

# Qualitative survey on squatting toilets and anal cleansing with water with a special emphasis on Muslim and Buddhist countries by using the SuSanA discussion forum

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# Table of contents

|  |    |
|--|----|
| 1. Introduction .....  | 2  |
| 2. Methodology .....   | 2  |
| 3. Results.....  | 3  |
| 3.1 Conclusions .....  | 3  |
| 4. Appendices .....  | 13 |
| A Questionnaire .....  | 13 |
| B Results of the survey in detail .....                            | 14 |
| C Additional information by e-mail or posts from forum users ..... | 29 |

## 1. Introduction

Only little information exists about the use of squat toilets in different regions of the world. This survey uses the experience of professionals and practitioners involved in different water and sanitation programs to collect more information about the use and prevalence of squatting toilets, with an emphasis on Muslim and Buddhist countries.

The purpose of the survey was to get semi-quantitative data about the use of squatting toilets in different countries and in different environments. Furthermore the data was collected in order to provide inputs for updating the Wikipedia article on squatting toilets:

[https://en.wikipedia.org/wiki/Squat\\_toilet](https://en.wikipedia.org/wiki/Squat_toilet)

## 2. Methodology

- The professionals and practitioners were contacted via the SuSanA Discussion Forum (<http://forum.susana.org/>) and the forum e-mail digest and also via direct e-mail (group e-mails were sent by Elisabeth von Muench to SuSanA members in predominantly Muslim or Buddhist countries where SuSanA members are present with more than about five people, i.e. Afghanistan, Burkina Faso, Cameroon, Indonesia, Iran, Israel, Jordan, Kyrgistan, Laos, Mali, Morocco, Myanmar, Nepal, Niger, Nigeria, Pakistan, Palestinian Territories, Senegal, Sri Lanka, Sudan, Tanzania, Thailand, Turkey, Togo, United Arab Emirates, Vietnam). The SuSanA Forum has nearly 5000 members, and the majority of these members work for sanitation related organizations.
- The members were asked about their estimation of numbers of squatting toilets in a) public, b) private, c) rural, d) urban spaces. Another question concerned the use of water for anal cleansing in order to assess a possible correlation between squatting toilets and anal cleansing. Furthermore, the respondents were asked to state their observations about changes in toilet use through time. For detailed information see the “questionnaire” (Appendix A).
- Professionals and practitioners were able to answer with numbers according to their personal estimation or by verbal descriptions. Those statements were translated into semi-quantitative data. The prevalence of squatting toilets was divided in three sizes ranging from “low” (0 to 20%) over “middle” (21 to 79%), to “high” (80 to 100%). Those three categories were also made visible by colours.
- The term “private” comprises the toilets in private households whereas “public” comprises toilets in buildings such as schools, universities, official buildings, hotels and restaurants.
- When users did not specifically differentiate between urban and rural, their answer for public / private was put in all rows.

In total, **33 responses from 29 different persons** were received.

The term “sitting toilets” in this document refers to a toilet used in a sitting position (on a pedestal). Most respondents used it to mean a flush toilet, even though a sitting toilet could also be a dry toilet.

## 3. Results

### 3.1 Explanations

In order to make the information provided comparable, we chose to put the proportions of persons using squatting toilets in the categories “low”, “middle” and “high” using the following definitions:

Prevalence of squatting toilets or anal cleansing with water:

|   |                    |  |
|---|--------------------|--|
| L | <b>Low or none</b> | Approx. 0 – 20% - No or few squatting toilets /anal cleansing with water, or less than 20% of all toilets / users                              |
| M | <b>Middle</b>      | Approx. 20 – 80% - Some or quite a lot of squatting toilets or users who practice anal cleansing with water                                    |
| H | <b>High</b>        | Approx.- 80 – 100% - A very high prevalence of squatting toilets or users who practice anal cleansing with water; nearly all squatting toilets |

The results from the survey are summarized in the table below. The following notes were used in the table:

- N1 means that the respondent made no differentiation between rural and urban.
- N2 means that the respondent made no differentiation between public and private.
- N3 means that the respondent did not address the question on anal cleansing

Many forum users mentioned in their posts that they find it hard to give reliable numbers. One problem is the regional differences that cannot only be captured by the difference between rural and urban. Also the differentiation between public and private does not take into account that “public” toilets might differ a lot depending on the type of building, target group and many more factors. Because of these problems of generalization, the results of this survey should be regarded as a rough estimation and as an inspiration for further need for investigation.

### 3.2 Conclusions

Based on the table below, the following main conclusions can be drawn (keeping in mind that the number of responses is still quite small and further research is needed):

- **For Latin America**, only information for one country (Mexico) was provided in a “structured” way, and squatting toilets have a low prevalence there<sup>1</sup>.
  - Information for other Latin American countries was also provided by three forum members before the start of the survey, however, the information is less clear and somewhat contradictory. The presence of squatting toilets in Latin America seems to be very low although they can be found in the Andean mountain ranges in Peru.
  - Contradictory estimations exist about how common squatting toilets are in rural areas of Bolivia and Peru.
- **For Asia and Pacific**, answers were obtained from the following ten countries: Australia, Cambodia, China, India, Indonesia, Malaysia, Nepal, Pakistan, Thailand, and Vietnam.
  - In general countries where anal cleansing with water is common (e.g. Muslim or Hindu cultures), prevalence of squatting toilets is high or medium. Also, all toilet types (sitting and squatting) in those countries are normally provided with some form of anal cleansing

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<sup>1</sup> We have a lower participation level in the forum from that region. Also due to the absence of Muslim countries in that region, forum members were not approached directly by e-mail which could also explain the lower participation rate in the survey (only members in predominantly Muslim or Buddhist countries were contacted by direct e-mail to encourage participation in the survey).

devices with water (such as a bidet shower), or at least a provision for anal cleansing with water (people taking their own jug of water into the toilet cubicle with them). In predominantly Muslim countries where anal cleansing with water is the norm, all toilet types (sitting and squatting) are provided with anal cleansing devices.

- In many countries there seems to be a trend towards more sitting toilets (this was mentioned for India, Indonesia, Malaysia, Nepal, Pakistan, Thailand).
- Remarkable is the emphasis on class differences. Wealthy areas and “high class” hotels, offices and airports are associated with more sitting toilets in contrary to low income areas.
- One exception to the region is Australia where no squatting toilets are to be found, but this is not surprising given the European history of the country.
- Concerning the differences between rural and urban areas, squatting toilets seem to be always more common in rural areas than in urban areas. This applies to Cambodia, China, India, Indonesia, Malaysia, Nepal, Pakistan, Thailand and Vietnam. Reasons might be the lack of appropriate water infrastructure (in the case of squatting toilets without a water seal compared to water flushed sitting toilets)<sup>2</sup>, traditions that do not change as fast in rural areas, or lower socio-economic status of rural residents (if squatting toilets are cheaper than sitting toilets).
- **For Caucasus / Central Asia**, answers were obtained only for Ukraine. Sitting toilets there are associated with flush toilets connected to centralised sewage systems.
  - In private homes water flush toilets are almost always sitting toilets.
  - Prevalence of squatting toilets is generally low but they can be found in some public areas.
  - In rural areas “outhouse dry toilets” (pit latrines) can be found that are constructed for squatting.
- **For Northern Africa and Middle East**, answers were obtained from the following countries: Afghanistan, Egypt, Iran, Jordan, Morocco, United Arab Emirates.
  - In most of those countries, anal cleansing with water is common.
  - Generally, it seems that in those countries both types of toilets, sitting and squatting, are common.
  - There seems to be a trend either to a mix of squatting and sitting toilets or to more sitting toilets.
  - Interesting is the high prevalence of anal cleansing with water in the United Arab Emirates whereas the prevalence of squatting toilets is low. This can be an indication that anal cleansing is not necessarily connected to squatting toilets.
  - Only little information was given about the differences between rural and urban areas. Based on the comments about Egypt it can be assumed that the prevalence of squatting toilets in rural areas is higher than in urban areas.
- **For Sub-Saharan Africa**, answers were obtained from the following countries: Kenya, Rwanda, Somalia, Tanzania and Uganda.
  - Squatting toilets seem to be very common in those countries.
  - The prevalence of squatting toilets seems to be higher in rural than in urban areas (this was stated for Kenya, Tanzania, Uganda).
  - A trend to more sitting toilets seems to occur especially in urban (wealthy) areas.
- **For Europe**, answers were obtained from Germany and France. While squatting toilets in Germany are basically non-existing, they can be found in France sometimes in public spaces.
- **General comparison between public and private toilets:**
  - Squatting toilets are regarded by some people as more hygienic than sitting toilets (mentioned for Indonesia, Pakistan and Tanzania). Also, squatting toilets are easier to clean (mentioned for Nepal and Rwanda). These might be reasons why squatting toilets are preferred in public settings. Namely it is France, Kenya and Malaysia where

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<sup>2</sup> As mentioned before: many respondents equated squatting toilets to toilets without a water seal even though flush squatting toilets to exist. Similarly, a sitting toilet does not necessarily have to have a water seal but may also be a “dry toilet”.

the prevalence of squatting toilets in public areas seems to be higher than in private.

- Typical public places with squatting toilets are schools (mentioned for Vietnam, Tanzania, Jordan, France, Ukraine) while other public toilets in new offices or “high class” hotels are mainly sitting ones.
- In private homes the choice for a sitting toilet can be explained by different factors. One is the “image” of sitting toilets: They are perceived to be modern, to be as a sign of status or a sign of progress (mentioned for South India, Indonesia and Ukraine). Another factor is the convenience of sitting toilets, especially for people with movement difficulties (mentioned for Iran, Pakistan and Somalia). These can be further reasons for a lower number of squatting toilets in private compared to public areas. Also, it seems like these motivations play a more important role in urban than in rural areas.
- Due to hygienic reasons, households with many people who have to share one toilet would feel undesirable about a sitting toilet (mentioned for Pakistan).

| Country                           | Rural          |         | Urban          |         | Anal cleansing with water | Changes over time   | Comments  |
|-----------------------------------|----------------|---------|----------------|---------|---------------------------|---|---|
|                                   | Public         | Private | Public         | Private |                           |   |   |
| <b>Latin America</b>              |                |         |                |         |                           |   |   |
| Brazil                            | N1             |         | L              |         | N3                        |   | Urban areas: Especially in the south and southeast, sitting flush toilets is the rule, even in poorer shacks with no connection to sewers, people do have porcelain toilets. I am even unaware of a term to 'squatting toilet' in Portuguese, people normally - and wrongly - refer to it as 'fossas'. <sup>3</sup>                 |
|                                   | N2             | N2      | N2             | N2      |                           |   |   |
| Chile, Peru and Bolivia           | L <sup>4</sup> |         | L <sup>5</sup> |         | N3                        |   | Squatting toilets are extremely rare to non existent (except maybe the hole in the ground type of pit latrines, but I am not sure if these count) <sup>6</sup>  |
|                                   | N2             | N2      | N2             | N2      |                           |   |   |
| Ecuador, South America in general | L <sup>7</sup> |         | L <sup>8</sup> |         | N3                        |   | I have never seen organized, presentable toilets for squatting in South America, aside from the UDDTs I build. Squatting is, however, standard for open defecation out in the woods or in a make-shift pit latrine with a wooden floor that has a drop hole cut into the middle of it. <sup>9</sup>                                 |
|                                   | N2             | N2      | N2             | N2      |                           |   |   |
| Mexico                            | N1             |         | N1             |         | N3                        | Squatting toilets over pit latrine existed some 30 years ago. |   |
|                                   | L              | L       | L              | L       |                           |   |   |
| Peru and Bolivia                  | N1             |         | N1             |         | N3                        |   | Squatting toilets exist as dry and as well as pour flush, they are common. I would estimate in the "Sierra" (Sierra is the Andean Mountain Ranges in Peru) they are (were) more common than sitting toilets, in the Amazonas and Costal region (Peru) there are more sitting toilets. But we build - asked by the people to do so – |
|                                   | N2             | N2      | N2             | N2      |                           |   |   |

<sup>3</sup> Information provided by e-mail from Maria Cecilia de Carvalho Rodrigues on 4 May 2015, see appendix C.

<sup>4</sup> No differentiation between urban and rural.

<sup>5</sup> No differentiation between urban and rural.

<sup>6</sup> Forum [post from KKMakowka](#), see appendix C.

<sup>7</sup> No differentiation between urban and rural.

<sup>8</sup> No differentiation between urban and rural.

<sup>9</sup> Forum [post from canaday](#), see appendix C.

|                         |    |    |    |    |    | only sitting toilets in the sierra. <sup>10</sup>  |
|-------------------------|----|----|----|----|----|--|
| Asia and Pacific        |    |    |    |    |    |  |
| Australia               | N1 |    | N1 |    | N3 | Australia has never had squat toilets.   |
|                         | L  | L  | L  | L  |    |  |
| Cambodia                | N1 |    | N1 |    | N3 | Public toilets: 50%, more in rural<br>Private toilets: 30%, more in rural  |
|                         | M  | M  | M  | M  |    |  |
| China (1)               | H  |    | L  |    | N3 | “Hi-end offices” in downtown of the big cities only have sitting toilets.<br>Some people do prefer squatting toilets, especially old ones who are brought up in the countryside.   |
|                         | N2 | N2 | N2 | L  |    |  |
| China (2)               | H  |    | L  |    | N3 | Trend to more sitting toilets in residential areas<br>the prevalence of squat toilets is significantly higher in public facilities.<br>I have never encountered facilities using anal cleansing water.   |
|                         | N2 | N2 | N2 | N2 |    |  |
| India (1)               | H  |    | M  |    | N3 |  |
|                         | N2 | N2 | N2 | N2 |    |  |
| India / South India (2) | N1 |    | N1 |    | H  | Trend to more sitting toilets<br>Public toilets: 50% (i.e. both types are provided);<br>in context of upper class clientele e.g. airports, 40-50%<br>Private toilets: depends on socio-economic class (which, to some extent, reflects caste, but even more so reflects socio-cultural and educational background); upper class (the rich) seem to favour sitting toilets (increasingly); as private homes of the less wealthy often have no toilets at all. |
|                         | H  |    | M  | M  |    |  |
| Indonesia (1)           | H  |    | M  |    | H  | Trend to more sitting toilets  |
|                         | H  | H  | M  | M  |    |  |
| Indonesia (2)           | N1 |    | N1 |    | H  | For both, sitting and squatting toilet, there is always water around for anal cleansing  |
|                         | H  | H  | L  | L  |    |  |

<sup>10</sup> Forum [post from Christoph](#), see appendix C.

|               |    |    |    |    |    |   |  |
|---------------|----|----|----|----|----|---|--|
| Indonesia (3) | H  |    | N1 |    | H  | Trend to more sitting toilets (especially in cities and among high income households)                           | Public places such as government offices and star hotels are provided with the sitting toilet.<br>Urban areas: among medium and low income households more households are using squatting toilets. In big cities people now prefer to have sitting toilets in their new house.   |
|               | N2 | N2 | N2 | N2 |    |   |  |
| Malaysia      | N1 |    | N1 |    | H  | Trend to more sitting toilets   | Public toilets: 80%, less in cities, more in rural<br>Private toilets: 60%, less in cities, more in rural<br>Anal cleansing: 90%, less in cities, more in rural  |
|               | H  | M  | M  | M  |    |   |  |
| Nepal         | H  |    | M  |    | H  | Over the last 15 years: more sitting toilets in middle class houses and in public places but not a big increase | Nearly all public toilets would have some squatting toilets and some may also have seats. For example, airports in out of Kathmandu areas, the vast majority are squatting toilets, but in Kathmandu airport about 50/50 split.<br>Anal cleansing is the norm.<br>In larger homes it is common to have a mix of squatting and seats. |
|               | H  | N2 | H  | N2 |    |   |  |
| New Zealand   | L  |    | L  |    | L  |   |  |
|               | L  | L  | L  | L  |    |   |  |
| North Korea   | H  |    | H  |    | N3 |   | Sit down toilets would be mainly found in areas focused on foreign visitor's (tourist places), and for the small group of wealthy upper class.<br>Anal cleansing water is not prevalent.   |
|               | H  | H  | H  | H  |    |   |  |
| Pakistan (1)  | H  |    | H  |    | H  |   | Rural areas: 95%; The remaining 5 per cent refers to those who are obese or have medical condition in knees and cannot use squatting position.<br>Urban areas: 80%; The remaining 20 per cent includes high-class hotels (to cater for western visitors) and those who prefer hifi style of life.                                    |
|               | N2 | N2 | N2 | N2 |    |   |  |
| Pakistan (2)  | N1 |    | N1 |    | N3 | Trend to more sitting toilets (especially well off people in large cities)                                      | People find it much easier to wash in the squatting position, so there is a direct correlation with anal cleansing and squatting toilets (but then again anal cleansing is practiced 100% regardless of the type of toilet).   |
|               | N2 | N2 | N2 | N2 |    |   |  |
| Pakistan (3)  | N1 |    | N1 |    | H  | Trend to more sitting   | Less squatting toilets in urban private homes (80%) than in rural  |



|                                |                     |   |                     |    |    |  |  |
|--------------------------------|---------------------|---|---------------------|----|----|--|--|
|                                | H                   | H | M                   | H  |    | toilets  | private homes (95%)  |
| Pakistan (4)                   | N1                  |   | N1                  |    | H  | Trend to more sitting toilets                  | Public toilets: about 5% of them have additionally western style sitting toilets<br>Private toilets: about 20% have additionally western style sitting toilets.<br>Anal cleansing: non Muslims who are part of the country are using water considering the importance of health and hygiene.   |
|                                | H                   | H | H                   | H  |    |  |  |
| South Korea                    | L                   |   | N1                  |    | N3 | Trend to more sitting toilets                  |  |
|                                | L                   | L | N2                  | N2 |    |  |  |
| Thailand                       | N1                  |   | N1                  |    | M  | Trend to more sitting toilets                  | Public toilets: 50%, more in rural<br>Private toilets: 30%, more in rural<br>Anal cleansing: 70%, more in rural  |
|                                | M                   | M | M                   | M  |    |  |  |
| Vietnam                        | N1                  |   | N1                  |    | N3 |  | Private toilets: Even in newly built houses in sub-urban areas, they still prefer squatting toilets.<br>Public toilets: In newly built shopping malls the percentage should be 0%. But in public buildings like schools squatting toilets are still chosen. I suppose that the percentage in schools should be very high. (99% of schools are public)  |
|                                | N2                  | M | N2                  | L  |    |  |  |
| <b>Caucasus / Central Asia</b> |                     |   |                     |    |    |  |  |
| Ukraine                        | N1                  |   | N1                  |    | L  | Trend to install water flush (sitting) toilets | No anal washing in western Ukraine (sometimes there is a bidet).<br>Carpathian region: At homes in cities and towns whenever there is a centralized sewage there will be definitely flush sitting toilets. At private homes without central sewage the toilet will almost always be an outside privy.<br>The majority of public toilets in this region are sitting flush toilets (café, resorts, markets, stations).<br>Rural area around Kiev: In the villages you mostly find outhouse pit privies. At homes (inside) you can see both squatting and sitting type of it. |
|                                | M - L <sup>11</sup> | L | M - L <sup>12</sup> | L  |    |  |  |

<sup>11</sup> In public sanitation sector 80% of water toilets will be sitting and 20 % squatting. In public dry toilets (e.g. schools) 40 % will be sitting 60% will be squatting.

<sup>12</sup> See footnote above.

|  |                     |    |                     |    |                 |   |  |
|--|---------------------|----|---------------------|----|-----------------|---|--|
|  |                     |    |                     |    |                 | I've never seen squatting flush toilet in private homes.  |  |
| <b>Northern Africa and Middle East</b> |                     |    |                     |    |                 |   |  |
| Afghanistan (1)                        | N1                  |    | N1                  |    | L <sup>13</sup> | Trend to mix of squatting and sitting toilets (especially in new official and some residential buildings)   | Anal cleansing: Shia community is washer and Sunni community is wiper.<br>(note: up to 90% are Sunnis, see: <a href="https://en.wikipedia.org/wiki/Afghanistan#Religions">https://en.wikipedia.org/wiki/Afghanistan#Religions</a> )<br>Public toilets: in modern buildings 10% sitting toilets<br>In rural areas sometimes still open defecation |
|  | H                   | H  | N2                  | H  |                 |   |  |
| Afghanistan (2)                        | N1                  |    | N1                  |    | H               | Trend to mix of squatting and sitting toilets (especially wealthy people in urban areas)  | Anal cleansing: People in rural areas also use dry mud.  |
|  | H                   | H  | H                   | H  |                 |   |  |
| Egypt                                  | N1                  |    | N1                  |    | H               |   |  |
|  | N2                  | M  | N2                  | L  |                 |   |  |
| Iran                                   | N1                  |    | N1                  |    | H               |   | Public toilets: sitting toilets (toilet farangei) are used in hotels, guesthouses and even private homes. Private toilets: squatting toilets are the traditional ones. Many modern houses build both types. Elder people are comfortable with the sitting ones.  |
|  | N2                  | N2 | N2                  | N2 |                 |   |  |
| Jordan                                 | M - H <sup>14</sup> |    | L - M <sup>15</sup> |    | N3              | Trend to more sitting toilets in some homes in uptown areas (which make 20 to 30% of the cities population)<br><br>Trend to more sitting toilets but less pronounced in downtown and public areas (1-2 out of 10) | Public toilets: squatting toilets in Muslim worship houses, organizations and schools.<br>At University and schools different variations of a mix of squatting and sitting toilets.<br>Private toilets: Most are squatting toilets but it differs in dependence of the city, region etc.   |
|  | N2                  | N2 | H <sup>16</sup>     | N2 |                 |   |  |

<sup>13</sup> Based on the user's comment on anal cleansing and the numbers from Wikipedia we chose an "L" in this row.

<sup>14</sup> The forum user differentiates here not between rural and urban, but between developed (modern and wealthy) and less developed (traditional) areas.

<sup>15</sup> See footnote above.

<sup>16</sup> The rate is high only for mosques as Muslim worship houses. Other public toilets can have different amounts.

|                           |    |    |    |    |   |   |
|---------------------------|----|----|----|----|---|---|
|                           |    |    |    |    | households reconstruct their bathrooms) |   |
| Morocco                   | N1 |    | N1 |    | N3                                      | Trend to sitting toilets  |
|                           | N2 | N2 | N2 | N2 |   |   |
| United Arab Emirates      | N1 |    | N1 |    | H                                       | Squatting toilets estimation in public and private: 20%<br>Dubai (as tourist destination): even lower   |
|                           | L  | L  | L  | L  |   |   |
| <b>Sub-Saharan Africa</b> |    |    |    |    |   |   |
| Kenya                     | H  |    | L  |    | M                                       | Most of the peri-urban and rural areas in Kenya prefer squatting toilets. Homes in urban areas prefer sitting toilets as it is perceived to be modern.  |
|                           | H  | H  | H  | L  |   |   |
| Rwanda                    | N1 |    | N1 |    | N3                                      | Public toilets: as people are changing their living style, they tend to use both squatting and pedestal toilets. My understanding is that, the reliability of water services will increase the use of pedestal toilets  |
|                           | H  | H  | H  | H  |   |   |
| Somalia (1)               | H  |    | H  |    | H                                       | Private toilets: those few ones who do not squat are overweight, elderly or sick  |
|                           | N2 | N2 | N2 | N2 |   |   |
| Somalia (2)               | N1 |    | N1 |    | H                                       | Trend to sitting toilets (in urban areas)<br>Anal cleansing: in water-scarce areas twigs and stones are used<br>Rural areas: about 2% practice open defecation  |
|                           | H  | H  | H  | H  |   |   |
| Tanzania                  | H  |    | N1 |    | H                                       | Urban: Trend to sitting toilets especially in new offices, hotels, houses<br>Public toilets: most schools, older public buildings (especially in small towns) and local hotels have squat toilets; newer offices and 'international' hotels have sitting toilets. Total: 65%<br>Total squatting toilet number is high, since the majority lives in rural areas. |
|                           | N2 | N2 | M  | M  |   |   |
| Uganda                    | H  |    | H  |    | N3                                      | Squatting toilets make up to 90% especially in rural areas.<br>In some parts of the villages, people have no toilets at all.  |
|                           | N2 | N2 | N2 | N2 |   |   |
| <b>Europe</b>             |    |    |    |    |   |   |
| France                    | N1 |    | N1 |    | N3                                      | Trend to more sitting toilets in public places<br>Squatting toilets still exist in public buildings and in school (less than 25%).  |
|                           | M  | L  | M  | L  |   |   |



## 4. Appendices

### A Questionnaire

The questions that were posted on the forum on 15 April 2015 were:

Please tell me your rough estimates for your country (split by region if it's a big diverse country):

- Percentage of squatting toilets in private homes
- Percentage of squatting toilets in public buildings
- Any changes you are observing in this pattern over time
- How common is anal cleansing with water (in case we can find a correlation between anal cleansing with water and the use of squatting toilets)
- Any other comments

See also forum post: <http://forum.susana.org/forum/categories/141-other-types-of-toilets-and-sanitation-systems/12901-please-help-me-with-a-global-survey-how-common-are-squatting-toilets-in-your-country>

## B Results of the survey in detail

See also forum thread: <http://forum.susana.org/forum/categories/141-other-types-of-toilets-and-sanitation-systems/12901-please-help-me-with-a-global-survey-how-common-are-squatting-toilets-in-your-country>

Table 2: Results of the survey in raw data.

| Country                 | Region           | % squatting         |   |  |   | Anal cleansing with water or not? | Comments  | Source (name, date)                      |
|-------------------------|------------------|---------------------|---|--|---|-----------------------------------|---|--|
|                         |                  | In public           | In private  | Rural  | Urban   |                                   |   |  |
| <b>Latin America</b>    |                  |                     |   |  |   |                                   |   |  |
| Mexico                  | Latin America    | Quite rare          | Quite rare  |  |   |                                   | I have only seen squatting toilets over pit latrines some 30 years ago. In the world bank latrine construction manuals published during the sanitation decade 1982 1992 there are references and instructions to build squatting plates and suggestions for it's use, they declare that for public facilities it is easier to maintain and clean than seats | <a href="#">Emilio, 17 April 2015</a>    |
| <b>Asia and Pacific</b> |                  |                     |   |  |   |                                   |   |  |
| Australia               | Asia and Pacific | 0%                  | 0%  |  |   | 0%                                | Australia has never had squat toilets (well in modern times anyway)   | <a href="#">Denniskl, 1 May 2015</a>     |
| Cambodia                | Asia and Pacific | 50% (more in rural) | 30% (more in rural)   |  |   | 70% (more in rural)               | Not much changes in Cambodia:)  | <a href="#">Denniskl, 1 May 2015</a>     |
| China                   | Asia and Pacific |                     | In the city, at home, few people use squatting toilets because they are | In the country side, almost all the people are using the squatting | In the hi-end offices in the downtown of the big cities, only sitting toilets |                                   |   | <a href="#">Scottchen, 22 April 2015</a> |

|                     |                  |  |  |   |   |   |   |  |
|---------------------|------------------|--|--|---|---|---|---|--|
|                     |                  |  | too cheap. not matching with the expensive apartments. But some people do prefer squatting toilets, especially for those old people who are brought up in the countryside.   | toilets.  | are available   |   |   |  |
| China               | Asia and Pacific | I would say that the prevalence of squat toilets is significantly higher in public facilities. In my experience (not living in a 'big' city), most public facilities would have squat toilets. |  |   | In big cities sit down toilets are prevalent in both public and private situations. However, this is likely not the situation in most cities. For examples, in the foreign student accommodation in a large university we used squat toilets. Newer residences in most cities would have sit down toilets – as is likely the case in rural settings also, but the prevalence of new buildings in rural areas is a lot less. | As far as I am aware, I have never encountered facilities using anal cleansing water (however, toilet paper isn't usually provided in public facilities, so ...) This includes in the north west, which is significantly Muslim in population (Note: I have more limited experience in this part of the country). | The trend is away from using squat toilets, certainly in residential situations. However in some new public facilities they both sit down and squat toilets have been installed.  | <a href="#">Bones 18 July 2015</a> <sup>17</sup> |
| India               | Asia and Pacific |  |  | 95%   | 40%   |   | Overall India: 90% squatting toilets.   | <a href="#">Shitalcera, 13 May 2015</a>          |
| India / South India | Asia and Pacific | 50% (i.e. both types are provided); in context of upper class clientele e.g. airports, 40-50%  | Depends on socio-economic class (which, to some extent, reflects caste, but even more so reflects socio-cultural and educational background); upper class (the rich) seem to favour sitting toilets (increasingly); as private homes of the less wealthy often have no toilets at all, toilets in private homes might be more than 50% sitting | in smaller towns and countryside rather 80-100% of public toilets |   | Very common; facilities for anal cleansing are a must.  | Change over time: Yes, the number of sitting toilets is on the increase. Don't know whether this has to do with the lack of physical fitness of the rich; or with the difference of status i.e. the sitting toilet being regarded as the more convenient toilet of the rich; or rather the combination of these two factors.<br>My experience (30 yrs) & impressions are based mainly on Tamil Nadu and the | <a href="#">Lukas Dengel, 2 May 2015</a>         |

<sup>17</sup> This comment was subsequently added.

|           |                  |   |  |  |   |  |   |   |
|-----------|------------------|---|--|--|---|--|---|---|
|           |                  |   | types.   |  |   |  | Southern states   |   |
| Indonesia | Asia and Pacific | 80% (less in cities, more in rural)   | 80% (less in cities, more in rural)                  |  |   | 90% (less in cities, more in rural)  | As country modernises more, squatting toilets re being replaced by sitting toilets, more for "westernisation" than functionality or health  | <a href="#">Denniskl, 1 May 2015</a>    |
| Indonesia | Asia and Pacific | nearly 100% in rural area, 20 % in the city   | 100 % in rural area, but only around 20% in the city |  |   | Of course for both sitting and squatting toilet, there always water around for anal cleansing. It's rare to have really dry toilet, not water splashes on the floor. Except for toilet that include high technology inside, so just push the bottom and there will be water come out through your anal. For this type of toilet, there also tissue inside and using it to dry up the anal and the seat. Usually this hi-tech sitting toilet in public buildings such as five star hotel or large company office building or mall/ huge department store. | Yes, commonly housholed toilet in the city using sitting toilet, with flush and water from shower nearby the toilet to clean up the anal. But, in the rural area they still use squatting toilets. Only for those who are rich or in high level of social status, they will prefer to have sitting toilet.  | <a href="#">Aardhiani, 15 May 2015</a>  |
| Indonesia | Asia and Pacific | In public places such as government offices and star hotels are provided with "the sitting" toilet. Commonly the sitting toilets (especially the one in government office or public places) are also provided with water tap with flexible pipe to assist in self cleansing. In star hotel they install sitting toilet with water spray for self cleansing inside the sitting toilet. |  | In rural areas, almost all are using squatting toilet. | In urban areas, I think more households are using squatting toilet (particularly among medium and low income households). More people in big cities now prefer to have sitting toilet in their new house. |  | The usage and hygiene of the toilet always become a problem (in public places) since people sometimes squat on the sitting toilet instead of sitting on it and they use water for cleansing after use the toilet. So the dirt and sand from shoes is left all over the place in the toilet room. You will hardly find tissues in toilet of public places (school, universities, station, shopping center) and government office unless you go to hotels or high-rise office building. | <a href="#">Dwipayanti, 29 May 2015</a> |
| Malaysia  | Asia and Pacific | 80% (less in cities, more in rural)   | 60% (less in cities, more in rural)                  |  |   | 90% (less in cities, more in rural)  | As country modernises more, squatting toilets re being replaced by sitting toilets, more for "westernisation" than functionality or health  | <a href="#">Denniskl, 1 May 2015</a>    |
| Nepal     | Asia and         | Nearly all would have some squatting toilets  |  | in rural and small urban towns - 80-100%               | In larger urban centers: 50% (% decreases the   | Anal cleansing with water is the norm. In middle class to upper class  | Changes: over 15 years, more sitting toilets in middle class  | <a href="#">DarrylOnT heMove,</a>       |



|             |                  |   |  |  |   |  |  |  |
|-------------|------------------|---|--|--|---|--|--|--|
|             | Pacific          | and some may also have seats. For example, airports in out of Kathmandu areas, the vast majority are squatting toilets, but in Kathmandu airport about 50/50 split. |  | In larger homes common to have a mix of squatting and seats.   | more educated owner is)<br>In larger homes common to have a mix of squatting and seats.                                   | paper is more common, but not uncommon to use water even with squatting toilets. | houses and more in public places but not a big increase<br><br>Squatting toilets tend to be easier to keep clean. Poorly kept seats are more common and floors are often wet.<br><br>From my experience in many years in South Asia and South East Asia, flexible hose with trigger gun is the most common way for water anal cleansing in most countries - very easy to retrofit, but leaking taps etc. do result in wet (and middy floors). Unlike squatting toilets, the floors in pedestal toilets are harder to clean when wet (in squatting toilets, one can simple wash water down into the (depressed) bowl) | <a href="#">27 May 2015</a> ,<br><a href="#">30 May 2015</a> |
| New Zealand | Asia and Pacific |   |  |  |   |  | No squat toilets, no anal cleansing. (I guess maybe in some back country farm you might find an outhouse!)   | <a href="#">Bones 18 July 2015</a> <sup>18</sup>             |
| North Korea | Asia and Pacific |   |  |  |   | I would say that anal cleansing water is not prevalent.                          | Certainly the majority of private and public facilities would be squat toilets in both rural and urban situations. Sit down toilets would be mainly found in areas focussed on foreign visitor's (tourist places), and for the small group of wealthy upper class.   | <a href="#">Bones 18 July 2015</a> <sup>19</sup>             |
| Pakistan    | Asia and Pacific |   |  | 95%; The remaining 5 per cent refers to those who are obese, or have medical condition in knees and cannot use | 80%; The remaining 20 per cent includes high-class hotels (to cater for western visitors); those who prefer hifi style of | 100% Muslims use water for anal cleaning.  |  | <a href="#">FH Mughal, 10 May 2015</a>                       |

<sup>18</sup> This comment was subsequently added.

<sup>19</sup> This comment was subsequently added.

|          |                  |  |  |   |  |   |   |   |
|----------|------------------|--|--|---|--|---|---|---|
|          |                  |  |  | squatting position.   | life; and with condition as noted above. |   |   |   |
| Pakistan | Asia and Pacific |  |  | In rural areas it is quite different. People are not generally willing to use the sitting toilets at all. |  | Reasons for people not willing to use sitting toilets:<br>This in some ways is linked to anal cleansing, but there are also other reasons. people find it much easier to wash in the squatting position, so there is a direct correlation with anal cleanings and squatting toilets (but then again anal cleansing is practiced 100% regardless of the type of toilet). | The trend in cities is rapidly changing and most well off people that live in cities (especially larger cities) already use or are changing to the sitting type of toilet. I think a far more important reason is that people consider the sitting toilet to be unclean and unhygienic, due to the fact that parts of the body come directly in contact with the seat and other parts of the toilet, whereas in the squatting type of toilet there is no contact of any part of the body with the toilet itself (people wear slippers while using the toilet or the bathroom in general, therefore there is no contact with the body whatsoever). In rural households when there is a toilet present in the house, it is shared by the whole household, which may consist of up to 10-15 people, therefore sharing a sitting toilet in these conditions is totally undesirable. People <b>perhaps</b> would be more open to sitting toilets if they were the sole users of such toilets. Even in WASH projects specially designed for Persons With Disabilities (PWD's) mostly the squatting toilets were provided on demand from the users. This is so that the rest of the household could also benefit from the toilet as well (which shows that they wouldn't use | <a href="#">Adeelmalik</a><br><a href="#">_28 May</a><br><a href="#">2015</a> |

|          |                  |   |  |   |  |  |   |                                      |
|----------|------------------|---|--|---|--|--|---|--------------------------------------|
|          |                  |   |  |   |  |  | it if it was of the sitting type). When squatting toilets were provided to PWD's, a special modification (a wooden frame to be placed over the squatting toilet, which enables the person with disability to sit over the squatting toilet) was made by some users. In another WASH project for PWD's both types of toilets were given to the households with PWD's, so that it would be used by all the members of the households. Some respondents in the these areas said they would be happy to have both types of toilets for the PWD's, but if they had to chose one they would definitely choose the squatting type of toilet. |                                      |
| Pakistan | Asia and Pacific |   |  | In rural areas,overall there are 5% of squatting toilets <sup>20</sup> both in in private homes and public buildings. | 80% of squatting toilets in private homes and are 70% of squatting toilets in public buildings | Most common is anal cleansing with water but hand washing with soap is minimal.  | There is increase in percentage of the users of toilets <sup>21</sup> over time.  | <a href="#">Lifefdn, 28 May 2015</a> |
| Pakistan | Asia and Pacific | 100%. if there is a washroom in public building there would be squatting toilet in it. yes few of them do have other western style and that can be counted as 5%. | 100% 20% have also installed the western commode system as well. |   |  | in PAKISTAN being muslim country anal cleansing is always with water even non muslims who are part of the country are using water considering the importance of health and hgiene. | change pattern: Yes now things are going to be more modernized in metro cities and family prefer western style over squatting ones. Also the western style toilets are highly appreciated by elderly people. urinating in open area is very common in PAKISTAN but that is only limited to MALE/MEN. Women/Female does not go to open area. in some rural area where there is no washroom facility in   | <a href="#">STAROPK, 29 May 2015</a> |

<sup>20</sup> Our assumption is that the user intended to write "sitting toilets".

<sup>21</sup> Our assumption is that the user intended to write "sitting toilets".

|                                |                    |   |   |   |  |  |  |                                       |
|--------------------------------|--------------------|---|---|---|--|--|--|---------------------------------------|
|                                |                    |   |   |   |  |  | house women also go in the open area but that is only in night time not in day light.  |                                       |
| South Korea                    | Asia and Pacific   |   |   | My main experience is living in rural communities, in private homes I expect the prevalence of sit down toilets to be more than 90%. Public facilities is likely similar. I'm not sure if I have ever encountered a squat loo in South Korea. |  | You do find fancy electronic toilets like in Japan, so there may be a move toward using anal cleansing water.  | The trend is certainly toward sit down toilets.  | <a href="#">Bones 18 July 2015</a>    |
| Thailand                       | Asia and Pacific   | 50% (more in rural)   | 30% (more in rural)   |   |  | 70% (more in rural)  | As country modernises more, squatting toilets re being replaced by sitting toilets, more for "westernisation" than functionality or health                         | <a href="#">Denniskl, 1 May 2015</a>  |
| Vietnam                        | Asia and Pacific   | The percentage should go as large as 70% . It is widely seen almost in rural or even sub-urban areas in the country. Even in newly built houses in sub-urban areas, they still prefer this type of toilets. I have no idea why but it seems that for the first reason, they have been getting used to this type of toilet. The second reason may be that the modern type of toilet is far from affordable of most households. In big cities, the percentage should be as small as 5 to 10%, which is mainly the result from the past. | In newly built shopping malls the percentage should be 0%. But in public buildings like schools squatting toilets are still chosen. I come from Hanoi, capital city, but as far as I remember, my primary school, secondary school and even high school still have this type of toilet when I was enrolled. ( I am 25 now) So I suppose that the percentage in schools in other areas of the country, the percentage should be very high. (99% of schools are public) |   |  | As far as I observe, if modern toilet is in use, it is always accompanied with small water - pipe for anal cleansing. Anal cleansing with water is more preferred. | Last time I saw this was 2 years ago when I visited relatives in the countryside. In Hanoi, all of my friends and acquaintances no longer use this type of toilet. | <a href="#">Anhpham, 17 June 2015</a> |
| <b>Caucasus / Central Asia</b> |                    |   |   |   |  |  |  |                                       |
| Ukraine                        | Caucasus / Central | I recall I've seen some squatting flush toilets   | Carpathian region of Ukraine: At homes in   | Rural area around Kiev: In the villages you mostly  | I think 100 percent of toilets in Kiev are water | I do not think there is a tradition to wash the anus after defecation at   | there is a general desire to install a water flush toilet  | <a href="#">BPopov, 4 May 2015</a>    |

|  |      |  |   |  |  |   |  |  |
|--|------|--|---|--|--|---|--|--|
|  | Asia | <p>15-20-30 years ago in Kiev in public toilets (Soviet Union times) but now what I see mostly in public toilets is sitting toilets (although actually majority people may actually use them without contact semi squatting). Carpathian region of Ukraine: The majority of public flush toilets (café, resorts, markets, stations) I have seen both in rural and urban are sitting pedestal toilets although again many people use it without contact. However I have seen several water flush squatting toilets . Two of them were at the petrol stations. At public spaces without sewage (schools, cafes, station) these are same outside privies but maybe with more compartments (holes). These are usually holes in the concrete slab floor . Sometimes they have higher places for feet on different sides of the hole.</p> <p>In public sanitation sector 80% of water toilets will be sitting and 20 % squatting. In public dry toilets (e.g. schools)40 % will be</p> | <p>cities and towns whenever there is a centralized sewage there will be definitely flush sitting toilets. At private homes without central sewage the toilet will almost always be a outside privy (pit or sometimes in some places -- a collecting bucket to throw the feces to the cow dung heap). These ones I mostly seen are kind of sitting toilets with the wooden bench and hole in it fitted with standart toilet plastic rim and lid.</p> <p>In private homes in Ukraine whenever we have water sewage – 99% of toilet will be sitting. With dry outhouses at private homes 90% of toilets will be sitting 10% squatting.<sup>23</sup></p> | <p>find outhouse pit privies. At homes you can see both squatting and sitting type of it. At public spaces (say schools or bus stops ) the toilets are mainly squatting (a hole in the concrete slab). Whenever people put a water flush toilet in the rural area they will almost definitely use a sitting pedestal toilet interface.</p> | <p>flush toilet apart from suburbs where sometimes you may find outside privies which have the same pattern as the rural area around Kiev. I never seen squatting flush toilet in private homes.</p> | <p>least in Western Ukraine. Sometimes you can find a water bidet in people’s houses or tourist hotels but I think they are considered for women’s use.</p> | <p>even if this then is a straight pipe to the nearest stream. A sign of progress. In our last project of public compost toilet at Sinevir Pass (I was designing and supervising) the owner (local guy) first installed kind of tile lined benches –pedestals for sitting but later replaced with squatting water flush ceramic receptacle where he cut the big hole for the chute . I like this idea but let’s see. So generally there is understanding that squatting is better for public spaces.</p> |  |
|--|------|--|---|--|--|---|--|--|

|  |                                 |   |  |   |  |  |   |  |
|--|---------------------------------|---|--|---|--|--|---|--|
|  |                                 | sitting 60% will be squatting. <sup>22</sup>  |  |   |  |  |   |  |
| <b>Northern Africa and Middle East</b> |                                 |   |  |   |  |  |   |  |
| Afghanistan                            | Northern Africa and Middle East | around 90 % squatting toilet, but some building including modern building have around 10% commode toilet. | its coverage is almost 100 % in urban areas, but in rural area in some places still we have open defecation. |   |  | Usually shia community is washer and sunni community is wiper...but access to water is also an important factor.   | we should keep in mind that some squatting toilets are water-based and some others are not which depends to availability of water. Changes over time: it seems in new official building and some residential, we have a mix of squatting and seat toilets.  | <a href="#">Hussain, 17 May 2015</a>             |
| Afghanistan                            | Northern Africa and Middle East | 99 %  | 99 %   |   |  | mostly people use water for cleansing anal and rural villages people use dry mud and after that in ablution they use water for cleaning anal before praying. | Changes over time: over 10 year ago they just used dry mud for cleaning genitals, and now they are using toilet papers instead of dry mud and using water, but no changes will occur in using urinals. However, more wealthy people in urban areas (Kabul), residents install western style toilets so they have both systems in their house (western style and squatting toilet) | <a href="#">Miller, 18 May 2015</a>              |
| Egypt                                  | Northern Africa and Middle East |   |  | - no toilet 0.25%<br>- pedestal toilet : 26%<br>- squatting toilet : 74% (results from a recent survey in 3 governorates in the Nile delta for densely populated rural areas) | In Cairo so far I have only seen sitting toilets with flush or pour flush and most of the time equipped for washers (external shower pipe or sometimes a pipe inside the toilet) and also quite often with toilet paper. It is not a habit to throw toilet paper in the toilet bowl but in a trash can next to the toilet or |  |   | <a href="#">Cecile, 10 May 2015, 12 May 2015</a> |

<sup>23</sup> Additional information from e-mail from BPopov, see also appendix C.

<sup>22</sup> Additional information from e-mail from BPopov, see also appendix C.

|        |                                 |  |   |  |   |   |   |   |
|--------|---------------------------------|--|---|--|---|---|---|---|
|        |                                 |  |   |  | directly on the floor on a pile in case there is no trash can.  |   |   |   |
| Iran   | Northern Africa and Middle East | (squat) sitting toilet is traditional toilet but western toilet (toilet farangei) also use in Hotels, guesthouses and even private house but not custom today many modern houses build both toilet traditional and western because elder people be comfortable in western kind.  |   |  |   | all Muslim must wash clean their anus and genital organ with plenty water after toilet. They use a lot of water for their clean washing | There is not open excretion from thousands of years here in even poor region people use of absorbed well for toilet and use of collected excretion as fertilizer but in recent decades because of public health hazard this kind of fertilizer excluded for agrofood application. | <a href="#">Fppirco, 12 May 2015</a>                |
| Jordan | Northern Africa and Middle East | I went to a University in Karak - South Jordan to study Water and Environmental Engineering. In our faculty, each W.C. area had from 4-5 units with one of them being a "Modern Stool" while the others were squatting ones. In the professors' area, I found that out of 3 units, only 1 is a squatting toilet, and sometimes none. (This is only an example, and it varies from a faculty to another, a public school to a private school to ... etc.) | Most of Jordanian bathrooms do have those squatting toilets, but it differs from a city to another, and a region to another in each city, town, or village as well. |  | Uptown areas in each city of Jordan's 12 cities are tending towards changing to the new stools, while some still stick to the squatting ones even if they live uptown due to personal, traditional and religious reasons. For an indicative average, uptown areas would not formulate more than 20-30% of the city's population. (this range also varies depending on the city)<br>On the other hand, and in the remaining downtown and public areas, you find some people who tend to reconstruct their bathrooms to meet "Modern Stools" and sanitation standards. I cannot generalize this figure, but you might find 1-2 households that do it out of 10. |   | The only thing I can be certain about is that Muslim worship houses, organizations and schools do use Squatting Toilets (an exception would be "Modern Stools" for people with special needs).  | <a href="#">Ejavyusi, 22 May 2015</a> <sup>24</sup> |

<sup>24</sup> See also e-mail from ejavyusi, Appendix C.

|                           |                                 |   |     |  |  |   |  |   |
|---------------------------|---------------------------------|---|-----|--|--|---|--|---|
| Morocco                   | Northern Africa and Middle East | Hygiene problems only in the ones with unrestricted public access, such as in railway stations or adjacent to rural cafes.                                  |     |  |  |   | Changes over time: Most probably in the direction of sitting over squatting and flush over pour flush. A combination of factors are at play: infrastructure improvements, modern home construction, a century of experience with plumbed toilets starting with French colonialism, immigration, tourism, the influence of the media, etc. Our last house, in Rabat, had multiple flush toilets; the one adjacent to the garden which also served delivery people and workers outdoors was a white porcelain squat. In sum, it seems to me that Morocco has hygiene norms that are better articulated and agreed on than anywhere else I've lived, including places like the US where norms are often dictated by code. | <a href="#">Carol McCreary, 23 April 2015</a> |
| United Arab Emirates      | Northern Africa and Middle East | 20%   | 20% |  |  | All toilets in the UAE are equipped with anal water cleaning facilities because of the culture here   | Sitting toilets are preferred in Dubai because it is a major tourist destination and tourists want to have the same "toilet" experience as back home.  | <a href="#">Apollo, 25 May 2015</a>           |
| <b>Sub-Saharan Africa</b> |                                 |   |     |  |  |   |  |   |
| Kenya                     | Sub-Saharan Africa              | Majority of public toilets in urban and rural areas have squatting pour flush or cistern flush toilets that are either connected to the main sewer network. |     | Most of the peri-urban and rural areas in Kenya prefer squatting toilets and the majority of the private homes in rural areas have squatting toilets | Homes in urban areas prefer sitting toilets as it is perceived to be modern. Most offices in urban areas have sitting toilets. | Anal cleansing (washers) are common in all the muslim communities, non-muslims in Kenya are mostly wipers. Here is more information about cleansing collected in 11 towns from 1,146 respondents (extracted from UBSUP study report, 2012)<br><br>- 91,4% of Muslims in the 11 towns use water, 11.8% of Christians use | UBSUP study: 58%, of the respondents mentioned that they prefer squatting toilets instead of sitting toilets. Of the toilets visited, 89% had footrests, a feature that is primarily seen in squatting toilets.  | <a href="#">Doreen, 23 April 2015</a>         |



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|--------|--------------------|--|--|--|--|--|---|
|        |                    |  |  |  |  | <p>water</p> <ul style="list-style-type: none"> <li>- 68% of Christians use tissue paper,</li> <li>4.4 % of Muslims use tissue paper</li> <li>- 18.5% of Christians use newspapers</li> <li>1.8% of Muslims use newspapers</li> <li>- 0.2% of Christians use a combination of water and paper,</li> <li>2.3% of Christians use a combination of water and paper<sup>25</sup></li> <li>- 0.8% of Christians use leaves, 0% of Christians use leaves<sup>26</sup></li> </ul> |   |
| Rwanda | Sub-Saharan Africa | <p>Squatting toilets are more prevalent than others because they are more easy to maintain hygienic conditions without water, which is a big problem in many low income countries. For instance in many countries of sub-Sahara Africa and Asia the use squatting toilets in both public and households because facilitate users to keep hygienic conditions. The most used squatting toilets are poor flush toilets and pit latrines.</p> |  |  |  |  | <p><a href="#">Dusingize, 1 May 2015;</a></p> |
| Rwanda | Sub-Saharan Africa | <p>There is no clear figure in the public buildings. But, as people are changing their living style, they tend to use both squatting and pedestal toilets. My understanding is that, the reliability of water services will increase the use of pedestal toilets in Rwanda.</p>  | <p>According to the Integrated Household living Condition Survey in Rwanda, 92% of households use pit latrines, and this means that 92% use squatting toilets.</p> |  |  | <p>I can see that pedestal toilets are common in Wealth countries where they have reliable water supply system and flushing toilets are commonly used. Squatting toilets are commonly used in low income countries where pit latrines, VIP latrines and poor flush toilets are commonly used.</p>  | <p><a href="#">Dusingize, 8 May 2015</a></p>  |

<sup>25</sup> Our assumption is that the user intended to write: 0.2% of Christians use a combination of water and paper, 2.3% of Muslims use a combination of water and paper.

<sup>26</sup> Our assumption is that the user intended to write: 0.8% of Christians use leaves, 0% of Muslims use leaves.

|         |                    |  |  |  |  |   |   |   |
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| Rwanda  | Sub-Saharan Africa |  |  |  |  |   | I can see that in low income countries they prefer squatting toilets because they are easy to maintain hygienic conditions and require little water to maintain and clean them. Eco-toilets can be a solution for countries where there is no reliable water supply services. But, the users must be trained to ensure that they clean and maintain the Eco-toilets properly. Eco-toilets can be either pedestal or squatting and require little water for cleaning and anal cleansing for the communities used to use water. However, Eco-toilets can be worse if they are not well maintained. That is why people tend to use fixed open defecation toilets (pit latrines) because they require less maintenance comparing to others. | <a href="#">Dusingize, 29 May 2015</a>  |
| Somalia | Sub-Saharan Africa | 100% percent are Muslims 98% of the entire population use squatting position. The remaining 2 percent of the population use sitting position, these are the elderly, sick persons and overweight people. |  |  |  | Thus we use water to wash anal and private parts of the body, that's being cleanliness is next to Godliness. Squatting position help the body to release faster the waste products from the body. |   | <a href="#">Boorso, 11 June 2015</a>    |
| Somalia | Sub-Saharan Africa | The squatting toilet in public building is 100% because bathroom is not separated from squatting toilets and no water installed but 5L or 3L Jeri can will be used for both purpose.                     |  | 98% use squatting toilets while 2% practice OD common in rural communities | In urban areas mostly are moving squatting to sitting/modernized type but it be long time for this type to be used in rural since it uses water to flash shit into the drainage. | Water is the only item used for anal cleansing and it is dictated by the Islamic religion, although in rural areas where water is scarce the twigs/stones are an alternative for anal cleansing.  |   | <a href="#">Jobow2015, 12 June 2015</a> |

|               |                    |   |   |   |  |  |   |                                       |
|---------------|--------------------|---|---|---|--|--|---|---------------------------------------|
| Tanzania      | Sub-Saharan Africa | most schools, older public buildings (especially in small towns), local hotels have squat toilets; newer offices, 'international' hotels have seat toilets: total 65%   |   | I guess 80% of pop live in rural areas of which 90% have squat toilets, | 20% live in small towns and cities of which 50% have squat toilets | I think anal cleansing with water is very common and not at all related to squat toilets as you find also in bathrooms of international hotels a spray pipe for that purpose beside the seat toilet. | I guess new offices, new hotels and new houses are to a larger extent equipped with flush and seat toilets than with squat toilets. Comments by a majority of 70 participants of a sanitation workshop about seating toilets: 'this is not relevant for us as 'we' prefer squat toilets. Seat toilets more easily transmit diseases.' | <a href="#">Hajo, 30 April 2015</a>   |
|               |                    |   |   | Total squatting toilets: 82%  |  |  |   |                                       |
| Uganda        | Sub-Saharan Africa |   |   |   | squatting toilets make up to 90% especially in rural areas         |  | In my village many people never seen a flushing toilet. In some parts of the village, people have no toilets at all, they decide to use bushes. At our school children are struggling even to get the squatting toilet  | <a href="#">Stephen, 21 May 2015</a>  |
| <b>Europe</b> |                    |   |   |   |  |  |   |                                       |
| France        | Europe             | Squatting toilets in public buildings : in school squatting toilets still exist (less than 25%). Reports from school association and surveys dating from 2007 reveal that students are complaining whenever their school still has squatting toilets. You can still find squatting toilets in public places for exemple on motorways parkings especially in remote areas. | Squatting toilets in private homes : close to 0%. There might be a small percentage remaining in old houses or appartments. |   |  |  | The tendency is to have less and less squatting toilets. On motorways parkings or in remote areas (mountains) they are sometimes replaced by dry toilets.   | <a href="#">Cecile, 10 May 2015</a>   |
| Germany       | Europe             | 0%  | 0%  |   |  | Not common in the "Christian" or non-religious part of the population; it assume it is common amongst the Muslim part of our population - which is 4-5% according to good old                        |   | <a href="#">Muench, 15 April 2015</a> |

|  |  |  |  |  |   |  |
|--|--|--|--|--|---|--|
|  |  |  |  |  | <p>Wikipedia<br/><a href="https://en.wikipedia.org/wiki/Religion_in_Germany">en.wikipedia.org/wiki/Religion_in_Germany</a>); although I am not sure if they practice it in public toilet because I have never really seen traces of it, e.g. water splashes on the floor or on the seat. Must speak to some of my Muslim friends about it and ask them.</p> |  |
|--|--|--|--|--|---|--|

## C Additional information by e-mail or posts from forum users

02.07.2015 ejayyusi (Ehabiddin Jayyusi from Jordan) wrote:

Also, I visited downtown with friends the other day. I ran into a public bathroom (please find attached photos). This place contains squatting toilets, urinal units, and abolition seaters. Each user of this facility must pay 0.10 Jordanian Dinar (USD 0.142) to use its services. The payment keeper estimated the average daily number of users to be 1000 - 1500 (Based on the cash collected in the end of the day). I hope this info could help as this is the most used place downtown Amman as it sits near the biggest mosque in eastern Amman.



30.06.2015 BPopov (Bogdan Popov from Ukraine) wrote:

I think it is quite hard to come up with the exact figures of squatting and sitting toilets in Ukraine. Also I wouldn't try to come up with regional differences. I think it is more or less even. With very careful estimation I would say that in private homes in Ukraine whenever we have water sewage – 99% of toilet will be sitting. With dry outhouses at private homes 90% of toilets will be sitting 10% squatting. In public sanitation sector 80% of water toilets will be sitting and 20% squatting. In public dry toilets (e.g. schools) 40% will be sitting 60% will be squatting.

**29.06.2015 ejayyusi (Ehabiddin Jayyusi from Jordan) wrote:**

Given that the number of squatting toilets (on private and public levels) varies from an area to another makes precise estimation almost impossible. The example which I have given slightly describes some cases in Muslim mosques and organizations, and Universities, I am not sure if this number could be generalized to include all public places as those places are also divided into more categories depending on the city and branching into each region.

If I was asked to provide an assessment on the usage of squatting toilets in Jordan, I would divide the usages into two categories (Something like: Relatively Developed Cities, and Less Developed Cities). Even more categories can be derived, but unfortunately, not a general number can be given, in my opinion.

I am sharing a small Excel sheet that I have just made for some cities based on your prevalence and percentage criteria, which I hope could give you an idea about what I mean (Please find attached ).

| Usage of Squatting Toilets in public areas Jordan |                              |                      |         |         |
|---|------------------------------|----------------------|---------|---------|
| City Name   | Developed Areas              | Less Developed Areas | Mosques |         |
|   | (Modern and Wealthy)         | (Traditional)        |         |         |
| Main Cities                                       | Amman                        | 0-20%                | 21-79%  | 80-100% |
|   | Zarqa                        | 21-79%               | 80-100% | 80-100% |
|   | Irbid                        | 21-79%               | 80-100% | 80-100% |
|   | Aqaba (Free Industrial Zone) | 0-20%                | 21-79%  | 80-100% |
| Other Ci-ties                                     | ...                          |                      |         | 80-100% |
|   | ...                          |                      |         | 80-100% |
|   | ...                          |                      |         | 80-100% |
|   | ....                         |                      |         | 80-100% |

**04.05.2015 Maria Cecilia de Carvalho Rodrigues wrote:**

Very briefly, Brazil is such a large country that even the smaller attempt to generalize things may incur in mistakes. I can say that in urban areas, especially in the south and southeast, sitting flush toilets is the rule. From my experience, even in poorer shacks with no connection to sewers, people do have porcelain toilets. I am even unaware of a term to 'squatting toilet' in Portuguese, people normally - and wrongly - refer to it as 'fossas'.

**12.04.2015 christoph (Christoph Platzer from Brazil) posted on the forum:**

In Peru and Bolivia squatting toilets exist as dry and as well as pour flush, they are common. I can't give percentages, I would estimate in the "Sierra"\* they are (were) more common than sitting toilets, in the Amazonas and Costal region (Peru) there are more sitting toilets. But we build - asked by the people to do so - only sitting toilets in the sierra.

We offered always the choice and we had a fiberglass squatting pan as well



(but did not sell any). So habit seems to be changing.

(See also: <http://forum.susana.org/forum/categories/141-other-types-of-toilets-and-sanitation-systems/12382-squatting-versus-sitting-in-latin-america-and-wikipedia-article-on-squat-toilets?limit=12&start=12#12852>)

#### **11.04.2015 FH Mughal (from Pakistan) posted on the forum:**

(...) In Makkah and Madinah, where I have been to 5 times, all the toilets in Masjid-e-Haram (the Grand Mosque) in Makkah; and in Masjid-e-Nabvi in Madinah have squat toilets (as shown in your first figure) - and these toilets run in thousands!. One may ask, why it is so. The answer is that of religious considerations. In sitting toilets, there are chances of splashing - and this is not allowed in Islam.

Having said that, there are many toilets in Pakistan of sitting type. There are two-fold reasons: one, obese people, or people with medical problems in knees, or having back pain, cannot use the squatting posture. They are comfortable with sitting postures. Doctors also advise that. One way to avoid splashing is to put few tissue papers in the WC - this preventing splashing. The other option is to clean that splashed part with water.

Those who do not practice Islam in strict sense, do not care about the types of postures. And, as you say, here also, in high-class hotels, they all have sitting toilets, to cater for the needs of western visitors. (...)

(See also: <http://forum.susana.org/forum/categories/141-other-types-of-toilets-and-sanitation-systems/12382-squatting-versus-sitting-in-latin-america-and-wikipedia-article-on-squat-toilets#12841>)

#### **09.03.2015 canaday (Chris Canaday) posted on the forum:**

I have never seen organized, presentable toilets for squatting in South America, aside from the UDDTs I build (inodoroseco.blogspot.com). Squatting is, however, standard for open defecation out in the woods or in a make-shift pit latrine with a wooden floor that has a drop hole cut into the middle of it. (...)

(See also: <http://forum.susana.org/forum/categories/141-other-types-of-toilets-and-sanitation-systems/12382-squatting-versus-sitting-in-latin-america-and-wikipedia-article-on-squat-toilets#12403>)

#### **06.03.2015 JKMakowka (Julius Krischan Makowka) posted on the forum:**

From my current experience in Chile, Peru and Bolivia I would say they are extremely rare to non existant (except maybe the hole in the ground type of pit latrines, but I am not sure if these count).

Came across a (sadly overloaded and thus quite smelly) UDDT in a really rural tourist resort in southern Bolivia yesterday though.

(See also: <http://forum.susana.org/forum/categories/141-other-types-of-toilets-and-sanitation->

[systems/12382-squatting-versus-sitting-in-latin-america-and-wikipedia-article-on-squat-toilets#12383](#))