**USG Comment 1:**

* Question 1 (areas that the draft has failed to cover):  One omission we noted was a discussion of climate change and snow/glaciers.  A significant amount of “storage” of water, particularly for irrigation, is in the form of snow pack and glaciers.  Climate change potentially reduces this capacity by melting glaciers and causing earlier snow melts that are beyond the capacity of existing surface water storage systems.  This is a particular concern in areas of Asia with water supplies fed by Himalayan glaciers.
* Question 1:  In addition, the draft fails to mention the promise of innovative agricultural technologies (such as biotechnology) in reducing water requirements, for instance through the development of drought-resistant and flood-resistant crop varieties.
* Question 4 (changes in water rights):  For countries with national water plans this will be an easier topic to address.  The key feature of the U.S. is that most allocation decisions and changes in water rights occur at the state level.  That difference between the U.S. and other countries is important to note.
* Section 2.4.4 (“Investing in Agroecology”):  We believe that it is inappropriate to highlight one particular agricultural approach as preferable to others, particularly as there is no agreed international definition for “agroecology.”  Moreover, as described in the draft report, agroecology includes political and ideological undertones that are inappropriate for this document.  Many of the claims made for agroecology are unproven (e.g., the preferability of “traditional” techniques.”)  Finally, many of the purported benefits of agroecology as described in the draft (e.g., fewer inputs) are not peculiar to agroecology.
* Recommendation 5 (“Addressing Changing Diets”):  “Responsible food consumption” is a concept that would be difficult to define, much less to implement.
* Recommendation 6 (“Fostering Sustainable Investment”):  The recommendations in this section inappropriately focus on “agroecological approaches.”  However, there is no mention of innovative agricultural technologies and techniques, including biotechnology.
* Recommendation 11  (“Trade as an Option”):  While the paper appropriately recognizes the importance of trade in the face of variability in water supplies, trade should be considered an integral part of promoting global food security, rather than as an “option.”  Moreover, the first point highlights imports as a “strategy” to be used whenever natural resources are insufficient to meet local demand.  We suggest that the focus of this point should be shifted to recognize the importance of the global trading system to food security as a general matter, since a strategy of only permitting imports when natural resources are insufficient to meet local needs is inconsistent with an open trading system, and will undermine global food security.

**USG Comment 2:**

Page 19, line 18 and the figures are from JMP 2012, but they published an update in 2014, so would be great to have the latest MDG numbers in this document. <http://apps.who.int/iris/bitstream/10665/112727/1/9789241507240_eng.pdf?ua=1>  
  
page 19 lines 25-29  I think it would also be useful to note that even though the MDG is met, over 700 million people still do not have access, since the goal was only to reduce by half those unserved from the baseline to 2015. And there is also data on the problems with using a type of technology (improved vs unimproved) as a proxy for the goal of safe drinking water, particularly for microbiological safety - see <http://www.who.int/water_sanitation_health/publications/2012/rapid_assessment/en/>. Basically piped water is pretty safe, and protected shallow wells isn't, which you could guess, but it is a reminder that the goal needs to be piped water under pressure 24/7 to really protect public health.

There are other critiques of this indicator that they hope to address in the SDGs, including that unofficial settlements are often overlooked in the urban data collection so the coverage is overstated.

page 20 line 4, again, would be great to reference most recent JMP data (2014) for this document.

Your issue #4 in the cover letter is a huge challenge.  In the WASH sector, our position has been that water is free, but that there is a real cost to delivering water services. Different water service providers have used different ways of cross subsidies and grants to extend service to poor neighborhoods, but even then there are major definitional issues about how much water is enough water as a basic right for domestic use, much less productive.

**USG Comment 3:**

I recommend updating Box 12 to reflect the research presented on the situation in Syria to speak in the past tense. I think situation has changed on the ground, but no one knows. ICARDA, probably produced that report and may be able to update Box 12.   
  
In general, throughout the report, there is a reliance on data and research that is old and may not reflect the situation on the ground. Not great for credibility.

**USG Comment 4:**

Thank you for the opportunity to review. The document presents a review of multifaceted food and water challenges very well, substantiated with appropriate references.

1. The scope of the topic of water and food security is very broad. Do you think that the V0 draft has adequately charted the diversity of the linkages between water and food security and nutrition?   
     
   Yes.  
     
   Is there important evidence or aspects that the present draft has failed to cover?   
     
   No additional comment.
2. Has the report adequately covered the diversity of approaches and methodological issues, in particular concerning metrics and data for water and food security? Which metrics do you find particularly useful and which not?   
     
   Suggest recognizing how water use can be incorporated into the total factor productivity (TFP) metric.
3. Food security involves trade of agricultural produce, and a virtual trade of water. Agricultural trade interacts with water and food security in various ways, and differently for food importing countries, food exporting countries, water scarce versus water rich countries. Do you think the V0 draft has appropriately covered the matter?  
     
   Yes.
4. In this report, we considered the potential for an expansion of the right to water to also encompass productive uses. What kind of practical and policy challenges would this bring?

Which systemic actions/solutions/approaches would be the most effective to enhance water governance, management and use for food security?   
  
One facet of a systematic approach:  Recognize the links between groundwater and surface water withdrawals, and manage allocations accordingly.

**USG Comment 4:**

I suggest changes to Section 1.1.2 Water quality and food security and nutrition, the last paragraph of the section, which ends:

On the other hand food production and processing as well as human waste (such as urine and faeces) impact water quality. Nitrogen and phosphorus are key water pollutants stemming from agricultural production. Both livestock and aquaculture production, when done on industrial scale, are associated with significant wastewater discharge along their value chains with potential adverse impacts on human and animal health and the environment (Delgado et al., 1999; Naylor et al., 2000). Appropriate reuse of wastewater, however, can reduce the cost of fertilizer applications, particularly phosphorus and nitrogen (Drechsel et al, 2010).

I suggest replacing that 7-line paragraph with the text below, and also adding the references cited:

On the other hand food production and processing as well as human waste (such as urine and faeces) impact water quality. Nitrogen, phosphorus, and a variety of pesticides are key water pollutants stemming from agricultural production. Both livestock and aquaculture production, when done on industrial scale, are associated with significant wastewater discharge along their value chains with potential adverse impacts on human and animal health and the environment (Delgado et al., 1999; Naylor et al., 2000). Appropriate reuse of wastewater, however, can reduce the cost of fertilizer applications, particularly phosphorus and nitrogen (Drechsel et al, 2010). Studies are also available that link long-term pollution of surface water, groundwater, and near-shore marine waters to nonpoint agricultural sources; namely, the application of fertilizer and pesticides to crop fields (Dubrovsky and Hamilton, 2010; Dubrovsky et al, 2010; Gilliom and Hamilton, 2010; Gilliom et al., 2010; Preston et al., 2011; Puckett et al., 2011; Sprague et al., 2011; Stone et al., 2014).

Additional REFERENCES CITED

Dubrovsky, N.M., and Hamilton, P.A., 2010, Nutrients in the nation’s streams and groundwater-- National findings and implications: U.S. Geological Survey Fact Sheet

**USG Comment 5:**

Broadly, we would like to avoid any language that subverts trade agreements to rights.

The assumptions about meat production and food processing should not be highlighted the way they are in here. There are alternative studies on meat production with different results. The focus on food processing and not other sector processing that affects water is also an issue.

There are more lines throughout which are detailed below.

Page 7, Lines 1-11: Suggest deleting references to changing consumption patterns as a problem. While this may be a factor, we recommend not taking the view that we need to produce less meat. Market prices should be allowed to drive consumer decisions.

Page 8, Lines 9-12: It is unclear from this statement whether irrigation will continue to dominate total water demands or if the competing factors listed will reduce the water available for irrigation in the future.

Page 9, Line 1: Please delete entitlement

Page 9, Line 49: Tools developed for water management should be optimized for local or national regions rather than standardized internationally as a one-size-fits all solution.

Page 11: Line 11: Note that production of food includes processed foods so the extra language is redundant; please consider removing "including processed foods"

Page 18, Line 17: Please delete “towards more livestock products.”

Page 19, Line 6-7: Drawing this linkage to a more "sustainable" system is problematic since the most efficient means are not widely agreed upon.

Page 19, reference 7: Delete final sentence, “The authors further suggest that increased water use per capita due to continued dietary changes might well overtake population growth as the main driver of growth in water use” as it is not required to make the point.

Page 29, Lines 31-35 and Lines 39-42: There are other studies that indicate the opposite. We would like to see a better representation of the results of those studies or deleting this section.

Page 33, Lines 35-36: Based on this USGS paper, all industries should be examined for impact on water, not just food processing, recommend revising or removing to be more accurate.

Pages 38-39, Lines 28-30 and Lines 1-7: Relying on one source may result in oversimplifying this issues. Recommend presenting a more balanced view by showing how veterinary drugs improve efficiency, and reduce feed use. Also, feedlots use less lands, reduce land degradation, and are more efficient ways to increase size of cattle.

Page 44, Line 26-27: While this may be true, it is unlikely to meet the food demands of the future.

Page 64, Lines 40-43: Suggest not encouraging governments to subsidize the price of water - in this manner; it goes against international trade obligations.

Page 73, Lines 13-14: Delete

Page 73, Line 19: Delete “with increasing globalization.”

Page 73: Lines 32-47: Delete this entire paragraph. We do not agree to subvert international agreement on trade and investment issues to human rights treaties.

Page 81, Lines 42-43: Trade should be described as an option no matter what - it is not based on whether a country can't grow enough food.

Page 81, Line 46: Replace integrate with “Maintain open, rules-based trading system to meet the goals of national food and nutrition security through markets”

Page 81, Lines 49-51: Suggest “Ensure that trading systems use internationally-accepted standards to allow the flow of safe food.”

Page 82, Lines 2-3: Replace with, “Affirm that countries follow obligations of international rules based trading systems to keep markets open, which may help mitigate crises due to lack of food and water.”

**USG Comment 6:**

Below, in the order in which they appear in the 104 page report, are those sections of the report that highlight positions therein that are either contrary to the USG’s view on Customary International Law of water and/or contrary to our understanding of USG policy/legal positions on water resources.

**INTRODUCTION** – “The underlying issue is: who should get what access to which water when, for how long and for what 25 purposes? Answering this question is complicated and often controversial enough within a single 26 country. Yet this is clearly not enough. While it is often observed that “water flows to power”, it is also 27 clear that, because of the existence of transboundary basins, water is a resource that “ignores” 28 administrative boundaries (be in infra or supra national), thus complicating the challenge of sharing 29 water and of water governance.”

“In this report, two fundamental lenses are used to examine the issue of water and FSN. The first is the 7 human rights framework, particularly the rights to food and water, and how these two rights intersect 8 and support each other. In particular, we are interested in exploring whether the right to water can be 9 expanded to encompass uses of water that are directed towards the realization of the right to food. 10 The second is a lens that looks at the possibility of reframing the challenge in order to reframe the 11 solution – looking at issues of redistribution and equity, reduction of waste, and changes in agricultural 12 and dietary practices in order to ensure water for FSN.”

**“1.2 Water resources** 8

When we look at agriculture and food security, all forms of availability of water have to be considered: 9 rainfall, runoff and groundwater. Water basins are the pertinent geographic entity to appraise/measure 10 water resources (rainfall, runoff or ground water).”

**“3 GOVERNING WATER FOR FSN**

\* \* \*Governance is polycentric and 7 located across a range of institutional arrangements from local to global, requiring constant  negotiations across domains of power.

In this chapter we highlight that: 10

\* \* \* \*

2) The nature of water resources almost always span across infra-national or supra-national 14 geographical boundaries and areas (surface and groundwater but also upstream, downstream and 15 transboundary) as well as jurisdictional and administrative boundaries, complicating issues of water 16 governance.

**“3.5 The emergence of a global water governance regime?** 1

As discussed in this chapter, the allocation and use of water are not technical matters, but often driven 2 by political and economic interests. Taking this view, an analysis of the key players and the power 3 relations at the global level becomes a useful tool in understanding the water and FSN debate. While 4 most solutions to water challenges or exploitation of water-based opportunities take place at the local, 5 national or regional level, there is a complex network of players at the global level that inform the 6 dominant policy discourse in the water arena. Contemporary water governance at the international 7 level is an arena characterized by a high degree of political contestation, competing regulatory actors 8 and processes, and therefore a great deal of institutional ambiguity with few agreed rules or 9 procedures regarding decision-making (Franco et al., 2013)”

“**3.6** A rights-based approach to water and food security implies that people’s access to water and food is 2 protected by law and legal mechanisms.”

**“3.6.2.** The Right to Water3.6.218

The now globally endorsed human right to water has been the result of intense global struggles since 19 decades and is a relative new-comer. Unlike the right to food, it was not explicitly acknowledged in the 20 1948 Universal Declaration of Human Rights.

“**3.6.3.** Unresolved matters concerning the right to water3.6.313

While the right to water now enjoys global recognition, it still remains conceptually ambiguous (Sultana 14 and Loftus, 2011). There have been many debates regarding whether or not it is compatible with water 15 privatization (Box 22).”

“3.6.6. **Growing calls to expand the right to water or have a separate right** 3.6.61 **to water, sanitation and water for the realization of right to food?**

There have been growing calls to elaborate a human rights perspective to land and to water that is 3 both more interconnected, more social justice oriented and encompasses productive uses of water 4 (Franco et al., 2013).”

**“RECOMMENDATION** **12. Rights to water and food”**

**USG Comment 7:**

Section 3.6. The right to water and the right to food

* Comment 1: References to “right to water,” “right to sanitation,” “right to health,” and “right to food.” The Panel may wish to consider changing references to these rights to “rights related to [water]/[food]/[health]/[sanitation].” Because the formulations of these rights vary between international instruments and documents, it would be more broadly applicable and more technically correct to refer to them in this way.
* Comment 2: References to ICESCR and UDHR. The Panel may wish to consider reviewing citations to language from ICESCR or the UDHR, to ensure that they are cited in full for accuracy and completeness. For instance, the UDHR states that “everyone has the right to a standard of living adequate for the health and well-being of himself and his family, including food,” whereas ICESCR states that “the States Parties to the Covenant recognize the right of everyone to an adequate standard of living for himself and his family, including adequate food.” These formulations, and the legal character of the two documents, are different and the Panel may wish to consider distinguishing them accordingly.
* Comment 3: Use of General Comments of the CESCR. When the Panel uses language from a CESCR General Comment or report, it may want to consider making clear that these are the opinions of the Committee on Economic, Social, and Cultural Rights, and not interpretations or language that have been agreed by States in any international instrument. The Panel may also wish to consider clarifying this when quoting from other non-legally binding sources.
* Comment 4: References to Voluntary Guidelines. The Panel may wish to consider using the full and correct title of the Voluntary Guidelines (“Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security”) to avoid confusion or mischaracterization. It also may wish to review any paraphrasing of the Voluntary Guidelines to ensure accuracy, and to consider quoting from the document to ensure that language and intent are accurately captured. For instance, the Voluntary Guidelines do not “call on States to develop strategies to realize the right to food.” Instead, they say that “States, as appropriate and in consultation with relevant stakeholders and pursuant to their national laws, should consider adopting a national human rights-based strategy for the progressive realization of the right to adequate food in the context of national food security as part of an overarching national development strategy, including poverty reduction strategies, where they exist.” The Panel may wish to review statements paraphrasing content of other documents as well, to ensure accuracy and to replace paraphrasing with quotes to ensure accuracy.
* Comment 4: Characterization of “right to water”. The Panel may wish to review statements about rights related to water to ensure that they fully capture the status of those rights. For instance, on page 70, lines 19-21, the paragraph states that the human right to water is now “globally endorsed,” and on page 71, line 14, it states that “the right to water now enjoys global recognition.” This is not completely accurate as written, as there are no legally-binding international instruments that recognize or define any such right. Additionally, the Panel may wish to consider bearing this in mind in its discussion of the Special Rapporteur on the Right to Water and its recommendations regarding expansion of her mandate, as well as in its recommendation on voluntary guidelines to implement the right to water.
* Comment 5: Status of UNGA and UNHRC resolutions. The Panel should consider reviewing its references to UNGA and UNHRC resolutions, to ensure that their content and status is accurately captured. For instance, UNGA Resolution 64/292 (referenced on page 70, lines 26-27) states that it recognizes the right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights, but does not reference “access.” Additionally, this resolution was controversial and ultimately put to a vote, with the United States abstaining, and was not passed by consensus. Indeed, at the time, the United States expressed the opinion that “there is no ‘right to water and sanitation’ in an international legal sense as described by this resolution.” Additionally, when describing the UNHRC resolution from September 2014, the panel indicates that the right to an adequate standard of living is contained in several international human rights treaties and that it is both justiciable and enforceable. The Panel may wish to consider clarifying that the right would be justiciable and enforceable only for States that have undertaken such obligations, and would not legally bind States that have not done so.
* Comment 6: Section 3.6.4. “Convergence and Conflicts”. The Panel may wish to reconsider this section, including its discussion of “prioritization” of rights related to water and food in the context of Article 2(1) of the ICESCR. This article states that “Each State Party to the present Covenant undertakes to take steps […] with a view to achieving progressively the full realization of the rights recognized in the present Covenant” – because States have recognized that economic, social, and cultural rights are to be realized progressively, using available resources, this may be a useful lens through which to view this issue.
* Comment 7: Section 3.6.5 “Rights under Threat”. The Panel may wish to offer a more inclusive statement of the potential effects of trade on the enjoyment of human rights, including the potential for positive impacts. The Panel may also wish to consider the views of States on the question of extraterritorial application of human rights obligations, rather than exclusively the views of the ETO Consortium.
* Comment 8: Individual nature of human rights. The Panel may wish to clarify that human rights generally belong to individuals, rather than groups, in its discussions of water and food.
* Comment 9: Mandate and Role of the CFS, UNHRC, and other bodies: The Panel may wish to consider the mandate and role of the CFS and the UNHRC in drafting its recommendations, to ensure that the recommendations do not encourage actions that exceed their scope of authority.