

Gender Equality Report Reporting Period 1

Author: Heleen Claringbould

A.11. S. 14. 20 (11) 10 1



www.iSQAPER-project.eu

Report number: 05 Report type: Document Issue date: December 2016 Project partner: Corepage Version: 1



DOCUMENT SUMMARY	
Project Information	
Project Title	Interactive Soil Quality Assessment in Europe and
	China for Agricultural Productivity and
	Environmental Resilience
Project Acronym	ISQAPER
Call identifier	The EU Framework Programme for Research and
	Innovation Horizon 2020: SFS-4-2014 Soil quality
	and function
Grant agreement no:	635750
Starting date	1-5-2015
End date	30-4-2020
Project duration	60 months
Web site address	www.isqaper-project.eu
Project coordination	Wageningen University
EU project representative & coordinator	Prof. Dr. C.J. Ritsema
Project Scientific Coordinator	Dr. L. Fleskens
Eu project officer	Ms Arantza Uriarte Iraola
Report Information	
Report title	Gender Equality Report – reporting period 1
Author	Heleen Claringbould
Author email	info@corepage.org
Work package	WP1
WP lead	Wageningen University
Nature	Public
Dissemination	Report
Editor	L. Fleskens
Report due date	-
Report publish date	December 2016
Copyright	© iSQAPER project and partners



participant	iSQAPER Participant legal name + acronym	Country				
1 (Coor)	Wageningen University (WU)	Netherlands				
2	Italy					
3	3 Research Institute of Organic Agriculture (FIBL)					
4	Universität Bern (UNIBE)	Switzerland				
5	University of Évora (UE)	Portugal				
6	Technical University of Madrid (UPM)	Spain				
7	Institute for European Environmental Policy (IEEP)	UK and Belgium				
8	Foundation for Sustainable Development of the Mediterranean (MEDES)	Italy				
9	ISRIC World Soil Information (ISRIC)	Netherlands				
10	Stichting Dienst Landbouwkundig Onderzoek (DLO)	Netherlands				
11	Institute of Agrophysics of the Polish Academy of Sciences (IA)	Poland				
12	Estonian University of Life Sciences, Institute of Agricultural and Environmental Sciences (IAES)					
13	University of Ljubljana (UL)	Slovenia				
14	National Research and Development Institute for Soil Science, Agrochemistry and Environmntal Protection (ICPA)	Romania				
15	Agrarian School of Coimbra (ESAC)	Portugal				
16	University of Miguel Hernández (UMH)	Spain				
17	Agricultural University Athens (AUA)	Greece				
18	Institute of Agricultural Resources and Regional Planning of Chinese Academy of Agricultural Sciences (IARRP)	China				
19	Institute of Soil and Water Conservation of Chinese Academy of Sciences (ISWC)	China				
20	Soil and Fertilizer Institute of the Sichuan Academy of Agricultural Sciences (SFI)	China				
21	CorePage (CorePage)	Netherlands				
22	BothEnds (BothEnds)	Netherlands				
23	University of Pannonia (UP)	Hungary				
24	Institute of Soil Science of the Chinese Academy of Sciences (ISS)	China				
25	Gaec de la Branchette (GB)	France				



Summary

Since EU has gender equality on the agenda, ensuring a more integrated approach to research and innovation, to help improve the scientific quality and societal relevance of the produced knowledge, ISQAPER is implementing this within its work program by starting with this inventory.

This report about gender equality in the first reporting period of iSQAPER, will mainly show us data about gender equality and gender diversity among the iSQAPER partners and stakeholders. And about the stakeholders' knowledge, ideas and wish to know more about soil improvement. In 2015 the case study sites were asked to do a questionnaire for the stakeholder identification from WP5.1. This year all iSQAPER partners filled the brief gender questionnaire.

The total number of staff working for the partners is 171 of whom 76 are women and 95 men. In percentages that is 44% women and 56 % men. Quite a good gender balance in personnel. The type of position is however outbalanced, more men work in higher academic positions.

A lot of information comes from the stakeholders from the iSQAPER case study sites. This is about the number of women and men stakeholders involved in the project case studies and about the type of stakeholders, meaning: size, is it a farmer or an institute; the area, do they work local or national; and the sector, are they a private individual or representing a government or a research institute? And about the roles of the stakeholders, about their aim to be involved as stakeholder, the type of information about soil they use for their work and what they want to know from the project.

To get a grip on the information, several figures are shown and comparisons are being made in the presentation at the plenary and in this report with a lot more information. The total number of respondent stakeholders is 234, 35 women and 169 men and 30 that were not issued gender disaggregated (not filled if they are a man or a woman, answered by a family or group or otherwise).

Although the stakeholder men are a majority (83% from total of 204) compared with the stakeholder women (17%), we know now that both men and women are mostly interested in soil quality improvement and sustainable land management.

Even though a minority, if the percentages are compared, proportional more women stakeholder in iSQAPER work for the public sector, more stakeholder men for the private sector. The stakeholder women work relatively more regional and local and stakeholder men more (inter)national. 67 of the stakeholders are land owner of whom 3 are women. Men are more into the farming, women relatively more in "other" topics related to soil.

There is more interesting content about the soil improvement practices, what the stakeholder aim at and what they bring to the project and hope to get from it. Which is mayorly about soil quality improvement and the application development. Still, we want to know more about how the women and men stakeholders interpret the soil quality and how we can work together to improve it.

In the next reporting period, more communication and data gathering, related with the SQAPP development and the gendered reasoning or indicators for soil quality, will give us more insight in the diversity and equalities to promote gendered approaches and advises, for an improved sustainable soil management and diverse insight in valuation of the soil.



Table of Contents

Su	mmary4
Та	ble of Contents5
1.	Introduction
2.	Results Partner questions
2	2.1 Partner numbers7
2	2.2 Balance research teams
2	2.3 Data gathering
3.	Results stakeholder identification10
3	3.1 Numbers stakeholders
3	3.2 Area
3	3.3 Topics and soil improvement practices
3	3.3 Roles
3	3.4 Sector
3	3.5 Aim
3	3.6 Information used
3	3.7 Information asked
4.	Gender disaggregated data
5.	Conclusion and follow up23
Re	ferences
An	nex 1 Questions gender equality25
An	nex 2 Stakeholder identification (WP5.1)25
An	nex 3 Numbers and type of position staff iSQAPER
An	nex 4 iSQAPER numbers case study stakeholders involved
An	nex 5 Aim stakeholders
An	nex 6 What info stakeholders use
An	nex 7 What info stakeholders ask from iSQAPER
An	nex 8 Data land rights Europe by FAO



1. Introduction

ISQAPER stands for: Interactive Soil Quality Assessment in Europe and China for Agricultural Productivity and Environmental Resilience. iSQAPER is analysing the gender aspects about the organizational structure of the project as well as project contextual issues, e.g. in relation to actions to improve the soil quality status and derive practical and policy related recommendations enhancing the soil environmental footprint in Europe and China. The development of the soil quality assessment tool (SQAPP), which is designed to improve conditions of soil, agricultural productivity and ecosystem services also relates implicitly to specific EU gender equality targets

The EU also has a gender ambition in Horizon 2020 noting that:

Gender is a cross-cutting issue and is mainstreamed in each of the different parts of the Work Program, ensuring a more integrated approach to research and innovation. Fostering gender balance in research teams, decision making and integrating the gender dimension in research and innovation content, helps improve the scientific quality and societal relevance of the produced knowledge, technology and/or innovation.

The expected impact is the increase of the scientific quality and societal relevance of produced knowledge, technologies, and innovations by integrating an in-depth understanding of both genders' needs, behaviours and attitudes. It also contributes to the production of goods and services better suited to potential markets. (EC 2016)

The operationalization of a gender plan, about the project consortium and the stakeholders, will be done in three sequential steps, ranging from i) a cross cutting project inventory at the start of the envisioned project, ii) development of targeted activities and related tools, and iii) regular monitoring and evaluation of gender equality within the iSQAPER consortium, as well as at a higher level, within the participating organizations. These 3 steps will consist of the following actions:

- 1. The first step is the inventory of gender equality among the partner teams and the Case Study Site stakeholders as was realized in Milestone 5.1. It gives insight in organizational aspects such as the numbers of women and men involved, how they are involved, positions, roles, ownership, and their needs. That can be read in this report.
- 2. The second step is about the gendered needs for the content development of the SQAPP application and of locally adapted gender friendly communication about soil value and soil improvement practices.
- 3. The third step will focus upon data and indicators that show difference in views and perceptions of male and female land users, for the selection and prioritizing innovative agricultural management practices for field implementation and policy making.

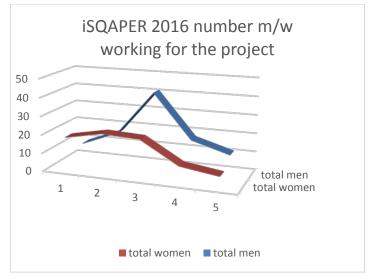


2. Results Partner questions

In putting together the iSQAPER consortium, a gender-sensitive approach was followed. Female scientists have been involved since proposal inception and are prominently represented in at least 14 out of 26 partner institutes. In the questions to all the partners it was asked how many people are working for iSQAPER and in what type of position. See questions in Annex 1.

2.1 Partner numbers

In total 171 people work for iSQAPER, 76 Women (44%) and, 95 Men (56%). The number of staff is quite balanced; however, the type of positions is outbalanced more men are at the higher academic (or project staff) positions, starting with the experienced researchers (number 3), see graph below.



1= other staff

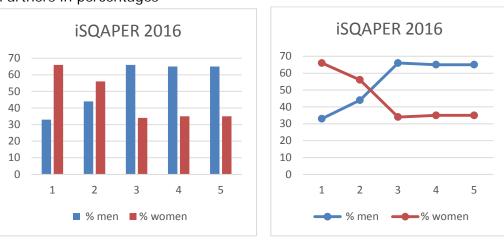
- 2= early researcher, < 4 years and/or PHD student
- 3= experienced researcher, 4 years>and/or PhD holder
- 4= scientific team leader or WP leader
- 5= scientific manager/coordinator

position number	1	2	3	4	5	Tot	%
total women	18	22	21	9	6	76	44
total men	9	17	41	17	11	95	56
total per position	27	39	62	26	17	171	100

When putting the numbers in percentages in a graph we see the following picture showing the percentages of women and men and when connecting them the "scissors"



appear, which is a figure that keep on showing up in M/W position division in Europe the past ten years (EU 2016). This is appearing due to several reasons and not easy to change but also a reason to keep working on the gender equality issue for reasons of equal opportunities and perspectives and preventing of new gender biases due to the project interventions. The numbers per partner are in Annex 3.



Partners in percentages

1= other staff

2= early researcher, < 4 years and/or PHD student

3= experienced researcher, 4 years>and/or PhD holder

4= scientific team leader or WP leader

5= scientific manager/coordinator

position number	1	2	3	4	5	Total
% men	33	44	66	65	65	56
% women	66	56	34	35	35	44

2.2 Balance research teams

All the partners were asked:

"Did you actively try to achieve and to keep a gender balanced project research team (involving men and women)? If so, how? If not, why not?"

In the following subchapters, the numbers between brackets are related to our iSQAPER partners.

"Yes", answered 8 partners. Four times it was a plain "yes" (6, 8, 15, 17) without many explanations. One yes, gender balance is achieved, (if scientific competence is secured) (2), and a "yes, within the possibilities of available expertise in the organization" (10) and a "yes, however staff is fixed, difficult to get female scientists" (19) and "Yes, but sometimes no choice." (18)



A few didn't answer with a yes or a no, but for example "selected on their credentials not for gender balance – but it did help to achieve a balance" (1). "Selection research team entirely on a scientific basis, both men and women experts in subject of the project." (13)

Or: "the team is not big enough to consider actively, choice is on competence rather than gender – but we achieve a balance." (3). "My organization is too small, there are no other people involved, but if I had the choice, I would take the balance into account" (21). "In our case, it is different because we work with the family for the project. Equal opportunities for men and women are important and it doesn't work without equal salary." (25)

No, we didn't actively try to achieve and to keep a gender balanced project research team, was mentioned 13 times. Some because they say it is "Not needed, already balanced" (4, 7, 16). And several times it is mentioned that it depends on availability and skills in area (5, 9, 11, 12, 14, 20, 23 and 24). "Not for project, but in the organization, yes" (22).

Concluding it is obvious that the scientific quality and expertise are the first selection criteria for the project teams. Sometimes it is necessary to create opportunities for women as well as men to enable them to join a project team. That start with the mobilization, the text of the vacancy the ones you invite to apply. Also, flexibility in schedules and travelling. There are a lot of creative solutions possible to facilitate people with high academic qualities to do their work properly and combine it with other life time requiring issues like care. (Work-life balance). We will later get into more detail about this.

2.3 Data gathering

The third question was: Did you gather any data for or related to the iSQAPER project that are gender disaggregated (M/W)?

Except from Corepage nobody really has gender disaggregated data, except a perspective from partner 22, Both Ends; "No, not yet. This will change when we commence with a transection analysis in the Netherlands."

And a suggestion came from Spain UPM (6) "The CIRCE project of the 6 FP had a very wonderful dataset on gender. However, the website of the project is no longer working. a link to the project is: http://www.iddri.org/Projets/CIRCE-Project-Research."

For information and inspiration suggestions are very welcome. When you gather stakeholder data or personnel data, if you can ask in the start if the respondent is a man or a woman, it will give a lot of information about gender equality in our project or in its context. We will continue with gathering this gender disaggregated data in the next project period and in the development of the application. In chapter 4 follows some more explication about gender disaggregated data, with input from the FAO world programme for the census of agriculture 2020.



3. Results stakeholder identification

The stakeholder identification was conducted using a **snowball sampling approach** adapted to the project situation from a similar initiative conducted in the EU-RECARE project (Leventon et al 2016). Meant to reach a diverse and relevant combination of stakeholders that are concerned with soil quality from different perspectives. A two-page introduction about why and how stakeholders can be invited for the project also mentioned diversity and gender balance as follows:

With the information about the stakeholders you can see if the stakeholders together cover the spectrum that you will need for the iSQAPER project. If issues are clearly missing you can try to find another stakeholder to cover that issue. Look at the **diversity** among them. There is no standard about the number of stakeholders to be involved. The following questions can help to find useful stakeholders:

- What do you/does the project want from the stakeholder?
 - Input for the project, experience with local land management, political, social, or economic knowledge or influence, presence at some meetings or events.
 - Formulation of needs referring to the project and especially the development of the app on soil quality, or testing the app.
 - Cooperation and knowledge sharing with the project, contact information
 - Suggestions for other stakeholders to be involved.
- How is the diversity among your stakeholders? To maximise the input:
 - Find **a balance of** old experienced and young people, **men and women**, small and large-scale land users, organic and conventional farmers, type of interest area, topic, role, sector, aim of involvement and types of land management.

In the questionnaire itself the first question is:

1.1 Please, fill	(man/women)		
In Chinese:	1.1	姓名及性□:	(男/女)
Most of the qu	uestionna	ires were translated in	the study site languages. See all questions in Annex 2.

This questionnaire resulted in many data filled by a man or a woman and shows their interests and questions that may be gender specific. All with the intention to know how the project can serve the stakeholders and vice versa to develop the best app in support of sustainable soil quality and gather a lot of knowledge. The stakeholder data about size, area, topic, role, sector, aim, information they use and information they want to know about soil are scheduled in matrixes as follows:

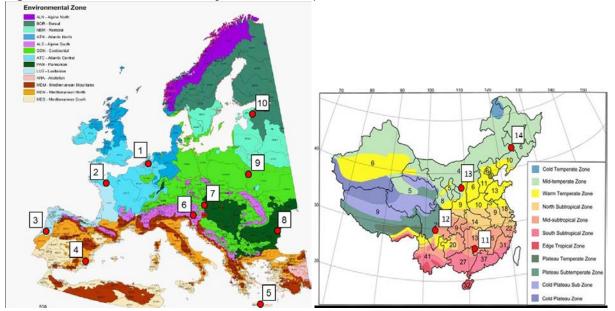
Schedule stakeholder identification

Stakeholder name m/w Question nr:	Size	Administra- tive area	Торіс	Role	Sector	Aim		Asked project information
(1.1, 1.2)	(1.3)	(2.1)	(2.2)	(2.3)	(2.4)	(2.5)	(2.6)	(2.7)

In this chapter, we show the results per question.



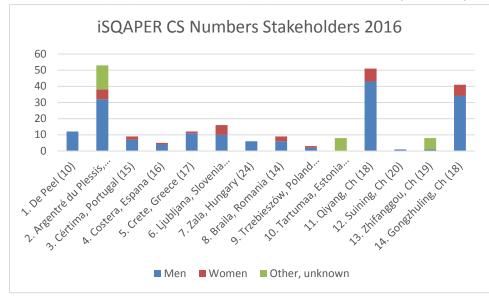
Figure 1. Location of Case Study Sites in Europe and China (DOW 2015)



3.1 Numbers stakeholders

The number of stakeholder (SH) women per case study (CS) varies from 0 to 8, men from 1 to 43, in total **234 stakeholders for iSQAPER** were identified. The **size** from the institutes represented by the stakeholders differ from 1 person (about 30 stakeholders) to more than 50 per stakeholder. Many of the Chinese stakeholders including the women are from agricultural institutes or villages that work with cooperatives representing more than 50 persons per stakeholder. That multiplies the number of stakeholders that are (in)directly related to iSQAPER. The respondents of the questions were 35 women and 169 men, 30 are not known because they were answered by families or not filled this question. See also the overview below. The relatively low number of women makes it hard to draw conclusions for upscaling, but at the project level it improves our knowledge.

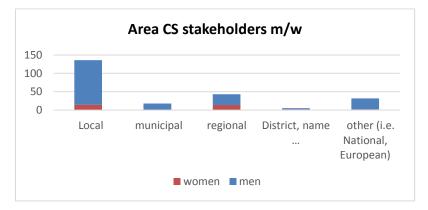
Stakeholder numbers Total 234, 30 gender not filled, counted total for percentage 204 of whom Women 35 (17%), men 169 (83%). See numbers per study site in Annex 4.



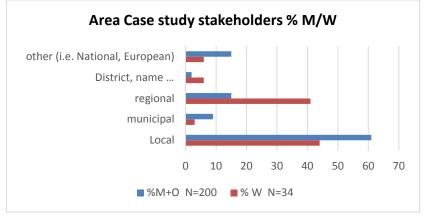


3.2 Area

The **areas** where the stakeholders work for differ from local (half of the stakeholders) to international (about 30 stakeholders). This is counted in numbers in total 136 working with the soil quality on a local level, of whom 15 women (11%), 43 stakeholders work on a regional level, 14 of them (represented by) women, on the (inter)national level work 32 stakeholders, 2 of them are women.



If we look at these numbers comparing the percentages among the genders separately, so how many of the women stakeholders involved are working on a local or a national level, the same with the percentages among the men (and others who involve families or colleagues), we get the next figure:



The N covers the total number of stakeholder respondents, including others for men

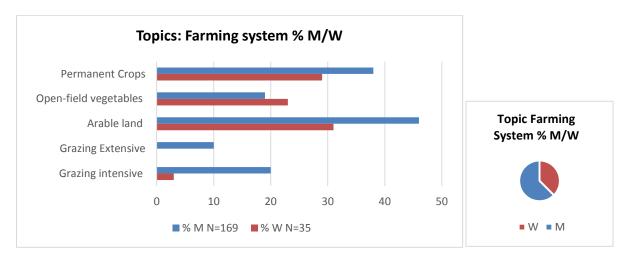
It shows that our women stakeholders mostly work in regional and local levels, men relatively more (inter)national and all the area levels are represented by the iSQAPER stakeholders.



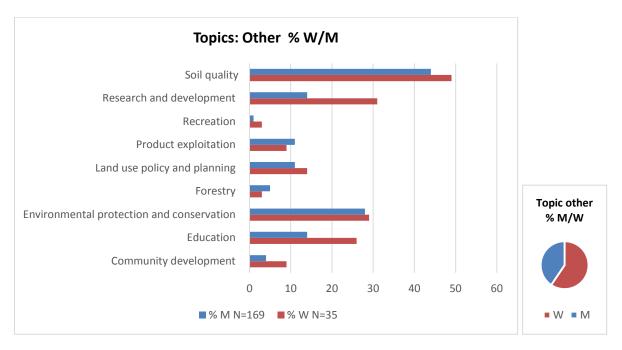
3.3 Topics and soil improvement practices

To the question: "What are the topics of your involvement in the project?", half of the stakeholders mention the "soil quality". Then the answers are focusing upon farming systems, other topics and soil improvement practices. The stakeholders cover all the mentioned farming systems whereas "arable lands" and "permanent crops" are most mentioned, followed by "open field vegetables" and "grazing intensive", as can be seen in the following graph.

Men, except from "open field vegetables", show higher percentages in farming systems especially in the grazing systems (Intensive and extensive). For the other issues the percentages of women in farming systems show nearly the same topics as the men.

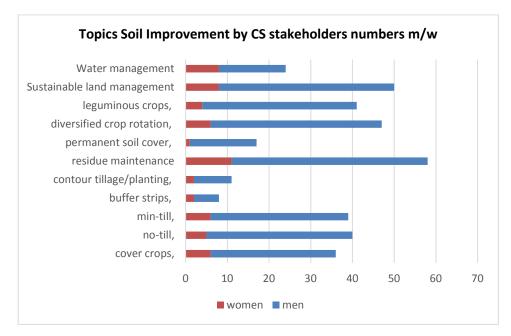


When we look at the "other topics", next to the high and similar percentages on "soil quality" and the "environmental protection and conservation", women show a higher percentage in "research and development" and "education". Women are more involved in these "other topics" than in the Compared to the farming systems women

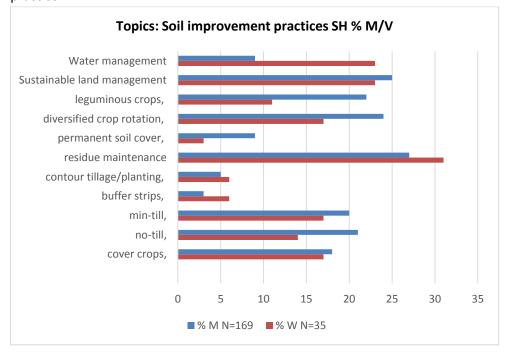




Concerning the "Topics" **soil improvement practices** that are used by the stakeholders, "sustainable land management" and "residue maintenance" score high. the issues like "leguminous crops", "diversified crop rotation", "min- and no-till" and cover crops are often mentioned. Interesting is the "water management" as can also be seen in the next graph. In this first graph, can be seen the numbers of men and women stakeholder implementing the soil improvement practices.



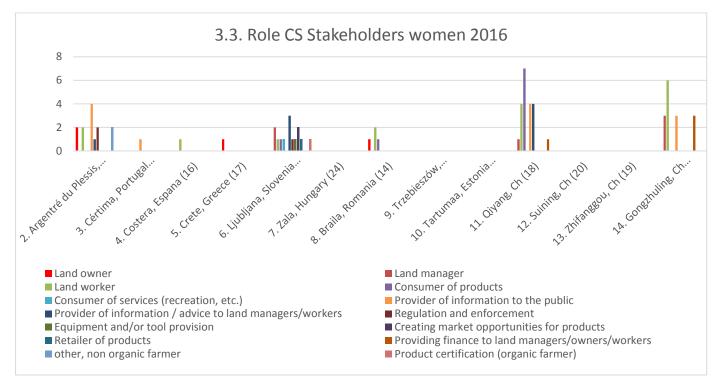
Looking at the percentages below shows that residue maintenance and water management is mentioned more among the stakeholder women than among the men. Sustainable land management shows a comparable interest from men and women. Among the men, a higher percentage of leguminous crops and diversified crop rotation is mentioned as soil improvement practice.



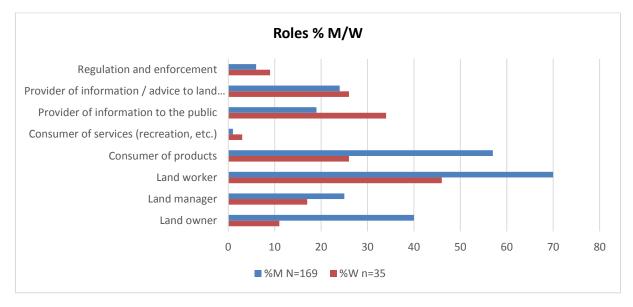


3.3 Roles

What role do stakeholders have in the project context? Is there a difference among roles from men and women stakeholders? The discussion here is not what women used to do in the different countries, it is about what they do as stakeholder in iSQAPER. This is interesting to know also when the roles would change due to the project we must know what impact it would have on gender division of roles and how to support the stakeholders towards a new solution where everyone benefits.



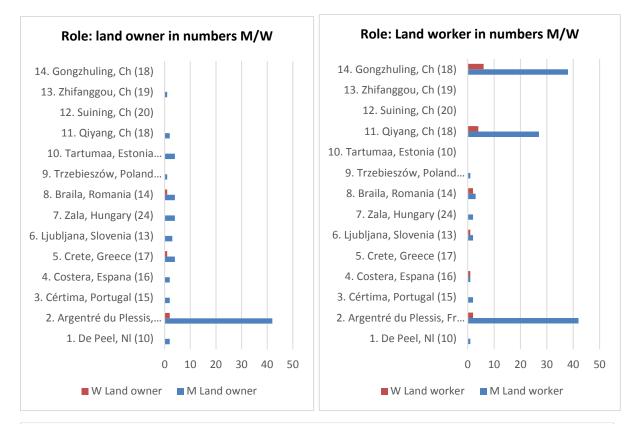
Half of the stakeholders are land workers, who at the same time can be the manager or the owner of the land, taking the decisions on the land use, the methods and approaches. There are also many information providers for farmers as well as for the public (relatively many women) involved in the project.

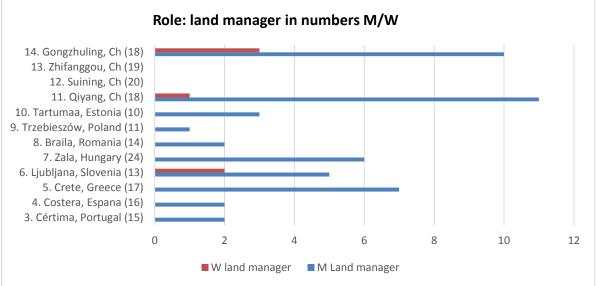




How about the role of land owner among our stakeholders?

Among our Chinese stakeholders 3 respondents out of 101 claim the role of land owner. 65 are land worker of whom 10 are women and 21 land managers of whom 4 women. In France, Greece, and Romania we count 4 women land owners. In total 67 male owners. The 42 owners in France are also the land workers. Total land workers are 119 (16 women) and total Land managers 49 (with 6 women).



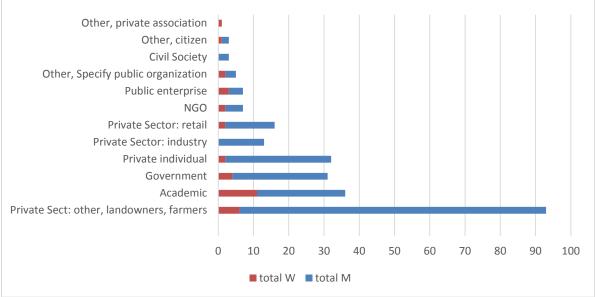




3.4 Sector

What sector do the stakeholders represent is about if they are representing private and public interest in the project? Is it an interest in making profit and/ or do they represent a branche or an association? Is it governemental or non-governemental? As we count the academics to the public sector we can conclude that: Among the stakeholder women twothird work in the public sector and half of them in the academics. The stakeholder men are most working for the private sector, as a landowner or a farmer, the part that works for the public sector is mostly for the government or the academics. The stakeholder men still outnumber the women.







3.5 Aim

The "aim" of stakeholders to participate in the project, is often about better understanding of the soil and its management. Many also mention the cooperation with the partners in the project and several mention the use of the app as their aim as a stakeholder in iSQAPER.

For most stakeholders mentioning their aim to participate in the project, it is to improve their knowledge about the soil. Some are more specifically interested in the sustainable soil management, among whom explicitly some women (From CS Portugal, Crete and Slovenia).

All the 15 Chinese women stakeholders (from 35 total women stakeholders) say that their aim in the project is to know more about the soil, soil information, soil nutrient information, soil improvement practices and soil fertility improvement.

Also, many stakeholders are looking for practical land use information how to improve crop production, fertilization, irrigation and conservation and soil protection.

Some stakeholders (one woman) want to know about support decision making and public policy. Several stakeholders are looking for cooperation and information sharing to provide to their land workers for example. Also, several want to know about the application if it will be useful to them.

The application (SQAPP) development was explicitly mentioned several times also by one of the women stakeholders. (CS Romania).

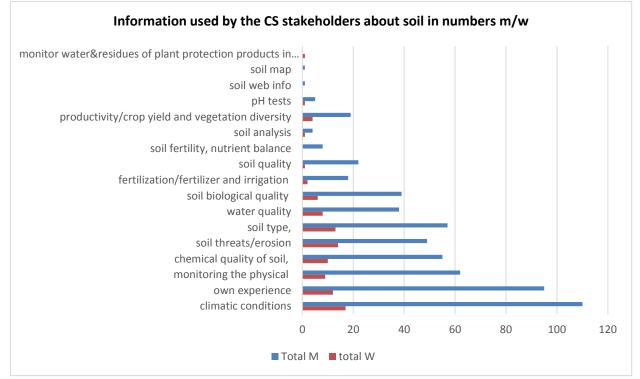
All mentioned Aims per stakeholder are in Annex 5.

Tot nr	11	20	130	16	5
				Knowledge	Knowledge
	app. Test new	Cooperation,	Knowledge	about soil	about soil
	tool	information	about soil	management	policies

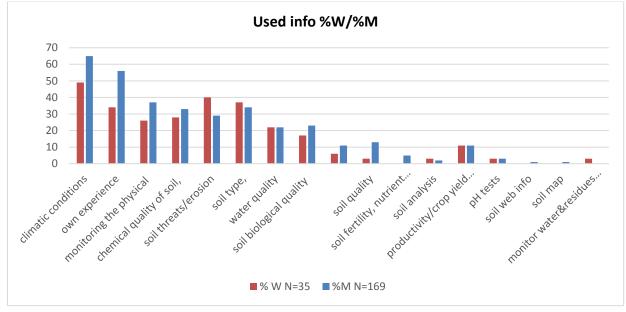


3.6 Information used

The question here to the stakeholder is: **What type of information about the soil do you use in your working area?** (Such as the type of soil, monitoring the physical, chemical, or biological quality of the soil, soil threats, climatic conditions, water quality, own experience). The information that the stakeholders use about soil is often their own experience, climatic conditions and they often monitor the physical, chemical, and biological condition of the soil, water quality and many other inventive and interesting measurements are being mentioned. For example, pH tests, soil web info, a soil map, monitor water& residues of plant protection products in soil. See overview information used per study site in Annex 6.



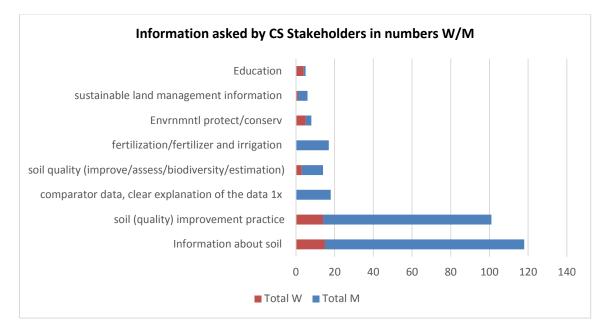
Percentages of the type of information about the soil used in the working area by the involved case study stakeholder women (N=35) compared to the % of men (N= 169) using the soil information.



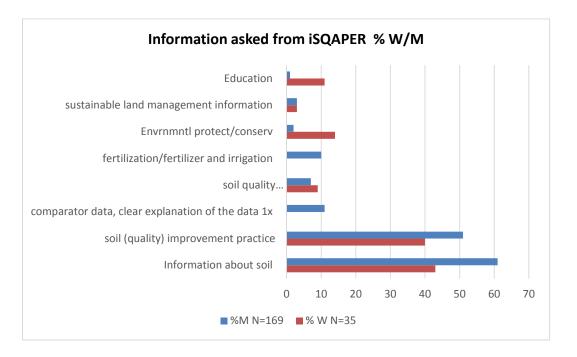


3.7 Information asked

The question to the case study stakeholders here is: What information could be useful to you from the iSQAPER project? It is mostly about soil and soil improvement practices. They ask for support from the project in their quest.



If we look at the percentages still both genders, M/W ask for information about soil and soil improvement practices. The percentage of women compared to men asking for information about education and about environmental protection and conservation comes mainly from one study site, this is important to pay attention to but not for mayor conclusions. See overview in Annex 7.





4. Gender disaggregated data

Through the stakeholder identification at the case study sites, the project shows a lot of gender disaggregated data, or data where a differentiation is made between answers from men and women. These data are necessary to enable research about gender diversity. This is also stressed by the FAO world programme for the census of agriculture 2020, (FAO 2015):

Household size by sex and age groups.

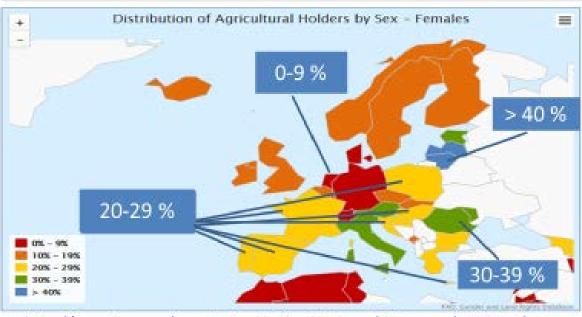
Essential item. The reference period: According to the de jure concept, the data on household size relate to persons who, at the time of the census, are usually resident in the household. The disaggregation of data by sex is a fundamental requirement for gender statistics.

The FAO has the national data about agricultural holdings which are:

"Typical structural data collected in a census of agriculture are size of holding, land tenure, land use, crop area harvested, irrigation, livestock numbers, labour and other agricultural inputs. In an agricultural census, data are collected directly from agricultural holdings, (...)" (FAO 2010)

These FAO data show us the context of the countries where we have our case study sites. From the countries for example in the map below we can see that in most of our case study site countries between 20% and 29% of the agricultural holders are women. In Estonia, it is 36% and in Switzerland and in the Netherlands, it is less than 9%. See the numbers and percentages in Annex 8.

Although the country percentages can differ from our study sites, it gives us some insight in the averages per country. This census will be updated in 2020. It could challenge us in reasonably balancing our stakeholders and keep men as well as women agricultural holders involved in our communication and application development.



Agricultural women Holders in Europe (FAO 2016)

http://www.fao.org/gender-landrights-database/data-map/statistics/en



In China, a few selected numbers in the FAO world census were as follows: Holders and members of their households engaged mainly in agriculture, T: 518.961.350, M: 272.181.013 (52%), W: 246.780.337 (48%) (-25.400.000 w) FAO world census 2000, China 1997

The holders of the agricultural households are well balanced between men and women in China. What does it tell us? It is difficult to relate this to the choice of our stakeholders. There will be a lot of differences in the areas of China and in our Chinese study sites. China is also rapidly changing. Most of our Chinese stakeholders (men and women) call themselves land workers or land managers. It is not about ownership, but who does actually take the decisions for changing the land uses? Who decides what is necessary to do to improve the soil quality? To get a better understanding, it will be good to share information and data about our soil management knowledge and uses.

It will be interesting to gather more gender disaggregated data with the Chinese partners. 15 from our 35 stakeholder women are from Chinese Case study sites. And for example, 9 of them are interested in residue maintenance (9 from 11 total). Most of the Chinese men and women stakeholders also want information on soil and soil improvement practices.

And what we want to know from both the men and from the women is how they look at their soil. What do they think is a good soil quality and what is for them an indicator that shows whether the soil quality is good or not?



5. Conclusion and follow up

To conclude, being a part of the iSQAPER project approach, gender equality has been started well by mobilizing excellent scientific researchers and gender balanced research teams together. Total staff is 171 of whom 76 (44%) are women and 95 (55%) men. The type of positions is outbalanced, more men in higher academic positions, which is a figure that keep on showing up the past ten years.

Among the stakeholders there are 35 women (17 % from 204), 169 men (83% from 204) and 30 who didn't fill their gender in the questionnaire. The gathered data about the type of stakeholders show us a rather well balanced group working for their farms, for agricultural and governmental institutes, partly private (more men) partly public (in percentage more women). Considering their roles, the stakeholders are mainly land workers, consumer of product and information providers. They are also proportionally more men, as are the land owners. Providers of information to the public are in percentages relatively more women.

The aim to be involved as stakeholder in the project is for the majority about better understanding of the soil and its management. The question about the "type of information about the soil, what they use in their working area", often show climatic conditions and own experience and a tiny little more women use information about soil threats and soil type. This is interesting for more research what exactly they use as indicator. The stakeholders also mentioned what they want to know from the project, mostly about soil and soil improvement practices.

The following steps for us to take will be about the gendered needs for the development of the SQAPP application. We will look for more indicators that help the stakeholders to recognize their soil quality and shows us difference in views and perceptions of male and female land users, which may influence the selection and prioritizing of innovative agricultural management practices for field implementation. This may open the perspective for research and more gender disaggregated data gathering and for further decision making.

Also, will be worked on locally adapted gender friendly communication and presentation materials, in the European and Chinese Case Study Sites to involve male and female stakeholders in the sustainable land management debate, and to encourage gender diversity and equality of opportunities within the change towards a sustainable land management and soil quality improvement.



References

All mentioned weblink pages available on 12-12-2016

DOW 2014 p.7 (Map sources: Europe - Metzger et al., 2005; China- Wu et al., 2010).

EC 2016: <u>http://ec.europa.eu/programmes/horizon2020/en/h2020-section/promoting-gender-equality-research-and-innovation</u>

<u>EU 2016:</u> She Figures 2015: Gender in research and innovation, p.126/127. <u>http://ec.europa.eu/research/swafs/index.cfm?pg=library&lib=gender_equality</u>

FAO 2010: http://www.fao.org/docrep/009/a0135e/A0135E04.htm

FAO 2015: FAO world programme for the census of agriculture 2020, THEME 8: DEMOGRAPHIC ANDSOCIAL CHARACTERISTICS 0801http://www.fao.org/3/a-i4913e.pdf p 101

FAO 2016: http://www.fao.org/gender-landrights-database/data-map/statistics/en/

Leventon et al 2016 <u>http://link.springer.com/article/10.1007/s11625-016-0385-1;</u> http://www.recare-hub.eu/



Annex 1 Questions gender equality

All iSQAPER partners: Questions on gender equality

partner name.....

1. Type of positions within your iSQAPER project team

	Number	of	Number	of
	Women		Men	
Scientific manager / coordinator				
Scientific team leader / work package leader				
Experienced researcher (> 4 years and/or PhD holder)				
Early researcher (<= 4 years and/or PhD student)				
Other staff, i.e				
Other staff, i.e				
Total number of women and total number of men in your team working for the iSQAPER project				

- **2.** Did you actively try to achieve and to keep a gender balanced project **research team** (involving men and women)? If so, how? If not, why not?.....
- 3. Did you gather any data for or related to the iSQAPER project that are gender disaggregated (M/W)? yes / no If so, can you send them to me by email or a link to these data?

(Except from the data for the stakeholder identification.)

Annex 2 Stakeholder identification (WP5.1)

iSQAPER study site? (F Stakeholder Question			
(Filled by a stakeholder	r)		
1. Basic information			
1.2 Name of your org	ganisation:		(man/women)
1.3 If you represent	an organisation, how	w many people does	it have?
□ 1	□ 2 - 10	□ 11 - 50	□ 50 and more
1.4. Contact details s Phone:		Website:	Address:
2. Stakeholders interes	st		
	community, name		
2.2. Topics of your in □ Farming system:	volvement? (Tic you	r topics and circle the n	nain topic)
	-	IArable land □Open-fie	ld vegetables □Permanent Crops



□ Education □ Environmental protection and conservation □ Forestry □ Land use policy and planning □ Product exploitation □ Recreation □ Research and development □ Soil quality □ Soil improvement practices such as: □cover crops, □no-till, □min-till, □buffer strips, □contour tillage/planting, □residue maintenance, □permanent soil cover, □diversified crop rotation, □leguminous crops, □ other □ Sustainable land management □ Water management □ Other, specify..... 2.3. Your role as stakeholder (tic your topics and circle the main topic) □ Land owner □ Land manager □ Land worker □ Consumer of products □ Consumer of services (recreation, etc.) □ Provider of information to the public □ Provider of information / advice to land managers/workers □ Regulation and enforcement □ Equipment and/or tool provision □ Creating market opportunities for products □ Retailer of products □ Providing finance to land managers/owners/workers □ Community leader □ Constructor (infrastructure and/or buildings) □ Product certification (e.g. organic, FSC) □ Other, Specify 2.4. Sector where you belong as a stakeholder □ Academic □ Civil Society □ Government □ NGO □ Private individual □ Private Sector: industry □ Private Sector: retail □ Private Sector: other □ Public enterprise □ Other, Specify 2.5. What is your aim as a stakeholder in the project? 2.6. What type of information about the soil do you use in your working area? (Such as the type of soil, monitoring the physical, chemical, or biological quality of the soil, soil threats, climatic conditions, water quality, own experience)

2.7. What information could be useful to you from the iSQAPER project?

(Information about the soil, about soil improvement practices, other)



Annex 3 Numbers and type of position staff iSQAPER

Q 1 type of p	osition	5 W I	5 M	4 w	4 M	3W r	3 M r	2 W	2 M	1 W	1 M	other		remarks	
Agroniem	Country											W tot	M tot		
1. WU	NI		1	1	2	1	2	1			1	3	6		
2. JRC	It /Hu				1	1						1	1		
3. FIBL	Swi				1	1		1	1	1	1*	3	3	*field tech	nician
4. UNIBE	Swi			1		1	1		1			2	2		
5. UE	Por		1					1				1	1		
6. UPM	Spain	1		1	1		4	2		1*		5	5	*administr	a ti ve
7. IEEP	UK, Bel	1	1	1		3* 1	4* 3	2				5	4		assistant
8. MEDES	lt		1	1		1	1	2		1		5	2		
9. ISRIC	NI				1	1	5		1		1	1	8		
10. DLO	NI						1	1	3	1	1	2	5		
11. IA	Pol		1			1	3	1				2	4		
12. IAES	Esto	1		1		2* 1	2	1	1	1	1	5	4	*same person coordi-	
13. UL	Slove			1	1	1	3					2	4	nator and t	eam leader
14. ICPA	Ro	1		1		4* 2	1			2		6	1		
15. ESAC	Por				1	1	1	1			1	2	3		
16. UMH	Spain	1				2* 1	2					2	2		
17. AUA	Gr		1		1			2	1			2	3		
18. IARRP	China		1		3	4	5	6	3	1*		11	12	*manager o	oflaborator
19. ISWC	Ch		1		2		2	1	2			1	7		
20. SFI SAAS	Ch		1		1		4* 2		1	3	1	3	6		
21.Corepage	NI									1*		1		*SME direct	or
22.BothEnds	NI	1				2	1			1*		4	1	*Controller	
23. UP	Hu		1	1	1				2	2		3	4		
24. ISS	Ch		1		1	1	2		1	2	1	3	6		
25. GB	Fr									1	1	1	1		
*person with s	econd role		11		17		41		17		9		95		
highest level re	ole counts	6		9		21		22		18		76		171	
												44%	56%		

From 5-1-2015 to 10-31-2016

5 W-Scientific manager woman

5 M-Scientific manager man

4 W-scientific team leader/work package manager woman

4 M -scientific team leader/work package manager man

3 W-Experienced researcher (> 4 years and/or PhD holder) woman

3 M-Experienced researcher (> 4 years and/or PhD holder) man

2 W-Early researcher (<= 4 years and/or PhD student) woman

2 W-Early researcher (<= 4 years and/or PhD student) man

1 W- Other staff woman

1 M- Other staff man

total Women

total Men



Annex 4 iSQAPER numbers case study stakeholders involved

	1. De Peel, The Neth (10)	2. Argentré du Plessis, France (26)	3. Cértima, Portugal (15)	4. Costera, Espana (16)	5. Crete, Greece (17)	6. Ljubljana, Slovenia (13)	7. Zala, Hungary (24)
Men	12	32	7	4	11	10	6
Women		6	2	1	1	6	
Other, unk	nown	15					
Total	12	53	9	5	12	16	6

	8. Braila, Romania (14)	9. Trzebieszów, Poland (11)	10. Tartumaa, Estonia (12)	11. Qiyang, China (18)	12. Suining, China (20)	13. Zhifanggou, China (19)	14. Gongzhuling, China (18)
Men	6	2		43	1	1	34
Women	3	1		8			7
Other, un	known		8			7	
	9	3	8	51	1	8	41

				N=204	N=204
	total W	total M	Total	% Woman	% Men
Men		169	169		83%
Women	35		35	17%	
Other,					
unknown			30		
			234		



Annex 5 Aim stakeholders

Study site (partner number between brackets), stakeholder number and subject mentioned (1xw) means 1x mentioned by a woman

1. De Peel, NI (10)

- 1.2 soil quality, influence of green fertilizer
- 1.4 everything related to soil
- 1.5 advise in agriculture, soil improvement, and soil manuring for farmers
- 1.6 interest in a good, vital soil as farmer
- 1.7 always working on technics for ground improvement and sowing
- 1.8 soil improvement through green fertilizer and crop rotation
- 1.11, 1.12 Advising farmers
- 2. Argentré du Plessis, Fr (26)
 - 2.22 better knowledge of his soil, (10x) practices improvement of the soil,
 - 2.30 After 20 years of organic farming, how are my lands Knowledge of my land
 - 2.32 soil evolution after analysis, He is using a special micro-organism called "Sobac".
 - He is using that product sine 12 years. He wants to know if it's still good to do it.
 - 2.35 better knowledge the potential of his land
 - 2.36 better knowledge of the soil, better productivity of the soil for a better environment
- (2x)
- 2.39 YES, better knowledge of the soil, fights against erosion, compare to other farm
- 2.40 Yes, work against rumex, thistle
- 2.41 YES, sustainable management land(2x), water quality (2x)
- 2.45 YES, soil evolution and practice
- 2.46 YES, water quality, soil analysis (4x), environmental protection and conservation
- 2.50 YES, soil analysis. He wanted to share his experience with others farmers who are using the same flora prairial.
- 3. Cértima, Portugal (15)
 - 3.1 Get information for support decision-making and public policy (1xw)
 - 3.2 Information of resilience indicators and their contribution to regional development
 - 3.3 Provide technical support regarding to wine production and its problems
 - 3.4-3.6 Have access to soil properties info and sustainable management practices (3xm, 1xw)
 - 3.7 Provide technical support and cooperation
 - 3.8 Provide support and technical information on soil and wine quality
 - 3.9 Provide technical support to researchers
- 4. Costera, Espana (16)
 - 4.1 To learn different sustainable managements of vineyards soils
 - 4.2 Improvements in soil managements and irrigation
 - 4.3 Results and soil sustainable management apps to spread with other SECS members
 - 4.4 Soil structure, microbiology and biodynamic management
 - 4.5 Assessing the effectiveness of the soil managements



5. Crete, Greece (17)

- 5.1 Sustainable use of land resources
- 5.2 Education
- 5.3-5.4 Soil protection (2x), fertility enhancement, carbon storage (2x)
- 5.5, 5.6, 5.8 soil quality (3x),
- 5.5, 5.8 Soil quality assessment (2x)
- 5.6, 5.7 Crop production improvement (2x, 1xw)
- 5.6, 5.7, 5.11-5.12 Sustainable soil use (4x, 1xw)
- 5.9 Techniques on crop production
- 5.10 Techniques on practices for soil improvement
- 5.11 Sustainable use of soils aiming in soil quality conservation
- 6. Ljubljana, Slovenia (13)
 - 6.1 Identification of appropriate indicators of soil quality related to environmental sustainability (1xw)
 - 6.2 Cooperation in successful end of the project
 - 6.3 To acquaint with tools for maintenance and improvement of good soil conditions

6.4 Participation in the points where friction occurs between the public supply of drinking water and farming on water protection areas (1xw)

6.5 To obtain further information on the characteristics of pollution of agricultural soils

6.6 Advice in determining soil parameters useful for producers of food and application in production (1xw)

6.7 Implementation of information for producers of vegetables in to practice, to increase the performance of the sector, the long-term cultivation of vegetables on the ground (soil) (1xw)6.8 Relationship between agriculture and nature conservation

- 6.9 Help in the formation of soil quality indicators relevant for improvement of
 - the soil cultivation practices, transmission of information from the practice
- 6.10 More information about soil and agriculture practices
- 6.11 Understanding and successful use of new production practices in agriculture
- 6.12 To get and to give as much knowledge about soils as possible
- 6.13 To get and to give information s about soil quality and sustainable management of soil
- 6.14 Providing information on irrigation equipment
- 6.15 Learning about the soil application developed in iSQAPER project
- 6.16 Get more information of soil management in organic production
- 7. Zala, Hungary (24)
 - 7.1-7.5 pilot area, data provider (5x)

7.6 Information on innovations in soil management, soil protection, their application in practice.

- 8. Braila, Romania (14)
 - 8.1 establishment of measures for soil quality improvement
 - 8.2, 8.3 information about soil quality 2x
 - 8.4, 8.8, 8.9 information 3x (2xw)



8.5, 8.6 participation and soil APP testing 2x (1x w)

8.7 establishment of measures for groundwater physical quality improvement

9. Trzebieszów, Poland (11)

9.1 management of the experimental fields

- 9.2 Presenting students with a task and results of the project on how to evaluate soil quality
- 9.3 management and control of the commune activity and development

10. Tartumaa, Estonia (10)

10.1-10.3 test an app 3x
10.2,10.3,10.6 get information, 3x
10.5 get a new tool
10.7, 10.8 improving efficiency of agricultural production (2x) in Estonia
10.8 environmentally friendly management

11. Qiyang, Ch (18)

11.x soil information 30x (7xw)
11.8, 11.12, 11.21, 11.29 crop adaptability, variety 4x (1xw)
11.x land management 12x
11.11, 11.20, 11.34, 11.41, 11.46 policy (Pest control, subsidy) 5x
11.x fertilization 10x
11.28 weeds and environmentally friendly pesticide 1x

12. Suining, Ch (20)

12.1 learn some advanced soil management technology and improvement practices, then provide information to land workers

13. Zhifanggou, Ch (19) soil management for crops

- 13.1 soil management for crops
- 13.2 land management
- 13.3, 13.6, 13.8 soil and water conservation 3x
- 13.4, 13.5 soil fertilizer 2x
- 13.7 soil conservation and reforestation

14. Gongzhuling, Ch (18)

- 14.x Application rate of fertilizer 10x
- 14.x soil information/soil nutrient information 20x (4xw)
- 14.x soil improvement practices 8x (3xw)
- 14.x soil fertility improvement 16x (2xw)
- 14.2 most want to get the advanced soil management practices or experiences of the EU



Annex 6 What info stakeholders use

Numbers are totals per study site (1-14)

Next to the numbers, between brackets, are numbers of women that mention the info asked per study site.

2.6 used info Study site Nr	1. De P	2. Arge	3. Cé	4. Co	5. Cr	6. Lju	7. Za	8. Bra	9. Trz	10.	11. Qi	12. S	13. Z	2 14. Go
climatic conditions	9	34 (1)	4 (1)		1	8 (2)	5	4 (3)	2	4	27(4)			29 (6)
own experience	5	37 (1)	5 (1)			3(1)	6	5 (2)	1	3	17(1)			25 (6)
monitoring the physical	10	19 (1)	5 (1)	1(1)	4	6(2)	5	1		7	5(1)	1		7 (3)
chemical quality of soil,	9	3	5 (1)	1(1)	5	6(2)	5	1	1	7	14(3)	1		7 (3)
soil threats/erosion	4		2 (1)		8	7 (4)	5		2	7	8(3)	1	1	18(6)
soil type,	10	2	2 (1)		2	9(3)	4	3 (3)	1	8	23(5)			6(1)
water quality	5	2	1(1)	2 (1)	3	8(4)		2 (1)	2	4	9(1)		4	4
soil biological quality	9	3			4	6(2)	4	1	1	3	7(1)			7 (3)
fertilization/fertilizer and irrigation				2 (1)	4 (1)						10		3	27 (4)
soil quality				1	2	2(1)						1	1	
soil fertility, nutrient balance					4	1				1	3(1)			
soil analysis		2		1		1		1 (1)						
productivity/crop yield and vegetation diversity				1	1						2			19(4)
pH tests		1						1			4(1)			
soil web info				1										
soil map						1								
monitor water&residues of plant protection products in soil						1 (1)								



Annex 7 What info stakeholders ask from iSQAPER

Numbers are totals per study site (1-14)

Next to the numbers, between brackets, are numbers of women that mention the info asked per study site.

2.7 (Summary of most) info asked														
	1. De P	2. Arge	3. Céi	4. Co	5. Cre	6. Lju	7. Za	8. Bra	9. Trz	10.	11. Qi	12. S	13. Z	14. Go
Information about soil	11	35 (1)			2	4	5	6 (3)			29 (6)			26 (5)
soil (quality) improvement practice	12	9 (1)	2(1)		5	8	2	5 (3)	1		28 (5)	2		27(4)
comparator data, clear explanation of the data 1x		18												
soil quality (improve/assess/biodiversity/estimation)		2 (1)			2	2			1	3	1		1	2 (2)
fertilization/fertilizer and irrigation						3	3					1		10
Envrnmntl protect/conserv		5 (4)	2(1)		1									
sustainable land management information			5(1)									1		
Education		5 (4)												
(impacts of current mobilization on) soil properties;			3(1)											
water quality/management		2 (2)						1						
Agricultural improvement				3 (1)										
Practices on soil and crop production improvement					2									
soil quality indicators (biological 1x)					2									
measures for soil tillages improvement								2						
How soil fertility can be maintained with the use of the SQApp	?						1			1				
How to increase water holding capacity and organic matter														
content and reduce acidity of soil?									2					
soil managemnt (Improving organic carbon)										1		1		
Sustainalbe and biodynamic agric improvements fruit orchard				2 (1)										
teaching explenations about soil		1												
Soil threats/erosion												1		
soil type		1												
soil fertility, nutrient balance, soil ecology	1												1	
soil analysis										1				
pH tests								1						
rooting of the plants		1												
Practices of sustainable soil use					1									
project (aims) information										1				
info about the land exploit in Europe												1		



Annex 8 Data land rights Europe by FAO

Gender and Land Rights Database FAO: female agricultural holders 2010

Gender and Land Rig			-
Country	Total	Female	% female
Austria	150,170	51,780	34.5%
Belgium	42,850	<mark>6,450</mark>	<mark>15.1%</mark>
Bulgaria	370,490	84,350	22.8%
Croatia	233,280	51,400	22.0%
Cyprus	38,860	8,010	20.6%
Czech Republic	22,860	3,450	15.1%
Denmark	42,100	3,770	9.0%
Estonia	19,610	<mark>7,020</mark>	<mark>35.8%</mark>
Finland	63,870	7,100	11.1%
France	516,100	<mark>117,120</mark>	<mark>22.7%</mark>
Germany	299,130	25,220	8.4%
Greece	723,060	200,070	27.7%
Hungary	576,810	<mark>151,870</mark>	<mark>26.3%</mark>
Iceland	2,590	400	15.4%
Ireland	139,890	16,120	11.5%
Italy	1,620,880	<mark>497,850</mark>	<mark>30.7%</mark>
Latvia	83,390	39,010	46.8%
Lithuania	199,910	95,360	47.7%
Luxembourg	2,200	350	15.9%
Malta	12,530	1,390	11.1%
Montenegro	48,870	6,290	12.9%
Netherlands	72,320	<mark>4,420</mark>	<mark>6.1%</mark>
Norway	46,620	6,560	14.1%
Poland	1,506,620	<mark>448,120</mark>	<mark>29.7%</mark>
Portugal	305,270	<mark>89,370</mark>	<mark>29.3%</mark>
Republic of Moldova	902,214	327,689	36.3%
Romania	3,859,040	<mark>1,248,580</mark>	<mark>32.4%</mark>
Serbia	778,891	141,182	18.1%
Slovakia	24,460	4,710	17.0%
Slovenia	74,650	<mark>20,340</mark>	<mark>27.2%</mark>
Spain	989,800	<mark>214,380</mark>	<mark>21.7%</mark>
Sweden	71,090	10,950	15.4%
Switzerland	59,070	<mark>3,820</mark>	<mark>6.5%</mark>
United Kingdom	186,800	<mark>24,490</mark>	<mark>13.1%</mark>
isoADER countries C	S nartnarc i	n <mark>vollow</mark>	

iSQAPER countries CS partners in yellow

countries other partners iSQAPER in blue

Source: Eurostat (agricultural censuses) FAO 2016