



## **WATER SCARCITY, WATER SECURITY & DESERTIFICATION**

**There is a science-policy disconnect *vis-à-vis* water scarcity.** Within most of the declarations, water scarcity is framed as a crisis of safe drinking water. Despite being a key concern of the scientific community, the topic of water scarcity has not appeared consistently in the declarations. This deficit highlights the need for better science-policy interface mechanisms and institutionalized approaches such as knowledge translation and brokering to ensure that information produced by the scientific community is actually useful to, and used by, the policy community (e.g. resolution drafters). Of note, “scarcity” has all but disappeared from the declarations in the last decade.

**The language of water-security is less institutionalized than that of food-security, although the term has recently begun to appear with some frequency in the language of water professionals.** The term ‘water security’ appears only twice as an issue in the declarations, and once only peripherally. Looking towards the future, it would seem that if water is represented as a security issue, it follows that its urgency becomes more difficult to ignore.

**The increased global focus on desertification, although sparsely mentioned among the declarations, can be read as an extension of previous concerns over water scarcity.** The strongest language found highlights the growing problem of desertification in areas where there is a sustained degradation of land productivity, thus relating the issue to agriculture, food and health directly.

## **WATER QUALITY**

**Although the concept of water quality appears in almost every declaration, the thrust and depth of language surrounding the issue of water quality is inconsistent.** Initially perceived as an environmental threat, the focus slowly shifts to global inequality with a progression towards the language of safety, followed by a gradual deepening via increased focus on threats to clean water (e.g. pollution). This deepening is, however, temporarily lost, only to return in more recent declarations through the vigorous reemergence of the language of safety.

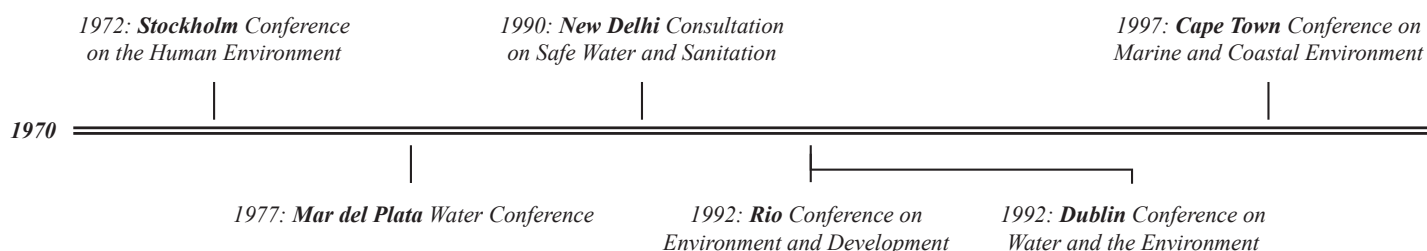
## **SANITATION**

**The relationship between water and sanitation is complex; in some cases, the mode of sanitation can have an impact on local water quality whereas in other cases the issues might be quite separate.** Across the declarations, we see an uneven representation of this problem across time ending with what may prove to be a renewed commitment to this keystone issue. A major hurdle to dealing with the subject is that the euphemistic word “sanitation” itself constructs an enormous distance between the clean-sounding word and the messy facts of urination and defecation.

## **SCIENCE AND TECHNOLOGY (S&T)**

**Science and technology maintain a fairly consistent presence in the declarations, however, this should not indicate stasis.** The word “technology” appears far more frequently than does the word “science”, a fact which suggests that, for their part, the declarations are more concerned about the application of existing science (i.e. technology) than they are about research. This focus highlights the need to implement and activate existing research by providing capacity-building, knowledge and/or technology-transfer tools, and links between the science and the policy in order to make the best use of this research base.

## **EVENT**



## **POVERTY**

Across time the declarations shows a growing acknowledgment of the links between the lack of available clean and safe water, unsafe sanitation practices, and poverty. Although poverty does not always garner many specific mentions in the declarations, it remains a consistent underlying concept, especially through the use of related terms such as “developing” nations. Although it may seem as if poverty is a separate issue, discussions of poverty are essential to putting water into a socio-economic perspective. Ultimately, poverty must be personified, making people primary, rather than allowing their poverty to define them.

## **GENDER**

Despite instances of sexist language, the declarations overall make several attempts to address gender issues. Across the majority of declarations, there is growing recognition that women are already fulfilling influential roles as members of water management and hygiene sectors and that this work needs to be supported. Later declarations offer some of the strongest, most robust language on gender-related water issues by acknowledging the specific hardships faced by women and children.

## **FOOD**

The language of security is used to describe both water and food sources, an overlap which may provide opportunity for forging stronger links between the goals of providing food and water as well as water for food. Within the declarations, a focus on the issue of food begins in earnest in the nineties, after which it becomes a frequent and growing theme. In later declarations, the language switches to the term “food security” to describe the goal of securing access to food for those in need.

## **CLIMATE CHANGE**

Within the declarations, the language surrounding climate change has morphed from a vague future-worry to one of the most significant concerns of our day. The topic of climate change functions as a sign of the times, its presence ebbing and flowing. In the latest declaration we get a sense of the gravity of this issue when its societal impact is compared to that of the recent global economic crisis.

## **HEALTH**

Health forms a number of interdependences to food and nutrition throughout the declarations because of its close links to the concept of water quality; however, when it comes to using the word “health”, the declarations reveal some unevenness. In some cases, the word “health” is underused to the point where it barely makes an impact on the overall document and, when it does, it is often buried in a list alongside other issues. This highlights the need for strengthening and prioritizing health as an integral component of declarations and linking it to all aspects of water discourse.

1998: **Paris** Conference on Water and Sustainable Development

2002: **Johannesburg** World Summit on Sustainable Development

2010: **Dushanbe** Conference on the Implementation of the International Decade for Action “Water for Life”

2001: **Bonn** International Conference on Freshwater

2009: **Muscat** First Ministerial Forum on Water

2012: **Rio+20**

2014

## *EFFECTIVE STRATEGIES TO HIGHLIGHT AND STRENGTHEN KEY CONCEPTS*

**Aim for a varied vocabulary.** Tracing the key terms across the documents, terms appeared fresh when the vocabulary is varied. Even the simple change between “water”, “water supply”, “clean water”, “safe water”, and “drinking water” suggested a different emphasis each time and helped to round-out an often-used word. The risk with such an over-used term is that its repetition renders it dull, and there is a tendency to skip over such words when reading.

**Choose active language that engages the reader.** One of the best examples of active language is found in the Bonn Keys, which employs short, declarative sentences and the present tense to describe the water crisis and its solutions. An example of more passive language can be found in *Rio*, in which future-oriented statements are prefixed by the word “shall” instead, as in “Nations shall agree to...” with the difference between the two being that *Bonn* reads as an imperative and *Rio* reads as a suggestion.

**Stay focused by resisting the ease of lists.** Burying a key term in a long list of other important issues proved to weaken it by distracting attention from the term itself. Lists were most effective when the listed terms were directly connected, with one item building on the next in a meaningful way.

**Be clear and specific by avoiding vague or ambiguous language.** One of the drawbacks of the shorter formats of the declarations and statements is that there is not enough space to offer extensive and comprehensive definitions of all the key terms. In some instances, however, vague language weakened the writing. Short definitions could help give the useful meaning to the terms and thus add strength to the documents themselves.

**Avoid euphemisms, discuss issues frankly.** In the case of sanitation, for instance, the sterility of the term itself does the concept a disservice by insufficiently describing the gravity of the need to contain human waste. The term “human waste disposal” is perhaps crude, but it is clear that it offers a more accurate description of the problem that may serve to better motivate action. Likewise, a more descriptive term may help us confront the taboos and stigmas that surround discussions of defecation.

**Don’t homogenize, personalize.** The use of person-first language should be encouraged in future statements and declarations as it acknowledges that people are the priority and that poverty is a material and economic state rather than a category of people. Further, effort should be devoted to recognize the diversity within the situation of poverty rather than paving over differences with homogenizing language.

**Give each word its due by refusing tag-alongs.** In many of the documents, for instance, the word “sanitation” mostly appeared following the word “water” in a repetitive manner. These types of tokenism made the word “sanitation” appear as if it were an afterthought rather than a genuine focus in and of itself. The tag-along does, however, successfully link two interdependent terms, like water and sanitation, and it can work if separate attention is given to the term at some point in the document.



UNITED NATIONS  
UNIVERSITY

**UNU-INWEH**

Institute for Water,  
Environment and Health

### The United Nations Think Tank on Water

United Nations University  
Institute for Water, Environment and Health  
175 Longwood Road South, Suite 204  
Hamilton, ON Canada L8P 0A1  
1.905.667.5511 • [www.inweh.unu.edu](http://www.inweh.unu.edu)

ISBN 92-808-6030-5

