

Lisbon Conference Reports of the discussions

Introduction

Reports of the plenary sessions and the discussions during the working groups during the international workshop Future skill needs in innovative agri-food and forestry-wood chains.

20-21 november 2006, Lisbon, Portugal. Per activity the questions and discussions are reported.

Monday, 20 November 2006

Working Group I: Research and innovation in food chains and networks

Speaker 1: Marianne Raben Olrik, Danish Fishermen's Association: 'Innovation in fisheries chains and networks'

The general development in the fisheries industry in Europe reflects a decrease in production, quota, number of vessels and tonnage. Also, the influence and power of the consumer is increasing.

Regarding the developments in the labour market for fisheries and the seafood industry we see low unemployment rates, a decrease in employees (as the sector becomes smaller) and an ageing in the sector. Even though there are several advantages when working in this sector, like having a free life and a relatively high income, it is hard to attract young people to this sector. Via European and Danish networks, attempts and activities are undertaken to recruit these young people by giving extension, organising 'open vessels', developing educational materials for primary schools, visiting primary schools, offering traineeships and by advertising.

During the discussion it is mentioned that for example in the Netherlands it is hard to get into the fisheries sector from other sectors, as the fishery industry is high capitalised. In other countries it is easier to enter this sector.

Future skills needed for employees in the fisheries sector mentioned are: motivation, leadership, dare to run a risk, life long learning, technical know-how, understanding of safety, being innovative. Some of these competencies are mainly important for the owners of the vessels, like being innovative and leadership while other apply to employees as well, like understanding of safety, motivation and technical know-how.

As the fisheries sector in Europe is decreasing, in the future there could be an increasing shift towards aquaculture which seems to develop towards a more sustainable sector with growing employment possibilities.

Speaker 2: Zorka Husova, Czech National Institute of Technical and Vocational Education: 'VET in agri-food – the case of the Czech Republic'

There are several trends in the Czech agricultural sector like organic farming, a focus towards sustainable development, technological developments, growing of alternative crops, attention to landscape protection, focus on quality assessment of products, growing agro tourism and increasing legislation for different parts of the sector.

Developments in the food industry reflect the principles of EU policy (2007-2013); food safety, bio products, high quality of products, marketing strategies, technology, hygiene and safety, etcetera.

When developing curricula, it is aimed to translate these trends into education. General competencies on which this education is focused are: team working, decision making, communication, ICT, foreign languages, marketing, management and personal development. In addition there are vocational competencies which are important for future employees in the agri-food industry like: hygiene and safety, working according ecological principles, product innovation, analysing process and product and being able to use (new) technologies.

From the discussion following these two presentations it becomes clear it is first important to know in which direction the development of the agri-food sector will develop, before there can be distinguished future competence and skills needed.

There are mentioned two directions in which the future could develop. The first could be a development towards industrialisation. This will lead to a generalisation of skills needed ('breaking up skills'). The other scenario reflects a situation in which specific skills and expertises are valued and specialised skills are needed.

In which direction the development will go shall probably differ between several sub sectors in the agri-food sector. One can imagine organic farming highly values a quality product in which specific skills are needed, while the horticulture has high tech developments and is more likely to become industrialized. Also, some industries will develop into processing industries while others stay at their own product and value the feeling and associations with their brand.

An important area for future development could well be the interaction between food and health or lifestyle. For the market and the food industry it will become a growing challenge how to bring added value into a product.

When trying to capture the main future skills needed in the agri-food sector, these could be categorized in three main areas:

1. Social awareness, which can also include flexibility and adaptability
2. Skills to handle technological changes
3. environmental consciousness

It becomes clear that the changes in the sector put more emphasis on the awareness of employees of their position towards their working field, market developments and globalisation. To be able to handle these changes, it is important for employees to develop broad en general competences to get and hold a job. This seems to conflict with employers wanting specialised employees.

Monday, 20 November 2006

Working Group II: Working group II: Research and innovation in wood chains and networks and organic farming

Speaker 1: Tapani Savisalo

What is the difference between skills and competencies? Some competencies you can't change. Competencies like entrepreneurship more have to do with

personal skills. It is the question to what extent these skills/competencies can be changed. The speaker did not choose competencies very consciously. He didn't choose it to narrow it down.

Is there a distinction between competencies that can be developed and competencies that can not be developed? The speaker says that the development of general skills depends on the talent. Competencies more related to the industries are competencies that can be trained. Entrepreneurial competencies are seen as dispositions.

Is there in the wood and forestry sector also something like an AGRI PASS? There is not a kind of agri pass. But the participant from Belgium says that in his country research is done to the minimum competencies (skills, knowledge and attitude) to work in forestry. They did the research in EU framework and he calls it an EU profile for forest workers. It also recognizes formal and non formal learning. Profiles for employees, employers and government. Next step within this project is to make a kind of intake.

To what extent is accreditation of (non)formal learning possible? In Belgium it is not possible, because the training centers are not working together.

Brief description of the presentation of the company UPM
Operations are moved out. This challenges the competencies that are needed. Wood is outsourced to China and paper to Uruguay.
Important values (including CSR): openness, trust and initiative.

There was a question about biomass. In recent research it is discovered that in biomass more than 3000000 jobs are necessary to deal with the growing demand for this kind of energy. Is that trend recognizable for the forestry and wood sector? And are the skills needed within this part of industry the same for forestry and wood?

And to what extent do you hire people for this job or do you outsource this job?

In reaction to the last question Tapani says that in Finland more and more labor is outsourced. Entrepreneurs, who are going to do this work are more and more specialized. Big organizations do not want to have all these different skills. More and more will be outsourced except some key activities. And there is no way back.

The biomass sector certainly asks for new skills. You can imagine: harvesting and logistics.

Key aspects in the sector: job opportunities are there. People within the sector stay in the sector.

Different skills are needed for biomass. Reusable energy should be used locally otherwise the added value of using this for energy is lost. But first studies should be done about the market value of biomass before we draw conclusions.

Using residuals for biomass asks another business model, according to Tapani. Jeremy Wall prefers to talk about packages. Within these new business models there needs to take place a change. This new model asks for new skills.

Nowadays big businesses are not interested in local activities (like biomass). New business models need to be created to see the local activities. Example of skills: micro businesses and networking. New business models should be developed with the universities VET can support this.

Jeremy Wall talks about packages. He sees that the companies, government and forest owners should come to new systems. There is a need to organize (use of residues for biomass for example) and finance them.

Monday, 20 November 2006

Final Discussion and brainstorming about future skill needs in the chains

Because of the differences in countries, sectors, companies and occupations there is diversity in skill needs between and within the Agri-food and forestry-wood sectors. Furthermore, you can not compare farmers with workers in agriculture. You should diversify on these sectors, also in education.

The question is raised who is responsible for defining and developing the future skills needed. There might be needed a separation between transferable skills which should be developed during the education and the specific skills which need to be trained in the working field, within the enterprise. Then it becomes also a matter of who will pay for this skills development, the government or the business field.

Regarding the modern philosophies, it would be the responsibility of the employee to develop his/her own skills at his/her own way, time and place but this might be difficult for older employees. Agrifoodworkers earn less than industrial colleagues. They do not have money for courses.

Therefore it should become clear who we want to develop, which groups of people are we focusing on so for whom we need to define future skills.

Tuesday, 21 November 2006

Working Group I: Labour market change in the food service sector

Speaker 1: Jan Gravemaker, AEQUOR, The Netherlands: 'A review of the developments in the skill needs in the food sector'

Within the food & beverage industry several trends are reflected on general, product, process, management & organisation and skills level.

There is a growing attention to the people within the organisation, which stresses the importance to put more attention to HRM in chains. There is increasing focus on communication and teamwork as well inside as outside the company (outsourcing).

When it comes to trends in skill needs there is a shift from food technology towards process technology, which needs a higher education. In addition, as the production processes become more complex, there is a growing need for higher levels of skills of the employees. As knowledge is assumed to be there anyway, there is more attention to the development of competences. Thereby it is important the competencies of the individual are in harmony with the competencies for organisations. Also, there is growing awareness of the importance of soft skills, besides to the hard skills which are usually already present.

During a conference held in 2005 people from the food industry were asked which 10 competences were most wanted in their sector. Mentioned were the following: quality attitude, learning ability, basic food technology/ hygiene, team player, commercial feeling, technical/mechanical skills, involvement/commitment, entrepreneurship, communication, problem solving

abilities. From this list it becomes clear that most competences reflect to attitudes and soft skills, only a few to hard skills.

Speaker 2: Sikke Meerman, Unilever: 'Innovation and skill needs of workers in the food sector'

As Unilever is an international company, which needs different skills from the employees like communication, teamwork, cope with cultural differences. In Unilever's Corporate Purpose it is stated that 'people are the heart of the businesses. Within the company people collaborate in Communities of Practice to collect knowledge and develop individual competences within a team.

Trends in the last 70 years reflect a growing focus on a healthy society, technological progress, process complexity, environmental consciousness, consumer concerns, media impact, convenience food, etc. For food developers and technologists it is important to be aware of and predict consumers' behaviour around aspects like colour and taste.

At this moment the company is looking for real innovation as this is becoming a prerequisite to be part of today's society.

General skills from employees depend on job type and work level. When it comes to basic skills requirements an adequate educational level, IT working knowledge and languages are important. Besides that an employee needs to be aware what is happening in the world around him. Regarding required capabilities there is mentioned passion for growth, team worker/ leader, communicator, change catalyst and social awareness.

Tuesday, 21 November 2006

Working Group II: Labour market change the wood service sector

Peter Martin (Lantra, UK) & Jeremy Wall (European Commission, DG Enterprise, Forest-Based Industries Unit)

To what extent are workers in the forestry and wood able to define their own training need?

The competencies mentioned for the WWI can be used in other sectors? That is not the case or not clear.

The sector is difficult to approach. The sector is big and fragmented. Segmentation of some sort would be better. National segmentation for example. Or the distinction between forest resource industry and forest based industry.

SME's are difficult to approach.

Are centers for education also approached? They know a lot about the competencies for the workers.

Tuesday, 21 November 2006

Plenary session: Brainstorming about future skill needs and next steps

The workshops and discussions reveal the numerous differences between sectors, jobs and skills needed for these jobs. There are the primary sectors of agriculture, forestry, horticulture and aquaculture but also the sector of the

industry which is quite different from the primary sector. And apart from that there are also various services around these sectors which are growing, like consultancy companies, extension services and research (academic/ practical).

There is not only heterogeneity within the sectors, but also between the levels of workers. Heads of enterprises are interested in entrepreneurship and business development. Managers and supervisors are managing larger operations relating to the scale enlargement. Then there are the permanent workers and seasonal workers for whom technical and communication skills are important.

The question is how does future work influence the skills of workers? There is a trend on upgrading skills, even though low skilled workers are still needed. There is also heterogeneity in educational levels, low skilled, medium skilled and high skilled levels and we see the double qualification structure in the educational system appearing in different countries.

If we want to define the skills needed in future, we need to concentrate on higher levels as on low skilled levels there is not much new to develop and learn.

But as the future cannot be predicted, defining future skills is not an easy task. There are different scenarios possible:

1. The sunrise sectors with economical unlimited growth which leads to crisis and disasters.
2. The sunset sectors in which there is no future
3. The sustainability/ development scenario with controlled growth.
Regulated by all stakeholders together; the government, the public and the social partners.

The third scenario would be socially and collectively the better scenario pushed by public responsibility. If we want to define new skills we should deliberately choose for this scenario. Sunrise and sunset sectors will always be there, but when defining new skills we should look at the third scenario as this is for the public good, and education too.

There are many trends and developments about sustainability, safety, globalisation and internationalisation, whereby globalisation is more about the global markets and trade, while internationalisation is more about intercultural work. Also chains become more and more important and scale enlargement is a trend in different sectors.

From the workshops and discussions several trends can be distinguished:

- ☐ Upgrading skills, a higher level of skills is needed
- ☐ A shift from knowledge towards performance
- ☐ Even though hard skills should be present as a basis, more attention is paid to the development of soft skills

Given the diversity and segmentation, the different growing sectors, sub sectors and niche sectors reflect developments on a variety of common themes, like:

- ☐ Skills related to sustainability
- ☐ Chains and networks. A growing number of companies work together in production processes, which has influence on the skill needs.
- ☐ Expectations of the public (policy, society and consumers) regarding agrifood and forestry & woodworking from the perspective of
 - the European of national administrations
 - the sector of organisations
 - the social dialogue organisations

- ☐ Service orientation. Producing is more and more fulfilling a demand in stead of only producing and selling.
- ☐ Scale enlargement
- ☐ Standardisation and regulation
- ☐ Waste management
- ☐ Broadening:
 - cross sectoral; companies and entrepreneurs need to communicate with various stakeholders of difference sectors.)
 - Diversification and the requirements of business models

For all themes, different skills needs can be formulated.

For the agricultural sector the following skills are experienced as being important within the context of current changes in the sector:

- ☐ Skills to develop and maintain ones employability
- ☐ Entrepreneurial skills
- ☐ Waste management
- ☐ People management (interpersonal skills)
- ☐ Innovative skills on an interdisciplinary level; need to go beyond the borders of the own company and own skills
- ☐ The more technology, the more need of hard skills on a high level but a loss of craftsmanship. There should be paid attention to the development of soft skills, but not at the cost of attention to hard skills.
- ☐ A combination is needed of social (gamma) and hard (beta) skills. The question is if this can or should be integrated in one person.

Within the agro forestry there could be developed a methodology or framework to educate skills. A goal is combining competitiveness with sustainability. In order to do this there would be developed a package consisting of an institutional framework including entrepreneurs and stakeholders and than a mutual facilitator, leaders and financing including sources, mechanisms and means. This then could be offered to the sector. Following, small medium or even micro enterprises should develop a set of core traditional processes/ services and a set of innovative ones. Skills which could be focused on are:

- ☐ Being adaptable
- ☐ Openness
- ☐ Receptiveness
- ☐ Communication
- ☐ Entrepreneurial skills
 - Internal entrepreneurship: being responsible for safety and people
 - External entrepreneurship: technical skills and management
- ☐ Networking skills
- ☐ Know how to learn to learn

Also, there should be attention to the coaching skills of the teachers, facilitators and coaches.

To be able to develop a kind of construction like this, there need to be knowledge about technology, know-how, distribution and efficiency.

Regarding entrepreneurship, it must be mentioned that entrepreneurial skills are not only important for managers and directors, but also for the employees and the levels below the academic levels.

Summarizing current developments, there are three important aspects to mention:

1. SME's grow into bigger companies towards multinationals. This puts emphasis on skills like teamwork, intrapreneurship, collaborative skills, communication and management. Also, an open attitude is very important for larger companies as they are so standardised that there is little room for innovation. A challenge for those companies is to be very open to other innovative companies.
2. Enlargement of the companies leads to outsourcing to be able to keep its flexibility, to have the opportunity to shift from one supplier to another.. This means splitting up integrated chains, which needs relationship skills, attention to efficiency and a quality product and organizing skills (f.e. being precise with quality standards).
3. For small companies there is the possibility of the niche market, in which there is direct contact to the customers, communication skills are important and in which is it all about 'selling emotions'. As the products are made by the companies themselves, hard skills in the sense of basic crafts skills are a prerequisite.

Tuesday, 21 November 2006

Plenary session: Final conclusions and Next Steps

Even though we are dealing with a very heterogeneous sector with many challenges, there are also similarities between different sectors. Especially for the softer and broader skills, the differences between the sector are small, while the harder skills can be more sector specific. This brings some challenges for the field of education and training. The most important task of education and training is to provide companies with competent workers and entrepreneurs. Second, from the view of the company it is important to have the right skills for the right jobs and to make it able for people to use their skills and to contribute to innovation, so to become employable. The third challenge would be to prepare people to switch between jobs and sectors as people cannot expect anymore to work in the same sector or occupation their whole life. The education and training system should provide the development of skills which facilitate this move. Especially the smaller and more traditional agricultural enterprises will not be able to cope with the current structure changes which will result in dismissing employees. It is important to identify the skills needed for people to enable them to find new jobs in other sectors.

Once identified the new skills needs, it is important for policy to implement these needs too. One should be aware that, there is a large time lap between the identification of new skills and the implementation into policy and education and training. Following, it will take a relatively long time before these students enter the labour market. This should be taken into account by all stakeholders.

The agricultural sector is very heterogeneous and a vast majority of the companies are small companies. This means that problem of training should not only be solved by policy makers because these small companies normally have a low work capital and the training provided depends mostly on the attitude of the owner. The question would be how policy could prevent the deployment of workers which are only there to be productive but without the possibility to continue training or to improve the HRD within

a company. In this we see the danger of a certain polarisation of this sector between low skilled people on one hand and high skilled people in modern and growing companies on the other hand.

It needs some research which kind and which levels of jobs are apparent within the sector, how this develops and how this could be improved.

These aspects make it important to continue with this work. Not only to identify skills needs and how the future environment would look like, but also to the roles and the appropriate methods which must be taken not only by policy makers but by all stakeholders in the sector. To continue this work it is necessary to exchange more information in a structural way and to form a network. It is important to find a way to foster this network in the future. For policy makers it could be useful to organise study visits in companies to give an insight in current developments and needs.