**MINUTES OF THE VIRTUAL ZOOM MEETING OF WORKING GROUP ON MODERNIZATION AND REVITALIZATION OF IRRIGATION SCHEMES (WG-M&R)**
14 February 2022, 14:00-16:00 hours IST

**Year of Establishment:** 2015  
**Completion of the Mandate:** 2023

**Scope of work:** To investigate, analyse, disseminate information on new developments and to formulate recommendations with respect to: Planning and preparation for modernization and revitalization of irrigation schemes; Interaction between modernization, revitalization and required operation and maintenance; Cost sharing for modernization, revitalization and required operation and maintenance; Institutional and organizational framework required for modernization, revitalization, and operation and maintenance; Methods and techniques of the lining of conveyance and distribution canals; Canal control systems with respect to their automation, using the internet, mobile communication and remote monitoring in canal operation; Modification to improve communication, operational capacities, and flexibility in operation and maintenance of systems; Standardization and codes of practice in irrigation systems.

**Members Present:** (1) VPH Ian Makin, Chair (UK); (2) Dr. Dong Bin, Vice-Chair (China); (3) Dr. Yalong Li (China); (4) Prof. Sunil D. Gorantiwar (India); (5) Dr. Neelam Patel (India); (6) Dr. Mohsen Barahimi (Iran); (7) Dr. Shinji Fukuda (Japan); (8) Dr. Toshihiko Kuno (Japan); (9) Ms. Mona Liza Delos Reyes (Philippines); (10) Engr. Reyne B. Ugay (Philippines); (11) Executive Director Harish Kumar Varma, ICID Central Office (India).

**Officer Bearer Present:** President Dr. Ragab Ragab (UK)

**Observer:** Wudi (Indonesia)

**Webpage:** [https://icid-ciid.org/inner_page/117](https://icid-ciid.org/inner_page/117)

**WG-M&R Minutes Item 1:** Confirmation of the Agenda

1. At the outset, Dr. Mona Liza F. Delos Reyes (Philippines) welcomed all the members and chaired the meeting as requested by VPH Ian Makin (UK). The agenda of the meeting is given as Annex.

2. She explained that VPH Makin might have difficulty in chairing the meeting due to the teleconferencing connectivity issues. VPH Ian Makin informed the group that Dr. Alok Sikka (IWMI) would not be able to attend while Dr. Dong Bin (China) will join the meeting soon. She acknowledged and welcomed President Ragab Ragab (UK) to the meeting. She briefly presented the agenda which focuses on the Working Group study on O&M Norms and Processes, then started the discussion with the members on each item. Dr. Sunil Gorantiwar (India) sought confirmation about the main purpose of the meeting to discuss the development of the survey questionnaires on O&M Norms and Process and reporting of the survey results. Dr. Delos Reyes communicated that the plan is to present the draft report on the results during the International Workshop and Working Group meeting in Adelaide in October 2022 and present the final report at the World Irrigation Forum in China in 2023.

**WG-M&R Minutes Item 2:** Check on progress and work plan

3. Dr. Delos Reyes informed the WG that the questionnaire was circulated to the NCs on 21 January 2022 and Executive Director Harish Varma from ICID Central Office confirmed that the questionnaires have been sent to the National Committees. He informed the WG that a completed questionnaire from Dr. Yuanjuan (China) was received and filled-in questionnaires from Dr. Shinji Fukuda (Japan) and VPH Francois Brelle (France) are expected soon. Further, it was proposed to finalize the deadline for filing the questionnaire from the National Committees. President Dr. Ragab proposed that the Central Office should send reminders to the National Committees (NCs) and suggested the group to provide the NCs enough time for good responses and provide enough time to the core group to analyze and report the results in October 2022. VPH Makin emphasized the need to have a substantial set of data by April to have sufficient time for the analysis and reporting and suggested setting April 30 as the deadline and in case of low turnouts, proposed May 31 as the extended deadline. It was agreed by the group and confirmed by Executive Director Harish to convey to the NCs April 30 as the deadline, send two reminders about a month apart prior to it, and extend the deadline up to the end of May, if necessary.
4. Dr. Shinji Fukuda requested if there is a guideline to determine the required number of receiving filled questionnaires from each National Committee. VPH Makin acknowledged that countries have different classifications of irrigation systems and management setup. He further said that the questionnaire was designed to capture the different classes or types of systems and it is up to the National Committees to decide what system differentiation represents the O&M norms and process in their respective countries.

5. VHP Makin provided a brief background on the development of the questionnaires and said a copy will be sent to all the members. Dr. Delos Reyes informed the group that the questionnaire is also available on the WG-M&R webpage https://icid-ciid.org/inner_page/117. Executive Director Harish informed the group that the questionnaire could not be converted into a Google Form for filling online due to the complexity involved in converting too many tables of the questionnaire.

6. It was agreed that Dr. Delos Reyes will be the lead contact person for clarifications requested by the National Committees and other respondents. ED Harish proposed to modify the contact details on the Preamble to include her as a contact person together with VPH Makin.

7. Dr. Sunil sought further clarifications on a number of filled-in questionnaires that can be submitted by the National Committees considering several location-specific responses. VPH Makin clarified that responses for its different regions can be submitted by a National Committee. He said that the questionnaire was modified to include subnational levels and to identify whether the responding organizations are at the national or local levels.

**WG-M&R Minutes Item 3: Coding and Analysis of responses**

8. The group agreed to use the SPSS program for data analysis. ED Harish suggested that the WG should consider identifying the core group for the data coding and analysis. It was proposed that the core group may consist of two or three members who will interact regularly to take up the thinking process for the coding and initial analysis. Dr. Sunil volunteered to help with the coding and preparing the initial analysis framework and be a part of the core group. As suggested by Dr. Sunil, the WG members agreed to provide their respective responses based on the case of their country. These responses will be used as test data for trial coding and run on SPSS and in preparing the framework for further analysis. Dr. Neelam Patel (India) informed that they have been using SPSS with similar data extensively and offered to help with the coding and data analysis using SPSS. Dr. Dong Bin also volunteered to help. It was proposed that the core group members consist of - Dr. Delos Reyes (Philippines), Dr. Sunil Gorantiwar (India), Dr. Neelam Patel (India), Dr. Dong Bin (China), and Dr. Mohsen Barahimi (Iran).

9. Dr. Dong Bin raised a concern regarding the need to translate the questionnaire to the local language and vice versa. ED Harish informed that the ICID Central Office can only help in receiving the filled-in forms from the NCs and forward the same to the concerned persons of the Working Group. It was proposed that in case of translation is necessary, Google translate can be used. Engr. Reyne Ugay (Philippines) said that language translation should be the responsibility of the NCs. Dr. Sunil added that there are irrigation terminologies specifically used in the country and it is the NC that can accurately translate them. It was agreed that the language translation will be left to the NCs.

**WG-M&R Minutes Item 4: Reporting Norms and Processes for O&M of irrigation and drainage systems**

10. VPH Makin said that the initial structure of the draft report is open for revisions and the decision to accept the report organization or mould it into some other form is up to the group members. He suggested that the core group for the coding and analysis should be the same group for the report writing and that the members of the core group can volunteer on which sections of the report they are interested in leading the analysis and report writing. He volunteered to help the writing group as editor, bouncing walls for ideas or questions, and facilitating the flow of the report writing from start to finish.

11. Engr. Ugay suggested that the file of the initial structure of the draft be shared in a Google Drive with the members of the Working Group so that the members can also contribute to identifying the general content of the report. He further suggested having a meeting to finalize the structure of the report. Dr. Delos Reyes said that sharing the file as a Google document in a Google drive is possible. Dr. Dong Bin raised his concern about the possibility that he could not access the Google document due to some Google accessibility issues in China. Dr. Delos Reyes volunteered to send the updated version of the document to Dr. Dong Bin by email in case he will not be able to access the document on Google platforms.
12. VPH Makin highlighted the need to carefully consider the differentiation of the different classes of irrigation systems in different countries and take those different definitions into account in the data analysis and reporting. He elaborated by taking the case of classification of irrigation systems by the scale and by management. The small, medium, large irrigation system categories in one country, could refer to entirely different scales of magnitude in other countries. Some countries have a government-managed national irrigation system like in the case of the Philippines while others like the UK do not have national irrigation systems but have what is considered large commercial irrigation systems but which are, generally, small when compared to national schemes elsewhere. He supposed that the classification based on management might have a more substantial difference than that of scale in terms of the O&M norms and process involved. In addition, Dr. Delos Reyes informed that in the case of national irrigation systems in the Philippines, the management and scale differentiation even go together, with the scale being a subcategory of the management category. Engr. Ugay pointed out that another system category is for water sources such as the run-of-the-river type and storage type. Dr. Delos Reyes agreed that indeed there can be several ways irrigation systems are differentiated and opined that the study should consider the system classification that has relevance or influence on the O&M norms and practices adopted. Dr. Dong Bin shared that the management responsibility for large- to medium-sized irrigation systems in China is by canal levels, with the O&M of the main and branch canals being the responsibility of the Irrigation Department while that of lower-level canals is the responsibility of local water users’ associations. Classifying irrigation systems considering the O&M aspect is not as simple as in the case of classifying them by water source and size. The question of how to appropriately classify the system for the purpose of the O&M study remains. ED Harish reported a quite similar system classification by size of command areas in India and O&M responsibility sharing in some minor schemes between the government and strong water users’ associations. Dr. Delos Reyes informed that the questionnaire has provision to capture the different O&M activities carried out by each concerned party (e.g., government, WUA and private groups, etc.) at what part (e.g., main and minor canals) of the system. Dr. Sunil suggested that the group can list all the considerations and have classifications based on those considerations.

13. On reporting the results for the sections of the questionnaire, Dr. Delos Reyes suggested that the same core group for the analysis do the reporting. Dr. Shinji suggested that the group should have a regular meeting every month to discuss any update or development on the responses received and to carry out the study activities accordingly.

14. On the scheduling of meetings to coordinate the development of analysis and reports, ED Harish suggested that the core group can schedule future meetings on Skype or WhatsApp on their own or through the Central Office. Dr. Delos Reyes will send the updated matrix of proposed activities and timeframe to the Central Office which will forward it to the members. ED Harish informed that the forwarded email, the group will have the complete list of its members’ email addresses, which it can use to schedule and conduct future meetings themselves. VPH Makin agreed to the suggestion for the core group to conduct future meetings using WhatsApp or a similar voice/video calling app, which will not tie up Central Office’s Zoom capacity. He said that the Working Group will still have two Zoom meetings, where the core group can report back to the WG members on progress on the O&M study. Dr. Delos Reyes noted that there are planned meetings of the WG in March and in June 2022.

WG-M&R Minutes Item 5: Other Business

15. VPH IAN Makin welcomed Dr. Neelam who joined the WG meeting for the first time and expressed his delight and appreciation of Dr. Neelam’s positive contribution to the meeting. He added that Dr. Alok Sikka would likely be interested in helping with the reporting. President Dr. Ragab said he learned a lot in this activity of the WG and is interested to see the output on the report in Adelaide. He commended the positive attitude of the members who volunteered to help with the analysis and reporting of the results of the survey. He expressed his appreciation of seeing members coming forward and sharing their time and expertise to do some work for ICID.

❖❖❖❖❖
WORKING GROUP MODERNIZATION AND REVITALIZATION OF IRRIGATION SCHEMES (WG-M&R)

ZOOM MEETING
14 February 2022 14:00 IST

CORE TEAM WORKING ON NORMS AND PROCESSES REPORT
Chair – Mona Liza Delos Reyes

Agenda

1. Confirmation of Agenda (5 minutes)

2. Check on progress and work plan (15 minutes)
   The intention is to analyse the questionnaire responses from National Committees and present a draft report on results during the International Workshop and Working Group meetings in Adelaide in Q3 2022. Further revisions and finalization of the report to be completed for presentation at World Irrigation Forum in China in 2023.
   a. Update on circulation and return of questionnaire (Central Office)
   b. Discussion of schedule for follow-up and reminders to NCs
   c. Identification of point of contact for clarifications (if any) requested by NC and other respondents

3. Coding and Analysis of responses
   a. How will the responses be coded and stored?
   b. Who will code the data from the returned questionnaires?
   c. How to clarify responses – who to contact those who submit questionnaires (WG or CO)?
   d. How to analyse results of the survey

4. Reporting Norms and Processes for O&M of irrigation and drainage systems
   a. Overall structure of the report
      An initial structure for discussion and revision or rejection is shown in Annex A
   b. How to classify different system types
      Differentiation of different classes of systems of relevance to O&M issues
   c. Reporting on sections of questionnaire and identification of lead reporters
   d. Schedule of meetings to coordinate the development of analyses and reports is shown in Annex B

5. Any other Business

❖❖❖❖
INITIAL STRUCTURE OF REPORT ON NORMS AND PROCESSES FOR O&M OF IRRIGATION AND DRAINAGE SYSTEMS

1) Executive Summary

2) Table of contents

3) Introduction
   Background to study – the mandate of WG-M&R
   Previous studies of O&M issues by ICID
   The objective of current study

4) Structure of Questionnaire

5) Summary of responses to survey
   a) Geographic coverage
   b) Area of I&D systems included
   c) Classification of systems reported
   d) Basic statistics of responses

6) Analysis of key O&M areas
   a) O&M of source structures and services
   b) O&M of main distribution systems and services
   c) Tertiary and on-farm O&M systems
   d) Drainage systems
   e) Cost recovery and O&M budgets
   f) Performance targets and measurement of O&M services
   g) Expenditure priorities
   h) Irrigation service charges
   i)

7) Water supply and drainage management and charges

8) ???

9) Key findings

10) Gaps and outstanding issues

11) Conclusions and recommendations

12) References

13) Tables and Figures

Annexes
A. Glossary of terms used
B. Questionnaire (as circulated)
C. Summary responses (anonymised)
D. Analysis process (and code if relevant)
### STUDY ON THE NORMS AND PROCESS OF OPERATION AND MAINTENANCE OF IRRIGATION SYSTEMS

**DRAFT activities, time frame, and lead involvement**

<table>
<thead>
<tr>
<th>Activities</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>Sep</th>
<th>Oct</th>
<th>Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Dissemination of questionnaires to NC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>through ICID Central</td>
</tr>
<tr>
<td>2. Core group meeting/discussion (identify specific questions/objectives, timeframe/schedules; data encoding &amp; analysis, report content, section lead/involvement)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Core group, WG-M&amp;R</td>
</tr>
<tr>
<td>3. Initial draft and submission of the outline of the report to WG-M&amp;R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Core group</td>
</tr>
<tr>
<td>4. Reminder/follow up of responses: 08 Mar (1st) and 08 Apr (2nd) reminders Target deadline for returns of questionnaires: 30 Apr (1st deadline) and 31 May (extended)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>through ICID Central</td>
</tr>
<tr>
<td>5. Submission/collection of responses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>through ICID Central</td>
</tr>
<tr>
<td>6. Data encoding/processing and analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mona, Sunil, Neelam, Dong, Mohsen,</td>
</tr>
<tr>
<td>7. Writing and submission of draft report to WG-M&amp;R for review/comments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Core group, Ian</td>
</tr>
<tr>
<td>8. Review and return of comments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sunil, Neelam, other WG-M&amp;R members, external reviewers (TBI)</td>
</tr>
<tr>
<td>9. Revision and submission of final draft report</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Core group</td>
</tr>
<tr>
<td>10. Presentation of results in Adelaide</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

❖ ❖ ❖ ❖ ❖ ❖