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## WEC's Guide for Writing Research Papers

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**These guidelines aim at receiving and publishing standardized research papers to reduce/eliminate the common mistakes and to reduce the time spent in formatting and editing. Research papers with inconsistent use of this standard will be returned back to the researchers.** Kindly refer to the attached [Word template](#) to start your article. It contains all the required standard formats and styles. Should you use MSWord, papers without using the template or with .docx extension will not be accepted.

**Title and Authors:** The first page of the research must include title of submission, author and affiliation of co-authors and acknowledgment.

**Abstract:** Start your article with an abstract of maximum 200 words. Opinions and Reviews do not require abstracts. Kindly refer to the attached [How to Write Research Abstract](#) to have a better understanding when writing your abstract.

**Acknowledgements:** Research papers must not include acknowledgements. However, if it is very essential to include them in your research paper, add that very briefly after the conclusion.

**Keywords:** Provide a maximum of six keywords and a minimum of 4 words not included in the research title.

### Research Structure:

- **Introduction:** Define and outline your problem and objectives clearly. Information about the study area also is mentioned here.
- **Methodology and Materials:** Explain the approach of your research's practical phase. This is an article and not a thesis, your methodology should be as short as possible. Methods and tools may be mentioned and given a reference.
- **Results and Discussions:** Highlight remarkable results and analyzed outputs. The authors should discuss carefully trends of outputs and factors affecting the behavior of results.
- **Conclusion and Recommendations:** Your conclusion should summarize the content and purpose of the paper. End up with your recommendations that realize the solutions of the research issues. Kindly note that adding recommendations to your research paper is optional.

### Formatting of the paper

Formatting the paper including all its elements such as the title, author/s, abstract..., etc. is discussed in the attached [Paper Instruction](#).

## Formatting of the text

For more detailed information on formatting the text of figures, tables, references, equations, and citation of the text, please see the attached [Instructions for Authors](#).

### Abbreviations

No full points within acronyms (e.g. USA not U.S.A.; "around 1500 BC"; PhD thesis), no full point after contractions. Exceptions include: et al., Ltd., Inc., Jr. (not Jnr.), Co., No. (for number). Note: i.e. and e.g. are not followed by a coma.

Examples: In the 1960s, mid-1970s, 18 January 1967, on the 18th, on 18 January, 'from 1997 to 2002', 1967-1969 (not 1967-69), 19th century.

### Capitalization

*Geographic features.* Use: Nile river basin, Van Vieng province, Chitradurga district, Jordan valley, Mediterranean sea, lake Victoria, etc. with capital letters only on the name itself; but the Middle East, West Africa, sub-Saharan Africa.

Cold War, World War II, the French Revolution, the Middle Ages, the World Bank, the Food and Agriculture Organization, but the state". (Example: The state of California).

Capitalize titles, positions, and names of divisions, departments, and offices in a government or an institution, when they are specific (Examples: the Government of Sri Lanka, the Director General, the Ministry of Agriculture) but use lower case for general use (Example: an irrigation engineer, the federal government).

### Comma

Use a comma before "and" or "or" in a series of three or more words or phrases, especially when the penultimate phrase has "and" or "or" in it (Example: seeds, fertilizer and pesticides, and machinery).

### Dashes

A spaced en dash (the character – with one space on each side) – rather than an em dash – is used to introduce parenthetical material or a positive phrase where commas might result in confusion (Example: The agent's promises – reallocation of land, equitable water distribution, and lower fees – never materialized).

### Dates

Write the day, month, and year in this form: 24 December 1947. Do not use "st", "nd", and "th" after figures in dates to indicate ordinals (January 23, not January 23rd).

Use slash marks for numerical dates in tables with day listed first, month second, and year last (Example: 24/12/93 for 24 December 1993).

### Figures

Figures should be inserted in the Word document. Right click on the picture and use option "in line with text". Centre them or, better, use the 'Figure' style of the style sheet. Please ensure that all text in your figures is legible, even after a 50% reduction in size. Arial font should be used preferably. Before each figure add a brief descriptive caption (style: caption\_figure) on a separate line.

Color figures are accepted, but authors should make sure that figures are also legible when viewed or printed in black and white.

If the figures imported into the text are too large, use the <compress> option: right-click on a figure, choose format figure/compress button/and select options: Apply to all pictures in document + change resolution: print.

In the text refer to the figure as follows: "... as shown in figure 3 and table 4 (see also table 5)" (no upper case).

## Footnotes

Use automatic MSWord footnotes (on menu bar, go to Insert and then highlight footnote on dropdown menu), numbered sequentially throughout the text. You may change an endnote into footnote by right-clicking on it and selecting the adequate menu item.

When associated to a word that ends a sentence, the footnote number must be inserted after the period, as in: (...) was reported by various observers.<sup>1</sup>

## Foreign words

Foreign words such as *warabandi*, *subak*, *zanjera*, *wadi*, *khattara*, *confederación*, etc. and local names of growing seasons (*maha*, *yala*, *rabi*, *boro*, etc.) should be used in italics and defined at first use, and may not be italicized subsequently.

## Hyphenation

The rules governing the use of hyphens are not stable. In general, use hyphens as little as possible. Most words formed with the following prefixes are not hyphenated: anti-, ante-, inter-, macro-, meta-, micro-, mid-, mini-, multi-, over-, post-, re-, semi-, sub-, super-, supra-, trans-, ultra-, un-, under-. Examples: microanalysis, overexploited, multilevel, nonagricultural, underpricing, cooperation, etc. But: pre-eminence, counter-hegemonic, pre-existing, non-existent, in-depth, etc. In case of uncertainty refer to <http://www.askoxford.com/dictionaries/?view=uk>.

Compound adjectives (adj+noun, noun+adj, noun+noun, noun+verb -ing) are hyphenated (small-scale system, low-income groups, price-based incentives, state-level agencies, cost-recovery, etc); but worldwide. "The decision-making process was transparent", but "Decision making can be a difficult process".

If two hyphenated compound adjectives modify the same noun, the second component of the adjective need not be written twice, but the first component retains the hyphen, followed by a space (Examples: low- and high-income groups, small- and large-scale farms).

If two prefixes that are not usually hyphenated are used with the same noun, the prefix standing alone carries the hyphen (Example: micro- and macroeconomics).

The combination of an adjective and an adverb ending in "ly" is not hyphenated (locally managed system, highly valued crop, mutually reinforcing).

Words with the prefixes listed above should be hyphenated if the prefix is combined with a proper noun (Example: non-Indian), with more than one word (Example: pre-World War II).

"Well" words are hyphenated when they precede their subjects (well-known varieties) unless they carry a modifier (very well known varieties). They are not hyphenated when they follow their subjects (This variety is well known among farmers).

"Self" words are also generally hyphenated (Examples: self-sufficient, self-contained; exceptions: selfish).

Hyphenate cardinal numbers with units of measurement when they precede a noun (Examples: four-year plan, seventy-hectare plot). However, percent is never preceded by a hyphen (Example: 14 percent increase).

Never use the hyphenation option of wordprocessors

## Numbers

In text spell out numbers up to ten, but use numerals for 11 onwards. Always use numerals when a unit is given (e.g. 7 ha). Use a comma as separator for a number with five digits or more (e.g. 12,500, but 7000).

## Quotes

Quotation marks (" ") must be used for direct quotations, words defined by the author, and words used in unusual contexts. Short quotations should be embedded in the text but quotations of more than 45 words (4 lines and over) should be shown as separate indented paragraphs, without quotation marks (use the "long quote" predefined style). Single quotation marks ( ' ') are to be used for a quotation that occurs within another quotation.

Note that commas or periods ending the quote are not included within the quotation marks, as in: (...) must be subject to the test of "reasonable use". In case the quote is followed by a reference, insert the reference before the full stop, as in: (...) and unfavourable research was ignored" (Banerjee et al., 2006).

When a part of the quote is not reported insert (...) where the quote is discontinued.

## References

Before submitting the manuscript, check all citations in the text against the References to ensure that they match exactly. Delete references from the list if they are not actually cited in the text of the article.

All journal titles should be spelled out completely. In the titles of articles, capitalization of the common names of organisms and the spellings of all words should agree exactly with those used in the original publication.

Provide the publisher's location and name.

When you cite symposia or conference proceedings, distinguish between the conference date and the publication date, if both are given.

## Citations in the text

According to Smith and Coward (1995) and Powel's (2003) declaration,...

...as shown by recent research work (Mollinga, 1999; Sardoy and Hume, 2000; Svendsen et al., 2007) and surveys (Abott, 1998a, 1998b, 2000)... Note the chronological order of citations. Indicating page reference as in (Abott, 1980: 10) is not required. Use (Kibaroglu, n.d.), when the date of the document is unknown.

Personal communications should be cited as normal references (Harvey, 1999) and details given in the reference list.

When referring to a reference not on hand and cited in another document use normal entries, list the two reference in the bibliography and add "Cited in xxx" at the end, as in:

Rhodes, R. 1997. The new governance: Governing without government. *Political Studies* 44(4): 652-667. Cited in Bell and Quiggin (2008).

Use italics when referring to names of books, as in: In the Western hemisphere, deliberative democracy has been informed by Habermas' *Theory of Communicative Action*.

**References (in the reference list)** (follow the styles defined below)

### **Article in a print journal**

Malano, H.M.; Bryant, M.J. and Turrall, H.N. 1999. Management of water resources: Can Australian experience be transferred to Vietnam? *Water International* 24(4): 307-315.

### **Article in an online journal**

Cumming, G.S.; Cumming, D.H.M. and Redman, C.L. 2006. Scale mismatches in social-ecological systems: Causes, consequences, and solutions. *Ecology and Society* 11(1): 14, [www.ecologyandsociety.org/vol11/iss1/art14/](http://www.ecologyandsociety.org/vol11/iss1/art14/)

(*Note: if there is no page range, the number of pages is indicated*)

**Books**

Mollinga, P. and Bolding, A. (Eds). 2005. *The politics of irrigation reform. Contested policy formulation and implementation in Asia, Africa and Latin America*. Aldershot, UK: Ashgate.

**Organization as author or government publications**

GWP (Global Water Partnership). 2000. Integrated water resources management. TAC Background Paper No 4. Stockholm: Global Water Partnership.

[in the text, refer to GWP (2000)]

World Bank. 2003. *World Bank water resources sector strategy: Strategic directions for World Bank engagement*. Washington, DC: The World Bank. US Bureau of Reclamation. 1978. *The story of the Columbia Basin Project*. Washington, DC, USA: US Government Printing Office.

**Chapter in book**

Molle, F. 2003. Allocating and accessing water resources: Practice and ideology in the Chao Phraya delta. In Molle, F. and Srijantr, T. (Eds), *Perspectives on social and agricultural change in the Chao Phraya delta*, pp. 45-70. Bangkok: White Lotus.

**Conference papers (with proceedings)**

Heyns, P.S.H. 2004. Strategic and technical considerations in the assessment of transboundary water management with reference to southern Africa. In Proceedings of the International Expert Workshop on Water, Development and Cooperation, pp. 120-134. Bonn, Germany, 27 February 2004.

Frederick, K.D. 1993. Adaptive responses to climate change: Demand management. In Ballentine, T.M. and Stakhiv, E.Z. (Eds), *Proceedings of the First National Conference on Climate Change and Water Resources Management*, pp. IV/54-60. Alexandria, VA, USA: Institute for Water Resources.

**Conference papers (no proceedings), unpublished reports**

Meinzen-Dick, R.; Mendoza, M.; Sadoulet, L.; Abiad-Shields, G. and Subramanian, A. 1994. Sustainable water user associations: Lessons from a literature review. Paper presented at World Bank Water Resources Seminar, Lansdowne, Virginia, USA, 13-15 December 1994.

NIA (National Irrigation Administration). 1986. Irrigation water management: Precluding activities, requirements and practices. Quezon City, The Philippines: NIA. Mimeo.

**Reports**

Keller, A.; Keller, J. and Seckler, D. 1996. *Integrated water resources systems: Theory and policy implications*. Research Report 3. Colombo, Sri Lanka: International Irrigation Management Institute.

**Theses**

Smith, J. 2000. Water politics in the Middle-East: New threats and opportunities. MSc (or PhD) thesis. University of Queensland, Brisbane, Australia.

**Newspaper articles**

Middle East Times. 2006. Turkey, Israel scrap water project. 23 April 2006.

Kenon, H. 2003. Deal to buy water from Turkey finalized. *Jerusalem Post*, 23 July 2003.

**Others**

Harvey, J.H.M. 1999. Personal communication. By email. 12 October 1999.

FAO. 2001. The challenges after Rio. [www.fao.org/ag/magazine/0102sp1.html](http://www.fao.org/ag/magazine/0102sp1.html) (accessed 2 September 2002) [There is no need for 'http://' before www]

Work accepted for publication but not yet published should be referred to as "in press".

### Checklist for reference lists

- First and middle names are initialised; in case of multiple initials do not insert a space between them. Initials are followed by a period (full stop).
- Only the first word of a title, or the first word after a colon, is capitalised.
- In case of multiple authors, "and" must be added before the last author's name (note: there is no semicolon before the "and")
- For journal articles, there is no comma after the journal name, no space between volume and issue numbers ("12(4)"), but there should be a space between the colon and the page range [12(4): 12-24].
- Titles of books, published reports and published scientific journals must be italicised.
- For published documents, the reference ends with the place of publication, followed by a colon, and then by the name of publisher.
- (Ed), (Eds) with no full stop; "(Ed)." in titles, and "(Ed)," in book chapters.
- MSc, PhD thesis, (no full stop, no capital letter for 'thesis')
- (For documents accessed on the web): "accessed [no capital letter] on 2 May 2000" [no comma before, no full stop after; no 'http://' if URL starts with www]
- For chapters in edited volume: give the page range after a coma following the book title. No colon after the 'In' (as in: 'In Molden, D. (Ed),...'). The book title must be italicised (no capital letters, except after colon).
- Name of publisher to be spelled out
- "GWP (Global Water Partnership). 2000" [not Global Water Partnership (GWP). 2000]
- Check chronological order of multiple bibliographical references in the text.
- Do not specify the total number of pages for books or reports;
- Do not specify page of reference: (Smith, 2000), not (Smith, 2000: 234).

### Spellings

Use a unified language spelling check throughout the word document (change the spelling and grammar check option to the preferred language).

When using British spellings, please use "labour", not "labor", "behaviour", not "behavior", "centre", not "center", and "organisation", not "organization", "calibre", not "caliber", "fuelled", not "fueled", "fulfil", not "fulfill", "modelling" not "modeling", "programme", not "program". Use -ise/isation endings rather than -ize/ization: characterise, maximise, legitimise, supervise, organise (but analyze, catalyze are exceptions).

### Tables

Place each table after the first paragraph that refers to it. Do not insert tables as graphics; please ensure they are in MSWord and not imported. Before each table add a brief descriptive caption (style: caption\_tables) on a separate line. Tables should be numbered sequentially. Try to avoid tables which are very long or too short. For large tables, select the table and choose the format "landscape" in the menu File/Page setup/.

### Units and Currency

Use SI (Système International) and metric units throughout. Leave a space between the numbers and units e.g. (56 ha, 56-78 ml). Use kg/m, not kg m-1; but 75% (close up). 47-50 °C, not 47-50° C.

Billion is taken as 10<sup>9</sup>; use Mm<sup>3</sup> and Bm<sup>3</sup> for million cubic meters and billion cubic meters, respectively. Fifteen thousand Yemeni Rials (YR 50,000).

## Copyright

If you include material, whether figures or tables, from other published sources (even your own work), permission to reproduce such material must be sought from the copyright owner.

## Common Mistakes:

The following mistakes are commonly found on papers submitted at the Water and Environment Centre (WEC), and special care should be taken to avoid them:

- 1- Plagiarism.
  - ⇒ **Plagiarism is forbidden.** Researchers may refer to online plagiarism checkers to avoid plagiarism. Cite the text and mention all references you used that text from their work. **Always use quotations when you copy/paste from other sources.**
- 2- Inadequate spacing between words and punctuations.
  - ⇒ Remember to leave one space after periods or other punctuation marks. No space BEFORE punctuation.
- 3- The structure of the paper is not the proper research structure.
  - ⇒ Research papers should not contain indexes nor abbreviation, tables or figures lists. Avoiding annexes is preferred, however, you may add very brief annexes for tables, maps and questionnaires if you find that important. **(Note: You must discuss adding annexes with your administrator before adding them to your research paper).**
- 4- Abstract is too vague/unclear.
  - ⇒ Abstract should give a general idea about the research while providing percentages, evidence and results.
- 5- Paper is too long and includes non-concentrated literature review (previous studies), and lots of figures.
  - ⇒ Focus on the same research topic and related topics. If other studies are included, it is preferred to mention the link between the subject and the studies and the concepts mentioned throughout the research paper. Use less figures and avoid their random organization or insertion.
- 6- The majority of the literature review is book references.
  - ⇒ More previous research studies should be mentioned (published in journals).
- 7- Details of methodology not mentioned nor the measurements of the research practical work.
  - ⇒ All details including instruments, measurements, equations, calculations, and methods of measurements should be mentioned. Methodology should be well-clarified, and materials should be described in details especially for the measurements and instruments.
- 8- Copy/paste tables.
  - ⇒ Copy/paste tables is not accepted in any part of the research.

- 9- Separate section to mention the study area.
- ⇒ It is better to mention the information about the study area in the introduction part.
- 10- Figures are numbered according to sections (i.e. figure 1.2.1)
- ⇒ Consecutively number all figures of the research papers despite what section they follow.
- 11- Long tables on stakeholders' answers on questionnaires.
- ⇒ Responses on the questionnaires are to be mentioned within the discussion text or/and shown in figures rather than tables.
- 12- Discussion contains very long phrases with incomplete ideas.
- ⇒ Re-phrase the sentences to be short and to the point phrases with concrete ideas.
- 13- Conclusion and recommendations contain lots of general facts not precisely related to the specific research topic.
- ⇒ Mention important results obtained by conducting the research study, **and researcher's points** of view which are seen as required to solve the problem being discussed. Also, it is required that the researcher focus specifically on his/her research topic; provide considerable evidence to support the conclusion given in the research objectives; avoid linking the conclusion to general concepts and findings related to general topics the research topic falls under; and reflect his/her research objectives in methodology, results, recommendation and conclusion.
- 14- Numeric and/or randomly sorted list of References.
- ⇒ List of references should be written (using the standard in the **References** styles mentioned above). No numbering is allowed. **Sort your research references list by last names in an ascending order (A to Z).**
- 15- Coloured text throughout the research paper.
- ⇒ Black is the unique colour for writing research papers. Using any other colour is not accepted.
- 16- Wrong research structure and/or organization.
- ⇒ Definition of the research problem and its objectives, the introduction, should follow the research abstract, then comes the methodology in which you can mention the previous studies with no details. You may mention the previous studies in your introduction, but with a brief reference. More details are to be mentioned in the discussion part if the results agree with them.
- 17- No start indication to the beginning of the different research sections.
- ⇒ Start all parts of the research with the proper title using headings or sub-headings. Most importantly, make sure you do not forget your research title nor the researchers' names. **(Note: When mentioning the previous studies, DO NOT title that as a Literature Review. Also, headings and sub-headings must not be numbered. Avoid too many sub-headings).**

18- Unclear introduction.

- ⇒ Precisely provide a concrete introductory idea(s) to your research topic, its problems and the study area, and its objectives.

19- Unorganized literature review and improper indication to references studies.

- ⇒ Literature review should follow the standard: (quoted text, research title, researchers' names, and year) within text. Researcher name should only include the last (family) name. However, if there are more than 2 researchers, the first name is mentioned and followed by: (et al.,) and then comes the year.

20- Literature review has few references which don't cover all topics related to the research, or all topics discussed.

- ⇒ A minimum of 10 references should be mentioned unless the research topic is a trend or a new topic lacking references worldwide.

21- Most of the selected references are around the explanation of facts that need to be complete.

- ⇒ Detailed, specific and to the point researches conducted locally are preferred, not general facts and broad topics discussed worldwide.

22- Methodology is not well-structured.

- ⇒ Restructure and support your research methodology by including all necessary details, such as social, technical, economic, and socioeconomic details. All details of IWRM should also be included to support your research. All researchers should depend on and refer to all topics studied in the diploma/master courses.

23- Insertion of other languages.

All research text must be written in English language (British or American), using any other language is not accepted.

### **Final Step: Checklist**

Before you submit a paper, please thoroughly check consistency of your text with the following guidelines. In particular check:

- The text is created with WEC – Sana'a University template (saved as .doc, not .docx)
- Format of the reference list has been checked [use special checklist]
- The reference list matches the citations in the text
- No words are hyphenated through the automatic function of the word processor
- Tables are created within the text (not imported as images)
- Text in figures is legible (even after reduction by 50%)
- Figures are inserted in mode 'in line with text'
- Spelling is modified throughout the document, either British English or American English.

### **Technical problems or questions:**

For any technical query please contact us at: [technicalsupport@wec.edu.ye](mailto:technicalsupport@wec.edu.ye)