Survey of good Vocational Education & Training practices and learning needs in the Dutch cultural and green heritage sectors ANHER Project_O1-A3 Dutch National Report Output 1

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Survey of good Vocational Education & Training practices and learning needs in the Dutch cultural and green heritage sectors

ANHER Project_O1-A3 Dutch National Report
Output 1

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Introduction

The aim of this report is to analyse existing good practices in Vocational Education and Training (VET) as well as the learning needs of workers in the cultural and green heritage sectors in the Netherlands. The result will help to formulate guidelines for the development of new learning materials aimed at integrating both cultural and natural heritage. This survey is the first output of the European project *Innovative format of education and training of the integrated archaeological and natural heritage (ANHER)*. All strategic partners united within the project produce comparable surveys that will be combined into a transnational report. The national reports consist of four parts, analysis of existing good VET practices (1), analysis of relevant publications and learning materials (2) a survey of learning needs using a questionnaire (3) and interviews (4).

The Netherlands is a cultural landscape. The interweaving of nature and human agency have historically been dealt with in three divisions of heritage, namely, archaeological, natural and cultural, separating elements of historical landscapes above and below the soil in different sectors as well as setting these apart from natural heritage. All three sectors must be addressed for this survey.

Within this national report, both good practices and relevant publications have been selected to reflect these three heritage domains, with the aim in mind to develop a productive model of vocational education and training (VET) for professionals in the archaeological and natural heritage sectors for the ANHER project. This approach was also applied to the online questionnaires and interviews. The rationale behind the ANHER project is to include the dynamic changes over previous years regarding heritage. Hence, the archaeological, natural, and cultural heritage sectors are all to be addressed in order to increase synergies between them and supply the demand for trained professionals.

In the Netherlands, the boundaries between archaeological, natural and cultural heritage are getting increasingly blurred. Integration of various heritage branches is very much part of today's discourse. As of 2018, all regulations concerning spatial aspects of heritage (heritage and planning) will be captured under one single planning law. Nearly all aspects of heritage management in planning will reside under the ministry of Infrastructure and Environment. This is a reflection of how the Netherlands approach the various demands placed upon the Dutch landscape.

The Cultural Heritage Agency is at the heart of heritage management in the broadest sense in the Netherlands and is closely involved in listing, preserving, sustainably developing and providing access to heritage. It is the research institute and ‘centre of excellence’ regarding monuments, historic buildings, archaeology, and landscape. The government incorporates the agency’s specialist knowledge into legislation designed to protect and develop heritage, and disseminating knowledge on the management, conservation and accessibility of heritage collections.¹

While the national government is responsible for the protection and sustainable preservation of cultural heritage of national and international importance, the provincial and local authorities are responsible for provincial and local authority monuments and historic buildings. The provinces have their own policy on the approval of zoning plans for example, including the designation of areas of special heritage or landscape importance and this policy will generally take the form of a regional plan. In this way, provincial authorities can prevent developments at places with important natural, archaeological and/or cultural values with the intention to help local authorities implement their own heritage policies. This in turn allows the heritage sector to be somewhat decentralised. However, the Dutch government must ensure that policymaking and regional plans of provincial authorities reflect national standards.

Employers’ interests are established in legislation, in a social partnership along with employees, and these interests are supported and advanced through sectoral bodies including Kenniscentra Beroepsonderwijs Bedrijfsleven or ‘knowledge centres’, similar to the UK Sector Skills Councils, in that their tasks are to promote skills development in a specific economic sector.\(^2\)

The figures on lifelong learning in the Netherlands, synonymous with VET, are based on the Enquête Beroepsbevolking (EBB), the ‘Labour Force Survey’, which provides information on the labour market. The figures from 2013 show that 17.4% of people aged 25-65 years participate in vocational education and training compared with 10.5% of people from the European Union (includes 28 countries).\(^3\) In summary, the Dutch vocational education and training, on a broad scope, is highly driven by employer demands in the Netherlands and thus is relational to labour demands. After examining the best practices for the archaeological, natural and cultural heritage sectors, the shaping and designing of VET reflects this supposition.

The next paragraphs contain the four parts of the Dutch Survey, analysing existing good VET practices and relevant publications (1) as well as learning needs using a questionnaire and interviews (2). Each part will touch on the three separate domains mentioned above. In this way, a proper insight is gained in the supply and demand of Dutch lifelong learning aiming towards the crossover between the cultural and national heritage sectors.

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1. Best Practices and Relevant Publications

The following analyses of best practices (1.1A, 1.1B, 1.1C) and relevant publications (1.2A, 1.2B, 1.2C) for the three aforementioned domains in the Netherlands will be relational to VET, highlighting methodologies, legal frameworks, reflections, integration of the other domains, as well as some recognised drawbacks. The selected 12 best practices and 15 publications we looked at have been divided into the archaeological, natural, and cultural heritage sectors. The best practices are summarised in the forms, looking at complexity, key concepts and general content of the courses (annex I). The publications cover content that is of an interdisciplinary nature, up-to-date legal frameworks, addressing a wide range of skills for a large audience (annex II).

Best practices can be set by an authority, such as a governing body, and serve as a guide as to how to go about actualising processes in a field of work and maintaining good quality of work. For instance, in the process of heritage management, examples of best practices can be provided to highlight the most efficient and appropriate way to proceed with various heritage tasks. Applying best practices also involves balancing the qualities of an organization, a heritage institution for example, with the practices that it has in common with others. The selected best practices and publications for the Netherlands reflect these notions and are used in the ANHER project for each of the three domains of heritage: archaeological, natural and cultural. These representative samples also reflect a variety of contexts and forms of landscapes and monuments within the heritage domains.

We use the outcome of the analysis as a guideline for the development of our ANHER courses. The purpose of this market survey research is to look at what is already available and what our target groups may require. By taking into account the scale (local, regional and national), rules and regulations, policies and target groups, the following good practices and publications provide information that covers the wide range of practices that occur in the Netherlands, specifically, a practical approach that addresses efficient implementation of sectors into their own professional practice.

1.1. Analysis of Best Practices

A. Domain of Archaeological Heritage

The analysis of best practices selected for archaeological heritage in the Netherlands highlight the promotion of further research in order to produce more knowledge both on content and management. Furthermore, the courses put emphasis on education on various landscapes, interpretation of archaeological sites, communication with various stakeholders and spatial integration of archaeology at all levels of government. The scale to which involves the local (community) level, the municipal level, and the regional level. Each level has its own legal frameworks and regulations for an effective archaeological practice, forming a network. The duration of these courses range from 1-5 days, with options to be tailor-made for specific archaeological heritage requirements. Core learning elements are based upon knowledge (1), attitudes (2), and skills (3).

1. Knowledge: some examples of content

Covering a wide range of techniques and research that includes both terrestrial and maritime archaeology, monuments, interpreting sites, management and reconstruction of landscapes, the chosen best practices use interdisciplinary knowledge that allows information to be made available for the cultural and natural heritage sectors.

For example, the Biological-Archaeological Platform (BAP) organisation promotes research, education, communication and integration of bioarchaeological research in archaeology and...
covers biological remains from sites, landscape management, landscape reconstruction, habitat types and fauna species.

The RAAP Archaeological Consultancy (the largest independent research and consulting firm for archaeology and cultural history in the Netherlands) includes the flexibility of (re)training employees who work with field devices or specific software for archaeological practice, including geophysical research, archaeological research for remains from World War II, maritime archaeological research, archaeological software, stream valley research, and building biographical research.

The PASTA (Post-Academic Training Pathway Archaeology) organisation aims to provide a general picture of what archaeology is and what the new laws require of local communities, including how to connect municipal officials with archaeology, the policy process, and public outreach.

Another best practice from PASTA involved understanding quaternary, geomorphology, soil science and hydrology and related processes to the extent that are important for the interpretation of archaeological sites and landscapes in the Netherlands.

2. Pragmatism: attitude

By recognising that the archaeological system is constantly changing, the best practices selected offer a pragmatic approach including options for a customisation of theory and practice that is relevant for particular needs; theory that is relational to daily archaeological heritage practice. The education and refresher training for employees who work with field devices or specific software for archaeological practice is important for students to obtain up-to-date skills and is therefore included in the best practices for archaeological heritage.

3. Inward, outwards: skills in crossing over to other disciplines and people

Predominantly, the best practices for archaeological heritage in the Netherlands are specifically designed for governments, companies, archaeological professionals, field technicians, employees of consulting firms, universities and research institutes. There is a lack of best practices that deals with public archaeology, however there is an inclusion for officials with no archaeological training who are employed by municipalities and regional departments dealing with archaeology in their portfolios.

B. Domain of Natural Heritage

The analysis of best practices selected for natural heritage in the Netherlands involves the ‘green’ heritage sector and includes gardens, parks, residential areas, fortifications, cemeteries, and country estates. There are natural and cultural landscape juxtapositions that are used in the best practices to extend knowledge of the structure and history of Dutch landscapes, including exploration of professional practice, insight into current laws and regulations, and understanding future perspectives with new forms of cooperation between different industries. The scale to which natural heritage touches upon is at the local (community) level, the municipal level, the regional level, and the pan-European level. Each level has its own legal frameworks and regulations for an effective archaeological practice, forming a network. The duration of these courses range from 2 days to 3-8 months. Core learning elements are based upon knowledge (1), attitudes (2), and skills (3).

1. Knowledge: some examples of content

Natural heritage best practices promotes economically oriented developments, including the tools to effectively and efficiently deploy local and regional policies. Managing and developing the
role of natural heritage is increasingly taking into consideration the variety of wishes of regional spaces and reviewing historical developments, offering a better understanding of current laws and regulations to the various professionals in the field.

For example, a course on the cultural landscapes of the northern Netherlands ‘unlocks’ scientific knowledge in a wider context for residents, governments and civil society organizations which deal with, understand and decide upon landscapes by extending knowledge of the structure and history of the cultural landscapes of Groningen, Friesland and Drenthe.

The Ecology Course organisation allows students to gain insight into current laws and regulations, exploring examples of the professional practice, visions for a variety of recent developments in the field, and understanding future perspectives with new forms of cooperation between different industries. This course covers Natura 2000 and policy with the aim to provide the tools to effectively and efficiently deploy regional policies and to realize the new role for nature through Natura 2000, helping to manage and develop this new role that will increasingly take into consideration the variety of wishes of regional spaces.

The Ecology Course organisation also has a course on the ecology and management of the Dutch landscape and landscape elements that focus on landscape and nature conservation in the Netherlands. This course explores ecological principles, landscape characterization, environmental dynamics, soil composition and water management.

The HAS Knowledge Transfer & Corporate Training organisation offers a green spatial heritage course that gives students the tools to develop a vision on green heritage, where students are introduced to a methodical approach to the preparation of comprehensive conservation and management plans for elements of the landscape. The topics covered include historic garden art and landscape architecture, interpretation, design and layout, historical horticulture and gardening art, technical implementation and design, stewardship via controlling and managing landscapes.

2. Pragmatism: attitude

Natural heritage best practices predominately involves landscape and nature conservation in the Netherlands, vegetation and practical management, historic garden art and landscape architecture, stewardship, value assessment of locations, ecological principles, landscape characterization, environmental dynamics, soil composition and water management. The practical application of the best practices allows for an expansion of knowledge of flora, fauna, sandy landscapes, coastal marine clay landscapes, and moorland landscapes. Both practice and theory are used to aid management and action plan proposals for selected gardens, parks and the countryside.

3. Inward, outwards: skills in crossing over to other disciplines and people

A wide range of target audiences are included in the selected best practices, including employees of local authorities, professionals employed by municipalities, provinces, ministries, water boards, engineering and consultancy agencies and affiliated parties. In addition, people working in education and/or research concerning conservation and development, nature lovers, volunteers and professionals who want to know more about ecological principles, native vegetation and management of Dutch landscapes are also constituted target groups.
C. Domain of Cultural Heritage

While the boundary between nature and culture is disputable in the Netherlands, the nature areas are an expression of Dutch culture of the late twentieth century. The best practices for cultural heritage focus on tangible heritage of archaeological and historical landscapes, with a focus on monuments and architectural works of historical importance, which include new prospects for agricultural nature and landscapes. The best practices for cultural heritage in the Netherlands focus on a local, regional and national scale. Each level has its own legal frameworks and regulations for an effective archaeological practice, forming a network. The duration of these courses range from 1-2 days or with an option to have a course on location anywhere in the Netherlands that can be set up in consultation, taking into account special needs. Core learning elements are based upon knowledge (1), attitudes (2), and skills (3).

1. Knowledge: some examples of content

With insights into the current developments and the various perspectives of different stakeholders, the practical application of case studies presented in the best practices help with gaining experience of drafting and assessing tendered areas for agricultural nature and landscape management in the Netherlands. The ‘green’ cultural heritage aspects, in the area of historical gardens and landscape architecture (including work in conservation), aims to show the best practices for the management and restoration of historic parks and gardens, the history of Dutch parks, and what occurs in the maintenance of historical gardens and landscape architecture.

For example, Oldenburgers Historische Tuinen is a private consultancy and design firm that aims to train in the area of historical gardens and landscape architecture (including work in conservation) where students learn about the management and restoration of historic parks and gardens, the history of Dutch parks and what occurs in the maintenance of historical gardens and landscape architecture.

The Erfgoed Academie organisation provides students with insight into the relationship between heritage and spatial planning, what this means for spatial planning and how to do it. The course outlines cultural history as a tool to structure vision, development plans and other spatial tools. General knowledge about heritage is desirable for this course, which can be followed up by ‘Heritage and Space II’ and focusing more on the practical work and complex issues surrounding the legal aspects of heritage in spatial policies.

The Erfgoed Academie organisation also offers a heritage and sustainability course where professionals in the sector provide practical tips and advice in the area of heritage sustainability. How do we make a monument more sustainable without putting the historic values in jeopardy? Where are the opportunities and where are the boundaries? How do you improve the energy of a monument? This heritage and sustainability themed course aims to show how the various investments we put into sustaining monuments, the more we get out of our monuments. This could be from an economic, heritage (identity), and/or tourism perspective.

The Wageningen Academy organisation focuses on a course where students gain insight into current developments, perspectives of the different stakeholders and new prospects for agricultural nature and landscape. The opportunities and pitfalls of new methods advocating for agricultural nature and landscape management is analysed, allowing to develop skills of how to monitor the state of agricultural nature and landscape and be aware of the proposed policy changes that can be applied to different situations.

2. Pragmatism: attitude

On the basis of recent scientific research and current policy discussions, the best practices offer insights into current developments in cultural heritage, including innovative thinking about nature, practical knowledge of heritage sustainability, relationships between heritage values and
sustainability, as well as spatial heritage policies. The best practices highlight the relationship between heritage and spatial planning, what this means for spatial planning, and how to undertake it in different regions of the Netherlands. The best practices outline cultural history as a tool to structure future vision, development plans and other spatial tools available for heritage management.

3. Inward, outwards: skills in crossing over to other disciplines and people

The best practices for cultural heritage is made available to a higher-educated audience, including university level professionals working with municipalities, provinces, ministry departments, water authorities, environmental organisations, engineering and consultancies who are involved with policy development, planning, and landscape management. Heritage and environmental professionals employed by municipalities and provinces are also included, along with spatial planners, policy makers of higher and lower levels of government, employees of garden and park management bodies, restorators involved in advisory organizations and members of local historical societies.

1.2 Analysis of Relevant Publications

A. Domain of Archaeological Heritage

National, pragmatic, interdisciplinary

Although the publications for archaeological heritage were widely selected, they featured information specifically for the Netherlands. Attention is primarily given to the treatment of vulnerable material finds, storage, and conservation of archaeological material with practical guides on how to better handle them. Information on how to treat fragile and other archaeological material is checked against the national Dutch Program of Requirements (PvE) with relation to the Dutch Quality Standard (KNA) for archaeological practice. The publications therefore are of an interdisciplinary nature, displaying the best practices for various experts working with archaeologists, where fields increasingly have to deal with one another.

Legal frameworks are up to date

The selected publications are up-to-date with additional changes in the laws and regulations that have taken place regarding modernized heritage conservation, planning costs, and ownership of archaeological finds. This also includes information on the Malta Convention and Dutch policies, the protection of archaeological values in Dutch legislation, nationwide quality and excavation permits, and the regulation regarding building, zoning and environmental permits.

Content and skills

Protected (national) monuments and the administrative law enforcement are also included in the publications, as they explore notions of the ownership of archaeological finds and the rules relating to the depositing of archaeological materials found. Knowledge of how to work with the various domains is also presented, especially when dealing with disciplines that use different methodologies for archaeological soils. The Netherlands has some 1500 archaeological sites listed under national importance and are protected by the Dutch government.4 It is important to include publications that describe how to maintain archaeological heritage and address the legal requirements to protect and preserve monuments.

Target groups

Most of the selected publications are directed towards a wide audience including councils, planning staff and building inspectors from municipalities, provinces and their advisers, owners of green monument gardens, garden and landscape architects, archaeologists, clients of archaeological research, developers, metal detector enthusiasts, amateur archaeologists, explosives experts, and interested stakeholders in the legal issues of Dutch archaeology. For the most part, the archaeological heritage publications available predominantly come from government and industry, highlighting its practical position within the commercial archaeological heritage sector in the Netherlands. One of the downfalls is that there are no VET publications relating to public archaeology within the Netherlands.

B. Domain of Natural Heritage

National, pragmatic, interdisciplinary

The publications selected for natural heritage provide recommendations for valuing green heritage, the careful handling of green heritage that involves many stakeholders and interested parties including owners, historical garden researchers, designers, supervisors and managers. Some of the publications follow on from one another, a logical transition from learning about the natural landscape history of the Netherlands. Geological history, cultural history, landscape types, ecological values, as well as construction and management of natural green heritage are highlighted in the selected publications, covering the different characteristics of the Dutch landscape.

Legal frameworks are up to date

The publications reflect a mix of recurring principles in natural heritage, including identity and sustainability, which are the characteristic components of landscape quality. Sustainability is based on community involvement, consistent policy, financial security and robust ecology and are indicators for the vision of Dutch landscapes. These serve as guidelines for further development into practice at local, regional and national levels.

Content and skills

With practical examples and recommendations, the publications provide insights and results of inspiration and basic principles of the design process to natural landscapes. The publications explore balanced decision making with both cultural and historical values being an essential component. For example, historic garden guidelines provide a helping hand to social organizations involved in the field of green heritage. The scientific discussion and methodology within the publications focus strongly on maintenance, conservation, restoration and reconstruction for valuing natural green heritage. The green heritage elements within the publications include pollarded trees, hedges and hedgerows, felled areas and wood groves; the flat green elements include heathland and meadows. Landscape elements are part of a certain type of Dutch landscape and are therefore often typical of a region. By knowing this context, one can better understand the possible role(s) of landscape elements and the related management measures to be undertaken.
Target groups

The publications allow for diverse target groups, including government, people involved in landscape management, conservation and development, public institutions, owners/managers of culturally and historically valuable gardens, garden and landscape architects, local volunteers, interested stakeholders who want to learn more about the history of Dutch landscapes in general and their own environment in particular, residents, and holiday-makers.

C. Domain of Cultural Heritage

National, pragmatic, interdisciplinary

While the best practices focus on cultural heritage in the terrestrial environment, the relevant publications have a core focus on maritime cultural heritage, contrasting the different elements of cultural heritage within the Netherlands. While the Wadden Sea is an example of UNESCO listed natural heritage, some of the selected publications observe it to be a region with cultural heritage that extends beyond the Netherlands. In order to safeguard cultural heritage, the best practices and relevant publications are intended to be used as practical tools to identify, appreciate and value the different concepts of cultural heritage present both on land and under water.

Legal frameworks are up to date

The publications explore an assessment of values, development possibilities, conflict issues and decision-making demands, in conjunction with the transfer of knowledge on landscape and cultural heritage, which aim to develop a spatial vision of land use. The proposals for spatial planning ensure the integration of landscape and cultural heritage in the overall spatial planning at different levels of government in different regions. The mechanisms of spatial planning that the Netherlands have put into place since the Second World War have been geared towards economic growth. Since the financial crisis of 2008, however, it has gradually become clear that restoring growth to many areas of the Netherlands is not a realistic option. The publications touch upon the regional authorities that are considering strategies for dealing with the decline of cultural heritage on an economic basis and provide case studies to highlight other European countries where certain regions have been experiencing decline for longer periods, so that they can be compared with the practices in the Netherlands and perhaps serve as examples for future changes.

Content and skills

The publications for cultural heritage cross between areas of national and international importance, the Wadden Sea region for example; a marine wetland area on the North Sea coast shared by Germany and Denmark. In order to ensure that the area is conserved and managed as an ecological entity, the region as a whole has a common cultural identity too, with very specific regional historic diversity that is explored in the publications. An important part of Dutch history has played out on or near bodies of water. In Dutch waters many archaeological, historical and cultural landscape values present are not yet included in the heritage policy of municipalities. Thus, in order to safeguard the handling of this heritage, some of the selected publications are intended to be used as a tool to identify, appreciate and value the water-related cultural heritage, with practical guidelines for municipalities to draft policies. Cultural heritage associated with Dutch waters include features such as lighthouses, beacons, windmills, dykes, bridges and disappearing underwater remains of habitation, ships and aircrafts.

Cultural and historical landscapes are addressed in the publications, with relevance to the management of landscapes. Landscape elements and historical values are described as owing
their special importance to historical forms of management. Therefore, cultural history management control is addressed too, which means that as much as possible is conducted in the same manner as in the past and close attention is paid to ‘old’ management practices. By being aware of thinking about the past, and how people in the past thought about and treated their past, and consciously reflecting on the past’s relationship with the present, cultural heritage can be described as being intrinsic to historical landscapes within the Netherlands.

**Target groups**

The publications are for a wide international audience, interested stakeholders regarding coastal and terrestrial heritage, and anyone interested in cultural heritage and landscape management. Municipalities also benefit from these publications for further knowledge and advice for policy making. The publications are also accessible to administrators, professionals and enthusiastic residents and entrepreneurs involved in cultural heritage projects both in the Netherlands and abroad.

**1.3 Conclusion**

It is clearly apparent that the selected best practices and publications for the archaeological, natural and cultural heritage sectors facilitate the transfer of knowledge to its practical applications in the field. The national legislation and international regulations are up-to-date with regards to the best practices and publications; so do not need further investigation. However, when it comes to professional awareness, the publications make the leap from interdisciplinary to transdisciplinary knowledge and methodology, while the best practices and the respondents to the questionnaires do not represent this shift. For example, the cultural heritage publications have a transdisciplinary outlook, while the best practices focus predominately on the relationship between heritage and spatial planning within the Netherlands. More emphasis on the best practices for transdisciplinary awareness regarding the three heritage domains on a national and international level should be considered for the Netherlands.

The best practices and publications for the three heritage domains explore examples of professional practice and feature the promotion of research, education, and communication between experts and stakeholders. Landscape management is a key feature that resonates with all three domains, with an understanding of the potential for future perspectives with new forms of cooperation between different industries. The relationship between heritage and spatial planning is a strong focus and directed more towards the outcomes of spatial planning rather than heritage outcomes; with cultural history being used as a tool to structure development plans. All of these aspects mentioned above are worth keeping in mind when designing the VET courses for the ANHER project.

**2. Analysis of needs of target groups**

**2.2 Online Questionnaires**

I. Introduction

The standard questionnaire was customized for the target groups, which involved translating it to Dutch and ensuring participants matched one of the three heritage domains ascribed above. An email with a link to the online questionnaire was initially sent to 121 individuals, 6 email addresses were incorrect, which means that 115 candidates received the questionnaires.

For the selective sample, candidates were selected equally from the three sectors and were working in private companies, governmental institutions and supporting organizations, funded
cultural and heritage management organizations, educational institutes, and self-employed workers. The next level of selection concerned the national, international, regional and local scale of practice of the companies or organizations involved. Lastly, participants were selected at the level of responsibilities within the organization they worked for, such as board members, managers, project leaders, and executives. After ten days, an email reminder was sent to all candidates.

Table 1 shows the number of respondents per domain. The overall response was 31.3%. In total, there were 34 fully completed questionnaires, which will be used in the analysis (29.6%), and 2 two questionnaires that were not completed after the first question and were therefore not included. To some parts of a question, participants did not respond or they skipped one question. Therefore, the number of respondents is given for each result.

<table>
<thead>
<tr>
<th>Domain</th>
<th>Questionnaires</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archaeological heritage</td>
<td>33</td>
<td>13</td>
<td>39.4%</td>
</tr>
<tr>
<td>Natural heritage</td>
<td>46</td>
<td>14</td>
<td>30.4%</td>
</tr>
<tr>
<td>Cultural heritage</td>
<td>36</td>
<td>9</td>
<td>25.0%</td>
</tr>
<tr>
<td>total</td>
<td>115</td>
<td>36</td>
<td>31.3%</td>
</tr>
</tbody>
</table>

Table 1. Sent questionnaires and responses per domain.

**Education**

Nearly all participants (64.7%) have a Master’s degree, 11.8% have a PhD and 23.5% have an undergraduate degree. Those undergraduates are nearly all working in the natural heritage domain (17.6%). Most of the participants holding a doctorate are working in the archaeological heritage domain (8.8%).

**Profession**

Participants were asked to pick their occupation from the drop down list in the questionnaire and if the occupation was not listed, they had the option to add it by themselves. Occupations that are nearly the same, such as regional archaeologists and municipality archaeologists, were counted alike.

32.4% of all participants are working as archaeologists, most of them in the archaeological heritage sector. A percentage of 23.5% are working as advisors in cultural heritage management and only 5.9% of the advisors are working within the archaeological heritage sector. Responding board members (17.6%) are working within cultural and natural heritage management domains. The latter hold undergraduate degrees. Among the category other (17.6%), are landscape architects, water management specialists and ecologists. Only 2.9% specifies educator as their occupation; these respondents are working in the natural heritage domain.

**Years of professional experience**

Participants were asked to provide the exact number of years they had been working in their specific field. The majority of respondents have worked for at least 10 years in their field of expertise, whereas the natural heritage domain offers some dispersion in working experience. The table of results is as follows:

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5 Working 5, 10, 20 or 30 years is counted respectively in the range 5-10, 10-20, 20-30 and >30.
<table>
<thead>
<tr>
<th>Period of professional experience</th>
<th>Percent of respondents archaeological domain (n=13)</th>
<th>Percent of respondents natural domain (n=14)</th>
<th>Percent of respondents cultural domain (n=9)</th>
<th>Percent of respondents total (n=36)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5</td>
<td>0.0%</td>
<td>14.3%</td>
<td>0.0%</td>
<td>5.6%</td>
</tr>
<tr>
<td>between 5 and 10</td>
<td>0.0%</td>
<td>14.3%</td>
<td>0.0%</td>
<td>5.6%</td>
</tr>
<tr>
<td>between 10 and 20</td>
<td>53.8%</td>
<td>21.4%</td>
<td>33.3%</td>
<td>36.1%</td>
</tr>
<tr>
<td>between 20 and 30</td>
<td>38.5%</td>
<td>28.6%</td>
<td>44.4%</td>
<td>36.1%</td>
</tr>
<tr>
<td>&gt; 30</td>
<td>7.7%</td>
<td>21.4%</td>
<td>22.2%</td>
<td>16.7%</td>
</tr>
<tr>
<td>no data</td>
<td>100%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Table 2. The respondents’ years of experience working in the field of archaeological, natural and cultural heritage. The last column shows the overall results of all respondents.

II. The knowledge of the natural and archaeological heritage management aspects

Participants of the archaeological heritage domain were asked if they were familiar with the different aspects of the natural heritage domain and vice versa. Aspects of both domains were asked about for participants in the cultural heritage domain. The results are calculated as percentages of positive answers ('yes' and 'familiar with') according to a specific aspect, and are presented in the pie charts below. It was not asked to what extent knowledge of specific aspects were understood, however the results sketch a general understanding. Results for the archaeological (orange) and natural (green) heritage domain are set against each other to show the differences and parallels. The results of the cultural (blue) heritage domain are presented underneath.

Archaeological heritage domain (n=12)  Natural heritage domain (n=13)

1. National legal frameworks for natural protection and conservation

2. International legal frameworks for natural protection and conservation

1. National legal frameworks for archaeological protection and conservation

2. International legal frameworks for archaeological protection and conservation
3. The public use of natural space

- Yes: 50.0%
- No: 50.0%

4. Ecosystems and biodiversity conservation

- Yes: 16.7%
- No: 83.3%

5. Management of natural reserves/parks/spaces

- Yes: 16.7%
- No: 83.3%

6. Promotion strategies for natural heritage management

- Yes: 16.7%
- No: 83.3%

3. The concept of cultural landscape

- Yes: 15.4%
- No: 84.6%

4. The significance and role of archaeological heritage

- Yes: 38.5%
- No: 61.5%

5. Promotion strategies for archaeological heritage management

- Yes: 30.8%
- No: 69.2%
Cultural heritage domain (n=9)

1. National legal frameworks for archaeological protection and conservation
   - Yes: 0.0%
   - No: 100.0%

2. National legal frameworks for natural protection and conservation
   - Yes: 33.3%
   - No: 66.7%

3. International legal frameworks for archaeological protection and conservation
   - Yes: 44.4%
   - No: 55.6%

4. International legal frameworks for natural protection and conservation
   - Yes: 22.2%
   - No: 77.8%

5. The public use of natural space
   - Yes: 22.2%
   - No: 77.8%

6. Ecosystems and biodiversity conservation
   - Yes: 11.1%
   - No: 88.9%

7. Management of natural reserves/parks/spaces
   - Yes: 33.3%
   - No: 66.7%

8. Promotion strategies for heritage management
   - Yes: 33.3%
   - No: 66.7%
The results express that the highest knowledge base concerning natural, archaeological and cultural heritage, is around national legal frameworks. Knowledge of international legal frameworks in other domains is well developed by natural and even cultural heritage professionals; in the archaeological sector this knowledge is limited. Familiarity with promotional strategies in other domains is low in the archaeological and natural heritage domain, while those people working in integrated cultural heritage management are more familiar with this subject (66.7%). On the other hand, their familiarity with the public use of natural space is not high (22.2%). In the other two domains this skill is more developed as demonstrated by these ratings (50%), and those for the concept of cultural landscape (84.6%). The lowest areas of knowledge are management of natural reserves/parks/spaces, ecosystems, and biodiversity, which is in line with the low scores on knowledge of natural protection.

III. Benefits from integral approach to natural and archaeological heritage

In order to value (on a general level) the benefits of an integral approach of the participants own field within natural or respectively archaeological heritage, participants were asked to rank five given options from 1 to 5, with 1 being the lowest and 5 the highest.

Table 3 shows the outcomes of the ranking based on the average of all summed results divided by the number of participants. This is calculated for each heritage domain as well as the overall results.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Average mark</th>
<th>Archeological domain</th>
<th>Natural heritage domain</th>
<th>Cultural heritage domain</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning strategies</td>
<td>3.8</td>
<td>4.0</td>
<td>3.6</td>
<td>3.8</td>
<td></td>
</tr>
<tr>
<td>Sustainable development</td>
<td>3.8</td>
<td>4.0</td>
<td>3.9</td>
<td>3.9</td>
<td></td>
</tr>
<tr>
<td>Landscape management</td>
<td>4.5</td>
<td>4.3</td>
<td>4.0</td>
<td>4.3</td>
<td></td>
</tr>
<tr>
<td>Tourism</td>
<td>4.4</td>
<td>4.3</td>
<td>3.9</td>
<td>4.2</td>
<td></td>
</tr>
<tr>
<td>Wellbeing and quality of life of local groups</td>
<td>3.7</td>
<td>3.2</td>
<td>3.9</td>
<td>3.5</td>
<td></td>
</tr>
</tbody>
</table>

Table 3. The average marks of the five aspects an integrated approach can benefit (n=34).

Landscape management would be considered to benefit the most from an integrated approach as opposed to natural and archaeological heritage, followed nearly equally by Tourism. The Wellbeing and quality of life of local groups is considered to benefit the least from an integrated approach. Because average results are less informative than the mode, each subject was also calculated for its mode. In the archaeological heritage domain respondents expect that Sustainable development and Landscape management benefit the most (mode=4). In the natural heritage field, respondents consider Landscape management and Tourism to benefit the most (both mode=5) and in cultural heritage management, Tourism (mode =4). Wellbeing and quality of life of local groups scored a 3 as most frequently ranked, which means that respondents value this aspect to benefit the slightest from an integral approach, or they may not know how local groups can benefit.

IV. Improving competence and performance by enhancing knowledge of natural and archaeological heritage management

Participants were asked to evaluate improvement of competency and performance in their own field by enhancing knowledge of the other work fields. For the archaeological heritage domain, it concerns enhancing knowledge of natural heritage, for the natural heritage domain it concerns knowledge of archaeological heritage, and both for cultural heritage. Options were
ranked from 1 to 5, with 1 being the lowest and 5 the highest. Table 4 shows the results for each domain, as well as for the entire heritage sector.

<table>
<thead>
<tr>
<th>Competences and performance</th>
<th>Archaeological heritage domain</th>
<th>Natural heritage domain</th>
<th>Cultural heritage domain</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better understanding of the complex nature of landscape, in particular natural and environmental context of human actions</td>
<td>3.2</td>
<td>3.6</td>
<td>3.3</td>
<td>3.4</td>
</tr>
<tr>
<td>More integrated and efficient landscape protection</td>
<td>3.7</td>
<td>3.7</td>
<td>3.8</td>
<td>3.7</td>
</tr>
<tr>
<td>More adequate management strategies</td>
<td>2.9</td>
<td>3.5</td>
<td>3.1</td>
<td>3.2</td>
</tr>
<tr>
<td>Application of more efficient mitigation strategies to deal with emerging challenges</td>
<td>2.8</td>
<td>3.4</td>
<td>2.9</td>
<td>3.1</td>
</tr>
<tr>
<td>Better communication and social awareness</td>
<td>3.6</td>
<td>3.4</td>
<td>3.4</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Table 4. The average marks of competences and performance improved by enhancing knowledge (n=34).

The higher the average, the more likely the competency and performance would be improved by enhancing knowledge of the other heritage domain. Therefore, a More integrated and efficient landscape protection is the most likely competency in all domains to be improved by enhancing knowledge. Better communication and social awareness scores 3.5 and is another competency which can benefit from enhancing knowledge of the other heritage domain, this is especially acknowledged in the archaeological heritage domain.

Application of more efficient mitigation strategies to deal with emerging challenges on the other hand, is the least likely competency to improve for all participants in the three domains. This low score (3.1) can also mean that participants find it difficult to imagine the benefits of knowledge being applied to efficient mitigation strategies, which is supported by the low average score for More adequate management strategies (3.2).

When looking at the mode, participants in the cultural heritage domain score 4 most frequently for all competences. The other two domains score 3 and 4 for all competences. The opinions are mostly spread out towards the competency More adequate management strategies, with 1 and 2 scoring as much as 3 and 5, depending on the respondent’s occupation such as manager (high score) or executive (low score).

In the three following questions, participants were asked which of the five areas would be best targeted to improve landscape protection, landscape management, or landscape planning, by way of the adoption of an integral approach to natural and archaeological heritage. The five options per question were ranked from 1 to 5, with 1 being the lowest and 5 the highest. The highest average score indicates respondents believe this particular area to be improved more significantly by an integrated approach. The results are shown in the tables 5, 6, and 7 below, for each separated domain and for the total of the heritage sector.
V. Improving landscape protection by the adaptation of an integral approach to natural and archaeological heritage

<table>
<thead>
<tr>
<th>Improving landscape protection by</th>
<th>Average mark</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Archaeological heritage domain</td>
</tr>
<tr>
<td>More efficient integration of landscape into regional and town planning</td>
<td>3.2</td>
</tr>
<tr>
<td>More efficient integration of landscape with cultural, environmental, agricultural, social and economic policies</td>
<td>3.9</td>
</tr>
<tr>
<td>Establishing and implementing legal measures aimed at efficient landscape protection</td>
<td>3.5</td>
</tr>
<tr>
<td>Increasing awareness of value and importance of landscape to the public</td>
<td>3.7</td>
</tr>
<tr>
<td>Triggering training and educational initiatives in landscape for general public</td>
<td>3.4</td>
</tr>
</tbody>
</table>

Table 5. The average marks for the five ways landscape protection can be improved by an integral approach to heritage (n=34).

Table 5 shows that both increasing awareness of value and importance of landscape to the public (4.0), and more efficient integration of landscape with cultural, environmental, agricultural, social and economic policies (3.9) score high on average. These two aspects of landscape protection are considered by the participants to be improved upon the most by adapting an integral approach. Triggering training and educational initiatives in landscape for general public (3.5) is considered by the participants to be the least improved. Respondents of the archaeological heritage sector however, offer more efficient integration of landscape into regional and town planning as the least important aspect of landscape protection to be improved upon by an integral approach (3.2).

The mode (2) demonstrates that the archaeological heritage domain feels that establishing and implementing legal measures aimed at efficient landscape protection will be improved upon the least by an integral approach. The frequent score of 3 from the cultural heritage domain underwrites this, while the natural heritage domain scores mostly 5 on this aspect. Their score (5) on the first related aspect, more efficient integration of landscape into regional and town planning, supports the latter score as both important areas to benefit from an integral approach.

VI. Improving landscape management by the adaptation of an integral approach to natural and archaeological heritage

<table>
<thead>
<tr>
<th>Improving landscape management by</th>
<th>Average mark</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Archaeological heritage domain</td>
</tr>
<tr>
<td>Facilitate better protection of landscape</td>
<td>3.4</td>
</tr>
<tr>
<td>More effective and efficient use of available resources</td>
<td>3.6</td>
</tr>
<tr>
<td>More efficient strategies of planning at the regional level</td>
<td>3.5</td>
</tr>
<tr>
<td>More effective and accurate reaction to the needs of sustainable development</td>
<td>3.2</td>
</tr>
<tr>
<td>Better serving the needs of local groups</td>
<td>3.4</td>
</tr>
</tbody>
</table>

Table 6. The average marks for the five ways landscape management can be improved by an integral approach to heritage (n=33).
The areas of landscape management that improve the most by adapting an integral approach are believed to be facilitate better protection of landscape and better serving the needs of local groups (both average 3.7, see table 6). The area that will benefit the least is supposed to be more effective and accurate reaction to the needs of sustainable development (3.4).

Opinions are divided. For example, the answers to question V from the natural heritage sector score higher average rates on planning strategies (4.0, mode 4) and their score on better protection of landscape (4.2, mode 5) is in line with the answers to the former question. Contrary to the latter, the average rates of the archaeological and cultural heritage sector to this aspect are low (3.4). From the cultural heritage domain, Better serving the needs of local groups is highly ranked (4.1), while the archaeological heritage domain consider this area to benefit less by adapting an integral approach.

VII. Improving landscape planning by the adaptation of an integral approach to natural and archaeological heritage

<table>
<thead>
<tr>
<th>Improving landscape planning by</th>
<th>Average mark</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Archaeological heritage domain</td>
</tr>
<tr>
<td>Better definition of different components of landscape and their hierarchy</td>
<td>3.2</td>
</tr>
<tr>
<td>Better definition of the peculiar character of a region</td>
<td>3.7</td>
</tr>
<tr>
<td>More efficient integration of natural and archaeological/cultural heritage into planning strategies</td>
<td>4.0</td>
</tr>
<tr>
<td>More explicitly address concerns of different facets of landscape management in implementing planning strategies at different administrative levels</td>
<td>3.7</td>
</tr>
<tr>
<td>Better serving the needs of local groups</td>
<td>3.2</td>
</tr>
</tbody>
</table>

Table 7. The average marks for the five ways landscape planning can be improved by an integral approach to heritage (n=32).

More efficient integration of natural and archaeological/cultural heritage into planning strategies is the area of landscape planning that is considered to be the most likely to improve by adapting an integral approach to natural and archaeological heritage, scoring the highest average (4.2, see table 7). All three domains show high rankings, natural heritage being the highest (4.4). The mode of all marks is 5 for this area. Other areas are valued lower, with Better definition of different components of landscape and their hierarchy as considered to improve the least with an integral approach.

The frequently scored 2 for Better serving the needs of local groups in the archaeological heritage domain confirm the previous answers of this group, that local groups benefit less from the adaption of an integral approach. The mode in the cultural heritage domain is 4, which means that this group believes that local groups benefit very well by an integral approach.

VIII. Value of different elements of the training process

The final question asked the participants to value aspects of the training process itself and to rank five options they consider the most important on a scale of 1 to 5, with 1 being the lowest and 5 the highest.
<table>
<thead>
<tr>
<th>Element</th>
<th>Average mark</th>
<th>Archaeological heritage domain</th>
<th>Natural heritage domain</th>
<th>Cultural heritage domain</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexibility of the course</td>
<td>3.8</td>
<td>4.0</td>
<td>4.0</td>
<td>3.9</td>
<td></td>
</tr>
<tr>
<td>Contact with the tutor</td>
<td>3.8</td>
<td>3.9</td>
<td>4.0</td>
<td>3.9</td>
<td></td>
</tr>
<tr>
<td>Assignments</td>
<td>2.9</td>
<td>2.8</td>
<td>2.8</td>
<td>2.8</td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td>3.6</td>
<td>3.1</td>
<td>3.7</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td>Obtaining a certificate</td>
<td>3.1</td>
<td>2.1</td>
<td>2.4</td>
<td>2.5</td>
<td></td>
</tr>
</tbody>
</table>

Table 8. The valuation of five elements of the training process in average marks (n=33).

Flexibility of the course and contact with the tutor are experienced as the most important elements of the training process (both on average 3.9, see table 8). Obtaining a certificate and assignments score with respectively 2.5 and 2.8 on average the lowest, which means that participants value this element the least important. However, these two aspects are valued very highly (4 and 5) by respondents who work in the lower echelons of an organization or company, or are self-employed. Flexibility of the course and contact with the tutor score high for nearly each occupation and the highest for people in the natural heritage domain (both mode 5).

2.2.1 Conclusion

Even though the answers to the questions, according to the remarks respondents made, were not easy at times to understand or were even too complicated for the respondents, the answers sketch a general attitude towards the proposed issues with some key themes extracted from the results.

a. By and large, the general public and needs of local groups are considered to benefit the least from an integral approach of archaeological and natural heritage. The beneficial focus lies on tourism, planning strategies and management of landscape, which means that in those three areas respondents especially expect improvements from an integral approach. Why the needs of local groups and the general public are areas that are supposed to benefit the least was not investigated. However, this view is supported by lacking competencies for all domains in the area of better communication and social awareness, and low knowledge of promotional strategies within the archaeological and natural heritage domains, while the cultural heritage domain is better aware of these activities and values the needs of local groups more so. The relationship between heritage and the role of the public and local groups is one to develop within the field of integral heritage management.

b. Opinions within the natural heritage domain differ from those of the archaeological domain. Knowledge of mutual working fields is limited, with both domains valuing areas of landscape management, protection and planning differently, such as the natural heritage domain’s emphasis on planning strategies and legalisation. The cultural heritage domain, on the contrary, adheres to a more integrated approach with an eye for different needs, targets and strategies. Although all domains believe that, an efficient integration of natural and archaeological/cultural heritage into planning strategies will be improved by an integral approach; answers to related questions do not underline this. Therefore, this is an important theme.

c. All three domains lack knowledge of integrated and efficient landscape protection, which is therefore the most likely area in all domains to be improved upon by enhancing knowledge of other domains and by adapting an integral approach. Correlated aspects, such as increasing awareness of value and importance of landscape to the public and integration of landscape with several policies both ranking highly, support this view.
d. Needs and expectations in training courses differ according to specific echelons. For example, the lower echelons are interested in obtaining a certificate while other levels are not. All respondents highly value flexibility and contact with the tutor.

2.3 Interviews

I. Introduction

For the interviews, the standard questionnaire was customized for the target groups, which involved translating it to Dutch and ensuring participants matched one of the three heritage domains ascribed above. A selective sample of the online questionnaire was made from the respondents who were willing to be interviewed. The candidates were selected based on their work in different geographical areas and their responsibilities covering local, regional or national interests. In the end, 5 interviews were held over the phone on a one-to-one basis to a structured set of the same questions and themes, taking approximately half an hour to one hour each to complete. Although the number of interviews does not provide a representative sample for the whole population, the results indicate some main issues and noteworthy discrepancies.

Education, profession and experience

All participants have a Master's degree. They are working as archaeologists for a municipality, collaborating municipalities, or provinces; as advisors in cultural and archaeological heritage at a national level, and as project leaders of urban planning activities. Their years of professional experience differ from 8 to 28 years and are shown as percentages in the table 9 below.

<table>
<thead>
<tr>
<th>Period of professional experience</th>
<th>Percent of respondents total (n=36)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5</td>
<td>0%</td>
</tr>
<tr>
<td>between 5 and 10</td>
<td>20%</td>
</tr>
<tr>
<td>between 10 and 20</td>
<td>20%</td>
</tr>
<tr>
<td>between 20 and 30</td>
<td>60%</td>
</tr>
<tr>
<td>&gt; 30</td>
<td>0%</td>
</tr>
<tr>
<td>no data</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 9. Years of experience of interviewees.

II. Integration of natural and cultural heritage management in their work and specific actions.

A combined domain approach is experienced as a working standard. Integration of natural and cultural heritage management has always been and currently is performed by dealing with reclaimed lands, estates and spatial structures such as the Waterlinie (a series of defence structures). Although a combined domain approach does not mean that both domains value each other's objectives. Today, all kinds of spatial planning projects need to strike a balance in the public domain between, on the one hand, natural demands (rising sea-levels for example) and economic demands (the need for expanding industrial areas for example), and on the other hand interests on a local or regional scale (economy, agrarian land use, tourism, residential areas, recreation, and heritage), whereby all must fit together. This collaboration is presently seen in new projects, including the strengthening of dykes in heritage landscapes according to modern standards, raising water levels to recreate old meadow landscapes and protecting the archaeology at the same time, creating a new natural graveyard in an area of high natural and archaeological value, or developing recreation areas in some wetlands which are also areas of high archaeological value.
III. Knowledge of the ecosystems and biodiversity, and archaeological heritage in their area and the strategies to protect, manage, value and promote them.

Only basic knowledge of ecosystems and biodiversity is, according to the interviewees, necessary for an archaeologist to deal with natural heritage. Archaeologists don’t have knowledge of natural values (species of flora and fauna which are specifically important for certain areas) and are focused on particular landscapes or landscapes in general. On the other hand, the interviewees acknowledge that a natural heritage specialist can learn from archaeology because most of the workers in natural heritage are not aware of the importance and qualities of the soil profile, geology, the genesis of the lands they work with, and its history.

The non-archaeologist, although aware of the existence of archaeological heritage, has little understanding of the strategies to protect and manage it. They often recognize the value of archaeological heritage and the ways in which to promote it because natural heritage organizations nowadays have to deal with a changing vision of landscape management, whereby landscapes are ‘given back to nature’. This approach attends to the organizations on the value of cultural heritage such as historic features including windmills, vanished waterways, and sunken ships, and will be used in the promotion and valuation of typical Dutch landscapes.

The provinces, municipalities and national public organizations such as Natuurmonumenten communicate most of the promotion activities concerning the cultural values of the landscape. The groups that especially enjoy heritage landscapes are the middle-aged and the elderly, who intensively use the bicycle paths.

IV. Skills to ensure natural and archaeological protection and conservation and methods used for it.

The interviewees point out the importance of collaboration, because specific knowledge is often required. Understanding of spatial planning, and long term development of natural and cultural areas is the most important thing. Because of the current legislation of archaeological heritage, archaeology is an important factor when dealing with landscape management. If not, collaboration and consultancy is not granted. How to deal with all the parties involved and enhancing the professional network are both important factors when facing current problems in heritage management. This means that workers are not so much interested in specific skills as well as in the sharing of knowledge.

V. Collaboration and support from natural and cultural heritage professionals

All interviewees work in projects together with specialists from other domains. Depending on the content and scope of the project, these include landscape architects, agriculture specialists, archaeologists, historical specialists, engineers, biologists, water management specialists, and/or spatial planners.

VI. Involvement in landscape management and planning and suggestions for a jointly approach of both domains.

The involvement in landscape planning is high, since the Netherlands know only of cultural landscapes where the pressure on the availability of land is high outside urban areas, caused by recreational needs, agrarian land use, spatial infrastructure (roads, waterways) and water management (river overflowing areas). Planning strategies and developing long-term visions on
integral landscape management are mentioned by the interviewees as being most important to provide sustainability in archaeological and natural heritage management. A lack of long-term vision is often mentioned as a drawback of the natural heritage domain, which should be improved when practicing a joint approach.

Future debate in natural and cultural landscape management will be on issues such as agrarian land use versus development of nature, and sustainability in tourism, agriculture and urbanization.

VII. Competences and performance enhanced by developing knowledge of natural and cultural heritage management and necessary skills to do that.

According to the interviewees it is not necessary to develop more skills used in the other heritage domain per se, but a general understanding of the other domain and enlarging this knowledge is essential when dealing with joint heritage issues. Moreover, a general understanding of the other domain will encourage the sharing of knowledge and experiences. Archaeologists specifically observe this, since they always deal with issues of landscape interventions. For example, more knowledge of specific data used in natural heritage management will enhance the results of archaeological desk research. People working in natural heritage management will, according to archaeologists, benefit more from developing knowledge and archaeology skills. They should learn more about landscape genesis, but also about small cultural features in the landscape including hedges, fences, decoys and bushes.

VIII. Interest in training regarding cultural and natural heritage management.

Most interviewees do have an interest in training with regards to cultural and natural heritage management. This interest concerns general themes such as how to deal with planning and management of heritage on different scales (local, regional), what are important policy objectives in the other domain, or how to deal with conflicting interests. But there is also interest in enlarging knowledge of specific landscape elements (farms, barrages), or learning from a specialist’s view on heritage themes.

2.3.1 Conclusion

Although the number of interviews does not provide a representative sample for the whole population, the results indicate some main issues and noteworthy discrepancies.

a. Integration of natural and cultural heritage is often experienced as a working standard. Although this does not mean that both domains value each other’s objectives or have knowledge of the other domain.

b. Only basic knowledge of ecosystems and biodiversity is necessary for an archaeologist to deal with natural heritage. Archaeologists have little knowledge of natural values and are focused on particular landscapes or landscapes in general.

c. There is little understanding in both domains of the strategies to protect and manage each other’s domain. Collaboration is important because specific knowledge is often required and a general understanding of the other domain and enlarging this knowledge is essential when dealing with joint heritage issues. Moreover, a general understanding of the other domain will encourage the sharing of knowledge and experiences.

d. Planning strategies and developing long-term visions on integral landscape management are important discussions to have in order to provide sustainability in archaeological and natural heritage management. Future debate in natural and cultural landscape
management will be on issues such as agrarian land use versus development of nature, and sustainability in tourism, agriculture, and urbanization.

e. Natural heritage organizations nowadays are dealing more often with the values of cultural and archaeological heritage.

f. The provinces, municipalities and national public organizations communicate most of the promotion activities concerning the cultural values of the landscape. The groups that especially enjoy heritage landscapes are the middle-aged and the elderly.

g. There are prejudices to be faced. Archaeologists assume that natural heritage management is focused on short-term development caused by their attention to living flora and fauna, and that they have no knowledge of long term landscape development as in terms of geology and genesis.

h. Interest in training concerns mostly general themes, such as the understanding of spatial planning, how to deal with planning and management of heritage on different scales (local, regional) and on a long-term basis, what are important policy objectives in the other domain, or how to deal with conflicting interests.

i. Respondents from both the online questionnaires and the interviews emphasize that courses should be practical and should even be carried out in the field itself.

3. Conclusion of survey

The following highlights summarise the outcomes from this research:

- While the opinions within the natural heritage domain differ from those of the archaeological domain, knowledge of mutual working fields is limited. There is little understanding in both domains of the strategies to protect and manage each other’s domain. This implies that a broad ANHER course that could cover some of these issues would be deemed as useful, especially when dealing with joint heritage issues. This in turn could be the inspiration to encourage the sharing of knowledge and experiences that can flow between heritage sectors, creating more open lines of communication that is presently lacking.

- While the present VET practices cover legislation very well, they are nationally and sectoral oriented and do not crossover. Courses developed by ANHER that broaden the scope in this regard would be useful when discussing pan-European case studies that also relates to relevant transdisciplinary approaches. More emphasis on the best practices for transdisciplinary awareness regarding the three heritage domains on a national and international level should be considered for the Netherlands.

- Sustainability in archaeological and natural heritage management requires cooperation regarding agrarian land use versus development of nature, and sustainability in tourism, agriculture, and urbanization. In this light, workers in the three heritage sectors do see the need for an integrated cultural and natural strategy for planning and therefore transdisciplinary ANHER courses would be welcomed by the industry. Especially since natural heritage organizations nowadays are dealing more often with the values of cultural and archaeological heritage.

- Integrated courses must be pragmatic and targeted at joint issues in safeguarding historic landscapes mainly through planning.

- The learning needs focuses on practical information and skills for experts. This is a logical result because experts were targeted for this survey. However, the relationship between
heritage and the role of the public and local groups is one to develop in the Netherlands. This raises the question regarding the limitations as to whom can do the ANHER courses; the professionals within the field of the three heritage domains with the possibility to include the interested and highly educated public?

- The Erfgoed Academie is an existing VET platform of high quality for heritage and planning, however they focus mainly on cultural heritage. The production of new learning materials from the ANHER project should be well defined against the existing programmes of this platform.

- While certificates were available for most of the best practices from the three heritage sectors, they were not deemed as very important for completion of a course by the questionnaire respondents as much as the knowledge gained from the courses themselves were. Thus, certification should not be considered as a high priority for the ANHER project.

Annex I: Publications (English)
Annex II: Good practices (English)
Annex III: Interviews (Dutch)