EU-level competence
development projects in
agri-food-environment

The involvement of sectoral social partners

Martin Mulder
Wageningen University, Wageningen, The Netherlands

Abstract

Purpose – The European Commission and social partner organisations at EU level encourage the
lifelong development of qualifications and competence. This is reflected in many policy reports and
reviews. This paper seeks to show the involvement of social partner organisations at the level of
EU-funded competence development projects.

Design/methodology/approach – A survey and four case studies were conducted. The population
of 60 Leonardo da Vinci projects for a specific sector (agri-food-environment) which were implemented
during the years 2000-2003 was selected for the study. For the survey project, documentation was
analyzed based on two variables: type of project (to what extent did it require involvement of sectoral
social partner organisations); and (the percentage of) involvement (of sectoral social partners who were
involved in the partnership). A Spearman correlation test was used to evaluate the relationship
between type of project and involvement. For the case studies project documentation was analyzed,
and in-depth semi-structured interviews were held with project managers.

Findings – The Spearman correlation between the type of project and involvement of sectoral social
partner organisations was \(-0.031\) \((p = 0.812)\). So there was no relationship. The case studies showed
that the involvement of sectoral organisations clearly contributes to realising results in the projects.

Practical implications – In the composition of partnerships for competence development projects
at EU level, the Commission and project managers should be aware of the importance of including
specific sectoral social partners organisations in the partnership.

Originality/value – No study has been conducted yet that empirically tested the relationship
between types of projects and the involvement of sectoral social partners in project partnerships.
Important discrepancies are shown, of which stakeholders in sector competence development projects
should be aware.

Keywords Competences, European Union information, Project management, Food industry,
Agricultural and fishing industries

Paper type Research paper

Introduction

In Europe, there is a lot of attention paid to competence development. Much of the
literature is about competence management (Zaugg and Thom, 2003; Onyeiwu, 2003),
competence development (Colardyn, 1996; Arbeitsgemeinschaft QUEM, 2000; Jenewein
et al., 2002; Mulder, 2002; Nybo, 2004), competence assessment (Brochier, 2002; Dochy
et al., 2002), and competence-based vocational education (Wesselink et al., 2005). The

The author would like to express his gratitude to Olimpia Gaspari, for her assistance, and
Marie-Jeanne Maurage for her support of the study.
concept has not been received with applause only. Authors have been pointing at pitfalls and ways to avoid them (Biemans et al., 2004). The European Commission (European Council, 2000; European Commission, 2003a, b, 2004b) and European social partners (ETUC, UNICE/UEAPME, CEEP, 2004) want to stimulate competence development, and during the last couple of years stakeholders at the EU level have stated that this cannot be achieved without the involvement of sectors and social partners. Various member states in the European Union employ a sector approach in competence (or skill) development. Sector competence development is the holistic process of the acquisition of new meaningful context-specific clusters of knowledge, skills and attitudes that are required for successful performance. A sector is defined as a cluster of economic activities, such as construction, transportation, manufacturing, and financial services, which can be subdivided in various sub-sectors, which are internally related, and can either be defined by technical classification systems, or by bottom-up association initiatives. National economies are generally comprised of about 15 to 20 large sectors.

The European Commission supports over 30 sectors at the EU level by a sectoral social dialogue committee, like agriculture, banking, civil aviation, cleaning, commerce, construction, electricity, footwear and furniture (see http://europa.eu.int/comm/employment_social/social_dialogue/sectoral_en.htm). The objective of this support is to create and maintain a platform for social dialogue in the sector, as part of the social model of the EU. Social dialogue includes dialogue about initial and continuing vocational education and training, or in the words of the EU social partners themselves, the lifelong development of competencies and qualifications (ETUC, UNICE/UEAPME, CEEP, 2004).

The European Foundation for the Improvement of Living and Working Conditions (2004), and Bainbridge et al. (2004) have given overviews of the developments regarding this sectoral social dialogue. The strong support of sectoral social dialogue is related to the basic right of freedom of association and collective bargaining, and is part of the EC Treaty, which states that the role of the Commission is to “develop the dialogue between the social partners at European level, which could, if the two sides consider it desirable, lead to relations based on agreements” (see http://europa.eu.int). Social dialogue is also perceived of as a means of improving governance in the EU (further characteristics of EU governance can be found at http://europa.eu.int/comm/governance/governance_eu/con_gov_en.htm).

At the EU level, participants in the cross-sectoral social dialogue are:

- ETUC, the European Trade Union Confederation, representing employees;
- UNICE, the Union of Industrial and Employers’ Confederations of Europe, representing 36 employers’ organisations in 22 member states;
- UEAPME, representing the interests – at European level – of crafts, trades and SMEs throughout Europe; and
- CEEP, the European Centre of Enterprises with Public Participation and of Enterprises of General Economic Interest, which is an international association of enterprises and organisations with public participation or carrying out activities of general interest, whatever their legal or ownership statute.
In this paper a study is presented regarding projects on the development of initial and continuing vocational education and training. In this paper we refer to these projects as being competence development projects.

Since the sectoral social dialogue on vocational training in the field of agri-food is one of the most advanced, this sector was chosen for this study. More specifically, projects in this sector that started in the years 2000-2003 were selected for the study. They were categorised according to the level at which sectoral organisations would need to be involved to achieve the desired results.

Other reasons for selecting the agri-food sector are that it has priority at the European level, it is a strong sector of the EU economy in terms of global competition, and it is characterised by heavy EU regulation in the framework of the Common Agricultural Policy (European Commission, 2004a) (see www.epha.org/a/495), systems innovation, structural change, and pressing labour market changes (Mulder, 2004).

The sectoral approach in vocational education has been studied in various projects (Theunissen, 1997; Bertzeletou, 1997; Warmerdam, 1998; Lovas, 2004a, 2004b). Also, in the agri-food sector, different projects have been conducted (Warmerdam, 1999; Papadaki-Klavdianou et al., 2003; Mulder, 2005).

The specific context of this study will be further described in the next section, and then the research questions, data collection and analysis will be presented. After that, the results will be described. Finally, conclusions are drawn and discussed. The major outcome of the study is that, however unexpectedly, there is no relationship between the categories of projects and the involvement of sectoral organisations in the project partnerships.

**Competence development in the agri-food-environment sector**

As has been stated, this study was undertaken in the agri-food-environment sector. The European social partners which are part of this sectoral social dialogue committee are the EFFAT from the employees’ side, and Copa-Cogeca from the employers’ side. These social partners have come to several opinions and agreements on vocational training and employment in agriculture, such as the European Agreement on Vocational Training in Agriculture in 2003 (GEOPA-COPA/EFFAT, 2003), the Joint Declaration by EFA/CES-GEOPA/COPA on employment in agriculture in 1995, the Opinion concerning training in agriculture in 1993, the Opinion with regard to training for agricultural workers in 1982, and the Opinion concerning the vocational training of and cessation of farming by agricultural workers in the context of the socio-structural measures proposed by the Commission (in 1979).

In 2004, GEOPA (Groupe des Employeurs des Organisations Professionnelles Agricoles de l’EU), which is related to Copa-Cogeca, held a conference with the support of the European Commission in which the situation regarding the implementation of the European Agreement on Vocational Training in Agriculture of 2003 was reviewed (GEOPA, 2004).

Much of the debate on sectoral social dialogue and competence development is taking place at the level of the Commission and the Council. At a more operational level, DG Education and Culture and the Directors-General of Vocational Training of the EU member states work on this theme. There seems to be a broad consensus that
sectoral social partner organisations should be involved in competence development policy development. At national level, sector involvement in vocational education development is not new for all EU member states, and can be institutionalised and regulated by law. In Scotland, Germany, Nordic countries, and The Netherlands, for instance, (sectoral) social partners already play an essential and regulated role in the development of qualification structures, national curricula and content determination. However, does this also hold for development projects at European level? This question is examined further in this study.

At the European level, many programmes are implemented to stimulate sectoral competence development. The Leonardo da Vinci programme is one of the programmes in which this is intended. Therefore, the population of projects in this programme is used to conduct the study. The projects in the field of agriculture are aimed at the development of competence of entrepreneurs and employees in the agri-food-environment sector, ranging from the primary sector, the food processing industry, and agri-food-environment related services. Competence development projects were chosen as the unit of analysis to evaluate the involvement of sectoral social partner organisations specifically. Agreements at EU level represent a general framework for actions that needs translation to concrete projects for competence development. Theoretically, sectoral social partner organisations should be involved in the projects. This is also stated by Warmerdam and van den Tillaert (1998), who studied the sectoral approach to vocational training in Belgium, France, Germany, Greece and The Netherlands. They contend that training needs vary by sector and should therefore be dealt with by sector-specific policies. But they also point at the decentralisation trend in vocational training policy making, and the fact that the utilisation of good training provisions depends to a large extent on linkages between the actors involved. Sectoral organisations have an important role to fulfil in linking provisions.

Research questions, data collection and analysis

Competence development projects can aim at competence development at several levels, ranging from the competence level of the individual student in vocational education to competence development in a segment of the labour market. This has implications for the involvement of sectoral organisations in the competence development projects. For instance, if a project is aimed at developing employment, for which a training programme is an important condition, and the project is located at educational institutions, social partners should be essential representatives in the partnership of the project. If a project is limited to designing new instructional materials that will be implemented in institutions for vocational training, this is less needed. Instructional development can be accomplished by teaching staff themselves in cooperation with content matter experts and instructional designers.

Based on this, the general research question of the study is: are sectoral social partner organisations involved in EU-level competence development project partnerships to the extent that this would be expected given the different goals of these projects, and does this involvement facilitate achieving the intended project results?
More specifically, the study addresses the following sub-questions:

1. What are the types of project results that are planned in the competence development projects?
2. To what extent do they require the involvement of sectoral social partner organisations?
3. To what extent are sectoral social partner organisations represented in the competence development projects in this field of agri-food?
4. What are the characteristics of their activities in terms of instructional development, curriculum development, needs assessment, implementation/dissemination and labour market development?
5. What are the results of the projects (in terms of developing new qualifications, common standards, diplomas or certificates, entry into jobs, retraining, and up-skilling)?
6. Does the involvement of sectoral social partners facilitate achieving the intended project results?

Two stages of data collection are distinguished:

1. a broad survey of the 60 sectoral competence development projects that were started between 2000 and 2003; and
2. an in-depth analysis of four cases in various sub-domains of the agri-food-environment sector.

For the survey data a quantitative data analysis took place, while for the case studies a qualitative analysis was conducted.

Survey of projects

The survey was first based on a list of projects included in a compendium of Coufalik (2005), but it appeared that this compendium did not completely match with the EU database of projects at that time of the study. Consequently the 60 projects that were available in the database were taken for further analysis.

The analysis was based on project descriptions and various interviews. Two main variables were constructed for this:

1. type of project; and
2. involvement.

“Type of project” means the type of specific project in terms of the intended results. “Involvement” means the extent to which sectoral social partner organisations were represented in the competence development project partnerships.

Regarding the type of project, the following categories for the intended results were used:

- instructional materials (including teaching guidelines) focused on use in institutions for vocational education;
The perspective from which these categories are developed is the institute for vocational education (the training provider). Theoretically, the categories are based on the work of Romiszowski (1981, 1986) on instructional systems and wider systems. Figure 1 depicts the systems levels of the different types of results. The wider the system, the more important the socio-economic environment, and the more the inclusion of sector organisations in the project partnership is needed.

The context of instruction is the curriculum, the context of the curriculum the educational institution, and the context of the institution the region with its socio-economic infrastructure, and next the whole society. For curriculum and instructional development, needs assessment in the sector is necessary (when it comes to sector specific competence development), and if the intention is to disseminate and implement the results of the development projects in the sector, sector involvement would facilitate this.

The categories are also based on work of Tanner and Tanner (1995) on curriculum development, Walker (1990), Mulder (1992), and more recent work by Mulder et al. (2005), who showed that different stakeholders have different opinions about the curriculum and that they should be included in curriculum deliberation processes.

In general, the higher the level of the project results indicated, the stronger the need for involvement of social partners, although this of course varies by EU member state and sector. In this study, in the field of agri-food-environment, where labour market
tensions are high and regulation policies at EU, national and regional level are intense, this is certainly the case. This assumption is also based on much experience within institutions (schools) for vocational education. Although governance of these institutions may be tripartite, it is possible to train people, but it is not possible to create jobs for which they are trained. Such a labour market change can only be achieved by the involvement of many other stakeholders, of which the social partners and their members (being company and employee networks) are most important. In general, to align vocational training and labour market absorption, institutes of vocational education need to cooperate with stakeholders in the labour market (such as companies, sectoral employers’ associations, and sectoral unions). This holds for the institutionalised vocational education infrastructure, but is even more important for specific projects, because the interest of social partner organisations at the general level may not be present at the specific project level. Therefore, the variable type of project is an ordinal variable, because the type indicates the level of intended project results.

The involvement of sectoral social partners was measured by their representation in project partnerships. Project partnerships exist of promoter organisations and partners. The number of partners per project varies from four to 28, so there are projects with only a limited number of partners, and projects with a very large number of partners, covering a large part of the EU.

A coding scheme was developed to indicate the type of promoting organisations and partners, such as:

- governmental organisations (at national, regional and local level);
- research institutes (in life sciences, food sciences, environmental sciences);
- institutes for higher education (colleges/universities in the fields mentioned above);
- institutes for general secondary education;
- organisations for vocational education (including adult/practical training);
- private companies; and
- sectoral social partner organisations.

Case study analysis
Data for the four cases were collected by analysing project documentation and personal interviews with the respective project leaders. For this, a semi-structured questionnaire was developed.

Selection of the cases was based on two dimensions:

1. the specific field within the agri-food sector; and
2. geography.

Specific fields were selected since the agri-food sector is still very broad; it includes fields like animal sciences, plant sciences, food and nutrition, environmental sciences and related social sciences such as food law, gender studies, agricultural economics, agri-business, marketing and consumer studies. As to the geographic dimension, the
member states that were promoting the projects were spread over different parts of the EU.

Originally six case studies were performed, but finally it was decided to leave two cases out of the analysis. The first one of these was more about an international network, and not so much a specific development project (it was the only project of this kind in the population of projects). The second was in the first stages of the project, and no results of the project were known yet. The geographical variation is somewhat diminished by the deletion of the two cases from the analysis, but this did not decrease the power of the design of the study.

Data were collected by analysing the project proposals and project websites, and through telephone interviews with project managers. In the interview protocol the research questions presented earlier were elaborated.

Based on the answers of the respondents, in-depth questions regarding the themes mentioned were asked. The interviews were recorded for reporting purposes, and the interview reports were sent to the interviewers for consent. This yielded minor changes that were processed in the interview reports and subsumed in the analysis.

Results
In this section the results of the (quantitative) survey and (qualitative) case studies are presented.

Survey
In Table I the numbers of partners, sectoral social partner organisations and the percentages of these organisations in the partnerships are shown, together with the project numbers and type of projects. In Figure 2 the number of projects by type of project is represented. There were only three (5 per cent), five (8 per cent) and four (7 per cent) projects at the levels of instructional development, curriculum development and needs assessment in the sector, respectively. The number of higher-level projects was much bigger – for the dissemination-related projects 27 (45 per cent), and for the employment development projects 21 (35 per cent). These numbers are quite high, and reflect the difference projects want to make at the level of sectors and employment development. An example of this is a project in which it was tried to keep employment levels in rural areas stable, and to stop the flight from farming by introducing new ways of income generation such as agri-tourism, which then of course would need a transformation of farms to include activities in the service sector, and to develop the competencies of the farm household to be successful in this sector.

Representation of sectoral social partner organisations in the project partnerships was computed by dividing the number of these organisations by the total number of organisations in the partnership multiplied by 100 (as can be seen in Table I). This procedure results in the weighted percentage of sectoral social partner organisations in the partnerships, and as such is a ratio-variable. In Figure 3 the distribution of projects is represented by the number of organisations in the project partnerships and the number of sectoral social partners in the partnerships.

The number of sectoral social partner organisations in these partnerships varied from zero to nine. So, the number of organisations in partnerships varies considerably.
Table I.
Data matrix of survey

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>7</td>
<td>3</td>
<td>42.8</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>11</td>
<td>5</td>
<td>45.4</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>13</td>
<td>3</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>11</td>
<td>1</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>13</td>
<td>4</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>4</td>
<td>9</td>
<td>1</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>5</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>5</td>
<td>14</td>
<td>1</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>9</td>
<td>2</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>5</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>3</td>
<td>7</td>
<td>1</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>4</td>
<td>28</td>
<td>3</td>
<td>10.7</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>5</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>5</td>
<td>7</td>
<td>2</td>
<td>28.5</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>3</td>
<td>13</td>
<td>3</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>5</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>2</td>
<td>8</td>
<td>1</td>
<td>12.5</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>4</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>5</td>
<td>7</td>
<td>1</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>5</td>
<td>11</td>
<td>4</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>1</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>5</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>3</td>
<td>11</td>
<td>2</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>5</td>
<td>13</td>
<td>2</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>4</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>5</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>4</td>
<td>24</td>
<td>7</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>4</td>
<td>8</td>
<td>1</td>
<td>12.5</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>5</td>
<td>7</td>
<td>1</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>4</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>4</td>
<td>15</td>
<td>9</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>5</td>
<td>24</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>4</td>
<td>7</td>
<td>2</td>
<td>28.5</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>2</td>
<td>11</td>
<td>2</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>4</td>
<td>8</td>
<td>2</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>4</td>
<td>25</td>
<td>7</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>4</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>5</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>5</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>5</td>
<td>8</td>
<td>1</td>
<td>12.5</td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>4</td>
<td>10</td>
<td>2</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>1</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>4</td>
<td>12</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>4</td>
<td>7</td>
<td>2</td>
<td>28.5</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>5</td>
<td>9</td>
<td>4</td>
<td>44</td>
<td></td>
</tr>
</tbody>
</table>

(continued)
As can be seen, there is a tendency that the higher the number of partners in a project, the more sectoral social partner organisations are included. The Pearson correlation coefficient between both variables is 0.447 (two-tailed; \( p = 0.000 \)).

As has been said before, the higher the level of the intended project results, the stronger the need for including sectoral social partner organisations in project partnerships. This is most evident at the highest level. When it comes to employment development, it is impossible for institutes and programmes for vocational education and training to create jobs. It is the social partners who can create these.

The representation of sectoral organisations in the project partnerships is listed in Table II. As can be seen in Table II, there is relatively low representation of sectoral social partner organisations in the projects that are aimed at achieving higher-level results.

### Table II

<table>
<thead>
<tr>
<th>Project Number</th>
<th>Level of Project Results</th>
<th>Number of Organisations in Partnerships</th>
<th>Number of Sectoral Organisations in Partnerships</th>
<th>Percentage of Sectoral Organisations in Partnerships</th>
</tr>
</thead>
<tbody>
<tr>
<td>51.</td>
<td>1</td>
<td>4</td>
<td>9</td>
<td>33</td>
</tr>
<tr>
<td>52.</td>
<td>2</td>
<td>5</td>
<td>7</td>
<td>3.32</td>
</tr>
<tr>
<td>53.</td>
<td>3</td>
<td>2</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>54.</td>
<td>4</td>
<td>5</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>55.</td>
<td>5</td>
<td>4</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>56.</td>
<td>6</td>
<td>4</td>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td>57.</td>
<td>7</td>
<td>4</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>58.</td>
<td>8</td>
<td>4</td>
<td>8</td>
<td>3.75</td>
</tr>
<tr>
<td>59.</td>
<td>9</td>
<td>4</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td>60.</td>
<td>10</td>
<td>4</td>
<td>24</td>
<td>0</td>
</tr>
</tbody>
</table>

Notes: 1, project number; 2, type of project (level of project results); 3, number of organisations in partnerships; 4, number of sectoral organisations in partnerships; 5, percentage of sectoral organisations in partnerships

### Figure 2

Number of projects by type of intended project results

Note: \( N = 60 \)

As can be seen, there is a tendency that the higher the number of partners in a project, the more sectoral social partner organisations are included. The Pearson correlation coefficient between both variables is 0.447 (two-tailed; \( p = 0.000 \)).
results. In the average project partnership, 1.6 sectoral social partner organisations are involved. One would expect that the number of sectoral organisations in the partnerships would increase for each higher level of project results. However, this is not the case. At the level of instructional development, the average percentage of sectoral organisations in the partnerships is 7.3 per cent, at curriculum development level 16.1 per cent, and at the level of needs assessment, 13.8 per cent. The percentages at dissemination level (18.2 per cent) and especially employment development (14.4 per cent) are relatively low.

The relationship between the level of project results and the involvement of sectoral social partner organisations in the project partnerships is tested by a Spearman correlation coefficient (or rank order variables), which is not only allowed given the nature of the data (type of project is a variable at ordinal level), but is even a conservative analysis procedure (since involvement is a variable at the ratio level). The Spearman correlation $R_{S \text{project by involvement}} = -0.031$ ($p = 0.812$). This means there is

### Table II.

<table>
<thead>
<tr>
<th>Type or project by planned project result</th>
<th>Number of projects</th>
<th>Average percentage of sectoral organisations in the project partnership</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Instructional development</td>
<td>3</td>
<td>7.3</td>
<td>12.7</td>
</tr>
<tr>
<td>2. Curriculum development</td>
<td>5</td>
<td>16.1</td>
<td>11.0</td>
</tr>
<tr>
<td>3. Needs assessment</td>
<td>4</td>
<td>13.8</td>
<td>9.9</td>
</tr>
<tr>
<td>4. Dissemination</td>
<td>27</td>
<td>18.2</td>
<td>16.7</td>
</tr>
<tr>
<td>5. Employment development</td>
<td>21</td>
<td>14.4</td>
<td>16.3</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>15.8</td>
<td>15.6</td>
</tr>
</tbody>
</table>

Note: $N = 60$
no correlation between the level of intended project results and the involvement of sectoral social partner organisations in the projects studied.

The lack of relationship between the level of projects results and the involvement of sectoral social partner organisations in partnerships can be easily seen in Figure 4.

Case descriptions
In this section the results of the case study analysis and survey will be reported. First, the cases will be described briefly. In the description, the intended project results, the involvement of sectoral social partner organisations and project results are summarised.

*TSULW.* This project was about training in the sustainable use of land and water on the farm. The promoter country was Bulgaria. The objective of the project was to develop an innovative training programme focused on the problems of sustainable use of land and water. This is related to general issues of sustainable agriculture such as the preservation of natural sources (soil, water, energy), and using environmentally friendly technologies. The project also included the improvement of language abilities of the participants through providing special training materials and manuals in English that needed to be translated.

The sectoral social partner organisation involved was the Bulgarian Cooperative Union. The activities of this organisation were aimed at preparing a brochure on how to use water on the farm, stimulating the use of training materials and dissemination of them among the members.

The specific result of the involvement of this organisation was gaining knowledge and experience of the project by Union members.

The results of this project were the development of a new qualification (on sustainable management of natural resources) and establishing a European Centre for Sustainable Agriculture, which is a virtual place for sharing knowledge.

![Figure 4. Percentage of sectoral social partner organizations represented in project partnerships by type of competence development project in terms of levels of intended project results](image)

**Note:** N = 60
E-rural. This project was about e-learning for e-business and territorial marketing online (for integrated rural development). The promoter country was Italy. The aim of the project was to modernise the agricultural sector and to increase the competitiveness of regions through the introduction and dissemination of ICT technologies. Therefore the project included creating innovative e-learning, developing training modules with topics related to the “market” approach in agriculture, training of e-learning trainers, and designing and developing an e-Rural learning portal. The portal was intended to be a platform for managers, farmers, students of agricultural schools and trainers. It would also serve as a tool for communication, which is being used for project partners, a tool for the dissemination of project results, and also as a source of information on e-business, ICT in agriculture and marketing. The final products of the project would be made available on the web site of the project.

The sectoral organisations involved in the project and their activities were:

- INIPA, the training body of the Coldiretti Trade Union;
- the Training Agency of the General Trade Union in Spain;
- the Consortium of SMEs in Agri-Food; and
- the Federation of Swedish Farmers.

The activities they performed were aimed at needs assessment, problem identification and dissemination of the project results. Specific results of the involvement of sectoral organisations in the project were gaining a better understanding of the needs of the target group and the adaptation of the course content and teaching methodology to the needs of the sector.

The results (at the time of the data collection for this study) of this project consisted of a prototype of the e-rural portal (which is, as mentioned, the place for knowledge sharing and counselling services), and a training course. The portal was in the testing phase. Not much was known yet about the actual use, but there seemed to be a large potential for integrated rural development of the portal.

Organicmed. This project was about training Mediterranean farmers in organic crop agriculture. The promoter country was Cyprus. The objective of the project was to provide information and develop training modules for organic crop farmers in selected Mediterranean countries. The training package – which was available in English, Greek and Maltese – was meant to contribute to competence development of organic farmers. There was much interest in organic farming in the countries involved in the partnership, despite the fact that it still has a small market share. The aim of this project more specifically was to offer continuing vocational training based on good practices, with the active participation of farmers themselves, and to encourage unemployed people to enter into the field of organic agriculture, and through that to increase employability in the sector.

The sectoral and professional bodies involved in the project and their activities were:

- the Cyprus Organic Producers Association;
- the Union of Biological Farmers of Pella;
- the Italian Association of Organic Agriculture; and
- the Maltese Organic Agriculture Movement.
The activities performed were aimed at problem identification, needs assessment, training course development, and dissemination of the results of the project. Specific results of the involvement of the sectoral organisations in the project were the acceptance of organic products by the competent authorities, and support from trustworthy institutions. This added a lot to the credibility of the organic farmers involved and their products.

The results of this project consisted of new competencies for farmers, an increasing number of organic farmers, and strengthening the organic farmers’ associations. The project also led to three new initiatives.

**Plus-hislacto.** This project was about a training course on hygiene in the milk and dairy sector. The promoter country was Portugal. The objective of the project was that it would develop hygiene training programmes for workers in milk production and the dairy industry. The project involved cooperation between different organisations in different segments of the milk chain. The result of the project should be a multi-lingual multi-media training programme for distance learning for milk producers and employees in the dairy industry. The aim of the training package is to create and promote a common European approach regarding hygiene rules and a common terminology, which will be translated into Portuguese, French, Spanish, and Dutch. The intention also was to create a common certificate in hygiene in the dairy sector.

The sectoral and professional bodies involved in the project and its activities were:
- the Association of Industry in Portugal;
- the Women Association in the Dairy Industry;
- the Co-operative Association; and
- the European Association of Dairy Teachers.

Their activities in the project were related to curriculum development, needs assessment, and dissemination of the results of the project. Specific results of the involvement of the sectoral organisations in the project were having contacts and meetings with representatives of the industry and enterprises, and having opportunities for disseminating project results.

The results of this project were a curriculum and a standard training course on hygiene in the dairy industry, a common European certificate in hygiene in the dairy sector, a more intensive use of IT by milk producers, and better cooperation between different organisations.

**Case study analysis**

The projects described can be referred to as projects that are about:
- educational development on sustainable land and water use;
- IT competence development for integrated rural development;
- competence development on organic farming; and
- training on hygiene rules and practices in the milk and dairy sector.

The analysis of the case studies makes clear that sectoral social partner organisations are involved in different ways. Their involvement can be specified as follows:
• **instructional development** – giving advice on plans to develop instructional materials, including ICT-supported learning tools and environments (like CD ROMs, DVDs, web sites, discussion platforms, and portals), commenting on designs and prototypes, delivering content matter expertise;

• **curriculum development** – involvement in the definition of outcomes and objectives, advice on development plans, comments on programme designs, delivering content matter expertise;

• **needs assessment** – being involved in sectoral needs assessment, job-related needs assessment and job profile development, and the assessment of competence development needs;

• **implementation/dissemination in the sector** – the distribution or rather the valorisation of instructional materials, ICT tools, and course programmes; and

• **labour market development in the sector** – contributing to the development of professional associations, creating new jobs, transformation of a labour market segment, sharing production tools.

The results of the projects, to a larger or smaller extent enabled by the involvement of the sectoral social partner organisations, can be summarised as follows. At the instructional level projects resulted in new learning materials, and at the course level in new qualifications and course programmes. At the individual beneficiary level the projects contributed to the development of new competencies of workers in agriculture and the use of IT. Regarding the dissemination of project results, partnerships organised conferences, distributed printed information materials, and provided information portals, virtual places for knowledge sharing, and counselling services. At the sectoral level, the project resulted in increased numbers of organic farmers, stronger association development, more intensive cooperation between different organisations, and international qualifications.

Regarding the relationship between the level of actual project results and the involvement of sectoral social partner organisations, it can be observed that partners in the TSULW project are aimed at achieving school-oriented results. This partnership uses a sectoral approach in educational development in which the sectoral organisations involved deliver opportunities for getting experience with certain practices and innovations that can be used in curriculum and course development, for marketing the educational programme, and for distributing information in the sector. Projects that are more directly aimed at sectoral competence development are different regarding the involvement of sectoral organisations and their activities. In these projects more sectoral social partner organisations participate, which is also required, since the aims of the projects are to make a difference in the sector itself. This is the case for the projects on IT competence development for integrated rural development, competence development on organic farming, and training on hygiene rules and practices in the milk and dairy sector.

The case studies show that high involvement of sectoral social partner organisations in project partnerships at a higher system level (level 4, dissemination
in sector, and level 5, employment development) facilitates the achievement of the projects results at the system levels concerned.

Conclusions and discussion

Returning to the main question of this study – the relationship between the goals of sectoral competence development projects and the representation of sectoral social partner organisations in project partnerships – based on the survey, it can be concluded that there is no systematic relationship between type of projects (in terms of system level of project results) and involvement of sectoral social partner organisations (in terms of their representation in the partnerships). The case studies showed that the involvement of sectoral social partners in the project partnerships at higher system levels (levels 4 and 5) is strongly related to the type of actual project results, which means that if sectoral social partner organisations participate in projects that are aimed at dissemination of the projects results in the sector, and at improvement of employment in the sector, actual dissemination and employment development take place.

However, several points for discussion remain:

(1) What does representation of sectoral social partner organisations in sectoral competence development projects imply? Representation does not automatically mean active and effective participation, and the reverse can also be the case – low representation of social partner organisations does not necessarily mean that the partners involved have little effect. It depends on their effort, which can be significant. One case was found in which the project manager stated that the one sectoral organisation included in the project was the only one in the sector. However, in international projects, this would be more the exception than the rule, because in most cases there are various social partners in the participating member states that could be involved in the project. Having low representation of sectoral organisations in the project partnership would also not necessarily mean that the project partnership could not work with sectoral organisations that are not included. During the course of a project, the team can search for cooperation with other sectoral organisations. However, since sectoral organisations also have to cope with limited resources, it is likely that those who are in the partnership will be more motivated to cooperate with the team than those who are not.

(2) Is the sectoral approach really needed to achieve interesting results in the development of vocational education and training? One can even go one step further by arguing that when it comes to transversal competencies and labour market restructuring, the sectoral approach could be an inhibiting rather than a facilitating factor. Furthermore, one can question the very essence of a sector and their involvement in the development of vocational training: what constitutes a sector? What sectors can be the best partners for educational institutions in developing vocational training? Can it be expected that these sectoral organisations put a lot of effort into the very many and diverse developments of vocational training? Do sectoral organisations have enough specific expertise when it comes to special programmes in vocational education?
and training? However, sectors do exist, they vary in specificity, and can be categorised by formal classification systems such as NACE. When it comes to sectoral competence development to enhance productivity or to facilitate restructuring, it is inevitable to include the social partner organisation in the development process. They are the very core stakeholders of sectoral competence development.

(3) What to do with the finding that there is no relationship between type of project and involvement of sectoral social partner organisations in the partnership? This should be a specific point of attention in planning sectoral competence development projects. This is especially important since there is a huge effort put into the promotion of the sectoral approach in the development of vocational education and training. Although the list of modes in which sectoral organisations can be involved in partnerships presented in the Results section is neither complete nor exclusive, the examples that were given can be helpful in defining the role of sectoral organisations in future projects.

(4) It would be interesting to be able to say that projects in which high-level objectives are defined, and that have higher levels of representation of sectoral organisations, achieved better results and had more effects at higher levels. The design of this study, however, does not allow such a conclusion, since it would require an effectiveness study including data from the beneficiaries and the sectors themselves. Such a study could – and in our opinion should – be done, but it would require an evaluation period of around two years to be able to see the sectoral effects. The Organicmed project, however, is a clear example of good representation of social partners and high-level effects of the project. The partnership of this project consisted of four sectoral social partner organisations and four others, so half of the partnership consisted of sectoral social partner organisations. There were also significant results produced by the partnership, especially regarding the increase in the number of organic farmers, the rise in the membership of the Cyprus Organic Producers’ Association, and the export of organic products such as potatoes to Germany. But there were also strong developments in other product groups like olives, cereals, vegetables, and fruits. It was mainly through good examples of the sectoral organisations, especially from Italy, where organic farming has a longer history than in Cyprus, Greece and Malta, and through knowledge sharing, that this project was successful.

Looking back on the study, we can say that projects cover a broad field of topics in the agri-food-environment sector, that many partners are involved (a total of 623 partner organisations participated in the projects), and that much work has been done. Many projects have quite ambitious goals, and have experienced difficulties in running European projects, such as language and cultural barriers. The translation of many educational materials raised problems, not only from a linguistic point of view, but also because of the diversity in Europe. This was clearly visible in study material on plant protection produced in one project. It is obvious that different climate conditions lead to different diseases and protection strategies. So, this diversity needs to be taken into account when planning sectoral competence development projects in this field.
Nevertheless, there were very many interesting examples of development projects in the field of agri-food-environment. It can be expected that this will contribute to the improvement of initial and continuing vocational education and training in these fields, and to the ultimate competence development of entrepreneurs and employees in the sector.

References


Further reading

About the author
Martin Mulder is a Professor at Wageningen University in The Netherlands, and Head of the Chair Group of Education and Competence Studies (see www.socialsciences.wur.nl/ecs). He is an expert in vocational education and training and human resource development. He has conducted many research projects on training, human resource development and competence development. He has supervised many MSc and PhD students from various continents, and has published many books and articles. Martin Mulder can be contacted at: martin.mulder@wur.nl

To purchase reprints of this article please e-mail: reprints@emeraldinsight.com
Or visit our web site for further details: www.emeraldinsight.com/reprints