In forestry, as in other fields, technological advances have resulted in significant changes in work practices and skill requirements. Vocational training and improvement of forestry workers' skills through lifelong learning can help achieve sustainability in forestry. The objectives of lifelong learning are to integrate people into working life and participate in what goes on in society at large. In the field of forestry, lifelong learning can play a role in helping workers develop the skills and knowledge that are prerequisites for sustainable managed forests. Through lifelong learning, workers can also become educated about worker's rights. In addition to new skills and knowledge, workers responsible for implementing sustainable forestry must also be acquainted with and feel ownership of the total concept of sustainable forest management. Forestry workers must actively participate in the purchase and use of new technology, care of the forest, and environmental protection. They must be able to make new judgments and new types of decisions to ensure that their work is in line with the overall policy of sustainability. Educating and training apprentices to practice sustainable forestry is easier in countries where forestry work is considered skilled labor than in those countries where it is considered unskilled labor. (MN)
LIFELONG LEARNING AND SUSTAINABLE MANAGED FORESTS*.

"I hear - I forget
I see - I remember.
I do - I understand**.


1. Introduction.
Working life has always throughout history been under change. However, during the last generation we have witnessed perhaps the most dramatically changes in the way that production methods and technological development have changed the way in which work is carried out and performed.

Forestry is no exemption from this general development. Due to new machinery and technology the traditional techniques of felling and transporting wood out of the forest has become obsolete. Forestry has had huge productivity gains through the use of new technology and machinery. Forestry has rapidly gone from being labour intensive manual work to resemble a fully fledged mechanical industrial process.

At the same time forests have become one of the favourite items on the agenda of the whole concept sustainable development. Forestry and forestry practises have suddenly become visible, and has thereby become an item that governments, consumer groups, environmental groups, companies, trade unions etc. care about and have interest in.

Technological change and sustainability in the way of managing forests demand new and improved skills from the forestry workers. Many new tasks have already been introduced to the forestry workers and many more new tasks will follow in the future. This means in effect that there is and will be an increasing need for the forestry workers to build new skills upon their existing skills and training.

This paper discuss how Vocational training, improvement of skills and lifelong learning can be beneficial to achieve sustainability in forestry.

2. Lifelong learning - a general concept
All over the world people are occupied with the concept of lifelong learning. The European Community made 1996 The Year of Lifelong Learning, because education and training are seen as a prerequisite for achieving important goals such as democracy and a sustainable development of our societies.

Following these objectives, lifelong learning is about how to adapt people to meet the challenges of the present and the future, and how to bring individuals the learning opportunities which can bring greater fulfilment to both their personal life and their
working life. It is no longer realistic to think in terms of education, working life and retirement as successive phases of life. Knowledge acquired in the early years becomes obsolete at an accelerating rate. Today no one can be content the rest of their life with the education they got in their youth.

The concept of lifelong learning by promoting education and training throughout the life cycle opens up new prospects for the shaping of peoples lives, and thus for the way they manage both their work and leisure time. Therefore we need to change the way that we traditionally has viewed education and training, and face the new challenges and possibilities.

Some countries has a very solid starting point for realising the vision of lifelong learning, and to make education and training a periodically recurring opportunity for every citizen. However most countries do not have the sufficient educational systems and vocational training traditions for fully integration and implementation of lifelong learning.

The objective of lifelong learning are twofold: (1) To integrate people into working life and (2) to participate in what goes on in society at large. In working life people must be able to adjust to technological, economic and social changes. This also means that you participate in the changes and have an influence on this development.

3. Sustainable managed forests and workers' rights
The whole concept of sustainability has its point of departure and main focus directed towards environmental aspects. However, the forestry and woodworkers unions regard it as a must, that workers rights and working and health and safety conditions are an integral part of sustainability, and in this case of sustainable managed forests. Sustainability only makes little sense if you do not incorporate the people, who have their outcome from forestry. As a minimum sustainable managed forestry must live up to the ILO Conventions concerning labour standards***.

The vocational training and lifelong learning we want to discuss in the last part of the paper are therefore explicitly centred around labour market issues in forestry.

Forest Stewardship Council (FSC) include social aspects of forest management in the principles of certification of forests, therefore the trade unions consisting the International Federation of Building and Wood Workers (IFBWW) actively supports the certification system developed by FSC. Another reason for involving ourselves in the general certification issues is that we want forestry workers all over the world to be an active part of sustainable forest management and forest certification. Through sustainable forest management and certification we want to create more and better jobs for our members.

Following this we believe that those closest to the actual forestry practises, the forestry workers, have many advantages that are crucial for successful sustainable forest management.

4. Skills and knowledge - a prerequisite for sustainable managed forests
Sustainable managed forests can be achieved by only a modest input of capital and technology. However, it calls for a high degree of skills and knowledge during planning and implementation. The people most crucial for implementing sustainability on the spot are those people who work in the forest. Thus, when the objective is sustainable managed forestry we must ensure that vocational training in its form and contents can fulfil the achievement of this objective.

Successfully implementing sustainable forestry requires more skills and knowledge of the forestry workers in connection to be acquainted with and to feel ownership for the total concept of sustainable forest management. Sustainable forestry includes for example an active participation of the workers in the purchase and use of new technology, care of forest, ecology and environmental protection. Forestry workers must be able to make new judgements and take new types of decisions in order to ensure that the actual work carried out is in line with the overall policy of sustainability.

This kind of participation in the implementation process must be based upon the skills and knowledge present by the individual forestry worker. "You must meet people where they are", Søren Kirkegaard once said. Kirkegaard did not mean the physical surroundings, but meeting people according to their knowledge and experience.

Therefore when we want to train the forestry workers we do not want to reinvent the wheel. On the contrary we want to exploit all the accumulated skills and knowledge that the forestry workers posses and to build upon this merit in order to reach a higher level of adequate skills.

In some countries forestry work is skilled labour. In these countries the task of educating and training apprentices to be able to practise sustainable forestry is easy compared to countries where forestry work is unskilled labour. The objective must be that forestry work in the future will be skilled labour, and that all aspects of sustainable forestry management are integrated elements in the curriculum of such an education.

When the market demands sustainable forestry, and governments across the world sign declarations to enforce sustainable forestry, foresters and forestry companies must act accordingly. For the forest companies and foresters it is a matter of survival to be able to meet the demands of the consumers and thereby to meet the markets ever changing demands in general.

Sustainable managed forestry is no exception from this. Therefore Sustainable managed forestry is in the medium and long term interest of the forest companies and forest owners. It will be crucial to the global competitiveness and economic viability of the forest companies that they ensure that their workers have a high level of skills and the commitment to be the primary ambassadors for sustainability in the forests.

Notes:
*) This paper draws upon information from the following sources:
The Danish Ministry of Education
The Swedish Forestry and Wood Workers’ Union
The EU Commission
Professor Rodolphe Schlaepfer
The General Workers Union in Denmark
The IFBWW.

**) Chinese fortune cookie.

***) ILO Conventions and Recommendations No. 87, 90, 98, 100, 105, 111, 135, 138, 146, 154, 155 and 163 must form the basis for workers rights etc. regarding sustainability.
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