Technologies for Water Recycling and Reuse in Latin American Context: Assessment, Decision Tools and Implementable Strategies under an Uncertain Future

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Gender Equality Report

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PREFACE

This report was made with the numbers and remarks of all the partner research teams of COROADO. I want to thank you all for your cooperation. Without your contributions it would be impossible to make such a realistic and open view on the gender equality issues concerning COROADO in its organization and its research practice. Especially I want to thank the research teams from the study site areas of Argentina, Chile, Mexico and Brazil for their valuable and detailed additions to the questions. There is still a lot to be done in gender equality in research at work and at the study sites and this cooperation helps to enjoy it and look forward to the highlights in the next project period.

SUMMARY

Women as well as men are involved in this COROADO project at all levels and positions. Generally there is a gender balance in the project, and there are opportunities and circumstances at work that help to keep the balance. Still awareness for the gender balance is not always there. Gender equality is often ignored as an issue. Where data are gathered, they are not always gender disaggregated, which makes it difficult to see if gender discrimination appears or changes. Some estimated balances may change in time unnoticed to outbalanced situations. And the existing outbalanced situations are taken for granted while one could start to change it, when it is clear where the differences come from. Schooling and career opportunities, conditions at the work place, contacting and informing a broad scope of stakeholders taking into account the access and gender roles in water supply and sanitation. And involve the broad spectrum of stakeholders in the gender disaggregated data gathering and monitoring of the improvements to be implemented like a reuse water supply and sanitation system.

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1 INTRODUCTION

The objective of COROADO is to assess water recycling and reuse technologies and provide solutions for water supply and sanitation in rural and agricultural areas in Latin America. An appropriate gender balance will help to inform the design and implementation of research. Therefore COROADO has a Gender Action Plan to promote gender equality.

> "Equality entails a legally binding obligation to ensure that everyone enjoys equal enjoyment of her or his rights. Equality does not imply treating people who are unequal equally; it does not indicate identical treatment in all cases. Substantive equality requires a focus on all groups in society experiencing direct or indirect discrimination, and the adoption of targeted measures to support these groups when barriers persist, including affirmative action or temporary special measures"(UN 2014a)
>
> Gender equality is a societal responsibility and requires the involvement, actions, commitment and will of everyone for it to become a lived reality for all." (UN 2014b)

This report gives the results from the second COROADO gender monitor for the EU after 36 months. In May 2013 the first COROADO gender interim report was made, based on responses from all the project partners. In November 2013 a presentation of the results was given in the COROADO plenary meeting in Cordoba, Argentina.

The questions for this second report refer to the recommendations from the first gender report and the presentation, these include: mobilizing a gender balanced research team (with a changing team) and organizing work-home balanced working conditions. For the study site it includes mobilizing a gender balanced representation of stakeholders for the workshops and collecting gender disaggregated data about the study sites and access to the water supply and the gender equal communication with stakeholders.

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2 RESULTS GENDER FROM COROADO 1ST PROJECT PERIOD

In the first 18 months COROADO has a gender balanced staff in average, this is a good start for the gender equality action plan. Eight of the thirteen teams are gender balanced. The higher positions however are more covered by men. This is a similar picture as the average of University staff as measured in Europe and USA. The respondents pointed out that not for all the involved COROADO institutes part time work , paternity leave, all year work place nursery, equal payment or even respect is normal at the working floor, they are still desired.

In the research case study sites men dominate in water supply and sanitation. Water powers appear to have more men than women according to the theories (Zwarteveen 2011) and this is also the experience of two of the COROADO partners that work with stakeholders (PUC, TDC). However their workshops held for stakeholders in the COROADO research were gender balanced.

For the COROADO project Gender Action Plan (See Annex A) in general, the recommendation is to keep mobilizing a gender balanced team (when the team changes) and keep the good quality of the team by adapting the available family friendly working conditions. Also activate gender balanced participation with special workshops or training. Use your awareness of gender inequalities in research, data gathering and product development.

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3. WATER AND GENDER IN UN AND EU PERSPECTIVE

Gender equality is not only an effort where the COROADO project works on, it is an insight that helps us to improve life in all aspects and is not yet self-evident. As UN special rapporteur says about gender equality in water supply and sanitation:

> "In order to reach equality of water and sanitation service provision, States must work towards eliminating existing inequalities. This requires knowledge of disparities in access, which typically exist not only between and within groups with different incomes, but also between and within rural and urban populations. There are further disparities based on gender and the exclusion of disadvantaged individuals or groups."(UN 2014c)

The United Nations Millennium development goals.

The implementation of the Millennium Development goals started in 2000 when the UN world leaders agreed on a vision for the future to uphold the principles of human dignity, equality and equity, and free the world from extreme poverty. In this context I focus upon the 3rd goal about "gender equality and women empowerment" and especially the issues labour market, family friendly working conditions and political participation. What results were measured and what conclusions are drawn for the follow up after 2015? (UN 2014d)

> …The proportion of women in part-time employment is more than double that of men in almost all countries where data are available. ... One of the indicators that measures gender disparity in the labour market is the time-related underemployment rate. It measures the percentage of employed men and women who are willing, and available, to work additional hours. In most developing regions, the time-related underemployment rate for women is higher than that for men.
>
> …These higher part-time employment rates are associated with a number of factors, including gender inequality in family roles, the absence of adequate and affordable childcare and elderly-care facilities, and/or other social perceptions which play a

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> significant role in the participation of women in employment, in their occupational choices, and in the employment patterns that reinforce gender disparities in the abour market.
>
> (…)This calls for more family-friendly policies, which not only encourage a better work-family balance, but also enhance the quality of part-time jobs and improve overall business productivity. The policies include legislation on flexible time, parental leave, other codes of conduct and new working practices, as well as childcare and elderly-care facilities.
>
> (…) Women's access to paid employment in non-agricultural sectors share increased globally from 35 per cent in 1990 to 40 per cent in 2012, with increases, although unequal, observed in almost all regions.
>
> (…)The percentage of women in ministerial posts at the executive level of Government reached 17.2 per cent in 2014, up from 16.1 per cent in 2008. By January 2014, there were 36 countries with 30 per cent or more female ministers. (…)Meanwhile, the percentage of female Speakers of Parliament has barely risen—from 14.2 per cent in 2012, to 14.8 per cent in 2013—suggesting that there may be a glass ceiling for women in some countries.

The UN Secretary General concludes about gender equality and the progress on Millennium Development Goals beyond 2015:

> "The evidence is clear: equality for women means progress for all," which underscored that empowered women lift up society as a whole: countries with more gender equality have better economic growth; "(…) This simple truth must be central as we work to accelerate progress towards the Millennium Development Goals [MDGs] by next year's deadline and craft an agenda for the years beyond 2015". (UN 2014e)

EU has gender equality as an issue in the 7th Framework Program (FP7) stating that

> "The integration of the gender dimension and gender equality will be addressed in all areas of research." (EP & CEU, 2006)

In the programmes in Horizon 2020, gender is addressed as a

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"…cross-cutting issue in order to rectify imbalances between women and men, and to integrate a gender dimension in research and innovation programming and content. (…) The gender dimension is explicitly integrated into several topics across all the sections of the Work Programme. An in-depth understanding of men and women's needs, behaviours and attitudes contributes to the scientific quality and societal relevance of produced knowledge, technologies and innovations. It also contributes to the production of goods and services better suited to potential markets." (EC 2014)

And as stated in the Treaty on European Union

"*The activities developed under Horizon 2020 should promote equality between women and men in research and innovation, by addressing in particular the underlying causes of gender imbalance, by exploiting the full potential of both female and male researchers, and by integrating the gender dimension into the research and innovation content as well as by paying particular attention to ensuring gender balance, subject to the situation in the field of research and innovation concerned, in evaluation panels and in other relevant advisory and expert bodies in order to improve the quality of research and to stimulate innovation. Activities should also aim at implementation of principles relating to equality between women and men as laid down in Articles 2 and 3 of the Treaty on European Union and in Article 8 TFEU".* (EC 2014)

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4. APPROACH 2ND PROJECT PERIOD

In the project months of the 2nd project period (18-36 months), the monitor continues with the subjects discussed in this first report; the awareness of gender equality in mobilization, stakeholder participation, monitoring, gender data gathering, appropriate technologies and equal working conditions. New focus is put on experiences with information dissemination, networking, and stakeholder gender stories. To gather the information all project partners are asked to answer to the questions and the study site partners are asked to fill some extra information on the study sites. (See Annex B)

Another part of the approach is to ask students from the Wageningen University & Research Centre to find out some gender and water related issues within the COROADO project context. Two students were able to work on this. One went to Cordoba, Argentina and the other to Copiapò, Chile. One so far resulted into an MSc thesis. Another approach was to join myself the plenary in Cordoba, Argentina, giving a presentation on the gender equality results of the first project period, to meet several project partners, better understand the project content and guide the first student at the same time. It gave some opportunity to talk to several partners about gender equality in their work situation.

The COROADO partners find it generally self-evident to have men and women in the team or stakeholder group. The gender action plan is to challenge this awareness and stimulate improvement of the gender balance where necessary, even where it was tried and failed.
All partners responded cooperative.

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5. RESULTS GENDER BALANCE IN RESEARCH TEAMS

The gender balance of the teams gives an insight in the diversity of project and the equal opportunities for man and women. The first three questions are about the gender balance in the project team, about the personnel involved in COROADO, their type of position within the project, the gender balance within the teams and their working conditions.

5.1. TYPE OF POSITION

The results for the type of position in the second project period and between brackets the first project period are given in the schedule below. A more detailed version is in Annex C.

5.1 Overview type of position COROADO

Type of Position project team COROADO 2014	**Nr of Women 2014 ('13)**	**Nr of Men 2014 ('13)**	**Total 2014 ('13)**
Scientific manager/coordinator	3 (1)	6 (7)	9 (8)
Scientific team leader / work package leader	4 (5)	8 (9)	12 (14)
Experienced researcher (> 4 years and/or PhD holder)	13 (19)	28 (24)	41 (43)
Early researcher (<= 4 years and/or PhD student)	13 (17)	15 (16)	28 (33)
Other staff	10 (9)	2 (6)	12 (15)
Total number of women and total number of men in your team working for the COROADO project, percentage	43 (51) 42% (45%)	59 (62) 58% (55%)	102 (113) (100%)

Total staff working for COROADO in 2014 is 102. These are 43 (42%) women and 59 (58%) men. This means the total staff has a gender balance. Same as in the first project period 8 from the 13 teams are gender balanced. Two more women scientific manager/coordinator were there compared to the first project period. In total 11 people less working for the project, of whom 8 women less and of them 6 experienced researchers.

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5.2. GENDER BALANCE IN THE PROJECT TEAM

The question is about action taken to get to a gender balance: **Did you do something for the gender balance in your project team? If so, what did you do?**

(The numbers between brackets refer to the project partners, see in Annex 3)

Two answered yes, followed by:

> *"I hired a woman as researcher/project engineer. Unfortunately she moved back to Switzerland."* (7.) And: "*Although the project team is balanced we always promote equal opportunities in our projects; as a consequence, we incorporated a female accountant in our staff. No gender issues within the working group have been reported or insinuated*" (12.)

One answer is "no" however they explained they did have an action for a gender balance which ended not successful;

> *In the first period of the project, a female PhD candidate was attached to the project. Unfortunately, based on personal grounds, she stopped with the research and is now working at a consultancy firm*. (9.)

Most teams (10 times) said "No" they didn't do an action for a better gender balance, because...

> "*We have not done anything more specific for the gender balance. Our personnel consists of 2 women and 6 men. Every time that new personnel was needed, the interest of men was bigger than the women's, thus there are more men in our team than women. This reflects the relevant qualifications of the applicants, as well as their competence in the field, disregarding their gender"* (1.) *"We have not actively pursued gender balance; our COROADO team has been quite balanced throughout the Project."* (5.)
>
> *"The team was formed based on the availability and capability of the individuals." (6. USP)*
>
> *"The main reasons are that the company comprises only from 4 people and the company established just in 2006. The youth of the company and the small market of Cyprus do not allow increasing the stuff of the company. Moreover the majority of the people that*

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involved with these Technologies in Cyprus are men although this is something that is changing and we will are very happy about." (8.) *… "We continue with original plan."* (11.)

So, the subject is not ignored, but the situation is sometimes taken for granted, or at least no urgency is signaled here. By answering the questions there is some gender awareness raised.

5.3. WORKING CONDITIONS

In the first project period we could learn something from the mentioned conditions in the working place. Issues like flexible working hours, part time work and day care are mentioned by the partners. The respondents even point out that not for all the involved COROADO institutes part time work , paternity leave, all year work place nursery, equal payment or even respect is normal at the working floor, they are still desired. That is why the same question about **family friendly working conditions** is repeated more or less for this second reporting period.

Several working condition are already applied for the partners. For example five mention the flexible working conditions. Some mention national regulations (Norway, Chile):

In accordance with the Norwegian law, a one-year maternity period is offered to women. (9)

Our institution follows the national regulations regarding working hours for pregnant women and recent moms (3 months pre and post birth). (7)

Some mention existing institutional regulations (CSIC, USP, and FHNW) about gender equality:

Working conditions in the CSIC team are family friendly: flexibility in the working hours and the possibility of organize and freely plan our holidays. Family friendly working conditions are important in our environment. Our institution has implemented such conditions in a positive way. (3)

This team is managed so to accommodate all personal issues as much as possible. Hours and schedules are very flexible. The University of São Paulo has many benefits to

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employees that relate to family issues, including health, family leave and grocery cards and bus passes. (6)

The institute of our research group in Switzerland (FHNW) had less women than men and unequal careers comparing women and men, so they decided to improve the equality in chances and make a Gender Action Plan with the following highlights for 2013-2016 (10) http://www.fhnw.ch/ueber-uns/gleichstellung/ *:*

- *5% more women in leading positions and professors*
- *5% improvement in the working balance opportunities*
- *A family friendly high school*
- *Making a concrete diversity policy for FHNW*
- *Secure and expand the working balance*

These special action plans are an attempt to make a difference in a practice that doesn't change easily. Although most partners express satisfaction with their working situation;

We usually work in the morning hours in the University, but there is always the flexibility to work from home in various times of the day. Maternity leave is taking place when needed and this is common practice in Greece. In the University there are not available childcare or elderly care services for working families (1)

There is still room for improvement. However, our conditions are clearly better than the local average (3).

…Additionally our engineers, regardless their gender, receive the same salary, which is dependent then on merits and years of experience. Finally our department of hydraulic and environmental engineering has a high percentage of female graduate students (around 50%). Thus offices and activities in general are very balanced from the gender point of view. (7)

We have flexible hours that permit accommodate specials needs for our working mothers (ten). There are other friendly working conditions already regulated (e.g.: maternal leaves, "feminine day", periods for breast feeding, maternal care, etc.). (12)

Still there are some improvements mentioned, this is about child care and elderly care (1), young people on the job who can easily travel (2) part time work and workplace nursery (5).

And from a broader societal perspective:

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(...) there are needs to help single parent families (single mothers with one or more children) to take care of their children and their education without leaving behind their progress possibilities (right now is mainly done through the extended family network). Due to the economic recession single parent families are in a much more vulnerable condition. Present situation require both parents (if they are present) to work (and elder siblings too). (12)

See an overview of the working conditions in Annex D.

COROADO UC 2012 **TDC Policy Makers, W&S Mgrs., Farmers & Participants, WS 1**

And, as the world economic forum explains about the economic success of gender measures in the work-life balance:

> While many developed economies have succeeded in closing the gender gap in education, few have succeeded in maximizing the returns from this investment. The Nordic countries are leaders in this area too–all five countries feature in the top 25 of the Economic Participation and Opportunity sub index. This occurs due to a combination of factors: the labour force participation rates for women are among the highest in the world; salary gaps between women and men are among the lowest in the world, although not non-existent; and women have abundant opportunities to rise to positions of leadership. These patterns vary across the Nordic countries, but, on the whole, these economies have made it possible for parents to combine work and family, resulting in high female employment, more shared participation in childcare,

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more equitable distribution of labour at home, better work-life balance for both women and men and in some cases a boost to declining fertility rates. Policies in some of these countries include mandatory paternal leave in combination with maternity leave, generous federally mandated parental leave benefits provided by a combination of social insurance funds and employers, tax incentives, and post-maternity re-entry programs. (WEF 2013a)

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6. RESULTS GENDER BALANCE STAKEHOLDERS

Chapter 6 gives us a view on the gender balance among and in interaction with our stakeholders from the case study sites. We want to know if we reach a diverse group of relevant stakeholders for the project purpose, concerning the balance between men and women.

6.1. STAKEHOLDER PARTICIPATION

The question here is about the amount of men and women stakeholders that did participate in the 1st and 2nd workshop. The gender balance in the stakeholder participation in the second project period is probably not very different from the first, unfortunately three of the workshops are held at the end of October and have to be worked out so they can't be compared yet.

In the Brazil case there were two more women participating in the second workshop (9>11) and 5 men less than in the first workshop (13>8). Mexico estimated a decrease of participants by half for both sexes, from 9>5 women and from 94>45 men. Chile and Argentina had quite balanced numbers in their 1st workshops (respectively 13 women and 18 men and 55% women and 45% men), the numbers from the 2nd workshops will follow.

The participation among men and women stakeholders is balanced, only TDC has far less women than men participating. We can relate this to the TDC respond to the next question about roles, showing a low participation of women in different levels.

6.2. STAKEHOLDER ROLES

The role of women and men stakeholders is important to understand when we want to apply changes in the system. Gender equality is about giving the same opportunities to men and women. When we change the existing situation even with only research activities, we want to know if the roles of the involved stakeholders and end users* are changing or bring new chances. *(For example: policy makers, water and sanitation managers, land owners or farmers helping monitoring practices, doing needs inventories communication and networking). If we ignore the role division, the changes might lead to missed opportunities and unnoticed gender outbalances. That is one of the reasons to incorporate this gender monitor into research projects.

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In respond to the question about the division of roles from stakeholders in water management, Brazil and Argentina made estimations:

> There is a mix of policy makers, technical people, industry representatives and sanitation industry, for both sexes. (6.)
>
> The number of male and female researchers is balanced. As for political officers or the directors of the agencies, there is a higher percentage of men than women (with a tendency to become more equal), not being this important in the area of water, but little gender difference is more apparent in the area of agricultural activities (usually more male dominated). (12)

Chile has a clear picture of the gender roles of the women stakeholders in the project:

> There is a variety of roles among women stakeholders: research: 2; Regional Industry and competitiveness association: 3; regional government: 1; Farmers´ Association: 3; Mining water users: 1; Water authority: 1; NGO related to water: 2 (7.)

TDC Mexico overview from the involved stakeholder in percentages:

11. TDC Role / Level	**Men**	**Women**
policy makers	95%	5%
water and sanitation managers	95%	5%
land owners or farmers helping monitoring practices	100%	
doing needs inventories communication and networking	80%	20%

From the information one can conclude the same as with the stakeholder participation; women are rather equally involved as men at the different levels of the water supply

6.3. GENDER INFORMATION GATHERING

The importance of gathering gender disaggregated data is stressed by UN as follows:

> The principles of non-discrimination and equality oblige States to look beyond… disaggregated data are essential in order to fully understand where and how

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> discrimination occurs with respect to access to the human rights to water and sanitation…(UN 2014f)

In this subchapter we look at the gender disaggregated information concerning the acceptance of reuse water supply. If one wants to know about the acceptance of reuse water it is interesting to see if there are differences between men and women, because if it shows differences, the information could be adapted towards the target group more specifically. If there is less acceptance among women a special meeting could be arranged for them. Anyhow, from the responds no differences were noticed (11, 12) or asked (6, 7).

The question about "social acceptance" in evaluating water reuse and recycling (WR&R) in the study site, included different information from men and women (gender disaggregated). Also was asked to send this information and links referring to the study site. Mexico sent their gathered information from the stakeholders about (among other issues) "social acceptance of water reuse and recycling" in 2012. (See Annex E). It is not possible to draw conclusions on gendered acceptance since there are only 3 women involved.

Except for Mexico**,** the participation of men and women in the stakeholder workshops is balanced**.** About the role division Brazil says the roles are all mixed, Chile has women in several roles, Argentina says it is balanced in the water activities but not in agricultural activities and Mexico is clear about a outbalance among the stakeholders, who are mainly men.

6.4. ACCEPTANCE REUSE WATER, INDIGENOUS KNOWLEDGE

In this subchapter we want to know if there is any resistance against the reuse water. Another issue here is the question if the study sites have any indigenous knowledge of water supply in the area.

> No difference in gender. General concern on reuse water is safety but main resistance is from environmental and health agencies. No indigenous knowledge in water supply. (6)

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We mostly noticed conflicts based on the final destination of reclaimed water. Farmers are against reclaimed water going to the mine, as they feel there is no support to a non-corporate activity as it is mining. About indigenous knowledge in the Chilean study site: There used to be knowledge in irrigation, but the indigenous community is very minor and lives in the city. (7)

In the region selected to the study case, there is not any indigenous race established. (11)

As we can see there is no difference in gender noted in the acceptance of water reuse and no indigenous knowledge at all.

6. Overview gender balance in COROADO Study sites research

Study site	**USP Brazil (6)**	**PUC Chile (7)**	**TDC Mexico (11)**	**UC Argentina (12)**
women / men	**w / m**	**w / m**	**w / m**	**w / m**
6.1. Participation in 1st Workshop **2nd Workshop**	9 / 13 11 / 8	13 / 18 2nd not done yet	9 / 94 2nd Expected: 5 / 45	55% / 45% 2nd following.
6.2. roles	There is a mix for both sexes in all roles	Roles total: 13 women	More men involved	

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-policy makers, **-research** **-industry representatives** **-technical people** **-water- and sanitation managers**		-regional government: 1; - research: 2; -regional Industry and competitiveness association: 3; -water authority 1 -mining water users1; -NGO for water: 2 -farmer ass's: 3;	- 5% w / 95% m, -20% w / 80% m needs inventories communication and networking, -5% w / 95% m -0% w / 100% m land owners or farmers helping monitoring	political officers, directors of the agencies, more men than women in the agricultural activities (not water) Producer market majority men, consumer market majority foreigner and women
6.3. gender disaggregated data about acceptance WR&R	The information collected was not classified by gender	No	Yes, 16 men and 3 women, is included a figure of that survey. (annex E)	We could not see differences in the acceptance of WR&R in terms of gender

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7. GENDER STUDY SITE INFORMATION

This chapter gives an insight in gender issues concerning the water supply from the case study sites. Most of the information is given by our COROADO partners. It is about numbers (7.1.), access (7.2), land ownership and decision makers (7.3.) and tasks divided by women and men (7.4.), the impact of reuse water supply on the roles (7.5.). Finally an overview is given of the responds per study site and subject (7.6).

7.1. NUMBERS MEN AND WOMEN

The question here is about the numbers of men and women living in the study site area making use of the water supply system. The four study sites responded, but not all the information is gender disaggregated, about men and women separately: The study site of Brazil covers close to 20 million people in the area. The statistics show a balance of 53% female 48% male. (6.) Argentina has 1.4 million inhabitants in Suquía basin (12) (COROADO 2013) and Mexico 1,275,562 inhabitants in the study site area (11). Chile mentions a 50% balance with 81118 men 80870 women (7).

The numbers show the amounts of people depending on the water supply system. The disaggregated numbers and percentages show a balance in men and women users.

An example with disaggregated gender information is given below. It is from the Mexican study site and shown in the COROADO deliverable from 2012:

Table7.1. below: Gender distribution shows a slight female advantage over male population, 50.3% against 49.7%, and is fairly constant throughout all municipalities (Table 2.34). However, in rural areas, gender distribution is different from the urban sector; male population tends to be higher than female, 52.1% to 47.9% respectively (Table 2.35). This could be due to the migration of young rural females to work in the maquila industry, concentrated in Reynosa and Matamoros (COROADO 2012) (11)

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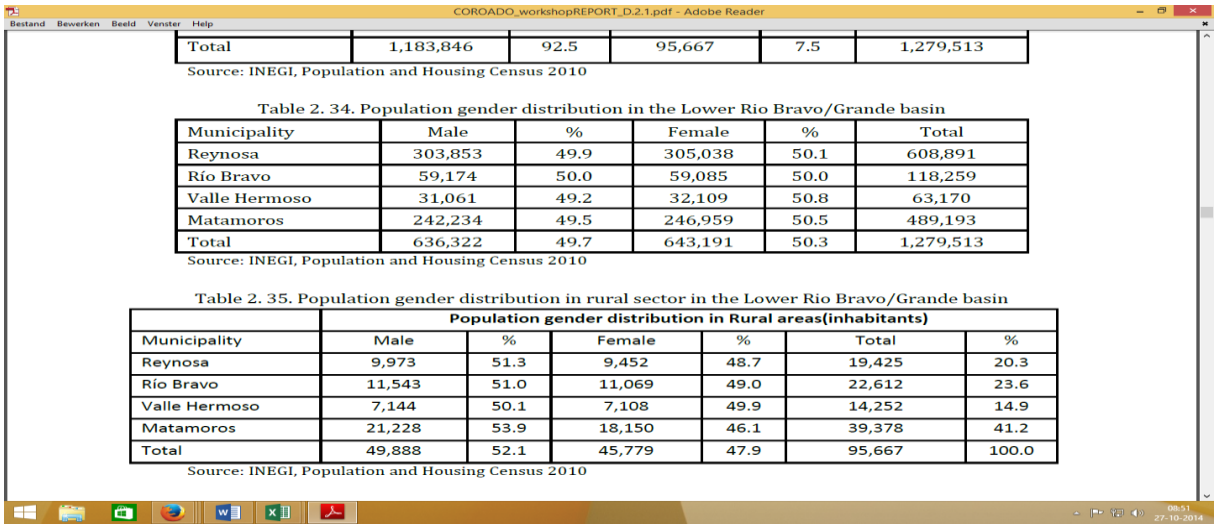

Total	1,183,846	92.5	95,667	7.5	1,279,513

Source: INEGI, Population and Housing Census 2010

Table 2. 34. Population gender distribution in the Lower Rio Bravo/Grande basin

Municipality	Male	%	Female	%	Total
Reynosa	303,853	49.9	305,038	50.1	608,891
Río Bravo	59,174	50.0	59,085	50.0	118,259
Valle Hermoso	31,061	49.2	32,109	50.8	63,170
Matamoros	242,234	49.5	246,959	50.5	489,193
Total	636,322	49.7	643,191	50.3	1,279,513

Source: INEGI, Population and Housing Census 2010

Table 2. 35. Population gender distribution in rural sector in the Lower Rio Bravo/Grande basin

	Population gender distribution in Rural areas(inhabitants)					
Municipality	Male	%	Female	%	Total	%
Reynosa	9,973	51.3	9,452	48.7	19,425	20.3
Río Bravo	11,543	51.0	11,069	49.0	22,612	23.6
Valle Hermoso	7,144	50.1	7,108	49.9	14,252	14.9
Matamoros	21,228	53.9	18,150	46.1	39,378	41.2
Total	49,888	52.1	45,779	47.9	95,667	100.0

Source: INEGI, Population and Housing Census 2010

7.2. ACCESS TO REUSE WSS

By understanding the extent of the study site population and the gender balance, the next step is to know if women and men have access to the water supply in the area and especially to the supply system to be implemented with reuse water. For the Brazil case study site the respond is that "anybody can apply, there are no limitations", Mexico estimates in the middle term: 30 to 50% of the population could have access. The Chilean respond is more detailed:

> "This is a question difficult to be answered. So far there is indeed a water recycling scheme, as 125 l/s of reclaimed water goes to the Candelaria Mine where 1196 people work as staff member and 1641 are subcontracted (total of 1837). Thus there is an industrial recycling scheme. In Chile, 7.1% of the people working in mining are women. Thus, it could be said that around 200 women (workers) are receiving benefits from water recycling. Another way to answer this would be to assume that this water could go to residential use instead. After considering a water consumption of 250 l/day per capita, one obtains 43,200 people receiving this water. Considering that this amount can go evenly to women and men, then 21567 men and 21633 women could apply for a reuse water supply. (7)"

Compared with the numbers living in the area there would be an equal distribution of the water to the man and women from the reuse water supply. So there can be an equal access to the reuse

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water supply, the question is more if it will be prepared for residential use or for the mines. It would be worth checking who really will be the users once the supply is developed.

7.3. LANDOWNERS, DECISION MAKERS

Two questions were asked: one about the division of roles on men and women landowners living in the study site area and the other about the decision makers in the water supply. The answers from Chile and Mexico were on both questions respectively:

> "Mostly men" (7) and "Almost all men. We estimate: 5% women, 95% men" (11)

About the landowners in the Brazil case study:

> We do not have data on this but property in most cases belongs to the couple once they get married. There are no issues with women owning property in Brazil, with or without a spouse. (6)

And a similar respond about marriage and landownership in Argentina:

> Land is owned by families, and the property is shared in equal parts by both male and female partners, as the Civil Code requires (marital property belongs to both partners and cannot be sold without the authorization of the other; in case of divorce is shared in equal parts). (12)

Some less equality among the decision makers in the Argentina study site:

> As for political officers or the directors of the agencies, there is a small imbalance inclined to men. Women do also have top positions in Argentina: the president of the country is a woman, the previous rector of the university was a woman until a few months ago, and the vice-governor of the province is also a woman… (12)

And in Brazil levels are expressed as 'fairly balanced':

> Hard to quantify in such a large area, and on the many levels of decision-making, but on the high level, the president of the utility company (SABESP) is a female. The governor of the state is a male, secretaries of Sanitation and Environment are males, and Secretary of Agriculture is a female. It is fair to say the other levels are also fairly balanced, taking into consideration some natural preferences. (6)

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In Mexico a protective law will change together with new opportunities.

> "In Mexico top and middle levels in Private business are occupied by men although not exclusively. It is because labour Mexican law protect a lot the pregnancy woman period, very much against the productivity of the companies. It looks similar in government positions although it is changing quickly because of a new law related to gender equality to get any top government position."(11)

7.4. TASK DIVISION M/W

In this subchapter information is given about the tasks done especially by men and by women at the study sites and also about eventual seasonal shifts in tasks or roles. And the possibility of changing roles after implementing the reuse water supply.

> Housekeeping, as a service, is done exclusively by women (3.380 women in the region in 2010). Diversification can be seen in all other areas of employment. The only exception being the Mining industry and the Construction sector, where physically extenuating labours are done almost exclusively by men. Women force in mining is about 7.1% in Chile. The private sector workforce is comprised mostly by men (71% in '10) whilst the public sector workforce is largely comprised by women (65% in '10)…It can also be observed that women are still largely engaged in jobs requiring no qualifications, i.e.: Commerce and Social-Community Services where the women comprise 65% of the workforce.
>
> During harvesting seasons, an external workforce enters the region to work on crop harvesting (locally, this type of workforce is known as "temporeros") lasting for about three months. As an example, 2893 men and 2020 women where hired as temporeros in 2009. The big proportion of women in this workforce is common in the northern parts of the country, women that, while not in season, mostly work on other common jobs or be housewives. (7.)

> Speaking on value crops women can highlight with more than 50% given its powers and attitude. The same happens in the commercial and industrial sectors. Top and middle levels in private business are occupied by men although not exclusively. Poor

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activity in farming in winter and summer season. Great activity in commerce and industry in winter. (11)

Home tasks are done mainly by women. Women dominate social interaction in the area. Machinery and vehicle related tasks are done more by men. Where more physical strength is needed, men predominate but, in general, field tasks are shared. There is no change in tasks during special seasons (12)

Additional information on the role division in general in the area

"....It is the traditional role division, established by state, school and church, that women do the house holding and men occupy the productive role (Pérez 2011). The majority of producers on the Mercado de Abasto (landowners and tenants) were men (with a ratio men/women of 7:1). At Mercado Norte, where products that are bought at Mercado de Abasto are sold to customers, the men/women ratio was conversely 1:3 with the majority of fruit and vegetable vendors being from foreign descent (i.e. Bolivia and Paraguay)."(Wilmink, MSc thesis 2014)

Except from Brazil: "No and agriculture is very limited in the area" (6), differences are mentioned in household tasks for women and tasks where "physical strength" is needed for men. In the seasonal tasks no big gender difference is given. Could the task division between man and women change after implementing the water reuse technologies?

Probably yes. Reclaimed water could be used in other uses that in which more woman have participation. (7.)

That's right. By the strong influence that women can have about men on the social and economic effects of families. (11.)

Not really (6)

No (12)

The COROADO study sites have a high representation of women as presidents: In Argentina, Chile and Brazil. More details about gender equality and women presidents in the study site countries in chapter 8.2.

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7. Overview numbers and roles study site women and men

m= men, w=women

	USP Brazil (6)	PUC Chile (7)	TDC Mexico (11)	UC Argentina (12)
7.1. Numbers water users	20 million 53% w 48% m	81118 m 80870 w	1,275,562 people	1.4 million
7.2 Access to reuse water supply	anybody	21567 men 21633 w	52.1% m, 47.9% w	
7.3a amount landowner m/ w	Property in most cases belongs to the couple once they get married.	Mostly men	Almost all men. Estimate: 5% w, 95% m	Land is owned by families, property is shared in equal parts by both male and female partners
7.3b decision makers in WS&S m/w	High level: President utility company and the Secretary of Agriculture : w Governor of state, secretary of Sanitation and of Environment: m	Mostly men.	Almost all men. Estimate: 5% w, 95% men	Political officers and directors of agencies: some more men. High level women: the president of the country, the previous rector of the university and the vice-governor of the province
7.4a task done by women only	No.	-Housekeeping, as a service, is done by w (3.380 w in 2010) -public sector 65%w -Commerce and -Social-Community Services also 65% w	-Value crops more than 50% w Also in - commercial and - industrial sectors. Supportive tasks - administrative or - clerical functions	-Home tasks are done mainly by w. -W dominate social interaction in the area.

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7.4b Tasks done by men only	no	Private sector most m (71% in '10) -Mining industry, (w force is only 7.1%) -Construction Sectors, almost exclusively men	-Top and middle levels in Private business and - government most occupied by men >changing law, see 7.3.	Where more physical strength is needed, men predominate Machinery and vehicle tasks done more by men. Generally field tasks are shared.
7.4c change in tasks during seasons?	No, and agriculture is very limited in the area	External workforce for crop harvesting 2893 m and 2020 w in 2009. Lasting 3 months.	Poor activity in farming in winter and summer. Great activity commerce +industry in winter.	No
7.4d change in task division?	Not really	Probably yes. Reclaimed water could be used in other uses that in which more woman have participation.	That's right. By the influence women can have on men on the social and economic effects of families.	No

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8. INFORMATION IN PERSPECTIVE

This chapter will show the ways how the information is spread about the project progress and possible new water supply methods, involving used media and considering the access to both men and women and mentioning examples if available. Also national and local success in gender policy are given to put the results in a broader perspective of time and place.

8.1. PROJECT NEWS ACCESSIBLE

Here the question is asked to the study sites on how the information about possible new water reuse practices is made accessible to both men and women.

> The information available on water reuse for the general public is still limited. The size of the area does not support direct input and the general public generally does not take interest on details on water issues unless a crisis arises. The media publishes limited information. As for the COROADO project, the **workshop and press releases** were the methods to reach the general public so far. (6)
>
> A desalination plant to send 1.16 m3s is currently under analysis, which will provide water for residential consumption and benefit the entire population of the region. (7)
>
> To improve information to women regarding the reuse of water would be necessary to use different information media such as **newspapers, magazines and even TV.** Do it by **technical media** alone makes possible the arrival the information to professional or interest groups involved are mostly men. (11)
>
> There is no information discriminated by gender. In Argentina, and in the city of Córdoba area, women are totally integrated to the working environment (also in the high levels, see 7.3.).

The answers together give a broad picture of what can be done to make the water supply a source of interest for the media. This will be when a new source of water supply becomes available, or when a crisis or a problem in water supply develops, the technical media are useful for interest groups and professionals, but since this could miss other interest groups, the workshop are

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organized for stakeholders to participate and attract the local media, and for a more general public are the press releases for the newspapers, magazines and TV.

8.2. NATIONAL AND LOCAL SUCCESS

About women presidents: In Argentina they had their first female President Isabel Perón in 1974–1976, bringing work and the right to vote for women, than the first elected female President: Cristina Fernández de Kirchner, in 2007 and she was re-elected in 2011. Michelle Bachelet Jeria from Chile was the first woman president in Chile in 2006 to 2010. She introduced the "pay equality legislation" in 2009, guaranteeing equal pay for equal work in the private sector, regardless of gender. She was elected again in March 2014. Isabel Allende was elected President of the Senate, as first woman that is involved in his role in Chile. In Brazil Dilma Vana Rousseff was the first women president. She was elected in 2011. (Wiki)

The study site countries have a remarkable result here (women presidents since 2006), compared to the rest of the world where "Since 2012, the number of female Heads of State or Heads of Government in the world has decreased slightly, from 19 to 18," (UN 2014d) from 193 countries that is less than 10 percent." In the international rankings however is counted with 50 years presidents, that changes the picture (see table below on rankings). (WEF 2013b) Very informative information on the situation and progress made in gender equality perspectives for the study sites send by the project teams are given below:

Chile

"- At country level, 36% of the **workforce** is comprised by women in the year 2012. In the Atacama region, this percentage slightly increased from 33.4% in 2006 to 36.1% on 2013. Specifically, in the mining industry this number was 4.2% in 2004 and increased to 7.5% in 2010.

- **Employment rate** in Atacama region varies between men and women (72% vs. 42.4%, respectively, in year 2012). Employment rate increases in the last and first months of the year due to harvesting season and the "temporeros" activity. The percentage of women in the workforce has steadily increased in the last years. In the

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year 2006, 33.7% of the workforce was women. This percentage increased to 38.9% in the year 2012.

- In the Atacama region, on average, **women income is 39% less** than men income

- The breach between women and men that have completed college (acquired a university degree is steadily decreasing. On the year 2010, 39.4% of college graduates working in the region were women. In contrast, on year 2002 this percentage was up to 56%.

- At country level, propositions made by women movements and organizations in the 1980s decade and the international compromises signed by Chile in gender equality subjects - the most important the CEDAW (Convention on the Elimination of all Forms of Discrimination against Women) in 1989, are considered to be the framework under which the government assumes the compromise of including in the democratization of the country the overcoming of gender inequality. In **1991, the National Service of Women** ("Servicio Nacional de la Mujer - SERNAM") and its regional directions were created to coordinate the termination of different forms of discrimination to women in the public agenda. In the year **2000 the Ministry Council for the Equality of Opportunities** is created, to incorporate specific politics associated to gender issues.

- In a regional level, as a part of the Government plan to promote the decentralization of the country, regional offices of the SERNAM formulate a regional Plan for Equal Opportunities ("Plan Regional de Igualdad de Oportunidades – PRIO") to include **gender equality in all regional development plans**. (They work a lot with social media see i.e.: http://portal.sernam.cl/?q=copiapo)

During 2008 and 2010, in the Atacama Region, several projects were developed.

- Workshops for Housewives centred on **employment options** and the implementation of different **educational alternatives for kindergarten-age children**, **dental care** programs, and new **nursery rooms**. More than 800 women where beneficed.

- Program of Prevention, Attention and Protection on **Domestic Violence**. The Atacama region has 3 **centres**, one of them serving the Copiapó valley, which attends women victims of domestic violence. They provide psychological and **social care, legal advice and trains social leaders and public officials** in the prevention, detection and derivation of Domestic Violent cases.

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- Good Practices in the **Workplace program for Gender Equality**. It aims to improve participation and position of women in high-tech sectors of the regional economy. It promotes non-discrimination against women when accessing the labour market, the reduction on occupational segregation and to produce a cultural change needed in social relationships.

-**Chilean Norm** NCH 3262 (august 2013), that contributes in the promotion and implementation of good employment practices, reducing gaps, improving women incorporation to the labour market and promoting the development of their professional careers. It also promotes the reconciliation of work, family and personal life between men and women, generating the same level of participation and co-responsibility of both. Finally, it seeks to generate discussion, communication and consensus inside the organizations regarding the reduction of salary breech, equal distribution in high responsibility jobs, eradication of discriminatory practices and protection of maternity, postnatal and such regulations." (7)

Tierra Amarilla cie. for indigenous community and poster for women empowerment by government.[1]

[1] https://www.facebook.com/pages/Prodemu-Atacama/597057013732471

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USP Brazil

"We do not have issues related to water in terms of gender, so the only thing we could contribute is that there is a good balance on all levels of decision making, including the top. Due to the structure of the workshop, we did not get any gender related stories or data, I am afraid. It was more a presentation of the DSS and evaluation, so there was no open discussion other than evaluation of the DSS." (6)

TDC Mexico

"It is worthy to recognize the work and contributions of Eng. Anayancy Badillo Golf Staff of TDC for the performance of our project in the first period to engage fully in the objectives, requirements and deliverables required of COROADO-Mexican Case Study, including related reports we are very proud of it" (…) "Likewise for the work done by the accountant Balquis Villalva Mojica for their extraordinary support in terms of budget, accounting and administrative matters of our project." (11.)

Argentina

About increasing amount of women political decision makers in Argentina:

"(…)The 'Ley de Cupos', passed in 1991, stipulated that at least 30 % of all electoral candidates were to be women, placed in winnable positions on the closed party lists. The result was a significant increase in the numbers of women elected. However, there were still very few women in positions of power within party hierarchies. Despite forming 47.7 % of party affiliates, in 1993, women formed an average of only 7.2 % of national party directorates. (Ibid.)

With the election of Menem, in 1991, a new organisation, the 'Consejo Nacional de la Mujer', was created. This organization was charged with ensuring the implementation of CEDAW13 and ensuring the 'maximum participation of women in all spheres'. But despite all efforts, the increase in the number of women deputies has not been accompanied by a similar increase in the number of women at the top of party hierarchies. Nor has there been a marked increase in the numbers of women in government or the implementation of policies favourable to women. (Ibid.)

In the 2001 elections, women's presence in the Senate increased from 6% to 37%. In Argentina, the amount of women in the parliament successfully increased, and elected

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women are successfully gendering the legislative agenda, but are yet not successful in gendering the legislative outcomes. (Franceschet 2008, Wilmink 2014)

As can be read a lot of effort is put in several ways to improve the basic principal of equality in rights and opportunity. Gender equality is not self-evident and not arising by time, it needs efforts from both genders. It will always be important to be aware of the gaps, and try to overcome them, at work, in the content of the work and at home. Below the brief overview of chapter 8, the picture of ranking of gender equality in the study site countries in a worldwide context, is shown the table below. (WEF 2013b)

8. Brief overview

COROADO 2014	**USP Brazil (6)**	**PUC Chile (7)**	**TDC Mexico (11)**	**UC Argentina (12)**
Media used	-workshop -press releases	-Contacts social sciences, -local women groups, -social media	-newspapers -magazines -TV -technical media	- same, no discrimination of information
Women president	2011, Rousseff, 2014 re-elected	2006 Bachelet 2014 re-elected		1974 I.Perón 2007 Fernández 2011 re-elected

Rankings World Economy Forum, Gender Gap Report 2013

Overall Rank 2013 from 136 world countries (Iceland 1, Yemen 136)	**Brazil 62 (82 in 2011) w / m**	**Chile 91 (46 in 2011) w / m**	**Mexico 68 (89 in 2011) w / m**	**Argentina 34 (28 in 2011) w / m**
Women and men in parliament, rank	9 / 91 (.09) 116	14 / 86 (.17) 91	37 / 63 (.58) 16	37 / 63 (.60) 15
Women / men at ministerial posts, rank	27 / 73 (.37) 34	18 / 82 (.22) 53	21 / 79 (.27) 44	8 / 82 (.21) 57
Women / men head of state last 50 years, rank	2 / 80 (.05) 32	4 / 46 (.09) 23	0 / 50 (.00) 60	7 / 43 (.17) 13

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Rank politics	68	67	36	55
Rank education	1	32	70	42
Rank health	1	1	1	34
Rank economic participation	74	112	111	101

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9. CONCLUSIONS AND RECOMMENDATIONS

COROADO takes part in the international effort to awareness and improvement of gender equality, related to the project research and the involved institutes and stakeholders. The conclusion from the UN millennium development goals for 2015 and beyond, is the need for family friendly working conditions, and the importance to improve working opportunities for women to an economic growth for all. The EU in the programmes for Horizon 2020 also points at the incorporation of gender needs and a gender balance by addressing the underlying causes of gender imbalance, by exploiting the full potential of both female and male researchers also in evaluation panels and in other relevant advisory and expert bodies in order to improve the quality of research and to stimulate innovation. This means that the international agenda sees gender equality (and diversification) as an important issue to keep paying attention to and improve where needed.

About the type of position in COROADO 2014

Total staff working for COROADO in 2014 is 102. These are 43 (42%) women and 59 (58%) men. This means the total staff has almost a gender balance. Same as in the first project period 8 from the 13 teams are gender balanced in personnel. In the higher level positions within the project, two more women scientific managers/coordinators were there compared to the first project period. In total 11 people less working for the project, of whom 8 women less and of them 6 experienced researchers. Although there is some more balance at the highest position, we have to be aware not to lose too many (women) researchers during the project. And to keep up the balance try to involve new women (who are most needed to keep up the balance) where someone leaves.

About the working conditions

Every respondent recognizes issues related to gender and life balanced working conditions. Flexible working hours and part time work are often mentioned being important. The subject of a gender balance in the project team is not ignored, but the situation is sometimes taken for granted, or at least no urgency is signaled here. Answering to the questions for this report by the research team themselves may help to raise some awareness for gender equality. Talking and writing about the subject might help to exchange ideas about conditions at the work place.

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Several working conditions are already applied for the partners. Sometimes through the national regulations (Norway, Chile), some use existing institutional regulations (CSIC, USP, FHNW) about gender equality, worked out in special action plans. Several partners clearly express satisfaction with their working situation compared to other employers in their region.
Still there are some improvements for more gender equality mentioned, this is for some partners about child care, elderly care and part time work.

About the gender balance and disaggregated data from the study sites

The gender balance in the four COROADO Latin American study sites is very situational and hard to compare because of the differences in numbers and ways of involvement. The participants in the workshops from our research partners were well balanced except one where women were 9 out of 103 participants (9%). Another workshop had 9 women out of 22 participants (41%). The conclusion that can be drawn is not about numbers directly, but the numbers help us to see that water issues may include gender inequalities. To see the differences it is important to gather gender disaggregated data. These give for example insight in the involvement of men and women and maybe in a broader scope of stakeholders and how that may change throughout time.
So the numbers of women and men participating are important to get insight for the research in the practice. And this insight helps to create awareness and can give a base to make plans to involve the gender balance in the integrated water management. Disaggregated data can also be useful to know if there is a difference in acceptance in reuse water. If it were an issue for men or women specifically they could be informed in a way that fits them and their roles best.

About roles and access and acceptance of reuse water supply

The roles in water supply management are equally divided among men and women in the COROADO study sites according to the respondents. In Argentina a gender outbalance is seen in agriculture. In Mexico there is no gender balance in the water management role division. There is hope that it will change soon because a new law is urging more equality in opportunities and working circumstances.
Typical roles for women in Chili and Mexico mentioned are in the commercial sector, in Chili specifically housekeeping as a service, the public sector and the social community service.

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Argentina mentions home tasks and the important influence of women in social interaction. Mexico mentions also value crops and supportive tasks as administration and clerical functions. Typical roles for men in Chili and Mexico are the private sector, in Chili also the mining industry and construction and in Argentina machinery and vehicle industry. Mexico also mentions the government that is almost occupied only by men. The other three countries have since 2006 regularly a woman as president which is a high score compared to the rest of the world leaders (10% women). Many gender equality improving laws are being implemented, however still a lot has to be done by both genders to change towards equal opportunities in all sectors and throughout time. Many worldwide figures show the gender inequalities that can be turned into more equal societies and can also fall back into inequalities if there is no political or social willingness to stay balanced.

No gender differences are noticed in the COROADO study sites concerning access or acceptance of a reuse water supply. It might require more profound research to be sure if there is no difference, but the responds here make clear that there are other priorities.

About the information dissemination

All types of media are used to give information about the project to the different stakeholders, including the workshops, meetings, networking, and press releases. These are very helpful to translate the technical message to a larger audience. Local website portals and social media are also easy and fast ways to reach this audience. And it helps to know the target group.

About the gender success

The local success story in Chile that could be without a gender outbalancing effect is a new desalination plant for water supply. If it is sending the water to the public. If the water is sent to the mining industry it might have an unequal effect on men and women, depending on who profits from the industry.

To conclude the question is not if we have to do something about gender equality, even if it is already there, the question is how to do something for gender equality. Within our team, our area of research, our institute or University and even on the study site with our communication

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invitations and in our search for support in the field. It is who we define as stakeholders and end users and the way we approach and involve stakeholders and end users in the COROADO research. As can be read a lot of effort is put in several ways to improve the basic principal of equality in rights and opportunity. Gender equality is not self-evident and not arising by time, it needs efforts from both genders. It will always be important to be aware of the gaps, and try to overcome them, at work, in the content of the work and at home.
For the next and final project year of COROADO it is important to focus upon the dissemination of information and incorporation of the project targets by the stakeholder men and women. As equality is good to prevent discrimination it is also good for the economic development.

About integrated water management

All the efforts made towards gender equality within the discipline of integrated water supply management are partly directed towards organizational issues like work life balance and equal opportunities policies. It can also be a part of the content in a total picture for water user management. This was clearly put in the next text and table (FAO 2012):

"Together with a clear understanding of the hydrological cycle – including supply, demand, recycling, and quality of water – water scarcity coping strategies also require a sound understanding of the institutional, social, environmental and financial dimensions of water management within a basin. While the term water accounting refers to a systematic study of the current status and future trends in both water supply and demand in a given spatial domain, the water audit places this account into the broader framework of institutions, finance and the overall political economy" (Table 3, FAO 2012).

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TABLE 3
From water accounting to water audit

Mapping water supply and demand	Mapping organization and management	Mapping socio-economics and finances	Mapping governance
Surface water: volumes, distribution	Infrastructure operations	Rural/urban population: incomes, health, education levels, water use	Water policies, agricultured policies, food security policies, environmental policies
Groundwater: aquifer characteristics	Farming practices, productivity, productivity gaps	Typologies of water users in agriculture	Institutions: mandate, interactions, effectiveness, level (national, river basin, local)
Infrastructure: regulation capacity	Technical efficiency in water use, conveyance losses	Gender and minorities: rights, access to water, use	Laws and regulations, enforcement
Demand: agriculture, cities, industries, environment		Water charges, incentives, development programmes (catchment management, etc.)	
Water quality, water treatment			
Return flow, recycling			

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http://www.stakeholderforum.org/sf/outreach/index.php/component/content/article/209-sids-day-8-wrap-up/11736-turning-good-intentions-into-action (Check October 10th 2014)

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UN 2014c Book 1 Introduction: Realising the human rights to water and sanitation. Introduction. A handbook by Catarina de Albuquerque, UN Special Rapporteur on the human right to safe drinking water and sanitation, Ch.9.1, p. 30.

UN 2014d: The millennium development goals (MDG) report 2014, New York, p 22-23

UN 2014e: http://www.un.org/en/events/womensday/2014/sgmessage.shtml
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UN 2014f source 9: Committee on Economic, Social and Cultural Rights (CESCR), General Comment No. 15: The right to water (E/C.12/2002/11), para. 53. (see Principles: Equality, pp.21-24) (from UN 2014 book 5 Monitoring p. 11)

WEF 2013a: The Global Gender Gap Report 2013 is published by the World Economic Forum. P.28 Geneva www.weforum.org

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Wilmink, J., Irrigation in an urbanizing area, MSc thesis WUR /UC/ COROADO 2014 p. 26

Zwarteveen, M. (a.o.), 2011. Questioning Masculinities in Water. Econ. and Politic Weekly 2011 vol XLVI 18, p.40-48.

Annex E: I Tables Water Related Conditions 130901 social acceptance 140924 gender survey.xlsx Table 2012, from TDC Mexico

Website links, portals:
http://cordis.europa.eu/documents/documentlibrary/90798681EN6 .pdf
http://www.coroado-project.eu

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http://nl.wikipedia.org/wiki (president Argentina, Mexico, Brazil, Chili, info from Oct 23rd '14)
https://www.facebook.com/pages/Prodemu-Atacama/597057013732471
www.weforum.org
http://www.un.org/en/events/womensday/2014/sgmessage.shtml
www.unwomen.org
http://www.stakeholderforum.org/sf/outreach/index.php/component/content/article/209-sids-day-8-wrap-up/11736-turning-good-intentions-into-action (Check October 10th 2014)
http://portal.sernam.cl/?q=copiapo
http://www.wssinfo.org/post-2015-monitoring (WHO and UNICEF joint monitoring program)

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ANNEX A: GENDER ACTION PLAN COROADO

The COROADO Gender Action Plan is divided into four components and two additional issues. The four components are: 1 Balanced mobilization and career opportunities of women and men; 2 Monitor gender balance and changes; 3 Information sharing and 4 Use gender neutral language. The two specific issues are Gender appropriate technology and Incorporation of gender needs.

1) **mobilization** of women into the project by implementing particular approaches and activities at all stages of the project, creating opportunities for women in the project design (from formulation to targeting of beneficiaries, to final reporting) and by addressing the needs of women researchers;

2) **monitory** of the gender dimensions to identify and quantify all gender issues and make them visible (a. by publication of gender statistics and gender issues in the COROADO Project in annual reports or on the website, b. by supplying gender information to other EU working groups and c. by collating and commissioning targeted research and establishing sex-disaggregated information systems);

3) **share and link information** with other women's networks at Institution, National, EU and International level to facilitate coalition building and awareness of employment and career possibilities;

4) **use of gender neutral language** which minimizes unnecessary concern about gender in their subject matter, allowing both the writer and the reader to focus on what people do rather than on which sex they happen to be. Implementation of the gender action plan may lead to innovative approaches like the development of gender appropriate technology and the incorporation of gender needs at stakeholder meetings.

Gender appropriate technology

Women are key members of many of the stakeholder groups who will contribute to COROADO project. Gender disaggregated statistics will be collected and analyzed for all stakeholder groups. Gender sensitive analyses will be used in all stages of the project where it is appropriate as it is in the definition of problems, in the development and validation of potential solutions, and in

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training and dissemination. This will include: a) new technologies (gender appropriate), b) systems approaches (gender in defining water use and needs), c) management solutions (involvement of women in decision making, gender empowerment for participation, gender sensitive communications and responses)

Incorporating gender needs

Some other positive actions will be taken to increase the input of women to the COROADO project – both as stakeholder contributors and as researchers because it is critical to provide incentives for women to stay in their areas and instead of being anonymous heroes, to become active members undertaking positions of competence and responsibility. Incorporating gender needs, actions which will be considered include:

- Seminar/conference/workshop to raise awareness about the need to increase gender equality in responding to the issue of water stress.
- Making Project activities, timetables, *stakeholder* meetings, etc. more flexible and family friendly to open the way to greater participation by women

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ANNEX B: THE QUESTIONS FOR THE 2ND INTERIM REPORT

1. Type of position

Type of Position project team COROADO 2014	Number of Women	Number of 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		
Total number of women and total number of men in your team working for the COROADO project		

2. Did you do something for the **gender balance in your project team**: Yes / No / other …
If you did, what did you do?

3. Could you mention some family friendly **working conditions** (like flexible working hours) that help to have a gender balanced project team? Which conditions were added, and which ones are in your view still missing?

4. If your project team does research with stakeholders in the study site for COROADO, how many men and women stakeholders did actively **participate in the workshops**?
(1st workshop …….men …….women, 2nd workshop …. men ...women, other meetings…)

5. What **role do the men and the women stakeholders have** in the research activities?*
*(For example: policy makers, water and sanitation managers, land owners or farmers helping monitoring practices, doing needs inventories communication and networking).

6. If you looked at "social acceptance" in evaluating water reuse and recycling (WR&R) in your study site, did you gather **information about WR&R from men and women**? Can you send me this information and links referring to the study site?

Additional study site information:

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I am gathering some extra gender information about the study sites, instead of asking you for a study site poster, please help me with the information/links you have about:

Numbers:

- The numbers of men and women living in the study site area making use of the water supply system. …….men …….women
- The number of men and women that could apply for a reuse water supply system. …….men …….women

Task division M/W:

- Could the task division between man and women change in the area after implementing the water reuse technologies? How?
- Are most landowners living in the study site area women or men? ….women ….men
- Are most decision makers in the water supply man or woman? …….men …….women
- Is there a change in tasks during special seasons? (Winter, summer, rain seasons?)
- Are there tasks only done by women? What tasks, why only women?
- Are there tasks only done by men? What tasks and why only men?
- If all the tasks are done by the men, what are the women doing?

Information to users:

- How is the information about possible new water reuse practices, made accessible to both men and women, could you send examples of the information?
- Did you notice any resistance against use of reuse water and if so, do you know why, was there a difference among men and women and how did you cope with it?
- Is there indigenous knowledge about water reuse practices? Yes / No,
- If yes, how is it being used?
- Can you give a short local gender success story?

Pictures, illustrations:

- Could you send any illustrations or pictures concerning the gender issues in the study site?

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ANNEX C: RESULTS TYPE OF POSITION (5.1)

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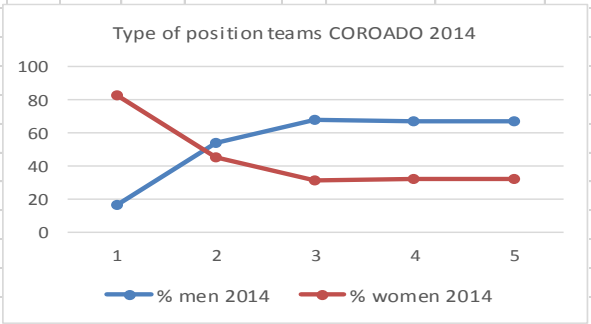
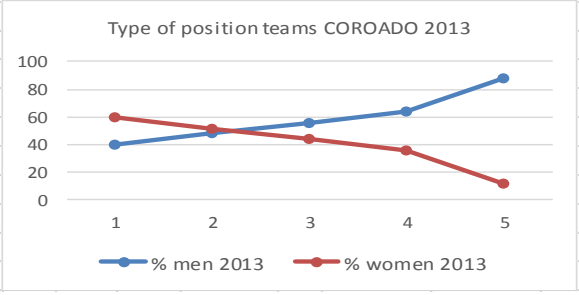
Organisation name	(5) w-Scientific manager/coordinator	(5)m-scientific manager/coordinator	(4)w-scientific teamleader/work package leader	(4)m-Scientific team leader/work package leader	(3)w-Experienced researcher (> 4 years and/or PhD holder)	(3)m-Experienced researcher (> 4 years and/or PhD holder)	(2)w-Early researcher (<= 4 yearsand/or PhD student)	(2)m-Early researcher (<= 4 yearsand/or PhD student)	(1)w- Other staff	(1) m- Other staff	total personnel COROADO '14	total women personnel COROADO '14	total personnel COROADO '12/13	total women personnel COROADO '12/13
1.AUA		1		1	1	3	1	1		1	**9**	**2**	7	1
2.ALTERRA	1		1		2	4	1	2	1		**12**	**6**	11	8
3.CSIC				1	3	2	1	1			**8**	**4**	8	4
4.UPORTO				1	1	2		2			**6**	**1**	6	1
5.NTUA	1	1	2	1	1	2	4	4	1		**17**	**9**	18	9
6.USP	1		1			3	2		2		**9**	**6**	11	7
7.PUC				1		4	1	3			**9**	**1**	6	0
8.GEOMATIC		1		1		1	1				**4**	**1**	5	1
9.BIOFORSK						1		1		1	**3**	**0**	4	2
10.FHNW		1				1	1		1		**4**	**2**	5	2
11.TDC						1	1	1	2		**5**	**3**	6	3
12.UC		1		1	5	3			1		**10**	**6**	21	11
13.SEA		1		1		1			2		**5**	**2**	5	2
Total											**102**		113	
total men positions		**6**		**8**		**28**		**15**		**2**	**59**		62	
total women pos	**3**		**4**		**13**		**13**		**10**			43		51

14Position number	**1**	**2**	**3**	**4**	**5**
total women	10	13	13	4	3
total men	2	15	28	8	6
total per position	12	28	41	12	9
% men 2014	17	54	68	67	67
% women 2014	83	46	32	33	33

1= Other staff
2= Early researcher (<= 4 yearsand/or PhD student)
3= Experienced researcher (> 4 years and/or PhD holder)
4= Scientific team leader/work package leader
5= Scientific manager/coordinator



13Position number	**1**	**2**	**3**	**4**	**5**
total women	9	17	19	5	1
total men	6	16	24	9	7
total per position	15	33	43	14	8
% men 2013	40	48	56	64	88
% women 2013	60	52	44	36	12



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ANNEX D: OVERVIEW WORKING CONDITIONS (5.3)

Already in place	Required/ asked for
(AUA) • *There is always the flexibility to work from home in various times of the day.* • *Maternity leave is taking place when needed and this is common practice in Greece.*	(AUA) *In the University there are not available:* • *Childcare or* • *Elderly care services for working families*
(Alterra) • *Flexible working hours*	(Alterra) • *Young workers without families, with possibilities to travel*
(NTUA) • *Extended Maternity/Paternity leave* • *Quite flexible working hours* • *Tele-working*	(NTUA) • *Still missing: Workplace nursery* • *Part-time work positions*
(CSIC) • *Flexibility in the working hours and the Possibility of organize and freely plan our holidays*	(CSIC) *There is still room for improvement. However, our conditions are clearly better than the local average*
(USP) • *Hours and schedules are very flexible.* • *Health and family leave* • *Grocery cards and Bus passes*	
(PUC) • *Working hours for pregnant women and recent moms (3 months pre and post birth).* • *Same salary for engineers, regardless their gender*	
(BIOFORSK) • *A one-year maternity period is offered to women*	

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(GEOMATIC) • E*quality in decision making and in salary (2013)*	
(FHNW) • http://www.fhnw.ch/ueber-uns/gleichstellung/	
(TDC) • *Flexible working hours*	
(UC) • *We have flexible hours that permit accommodate specials needs for our working mothers (ten).* • *There are e.g.: maternal leaves, "feminine day", periods for breast feeding, maternal care, etc.*	
(SEA) • *We have implemented family friendly flexible working hours and conditions.*	

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ANNEX E: TDC STUDY SITE DATA COLLECTION ACCEPTANCE WATER REUSE

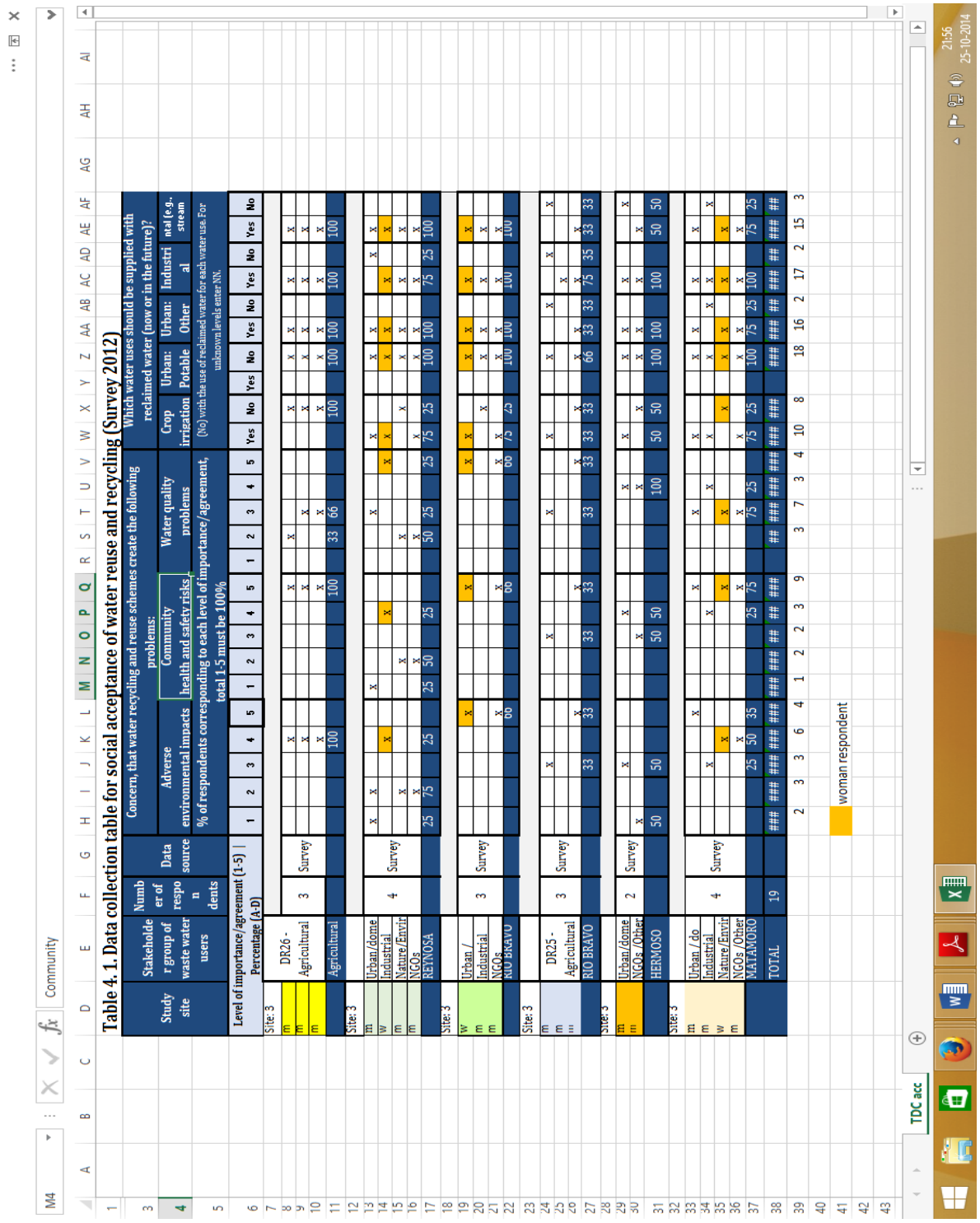

Table 4. 1. Data collection table for social acceptance of water reuse and recycling (Survey 2012)

Study site	Stakeholder group of waste water users	Number of respondents	Data source	Concern, that water recycling and reuse schemes create the following problems: Adverse environmental impacts					Community health and safety risks					Water quality problems					Which water uses should be supplied with reclaimed water (now or in the future)? Crop irrigation		Urban: Potable		Urban: Other		Industrial		Industrial (e.g. stream	
Level of importance/agreement (1-5) | Percentage (A-D)				% of respondents corresponding to each level of importance/agreement, total 1-5 must be 100%															(No) with the use of reclaimed water for each water use. For unknown levels enter NN.									
				1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Site: 3	DR26 - Agricultural	3	Survey																									
m						x	x					x			x				x		x		x		x		x	
m							x					x			x				x		x		x		x		x	
m						x									x				x		x		x		x		x	
	Agricultural					100									66				100		100		100		100		100	
Site: 3																												
m	Urban/dome	4	Survey	x	x		x		x						x				x		x		x		x		x	
w	Industrial				x						x								x		x		x		x		x	
m	Nature/Envir				x						x				x				x		x		x		x		x	
m	NGOs				x						x				x				x		x		x		x		x	
	RETNOSA			25	75		25		25	50		25		50	25		25		75	25	100		100		75	25	100	
Site: 3																												
w	Urban /	3	Survey					x					x					x	x		x		x		x		x	
m	Industrial											x				x			x		x		x		x		x	
m	NGOs							x					x				x		x		x		x		x		x	
	RIO BRAVO							00					00					00	75	25	100		100		100		100	
Site: 3																												
m	DR25 -	3	Survey			x					x					x			x		x		x		x		x	
m	Agricultural						x					x					x		x		x		x		x		x	
m						x						x					x		x		x		x		x		x	
	RIO BRAVO					33					33					33			33		33		66		33		33	
Site: 3																												
m	Urban/dome	2	Survey																									
m	NGOs /Other			x		x					x					x			x		x		x		x		x	
	HERMOSO			50		50					50	50				100			50	50	100		100		100		50	50
Site: 3																												
m	Urban / do	4	Survey				x					x					x		x		x		x		x		x	
m	Industrial					x					x					x			x		x		x		x		x	
w	Nature/Envir				x							x				x			x		x		x		x		x	
m	NGOs /Other				x							x				x			x		x		x		x		x	
	MATAMORO			25	50	25					25	75				75	25		75	25	100		100		75	25	100	
	TOTAL	19		###	###	###	###	###	###	###	###	###	###	##	###	###	###	###	###	###	###	##	###	##	###	##	###	##

woman respondent