Interactive comment on “HESS Opinions
“Urgent water challenges are not sufficiently researched”” by P. van der Zaag et al.

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Addressing the issue of what gets studied (and funded) or not is a very relevant issue. I am not sure queries of a few words in ISI database is a very reliable approach but even on a qualitative plane the question remains. Interestingly, the paper addresses the "why" question only superficially. The politics of knowledge is a fascinating issue that needs more attention.

Research in the field of water is heavily biased against sanitation: One observation: this is perhaps because sanitation is first and foremost a financial issue, coupled with a political question on the incentives to decision-makers to make it a priority. This may be why it does not feature so prominently in the research literature. It may also be similar to malaria, which receives much less money than cancer (or perhaps obesity),
and other diseases that are of concern in rich countries. One caveat: Water Supply
and Sanitation features highly in non-technical global conferences (see Istanbul); (Are
these "biased against" water in agriculture?). Note: Statistics on access to potable
water are often mixed up with statistics on people having access to tap water. I am not
sure how the former is assessed; as for the latter they conjure up a picture of women
fetching bad quality water two hours away from their village but they also include ‘nor-
mal’ supply by springs or rivers to which many villages are associated.

Bias in favour of conventional irrigation: Maybe "irrigation" is a more natural keyword
than "rain-fed agriculture"; many papers on rain-fed agriculture just consider it as the
most common situation and may not feel it is useful to stress this; they will chose
keywords relative to the aspect they are addressing. I am not convinced there is a bias
here and this maybe only be because what is considered is a water literature context.

Too little research is conducted on adaptation to climate change by developing coun-
tries: This may reflect the fact (just as for the production vs environment debate) that
developing countries face severe on-going challenge that are more pressing than com-
ing threats (even though some of these challenges might already been linked to climate
change). A subsequent question would be: is our research not getting biased in favour
of climate change? The amount of funding that is being poured into research that
assesses what the situation will be in 2050 in basins with severe current challenges
is absurd; and this fuels more desktop computer-based research to the detriment of
on-the-ground research, unfortunately. Note that this does not only favour researchers
sitting in the North; many researchers in the South are all too willing to believe that
computer-based studies are the only real science...

"The huge land and water concessions that European and American investors are
acquiring" in the South are somehow a distinct challenge; they are also understudied
because quite recent but yes this is an issue that deserves much more attention. It
really deals with the linkages between the global situation (foodstuff prices, climate
change or vagaries, issues of food security reverberating on some nations’ policies,
etc) and local dynamics. The "solution" given in terms of regional and south-south networks is interesting. The author should definitely elaborate on that point.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 6, 1411, 2009.