of care and repair;
- · organization of care and maintenance.

Organization

Organization of the enterprise

- · definition of comprehensible business objectives;
- · assignment of competences and responsibilities on the basis of job descriptions;
- · adequacy of information and communication.

Work organization

- systematic and well-scheduled task planning and organization;
- · detailed work order;
- choice of procedures;
- · provision of risk analysis at workplace for staff;
- · organization of first aid and rescue operations.

Cooperation with third parties

- · placing orders by tender;
- · appreciation of offers according to safety criteria;
- responsibilities in the case of cooperation with several contractors on same working site.

Working conditions

- · adequacy of the wages system;
- · participation in business decisions;
- · arrangements for protection against weather;
- special agreements for part-time employees.

Staff

Management

- · exemplary function of operating manager;
- · initiation of new staff;
- structure and discussion of long-term working plans;
- clarity of orders and instructions;
- supervision and feedback regarding occupational safety.

Work execution

- judgement on work situation and objects;
- · order and plain visibility on work site;
- · careful treatment of work implements and fuel;
- measures to protect third parties.

Basic and further training

- · staff qualifications;
- · frequency of further training.

Selection of staff

- · technical aptitude;
- · physical aptitude.

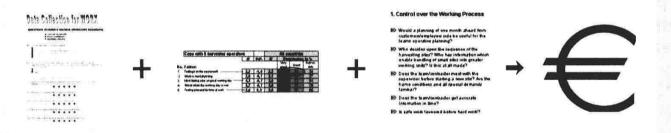
Source: Swiss accident insurance company SUVA, 1995. Betriebsanalyse Sicherheit – Checkliste für Forstbetriebe, SUVA, Lucerne.

The WORX tool

A comprehensive tool for self-inspection in contractor businesses and harvesting teams has been developed in the ErgoWood project (see above). A specially designed and carefully tested questionnaire helps to collect data for the analysis, which includes safety and health aspects as well as data concerning business and work organization (see Best Practice 14).

BEST PRACTICE 14. WORX – MAKE STRENGTHS AND WEAKNESSES IN WORK CONDITIONS VISIBLE

The tool includes elements of benchmarking. Based on European comparisons, relevant improvement measures can be identified, discussed and prioritized.



With a specially designed and carefully tested questionnaire one can assess the current standards with regard to:

- · cooperation in teams;
- · mental strain;
- the health situation of the operators.

Furthermore the basic conditions are summarized as:

- operator factors;
- · work organization;
- · management system/support.

Finally the working climate in the team or company is described in terms of:

- · the operators' control over the working process;
- · their social support;
- how the operators identify themselves with the company, and their perceived possibilities to contribute to the improvements of the work practices.

With the help of automatic routines the results are generated and presented graphically for each aspect, in total nine tables. WORX facilitates for single teams and contractor firms to compare themselves with data from the six participating European countries: France, Germany, Norway, Poland, Sweden and United Kingdom.

Assistance and support in interpreting the results from the benchmarking with the WORX tool is provided as sets of motivating and provocative questions. Furthermore there is guidance on how to develop an action plan for improving the work organization in mechanized harvesting.

Source: Benchmarks for good work organisation and successful implementation processes, Report 11 from ErgoWood, Ewa Lidén, delo – Organisationsberatung, sub-contractor to Swedish University of Agricultural Sciences, Uppsala, Sweden. 2005. http://www2.spm.slu.se/ergowood

Job security

What it is

Nearly all contractors suffer from a fluctuating volume of orders, because of numerous causes. The risk easiest to calculate is the varying utilization of capacities as a result of seasonal differences in timber harvesting. But calamities such as windblow can – literally – overthrow any business planning for years to come. Competition between businesses also seems to have a growing influence on the volume of orders, especially in Central Europe. Where contracts are of short duration – still a common occurrence in the sector – there is a constant risk that no successive orders are placed because another firm is offering the work at a cheaper rate. Competition with underselling seems to occur nearly everywhere at present. In Central Europe, the opening of markets in the East has contributed to this situation.

Guiding principles

The employment situation should allow a contractor to offer long-term employment. Lack of perspectives is certainly the result of deficient economical prosperity and absence of long-term utilization of capacities for contractors as a whole. On the other hand job security is a pre-condition to obtaining qualified staff in contract labour in forestry.

Objectives

Long-term <u>labour contracts</u> with employees, in which working conditions and payment of a socially adequate kind and amount are fixed, should be the standard mode of employment regulations.

Potential consequences

The current developments also carry certain risks, as forms of employment and working conditions may be generated that are not acceptable from aspects of social security, of health conditions and of individual development opportunities. It is a fact that the level of information on the effects of the development of contractor work on working and living conditions in rural areas is as yet insufficient. Because alternatives to employment in forestry are often very limited in rural areas, contractors are particularly important as employers, and are significant in the further development of rural areas. Employment in rural areas is mostly created by small- or medium-sized enterprises (Hyttinen et al., 2000).

Well-qualified or specialized staff has better employment security in service providing businesses, especially when the enterprise in question has invested in their qualification. This is particularly true for machine operators who have either followed cost-intensive training or have reached a high level of qualification by experience and practice in machine work. Such staff is usually employed by contractors on a long-term basis, especially as at present there is a lack of qualified machine operators on the European market.

On the other hand there is a high fluctuation rate in forestry staff. One reason for this is the attempt of forestry workers to change from a more or less insecure job in a service providing business into more secure employment in another sector. This trend is strengthened because of the relatively low income level in forestry in comparison with other sectors of the economy. Staff fluctuation rates and insecure employment conditions are no doubt closely interrelated.

Best practice

Labour contracts

The relations are in any case established by contractual agreements – first of all independently from the form and structure of the contract. To begin with, it must be said that it is quite common in contract labour in forestry to conclude labour contracts on the base of verbal agreements. However, a labour contract is the basis for the legal relations between employer and employee and should contain juridical matters, particularly relating to the rights of employees. For this reason it is a fundamental requirement of sound practice to formulate written contracts.

Labour contracts should contain the following:

- <u>Duration of contract (employment)</u>: The labour contract must state without any doubt whether it is a permanent employment or not, and for what reasons a time (or seasonal) limit is fixed.
- <u>Duties</u>: The contract should contain an exact and comprehensive job description including all duties and responsibilities of the employee. At this time it is equally necessary to state the knowledge and skills required in order to fulfil these duties.
- Remuneration (kind and amount): Besides the amount and kind of payment (time-rate, piecework and wages on a commission basis) it is also necessary to lay down the criteria used for determining salaries (possibly wages groups, time and motion studies for piece wages).
- Working hours: There needs to be an agreement on the number of working hours per day and/or per week. Labour contracts should furthermore contain indications on the extent to which overtime may occur and how it is paid.

Notice: A labour contract must state clearly on what grounds and in what period notice of termination of contract may be made.

Tariff agreements

In some countries and regions there exist tariff agreements that serve as a basis for labour contracts between contractors and their employees, e.g. in Germany, Finland, Norway, Sweden and Switzerland.

Tariff agreements are the best means for employees to influence their working conditions. They are also an excellent way of creating comparable competition conditions in a region or country. They furthermore increase the legal security of employees – over and above the effectiveness of single labour contracts – as they are the most powerful regulating instrument beside legal provisions. An example of a tariff agreement is to be found in Germany (Best Practice 15).

BEST PRACTICE 15. FEDERAL TARIFF AGREEMENT FOR EMPLOYEES OF MEMBER ASSOCIATIONS OF THE GERMAN FORESTRY CONTRACTORS ASSOCIATION (DEUTSCHER FORSTUNTERNEHMER-VERBAND DFUV)

In 1998 a framework tariff agreement was concluded between the Federal working group of forestry contractors (Bundesarbeitsgemeinschaft forstwirtschaftlicher Lohnunternehmer, BaFL), the organization that preceded the newly founded DFUV, and the industrial union Building-Farming-Environment (Bauen-Agrar-Umwelt). Up to the present day, this framework tariff agreement is in force in four German federal states. It comprehensively regulates the working conditions of employees and contains detailed information on:

- · Working hours: The weekly working time is fixed at 39 hours and may not exceed 45 hours.
- Type of wages: Time-rate wages are paid.
- Supplementary remuneration: Additional wages are paid for tasks specifically defined as well as for extra work (overtime, work on weekends).
- · Accident prevention: Employees must comply with regulations in force.
- Tools: Tools are basically provided by the employer.
- Secondary activities: Secondary activities may not affect performance and may not instigate competition with the employer.
- Holidays: The length of paid leave is fixed depending on the relationship to the business. The
 reference basis is 24 days a year.
- Continued payment of wages: The payment of wages is continued in case of death, illness (6
 weeks), family events, loss of working time because of the weather.

In mid-2001, the then newly founded DFUV concluded a binding federal tariff contract valid for a total of eight German federal states, as a further development of the existing framework agreement. It equally attempts to negotiate a wages contract with the same purview. This should reduce a former problem of the German parent association, namely that the existing tariff agreement is only in force in a limited area. However, only a small proportion of forestry contractors in Germany are organized in associations. Therefore the tariff agreement is only valid for a very small proportion of people employed by contractors.

<u>For more information and contacts</u>: German forestry contractors association (Deutscher Forstunternehmer-Verband e.V. DFUV; www.forstunternehmer.org).

Working time

What it is

One of the most frequent problems encountered by contractors and their staff is the number of daily and weekly working hours (e.g. Lidén, 1995; Kastenholz and Lewark, 2005). The number of total working hours is not only a critical factor regarding the working conditions from a social perspective, but also for health reasons. The number of working hours per day on machines is equally significant. Already a daily workload of eight hours spent entirely on a machine is considered too long, causing too high a strain and stress (Pontén, 1988). In Swedish forestry, where numerous research results have been put into practice and organizational measures have been taken to reduce the problems of safety at work, recent studies show that the average working hours per week of machine operators amount to 61 hours (Erikson, 2000).

In the meantime, there exist laws or other rules regulating working hours in nearly all countries, in each case subjected to the social and industrial relationships and traditions of the

country in question (Clerc, 1985). Whereas employees are often – at least formally – protected by these legal regulations on working hours, self-employed contractors do not feel bound by them. Even if regulations on working hours are generally not legally binding for self-employed contractors, they should respect recommendations on maximum weekly working hours. From this point of view, the self-employed are particularly at risk under social and health aspects.

Guiding principles

The number of working hours should usually not exceed eight hours a day, in accordance with general conceptions on good working conditions. Contractors should comply with national regulations on working hours and should furthermore – considering how arduous and dangerous their work is – counteract any exploitation of themselves and of their staff.

National rules on working hours and tariff agreements are valid without restriction for employees; however, in many countries self-employed contractors do not necessarily fall under the provisions of workplace related legislation.

Internationally recognized standards form a framework where no such legal provisions exist, particularly the ILO Reduction of hours of work recommendation (No. 116, 1962). This Recommendation sets down a 48-hour week as basic standard, with a progressive reduction to a 40-hour week as a social objective.

Objectives

Contractors should be able to limit their own and their employees daily and weekly working time to a level that allows for an appropriate time left for family, social life and recreation.

Potential consequences

The dilemma encountered by self-employed contractors in highly mechanized timber harvesting is that they attempt to achieve machine running hours necessary for a profitable business by working harder, and in doing so overtax themselves. They often do not consider hiring staff to operate a machine in several shifts as an alternative, as they consider the general business costs linked to the employment of staff as excessive. Contractors fear that the additional income generated in this way will not be sufficient to cover the increased costs. They fear in particular that the higher expenses for staff management and bookkeeping are not worthwhile. Apart from this, contractors have a number of psychological problems that cannot be generalized but are characteristic of forestry contractors:

- They fear that employees will not be able to meet the high quality requirements of clients not least because there is still a lack of skilled machine operators.
- Owners operating their own machines often seem to think the machine will not take a change of driver. They do not trust employees to operate and maintain the machine properly and think they will not take care of it.
- Self-employed contractors *hesitate* in assuming the responsibilities and commitments of an employer. The underlying reason for this is the uncertainties concerning the future volume of business. This makes many contractors shrink from any long-term obligations towards staff.

All these things can generally be rated also as symptoms of the lack of management skills. The main problem behind long working hours is the poor profitability of forest contractors, because of the fact that the price level of forestry products is low and under constant pressure, and that clients pass the low prices on to contractors. This is a problem throughout the world.

Best practice

Even if working hours should be settled as part of contracts or tariff agreements, intolerably long working hours of contractors and of their employees are such a great problem for the entire profession that measures to reduce them must be looked into separately, going beyond the description of contractual agreements.

A procedure planned by the Swedish occupational safety authority to reduce long working hours – presented in Best Practice 16 – makes it clear that working hours are a problem that is difficult to solve, even in countries where occupational safety standards are of high importance, and where a comprehensive and well-established supervision system exists. Looking back on years of negative experiences in Sweden, regarding the regulation of working hours with legal provisions alone, Swedish experts have concluded that a reduction of working hours, which are so long as to endanger health and reduce the quality of work, can only be reached by a work organization with job rotation (Synwoldt and Gellerstedt, 1999).

BEST PRACTICE 16. MEASURES TO REDUCE LONG WORKING HOURS ON MACHINES The strategy of the Swedish occupational safety authority

Because of the massive problems with muscular and skeletal disorders and diseases affecting machine operators, the Swedish occupational safety authority had already intended a number of years ago to reduce the number of working hours on machines by legal measures. Nevertheless the authority gave industry a period of two years to solve the problem on its own initiative. A project was launched in which authorities, labour unions, the forestry contractors association and researchers were involved. Up to 80 or 90 percent of Swedish logging companies agreed with this manner of proceeding.

More recent observations indicate, however, that with the growing demands for rationalization, machine operators are increasingly suffering from strain because of long working hours. As this trend seems to be continuing, the Swedish occupational safety authority is again considering tightening regulations on machine operating hours (Synwoldt and Gellerstedt, 1999). The present regulation decrees that machine operators have to spend two hours a day on tasks other than machine work.

The problem of implementation: Legal regulations on occupational safety can only be controlled and sanctioned in businesses that have employees. The self-employed are more problematical as they are not directly affected by rules on working hours, because legal regulations generally only provide for the rights of the employed. This applies as long as the business of the self-employed is not organized in a legal form where they are formally considered as employees (this case also exists: self-employed contractors who are employees of their own business firm, e.g. if they have it registered as a so-called public limited company). Supervision authorities have only very few possibilities to influence and sanction persons not working in any kind of employment relationship.

Source: Synwoldt, U. and Gellerstedt, S. 1999. Experiences of Swedish forest corporate initiatives in ergonomics. Proceedings of the Joint FAO/ECE/ILO Committee Seminar: "Forest Operations of Tomorrow", 20.- 24.9. 1999, Pessac, France. p. 389-401.

Shift-work - threat and challenge to health and safety

Shift-work is not in any case a threat to health and safety, which is generally believed. It all depends on how to organize a shift schedule in a team of workers. If properly and skilfully planned, a work-shift roster that includes job rotation and job enlargement and

thus contributes to the reduction of strain that particularly accompanies machine work, can contribute considerably to the improvement of health, safety and performance (see Best Practice 17).

BEST PRACTICE 17. ASSESSMENT OF WORK-SHIFT ROSTERS

A method to identify workload using so-called workload points (WLP) has been refined and presented in the ErgoWood project. During work, one accumulates WLPs. More points mean more effort and fatigue. To recover, it is necessary to do something else, such as manual work or to take a longer break. This tool offers a basis for discussions on health implications of different shift work rosters.

By assigning WLPs one can evaluate the impact on the body from a shift roster:

- The first working hour in a harvester gives 0 points, the next 1 point, then 2 points, and so on.
- The first working hour in a forwarder gives 0 points; the second and third hour gives 1 point each, the fourth and the fifth 2 points each, and so on.
- One hour of physically straining work after working in the machine cab gives minus 2 points, the next gives minus 1 point; the third 0 points. From the fourth hour and on, there are positive points. Notice: If one starts a shift doing manual work, one cannot accumulate negative points.
 One should start calculating as from hour 3.
- One hour of break reduces the following machine hour work load by 1; 2 hours reduce the
 following machine hour by 2, and so on. However, one still keeps the accumulated points from
 the previous work.

The different outcomes from shift rosters should be compared and the best solution chosen. Everyone has a different tolerance to workload. It is therefore not possible to state a limit, where WLPs begin causing health complaints for each individual.

Through the selection of a shift roster, the following aspects should be considered:

- Could the different tasks be distributed in alternative ways, thus reducing the workload of individual operators?
- Could more tasks other than machine operation be added to the total work tasks of the team, thus creating the possibility of more varied work?
- Could work be organized in a different way, thereby reducing the total workload?
 The method has been used at the forest industry companies, Sveaskog and StoraEnso in

 Sweden. It was originally developed by Jan Adolphsson, Human Resource Manager at the Forest Division of StoraEnso.

Source: Health and Performance in Mechanised Forestry, Sten Gellerstedt (editor), Swedish University of Agricultural Sciences, Uppsala, Sweden. 2005. http://www2.spm.slu.se/ergowood

TECHNOLOGY

What it is

The specialization of some contractors in the use of machines is undoubtedly an important advantage in using contractors. Throughout the world, contractors work with a high degree of mechanization.

Guiding principles and objectives

Contractors must be able to provide adequate equipment for the task in question. Minimum equipment for forestry work comprises, in any case, tools and machines that comply with the security standards required, as well as any personal protective equipment necessary for the

task. There has lately been a distinct tendency towards the use of modern communication and information technology for highly mechanized tasks. Clients of forestry contractors will be demanding the use of these new technologies more and more. Contractors who are unable or unwilling to make use of these innovations will lose in competitiveness.

QUALITY MANAGEMENT

What it is

The increasing demands of clients and of society towards contractors and their performance – as also expressed through forest certification criteria – make it more and more important for contractors to deliver the services according to clients' requirements. Therefore they have to describe and document their business organization and processes. It is even likely that in the course of certification processes the existence of a certified quality management system (i.e. a system with transparent and reliable auditing processes) will become a compulsory condition for obtaining a contract.

BEST PRACTICE 18. ERGONOMIC GUIDELINES FOR FORESTRY MACHINES

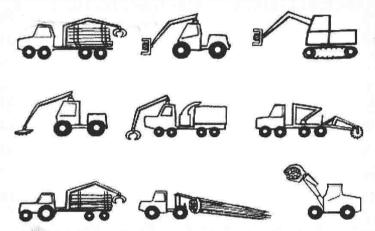
The purpose of ergonomic guidelines for forestry machines is to provide guidance in ergonomic matters for manufacturers, buyers and users of forest machines. This is in the hope that it will encourage the development of safe forestry machines, which would be easy to use and maintain. This, in turn, would offer machine operators a better opportunity to preserve their health and general well-being, as well as to secure a good income. The advice given is based on sound knowledge and experience pertaining to the physiological, psychological and social aptitude of people in using and maintaining off-road machines.

Ergonomic guidelines cover all cab-equipped off-road machines that weigh more than 2 tonnes and are used in forestry – which means that such machines as excavators and farm tractors are also included. The guidelines largely specify the functional criteria to be met by the design of the operator's workstation, the control and operation of the machine and its equipment, and maintenance procedures.

Do you want to buy a new forest machine? Have you considered how poor ergonomic design affects you or your operators' health and well-being?

For this purpose a booklet with checklists has been developed.

An user can assess a machine to find out how, where and by whom it can be used or to determine which aspects should be given priority in an overhaul of the machine.



Based on this handbook a simplified booklet "Ergonomic and Safe Forest Machines" has been developed, which leads potential and actual users step-by-step through the most relevant features (see table below) of the machine and its handling.

A comprehensive description of ergonomic and safety standards shows how the machine should be designed to maintain health and well-being.

	Ergonomic feat	tures	
Access systems	The winch	Climate control in the cab	
Cabin access	Remote control	Gases and particulates	
Cabin	Operating the machine	Manuals and instructions Maintenance	
Operator's seat	Information from the machine		
Visibility	Operator safety	Mental stress	
Lighting	Noise	Ecology	
Work posture	Vibration		

The checklists enable to discern and evaluate differences in ergonomic quality between machines. The checklist also ensures that no ergonomic aspect is overlooked. Basic qualifications for using the checklists are interest in ergonomics and forest technology.

The background and the detailed description of the tool are presented in a report from the ErgoWood project. The report and the tool itself can be downloaded from the ErgoWood homepage: http://www2.spm.slu.se/ergowood

Various systems were presented at the first European Forest Entrepreneurs' Day that took place in Celle in 2000. The forestry contractors' associations represented there agreed unanimously that quality management is important for improving the profitability, reliability and the trust in small enterprises and that quality management is increasingly in demand and expected by environmental organizations, the timber processing industries, forest owners, society and many others. In the opinion of European forestry contractors, quality management systems will for this reason be almost vital. The objective should be a common system at European level. The ENFE should be used as a forum to exchange experiences and to initiate efforts of standardization (KWF, 2001).

Guiding principles

Forestry contractors should have a written description about their way of doing forestry work and how the company improves its activities continually (i.e. a quality management system).

These quality management systems should have a common structure specially designed for forestry contracting. The system should be transparent and subject to an external audit, which is acknowledged by the contractors' market partners, social partners, public authorities and other stakeholders such as NGOs.

Objectives

Quality management systems (QMSs) can be seen as a tool for contractors to handle all the demands from outer society (customers, authorities, NGOs, forest owners, etc.) in an effective way. By means of quality management, contractors have an instrument to justify to the outer society (whomever they are) that they fulfil the demands both of their clients and society. If quality management systems are seen as a compulsory but not useful tool, these systems will be a heavy burden for the contracting enterprise.

Potential consequences

The basic ideas of a QMS is to proactively improve the business, prevent mistakes and learn from mistakes. Continual follow-up activities are one essential element of QMS implementation.

A QMS leads to:

- · less mistakes at work and thus to cost savings;
- better quality of products and services, thus, to a higher satisfaction of customers;
- higher productivity and thus to a better economic result;
- understanding by employees of the demands of employers and customers, and this
 increases job satisfaction;
- better awareness by all members of an enterprise of what is happening in the company, and this ensures right decisions.

Best practice

Many countries are working on the development of quality management systems and on their adaptation to the needs of forestry contractors. For instance, independently of each other, Germany, Sweden and Finland have all worked on such concepts.

In Finland the system is based on ISO 9000. The forestry contractors association has built up a QMS service mainly for its members. This offers a tailored service even for a single contracting company to create a QMS for the client at a reasonable price. It contains also educational services for groups of enterprises. In order to create and update the QMSs, the

contractors association has devised a data-system with both common and specific individual company components in it.

In Germany, an important element of such a system is the RAL quality mark, a German standard for the certification of sound professional practice (see www.wald-und-landschaftspflege.de). In Sweden the system is based on the standards and criteria of the Swedish Institute for Quality Development (see Best Practice 19).

ECONOMIC VIABILITY

What it is

The price for forestry services is tending towards a level merely just acceptable for contractors. The procedural and organizational rationalization that has taken place in recent years – be it by a high degree of mechanization of timber harvesting, or also by improved qualification of contractors – seldom increases profits. Instead, clients tend to benefit from successful rationalization by lowering prices. The contractor often does not get the return he needs to run his business; it is often the client who decides what he is prepared to pay, also against the background of small profit margins on proceeds of timber sales. Forestry services are, to put it mildly, a buyers' market. Contractors are increasingly finding it difficult to make a profit after covering the costs of staff and especially of machines. A profit is however necessary to sustain the business: for building up reserves, for new investments, for further qualification and for more intensive management of the business.

BEST PRACTICE 19. QUALITY MANAGEMENT

The Swedish approach: THE TOOL

Already a number of years ago Sweden began developing a QMS for forestry in general and for forestry contractors in particular. It was created in close cooperation between the Swedish forestry contractors' association, SMF, and SkogForsk, the Swedish forestry research institute. During the first reflections on such a QMS concept it was decided to base it on the "Mission" and the "Vision" of the Swedish Institute for Quality Development (Institutet for Kvalitetsutveckling [SIQ]).

SIQ Mission

The SIQ initiates and contributes to positive developments in all sectors of Swedish society.

We shall reach this objective not only by obtaining, collecting and communicating existing knowledge on total quality management, but also by developing methods for its use in practice. We give new impulses by international cooperation.

SIQ Vision

<u>SIO</u> is the driving force behind the use of Swedish developments to improve general welfare and to be able to compete with the world best.

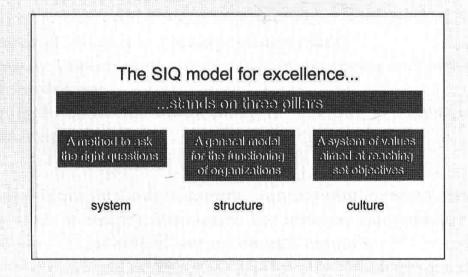
<u>System:</u> The analysis of the situation at hand is the starting point, whereby it is not only a question of gathering information, but also of systematically and methodically asking the right questions. The key questions to be analysed systematically by a business are:

- · How do you work?
- · How do you judge your work and how would you improve it?
- · To what extent can you improve your work?
- · What are the results in relation to your system of values?

<u>Structure:</u> The SIQ concept contains a general model for the functioning of organizations (see figure below). This model is based on the management responsibility of the entrepreneur and comprises the following organizational elements. These are decisive in reaching set objectives:

- · information and evaluation;
- strategic planning;
- staff development;
- · process management.

The highest objective is customer satisfaction.



<u>Culture:</u> The culture of a business is based on a comprehensive system of standards. Basically these standards aim at reaching the business objectives. They are:

- customer orientation;
- · management responsibility;
- · participation of all concerned;
- · professional development;
- long-term perspectives;
- responsibility towards society;
- · process orientation;
- prudence;
- · continuous improvement;
- learning from others;
- rapid reactions;
- · management by facts;
- partnership.

The objective is management based on facts. When using one of the tools based on the SIQ model, the process is one of continual analysis of the enterprise. This serves to gather ideas for improvement and to review the results. This then leads to a new description of the current situation.

The instrument co-developed by SMF is also based on this model and is simply called "The Tool". It is an instrument for "the improvement and development of qualitative standards for forestry contractors" and involves the following steps:

- It begins with a summary description of the business.
- It analyses the current situation.
- · It demands new ideas for improvement.
- It introduces improvements in the business.
- It analyses the new situation and demands a continuous repetition of the process described above.

"The Tool" was first applied in the Swedish forestry contracting businesses in 1999 and 2000. On the whole, the experiences show that the forestry contractors have succeeded in using "The Tool" and that it is widely accepted in contracting practice. The introduction of "The Tool" has had a positive influence on profitability.

Source: Omberg, H. 2000. Qualitätsmanagement. In: Documentation the 13. KWF meeting in Celle, Germany. KWF, Groß-Umstadt.

Many contractors are one-man or micro businesses with little capital. Machines are mostly paid for by loans. Building financial reserves for new investments, both in machinery and in business development, is difficult. Where national legislation allows, businesses can limit their private liability risk by choosing an adequate legal form for the enterprise. With the globalization of timber markets, and the ensuing of worldwide competition, forest owners and the timber industry are forced to reduce all costs of forest management. One option is the reduction of labour costs by rationalization and outsourcing, in the hope that they will not only reduce their direct labour costs, but also their organization and planning expenses. However, in order to fulfil the requirements of clients the industry needs efficient and competent contractors who can provide high quality products and services at low cost.

Guiding principles

Forest owners and the timber supply industry must understand the economic situation that contractors face from the combined pressures of low quality contracts, i.e. low prices, short-term contracts and poor working conditions and increasing costs arising from environmental pressures and staff cost.

All sectors of the timber industry supply chain should therefore understand the importance of an economically viable and sustainable contracting resource to provide timber from sustainable forests to the timber processing industry. It must be fully understood by all actors in the forest supply chain that sustainable forestry requires a sustainable workforce.

Contractors should have the knowledge and necessary tools to fully understand the economic viability of their business operations, and that they plan to provide sufficient financial stability necessary for the business to be capable of sustaining long-term investment and development.

Objectives

Forest owners, the forest industry and all employers of contractors shall accept that:

- sustainable forestry requires a sustainable workforce;
- the employers have the power to improve the economic viability of contracting businesses, not only by increasing prices, but also by improving many contractual issues, including ensuring continuity of work, adopting and encouraging improved work practices, and ensuring fair competition for services.

Contractors shall be capable of:

- understanding basic economic and financial structures appropriate to their businesses;
- utilizing computer-based systems to understand and interrogate their business operations;
- · carrying out ongoing analyses of business trends and development;
- in order to:
- generate an operating surplus sufficient to cover short- and medium-term financial demands of the contracting business and for contractor's subsistence, while enabling provision of capital for long-term investments in technology and qualified staff.

Potential consequences

If forest owners, merchants and the timber processing sector do not accept the need for supporting the concept of a sustainable workforce then the supply side of the industry could collapse in some countries. There is evidence that the pressures on contractors are increasing and that the numbers of contractor businesses are reducing in some countries. A shortage of contractors will reduce the capacity of the industry to respond to increasing demands for wood for conventional products, as well as to cater to the increasing demands for wood fuel.

Allied to the impact of policies of the employers, business management deficiencies of forest contractors are highlighted in the section on management skills (Part C, Management skills) as a major problem, and it is this deficiency – on the economic front – that lies at the root of the inability of many contracting businesses to ensure realization of their economic and financial goals. Unless these deficiencies can be overcome, the contractor, no matter how highly skilled in operational and technical matters, will be unable to operate viably and will be unable to continue to practice.

Best practice

One measure towards economic viability is <u>long-term contracts</u>: in Finland it is common use that contracting operations be based on long-term contracts. The majority of contractors have

at least a one-year contract with one big client. Even forest owners' associations, which cannot be sure that they can offer cutting sites for one year ahead, try to offer long-term contracts.

There is a major role for forestry contracting associations to be involved in the process of education at the political level for the need of a sustainable workforce, at employer level for the need of fairer treatment of contractors, and with their peers in supplying training and tools to ensure an improved knowledge of economics and financial issues.

An example of education at a political level is shown in Best Practice 20.

BEST PRACTICE 20. FORESTRY CONTRACTORS AS A DRIVING FORCE FOR INNOVATION AND A CRUCIAL RESOURCE FOR SUSTAINABLE FOREST MANAGEMENT

Considering forestry and the wood supply chain, one has to admit that in most cases not only the forest owners and the wood processing industry are driving forward innovation. Rather it is forestry contractors who are – besides their increasing importance as the major labour resource for forest operations – the major driving forces for innovation in the wood production chain.

- Contractors invest in and contribute to the improvement of advanced forestry techniques in most European countries and regions.
- In addition to their role in the further development of technical solutions, contractors strive to improve qualification of their workforce, thus becoming more and more important as forestry is aiming at nature oriented management throughout Europe. This therefore requires higher skills and qualifications from all actors in the production chain.
- Forestry contractors, such as small- and medium-sized enterprises (SMEs) in wood processing, account for the preservation of employment in rural areas.

Source: Kastenholz, E., 2002. The Role of Forestry Contractors in Rural Development. In proceedings of Joint FAO/ECE/ILO Committee on Forest Technology, Management and Training, Seminar on "Partnerships in Forestry". Belgium, 2002.

COMPETITION

What it is

With the present rapid development of the contracting sector in forestry, it can often be observed that contractors are competing under unequal conditions. The inequalities have many causes, ranging from diverging tax assessments to distinct differences in qualification and technical standards, even within the same region. The creation of equal competitive conditions for all contractors of a region remains a challenge for the entire sector.

Examples of unequal competitive situations:

- The market structure in many areas is asymmetric. This is a consequence of the fact that there are only a few big and strong customers (forest industry companies) and many small enterprises that offer forest operations services. This leads to a situation where customers rule the markets.
- In many areas, forestry contractors, farmers, state or communal organizations and forestry owners' organizations are competing in the same market. In that case, it can be assumed that some organizations achieve their ability to compete by getting EU or national subsidies. At the same time they are taxed through different taxation systems or obliged to business insurance at varying levels. All of this leads to unfair competition.
- Information on market prices, demand and supply is insufficient among contractors.
- The contractors' level of basic education in business is low and therefore their expertise about their own production costs is limited.

- There is a lack of competent labour.
- The problem in international markets lies in differences in working costs between neighbouring countries. This has become particularly apparent in the use of contractors from abroad, and this can threaten the livelihoods of local contractors. Thus, it is important that competition in any market is based on local rules. The market has to be open for all, but also the rules must be the same for all. The creation of conditions for equal competition regarding all contractors in any market area remains a challenge for the entire sector.

Fair competition is the only way to ensure cost-effective production and the development of the contracting sector. Fair competition means that the same rules (legislation, certification rules, etc.) apply to all actors according to these rules. Only the expertise, skills, capability to improve services and thus cost-effectiveness of actors are relevant in finding the winners.

Objectives

Fair competition means, that:

- markets are open to all who accept and fulfil the commonly accepted rules;
- there are no preventive barriers for companies to be established in the markets;
- rules must be the same for all;
- actors have the same and equal market information;
- there are many actors in the market;
- there is no harmful cooperation, neither between contractors nor on customers sides.

Potential consequences of unfair competition

In the case of insufficient knowledge and business-related information, competition easily leads to a price level that is risky for companies. The setting of prices is determined by the stronger and in many cases the more skilful partner. If this stronger partner is not responsible, it can lead to a price fixing that threatens the viability of the sector or single enterprises.

Best practice

Recognition of forest contractors

In many countries there are comprehensive legal provisions regulating the status of business firms. An important criterion is the registration as a commercial enterprise with the competent government authority. Even if the procedures of registration vary according to national regulations, there are still numerous similarities that apply in all countries. In particular the registration of a business at the fiscal office seems to be necessary worldwide.

There is however a number of examples where the forest and timber industries as a whole concluded regional agreements, stating the requirements for the formal recognition of contractors, but most of all stipulating that only contractors who comply with these requirements may be hired. In the Netherlands, for instance there exists a regulation for the entire sector to employ only contractors registered according to the "Erkenningsregeling Bosaannemers" (see Best Practice 21). An example from Finland is shown in Best Practice 22.

The success of this self-imposed sectorial obligation probably lies, first of all, in the mutual control of contractors and, second, in the use of it as a competitive factor towards contractors that do not adhere to the rules.

BEST PRACTICE 21. "ERKENNINGSREGELING BOSAANNEMERS"

A sectorial agreement in the Netherlands

This is an initiative involving the entire sector for the identification of criteria for good contractor work and for the certification of good contractors. Already in 1990 a voluntary forestry contractors' certification system had been launched that was meant to contribute to differentiate "good" from "bad" contractors.

The initiative was supported by **Bosschap**, an organization aiming at improving the economic and social situation of forestry, as well as the quality of forest management. The members of Bosschap are forest owners, workers' unions, the forestry contractors' association (AVIH) and also public nature protection authorities and environmental NGOs.

The **Erkenningsregeling Bosaannemers** are the result of this initiative. It is a comprehensive set of rules that define under what conditions a business can obtain recognition as a registered forestry contractor.

Contractors applying for entry in the register must guarantee their compliance with these rules in a legally binding way. They must prove their sound practice by a series of clearly specified documents. Among others, the rules of recognition make specific requirements regarding the qualifications of contractors: They must have a certificate as a trained forest technician (Beropsbeoefenaar Bos) or an equivalent formal qualification.

Besides the rules of recognition that entitle a forestry contractor to become added to the so-called ErBo list, there exists a comprehensive catalogue of rules of arbitration in case of conflict. The sanctions for infringements of the Erkenningsregeling Bosaannemers are regulated in a detailed code.

Sources: Bosschap (1997): Erkenningsregeling Bosaannemers. Bosschap, Zeist. Bosschap (2001): Reglement Geschillen op grund van de Erkenningsregeling Bosaannemers. Bosschap, Zeist. Staudt, F.J. (1996): The Dutch voluntary "certification" for qualified entrepreneurship in forestry: success story of the nineties? Proceedings: Joint FAO/ECE/ILO Committee Seminar on "Safety and Health in Forestry are Feasible", 7.-11.10.1996, Konolfingen, Schweiz. p. 387-391.

BEST PRACTICE 22. CERTIFICATION AS FACILITATOR FOR FAIR COMPETITION - FINLAND

The Finnish forest certification system (FFCS) includes some criteria, which aim at guaranteeing fair competition. FFCS consists of 27 different criteria concerning forestry as a whole. These criteria are based on the idea that all actors in the forestry sector have to fulfil legal requirements. Deviations (negative feedback) in the independent auditing can be given, if somebody breaks the law, and this is evidenced by a court decision. In addition to the legislation there are forest certification criteria. The following criteria concern fair competition:

- A basic rule is that customers buy services only from contractors who have committed themselves to provide quality service similar to or exceeding forest certification standards.
- Customers as employers have to follow requirements and rules of labour legislation and collective agreements, and they have to insist that their subcontractors do so as well.
- Customers are responsible to check that their subcontractors are legal entities (i.e. registered companies), have fulfilled the requirements of the taxation system and hold personnel insurance.
- Contractors and other employers in the forestry sector need to have means to ensure that employees use their skills to perform their work in a safe way.
- Employers need to have evidence that they have updated employees' skills and expertise so as to conform to any changing requirements.
- Employers have to document that employees have had medical examinations according to legal provisions and collective agreements.
- Before starting to work, operators must have adequate information (preferably in writing)
 about: a work site, be able to work safely, foreman contact information, environmental issues
 to be taken care of, timber products, power lines, dangerous areas (steep terrain, etc.), maps,
 storage areas, forest owners special requirements, etc.

See more www. Ffcs-finland.org

COOPERATION

What it is

Two new development lines are becoming apparent, whose magnitude and significance for the sector is still difficult to foresee. On the one hand, there are concentration processes taking place in the forestry contracting trade. Examples for this exist in Chile and Brazil, where forestry contractors with several thousand employees are entering the market, and in Germany, where there is a new trend for contractors to offer complete services from timber harvesting to marketing on a larger regional scale, where they work to the order of the timber industry or of a group of forest owners. In the latter example, however, it is often subcontractors who perform the tasks ordered for these contracting businesses.

On the other hand, there are numerous very small businesses – often run by one person – who work alone for whatever reasons. It is difficult to foretell whether these tiny enterprises will succeed in competing with large contractors in the long term. There is so far no definition of the critical size of a business, below which a sustainable development is impossible. It seems that such businesses have low chances of survival if they do not attempt to reach profitability by increasing production. If small enterprises cannot expand their production themselves they should look for partnerships within the contracting sector, or with the forest owners who are their clients.

Cooperation between partners helps to increase competitiveness. The basic idea is to achieve more benefits by working together with somebody, than operating alone. In many countries all kinds of cooperation are acceptable and desirable except any cooperation negatively impacting price negotiations.

In this respect, research and development is needed to elaborate new models and forms of cooperation that complement and improve the social dialogue between workers' unions and employers, which is not fully effective at present. The focus should lie on the improvement of working and living conditions of small and – deliberately or unintentionally – independent contractors.

Guiding principles

The contracts between contractors and subcontractors should basically follow the same rules as work contracts between other parties:

- Subcontractors should also be recognized and registered business firms that comply with existing criteria for recognition as forestry contractors.
- Contracts should contain a clear description of the order: the quantity needed, as well as quality and environmental requirements.
- Responsibilities and competences for safety at work need to be defined using an occupational safety management system.
- Preference needs to be given to subcontractors who possess a quality management system compatible with the client's standards.

It is furthermore necessary that national laws and sectorial agreements clearly differ between employees and independent businesses. Uruguay implemented this when a clear regulation on the registration of businesses was formulated after comprehensive tripartite consultations. Every client who employs an unregistered contractor is responsible for their health and safety at work, as if he were an employee. This is also valid for contractors placing orders with subcontractors (ILO, 2001).

Objectives

Cooperation intents to improve contractors' networking on different levels and in different issues to work more cost effective, to be able to handle bigger contracts and to improve political acknowledgement.

Best practice

"Business Approach" - a new strategy for developing partnerships

As mentioned previously, it is necessary to develop and organize new forms of cooperation in order to ensure a viable development of contract labour in forestry. The structures in forestry are characterized by disparity of the market partners – large forest properties and timber industries on one hand, small service providing businesses on the other. This often forces contractors into a situation in which they overtax their capacities. To enable a positive development, however, contractors need to bundle their potential to improve the situation.

Within the discussion on the viable development of forestry, Norin (2001) introduced new ideas on a strategy to improve the business relations between contractors and their clients, naming it the "Business Approach". Norin outlines a complex cooperation strategy in which clients and contractors join forces to look for ways to optimize their business relations (see Best Practice 23).

BEST PRACTICE 23. THE "BUSINESS APPROACH" TO IMPROVE HARVESTING SERVICES IN SWEDEN

A business approach should be designed to achieve progress, as:

- · responsibility for any development is shared between the customer and the service provider;
- · contractors are proactive rather than reactive;
- · clients know what is needed;
- · logging is profitable;
- · contractors have time or energy left for development.

The development of a new business approach is promising and absolutely necessary for maintaining and improving competitiveness.

The manner in which services are purchased gives incentives and influences the direction and dynamics of development work by contractors.

Clients should for this reason integrate contractors into their "team" by a business approach that encourages development and includes the formulation of common objectives, thus leading to win-win situations.

Source: Norin, K. 2001. In search of excellence – Business approaches to obtaining and developing logging services in Sweden. Presentation at the ELMIA WOOD Seminar: Efficient systems for sustainable forestry, 6.-7. June 2001, Jönköping, Sweden.

BENEFICIAL COOPERATION THROUGH ORGANIZATION

The Finnish example shown in Best Practice 24 illustrates that the contractors' association serves as the initiator for various co operations between contractors, and between contractors and different actors in their business activities.

BEST PRACTICE 24. A SET OF EXAMPLES FOR COOPERATION FROM FINLAND

Collective purchase to achieve discount on products and services

Agreements exist with contractors nationwide or with local association and service providers for developing services and products and by centralized purchase to reduced price levels. These kinds of cooperation and agreement have been done in the purchasing of:

- · insurance;
- · fuel and lubricants;
- tyres;
- · spare parts, hoses, chains, etc.;
- · floating equipment;
- · clothing.

IT Development

Some contractors had a need for developing tailored management software. For example, ten contractors in Finland designed together with a small information technology (IT) company software for salary calculation and management. They also asked the contractors association to join this project. Now this tailored software can be bought for a reasonable price by every contractor. Markets for this kind of software are very limited, and without cooperation between contractors this venture would not have been possible.

Training

Contractors and forestry training centres have joined together to make better and more effective promotion work to get more young students enrolled in an education in forestry mechanization. They have established a four-year project and collected money for planned and coordinated activities for students at the age of 15–18 years. Again, no single contractor could have afforded to do this kind of activity alone.

Establish joint ventures

Customers more and more ask for bigger volumes and larger responsibilities from contractors. A one-man contracting company can hardly fulfil these requests. One way to continue business for very small companies is to establish joint companies, where each company becomes a shareholder and decision-maker. This joint company will make contracts for bigger volumes and also carries the responsibility that the work will be done. Every single company keeps its size but remains on the market.

Source: Koneyrittäjien liitto ry, Finland. Contact: www. koneyrittajat.fi

ORGANIZATION

What it is

Organization in associations

There are forestry contractors' associations in many countries. With the increasing significance of forestry contractors, these associations are attempting to gain more political influence, even if they in fact are often still in their initial phases. There is a need for them to gain influence

on forest policy not only at national level but also international. The diverse and sometimes inconsistent certification criteria of various certification schemes are just one example – albeit one that demonstrates that forestry contractors' associations have had hardly any influence at international level.

Forestry contractors' associations play an important role, and are often even the initiators in activities in the promotion of good practice as presented in this guide. Activities concerned with occupational safety, qualification measures, tariff negotiations, quality management concepts, and the participation in the definition of certification criteria are good examples of the achievements of forestry contractors' associations. A review of structures and activities of forestry contractors' associations was made prior to the foundation of the European Network of Forest Entrepreneurs (ENFE) (Kastenholz, 2000).

Forestry contractors' associations play a special role as social partners when, together with workers' unions, they set standards for working conditions through the negotiation and conclusion of tariff agreements in a given region. Further, the associations can and must contribute to the structural changes taking place in the contracting sector by developing new social relations and encouraging cooperation.

Forestry contractors' associations can play a substantial part in the definition of standards for good practice in forestry contracting at national and international level if they ensure that their members comply with social standards and sanction them if necessary. A good illustration of this can be seen in the rules for the recognition of forestry contractors in the Netherlands presented in the section "Competition" (Best Practice 21).

Cross-border cooperation of associations

Most of the activities for the improvement of forestry contractors take place at regional or national level, as the given examples demonstrate. This is only a first step, as in almost every case it is a question of complying with or creating the national legal provisions and economic framework conditions. There is however an increasing need for a cross-boundary view of criteria and measures for implementing good practice in forestry contracting. There is not only a growing cross-frontier economic activity in the timber industries. Increasingly, forestry services are also being offered and performed on an interregional scale.

The need for the definition of internationally comparable standards is of particular importance when it relates to qualification for motor-manual as well as for highly mechanized work as discussed earlier in more detail. On one hand, a forestry worker wishing to work abroad must be able to prove that he is qualified to work in the specific country. On the other hand, the competent authorities in this country must be able to judge whether the qualification certificate issued by the worker's country of origin corresponds to their standards. This is equally valid for quality standards of services offered, even if these have not yet reached the same significance for competition within forestry services that all people involved in the sector would like to see.

Particularly in the EU, where internal barriers to work, trade and provide services are being removed, and freedom of movement is an objective, there is an urgent need for a common understanding on the compatibility of standards. This will be one of the priority activities for the recently founded ENFE (see Best Practice 25), besides the lobbying at international level treated in the section below.

International lobbying

The rules for contractor work are being laid down more and more at interregional or international level. Because the organizations of forestry contractors are still relatively weak

at regional or national level, it is hardly surprising that the interests of forestry contractors have rarely been represented in international decision-making fora. At least there are and have been numerous meetings where contractors, as individuals or as representatives of national associations, took the opportunity to stand up for the interests of the services sector. This was particularly noticeable in a series of seminars of the ECE/FAO/ILO Joint Committee on forest technology, management and training. Problems and interests of the services sector are also recognized and discussed by national and international organizations. The ILO has taken the lead in this matter and has provided substantial work in the initiation and coordination of the seminars named above.

In spite of this, recent observations in the European forest debate indicate that lobbying for and committees are mostly composed of representatives of forest owners and of the timber industry, and that an official representation of the services sector as a politically recognized lobby is still missing. The foundation of ENFE was a response to this urgent need for action (Best Practice 25).

Objectives

The objectives are to:

- provide a coherent and integrated approach on behalf of the workforce, inclusive of contractors and employees to the decision-makers and opinion formers in the forest, land-based and rural development sectors;
- encourage such approaches on a regional, national and international level;
- ensure that successful initiatives are duplicated, without the need for "reinventing the wheel" at national and international levels;
- provide liaison between organizations, their initiatives and their officers to ensure an effective, coherent and integrated approach.

Potential consequences

The organization of forestry contractors in unions or associations is no imperative necessity for implementing good practice in the use of contractors, but it can help implement the development objectives. It can particularly contribute to the improvement of working conditions where contractors are mostly very small enterprises of self-employed who have to defend their interests against large forest owners and the timber industry. Such microenterprises are highly dependent on the businesses that are their clients, because of their inferior market power. This dependence on one or few clients is often so intense that it raises legitimate concerns whether they are still acting as independent contractors or rather as precariously employed staff (pseudo-independence).

BEST PRACTICE 25. THE EUROPEAN NETWORK OF FOREST ENTREPRENEURS (ENFE)

Many small- and medium-sized enterprises in a number of European countries have formed into forestry contractors' associations, as a result of the need for an infrastructure, in order to transmit information and represent interests – a role previously played by forest enterprises as employers. It is becoming more and more necessary to coordinate these representation duties on a cross-frontier basis, as a large number of framework conditions influencing contracting work are now being laid down at European level. The coexistence of national forestry contractors' associations has led to uncoordinated action. For instance, there are no common directives on education and training. There is also no coordination of research and development programmes; these are all conducted independently in each country.

In order to improve the situation, ENFE was founded. In the year 2000, representatives from forestry contractors' associations and non-organized contractors from 13 European countries established ENFE. While respecting national particularities and reasonable needs for independence ENFE creates a joint platform that enables the identification of common interests, exchange of experiences and improvements of social conditions in European forestry contracting.

This network will ensure an intensive flow of information between its members and political decision-makers. It should enable cooperation at European level in activities necessary for the improvement of the economic situation of small- and medium-sized enterprises in European forestry.

A necessity for common action is seen in:

- the representation of the forestry contractors as important decision-makers in European countries and the EU;
- the development of common quality management standards to assist the integration of contractors in forest certification processes;
- the communication of guidelines for action for all activities of forestry contractors, particularly in the improvement of health protection and occupational safety;
- the development of initial and further training programmes to increase mobility within Europe;
- the support of cross-border contracting;
- the improvement of dialogue between forestry contractors' associations, workers' unions and employers' associations.

Information and contact:

European Network of Forest Entrepreneurs (ENFE), www.enfe.net

FUNDAMENTAL ILO CONVENTIONS

Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87) Right to Organise and Collective Bargaining Convention, 1949 (No. 98)

Forced Labour Convention, 1930 (No. 29)

Abolition of Forced Labour Convention, 1957 (No. 105)

Minimum Age Convention, 1973 (No. 138)

Worst Forms of Child Labour Convention, 1999 (No. 182)

Equal Remuneration Convention, 1951 (No. 100)

Discrimination (Employment and Occupation) Convention, 1958 (No. 111)

REFERENCES AND FURTHER READING

- AFOCEL. 1999. Forest Operations of Tomorrow. Proceedings of a Joint FAO/ECE/ILO Committee Seminar, 20–24.09.1999. Pessac, France.
- Bosschap. 1997. Erkenningsregeling Bosaannemers. Bosschap, Zeist.
- Bosschap. 2001. Reglement Geschillen op grund van de Erkenningsregeling Bosaannemers. Bosschap, Zeist.
- Clerc. J.-M., ed. 1985. Introduction to working conditions and environment. International Labour Office. Geneva.
- Connors, J.J.G. 1996. Certification of forestry workers in Ontario: our experience, our challenge for the future. In Safety and health in forestry are feasible. Proceedings of a Joint FAO/ECE/ILO Committee Seminar, 7-11.10.1996, Konolfingen; Switzerland. p. 214–230.
- Craig, N. 2000. Improving cooperation in the use of contractors, occupational safety and health protection. In: Documentation on the 13th KWF meeting in Celle, Germany. KWF, Groß-Umstadt.
- Erikson, G. 2000. Stress among forestry contractors. Summary In: Forworknet Update, December 2000, Ed.: Sectorial activities department, International Labour Office. Geneva.
- FAO. 1996. FAO model code of forest harvesting practice by D.Dykstra
- Gabriel, O. 2003. Solidarkasse für Fortbildung. Forst und Technik 10/2003.
- Garland, J. 1997. Contractors in forest harvesting and silviculture: Oregon and the United States. In: ILO: Contract labour: Looking at issues Nine country cases. Labour education No 106/107. p. 78–87, International Labour Office. Geneva.
- Gellerstedt, S. 2005. ed. Health and performance in mechanised forest operations. Swedish University of Agricultural Sciences. Uppsala, Sweden.
- Geske, H. 2000. Maschinenführerweiterbildung nach dem Modell Niedersachsen. Presentation at the 1st European Forest Entrepreneurs' Day. In Documentation on the 13th KWF meeting in Celle, Germany. KWF, Groß-Umstadt.
- Health and Safety Executive. 2003. Managing health and safety in forestry. INDG294 (rev1), 9/03, C250.
- Hock, Lee Kiong and Sivananthiran, A. 1997. Contract labour in Malaysian plantation, construction and sawmilling industries. In: ILO: Contract labour: Looking at issues Nine country cases. Labour education No 106/107. p. 45–54. International Labour Office. Geneva.
- Hyttinen, P, Niskanen, A. and Ottitsch, O. 2000. The contribution of the forest sector to regional employment and income the forward results. In MCPFE Liaison Unit Vienna (Ed.): The role of forests and forestry in rural development implications for forest policy. p. 123–137. Vienna.
- ILO. 1998. Code of practice on safety and health in forestry work. International Labour Office. Geneva.
- ILO. 1999. Decent Work. Report of the Director-General. International Labour Office. Geneva.
- ILO. 2000. Approaches to labour inspection in forestry. Working Paper 155. International Labour Office. Geneva.

- ILO. 2001. Social and labour dimensions of the forestry and the wood industries on the move. Report for the ILO Forestry and Wood Industries Meeting, September 2001. Geneva, ILO.
- ILO. 2005. Guidelines to labour inspection in forestry. Report from the meeting of experts. MELIF/2005/8. ILO, Geneva.
- Jayne, V. 1997. It's Supergang. Contractor opinion and criteria for business success. New Zealand Forest Industries Magazine, 29 (5): p. 11–13.
- Kastenholz, E. 2000. Forstunternehmerverbände in Europa. In: Documentation on the 13th KWF meeting in Celle, Germany. KWF, Groß-Umstadt.
- Kastenholz, E. 2002. The role of forestry contractors in rural development. In proceedings of Joint FAO/ECE/ILO Committee on Forest Technology, Management and Training, Seminar on "Partnerships in Forestry". Brussels, Belgium.
- Kocel, J. and Rzadkowski, S. 1999. Privatisation of forest activities in Poland. Forest Operations of Tomorrow. Proceedings of a Joint FAO/ECE/ILO Committee Seminar, 20.-24.9.1999, Pessac, France, p. 317–324.
- KWF. 2001. Dokumentation des Ersten Europäischen Forstunternehmertags. In: Documentation on the 13th KWF meeting in Celle, Germany. KWF, Groß-Umstadt.
- Lidén, E. 1995. Forest machine contractors in Swedish industrial forestry. Sveriges lantbruksuniversitet, Institutionen för Skogsteknik, Rapport nr 195, Garpenberg.
- Lidén, E. 2005. Benchmarks for good work organisation and successful implementation processes. Report 11 from ErgoWood, Swedish University of Agricultural Sciences, Uppsala, Sweden.
- Lidén, E. and Kastenholz, E. 1999. Zukünftige Entwicklungen der Arbeitsbedingungen von Waldarbeitern in forstlichen Dienstleistungsunternehmen in Deutschland. Ed.: Industriegewerkschaft Bauen-Agrar-Umwelt, Frankfurt/M.
- Morat, J. 1998. Training possibilities for forest contractors in Germany why do the target groups not respond? Proceeding of the Joint FAO/ECE/ILO Committee seminar on Forestry training for target groups which are hard to reach. La Bastide-des-Jourdans, France, 20–24.4.1998. p. 166–176.
- Norin, K. 2001. In search of excellence Business approaches to obtaining and developing logging services in Sweden. Presentation at the ELMIA WOOD Seminar: Efficient systems for sustainable forestry, 6.–7. June 2001. Jönköping, Sweden.
- Nussbaum, R. 2001. Contractors and certification: How does forest certification impact the use of contractors. Presentation at the South African Institute of Forestry Symposium: Outsourcing in Foresty Opportunity or Threat? on 3 March 2001, Sabie, South Africa.
- Omberg, H. 2000. Qualitätsmanagement. In: Documentatio of the KWF meeting in Celle, Germany. KWF, Gross-Umstadt.
- Pischedda D. 2004. Technical Guide on Harvesting and Conservation of Storm Damaged Timber. By the team of experts from the EU Concerted Action STODAFOR, QLK5-CT2001-00645:. CTBA and FVA p.16–17.
- Pontén, B. 1988. Health risks in forest work a program for action. Sveriges lantbruksuniversitet, Institutionen för Skogsteknik, Rapport nr 177, Garpenberg.
- Poschen, P. 2000. Dienstleistungsunternehmer in der europäischen Forstwirtschaft. In: Documentation on the 13th KWF meeting in Celle, Germany. KWF, Groß-Umstadt.
- Ramsey, E.B. and Green, M.A.E. 1996. The use of contractors to introduce and enforce certificates of competence for chain saw operators The GB experience. In: Safety and health in forestry are feasible. Proceedings of a Joint FAO/ECE/ILO Committee Seminar, 07–11.10.1996, Konolfingen; Switzerland, p. 204–210.

- Sluysmans, J.J.L. and Staudt, F.J. 1991. Die Qualität der Motorsägenarbeit beim Fällen und Aufarbeiten in den Niederlanden erfordert branchenweite Verbesserung. Forsttechnische Informationen 43 (12): p. 90–93.
- Staudt, F.J. 1996. The Dutch voluntary certification for qualified entrepreneurship in forestry: success story of the nineties? Proceedings: Joint FAO/ECE/ILO Committee Seminar on "Safety and Health in Forestry are Feasible", 7.-11.10.1996, Konolfingen, Switzerland. p. 387–391.
- Strehlke, B. and Moser, U. 1996. Professions, skills and training in forestry. Joint FAO/ECE/ILO Committee on forest technology, management and training, Geneva.
- SUVA. 1995. Betriebsanalyse Sicherheit Checkliste für Forstbetriebe, SUVA, Lucerne.
- Synwoldt, U. and Gellerstedt, S. 1999. Experiences of Swedish forest corporate initiatives in ergonomics. Proceedings of the Joint FAO/ECE/ILO Committee Seminar: "Forest Operations of Tomorrow", 20.-24.9.1999, Pessac, France. p. 389–401.
- Wettmann, O. 1996. Forests Safety is feasible: A project to promote occupational safety and health in Swiss forestry enterprises. p. 305–313.
- Wippermann, D. 2001. Zertifizierung von Forstunternehmen. Forst und Technik, Heft 7, 2001. p. 28–29.

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