

**AGENDA FOR THE 6<sup>TH</sup> MEETING OF THE  
WORKING GROUP ON SUSTAINABLE DEVELOPMENT OF TIDAL AREAS (WG-SDTA)**

6 November 2023, 09:30-11:00 hours (Session-I)  
6 November 2023, 11:30-13:00 hours (Session-II)  
Visakhapatnam (Vizag), Andhra Pradesh State, India

**Strategy Theme: Basin**

**Presented by the Chairman**

**Year of Establishment: 2017**

**Extended the completion of the Mandate: 2023**

**Mandate :** (a) To understand the existing and potential challenges and opportunities of tidal areas for now and the future by figuring out underlying issues; (b) To raise awareness of the increasing risk on tidal areas due to global climate change and stimulate interdisciplinary discussions on impacts, mitigation, and adaptation; (c) To enhance survey, design techniques, and monitoring and management programs for the irrigation and drainage facilities, and apply to collect information about the tidal area environment around the world; (d) To identify sustainable development and management options in tidal areas, and find a balance between the conservation and development of tidal areas with acknowledgement of ecosystem services; and ( e) To join the international dialogues and organize international conferences and short courses to promote interdisciplinary and participatory land and water planning and management in tidal areas; and (f) To collaborate with other related working groups actively, and to exchange relevant experiences amongst NCs and support for developing, and least developed countries.

**Website:** [http://icid-ciid.org/inner\\_page/109](http://icid-ciid.org/inner_page/109)

**WG-SDTA Agenda Item 1: Action Taken Report by Chair<sup>1</sup>**

1. Dr. Ruey-Chy Kao (Chinese Taipei Committee), Chairman of the WG-SDTA will present the report on the actions taken on the decisions and proposals of the Working Group at its last meeting held on 08 October 2022 at Adelaide, Australia.
2. The Philippine National Committee on Irrigation and Drainage (PNC-ICID) has nominated Dr. Mona Liza F. Delos Reyes for the membership of WG. During the first virtual meeting of the WG held on 16 March 2023, Dr. Mona Liza F. Delos Reyes has attended the meeting.
3. Chair in consultation with Vice Chair, Secretary of the WG and the Central Office have updated the membership of the WG as given at **Annex 1** (*refer electronic version for latest list*). New nominations, if any, for the membership received will be dealt suitably after the meeting.

**WG-SDTA Agenda Item 1.1: A brief report of Online/WebEx Meeting of the Group, 16 March 2023**

4. The WG-SDTA organised its first virtual meeting on 16 March 2023. Dr. Rey-Chy Kao chaired the meeting which was attended by Secretary Mr. Paavan Kumar Reddy (India); Dr. (Ms.) Hsiao-Weng Wang (Chinese Taipei Committee); Prof. Budi Santoso Wignyosukarto (Indonesia); Dr. Vijay K. Labhsetwar (India); Dr. Hiroki Minakawa (Japan); Ms. Mona Liza F. Delos Reyes (Philippines); and Er. B.A. Chivate, Director (Technical), ICID Central Office, New Delhi, India.
5. During the virtual meeting, WG discussed the issues about the new membership; Action Plan 2030 (Road Map to ICID Vision 2030), International Workshop plan for 74<sup>th</sup> IEC meeting & 25<sup>th</sup> ICID Congress in November 2023 at Vizag., Andhra Pradesh, India, Short Course on 'Tidal Predication and Land Subsidence Prevention and Reclamation' in 2023; Side Event in 2023, Web-based seminars; e-Discussions; updating MTD of the WG; prepare country paper (two-page) on 'Sustainable Development of Tidal Areas'; ICID members' profile section and register on World Irrigation and Drainage Schemes. In this regard, the online minutes of the WG-SDTA ([https://icid-ciid.org/icid\\_data\\_web/min\\_sdta\\_webmeeting16032023.pdf](https://icid-ciid.org/icid_data_web/min_sdta_webmeeting16032023.pdf)) have been circulated to the members of the group for their information. Chairman may like to apprise the members during the WG meeting.

**WG-SDTA Agenda Item 2: ICID Action Plan 2030: Activities on Sustainable Development of Tidal Areas**

6. The WG reviewed the Action Plan 2030 (Road Map to ICID Vision 2030) based on the mandate by updating the activities on sustainable development of tidal area issues and provided updated about the fresh action plan for 2018-2023 as indicated in the **Annex 1**. Chair may provide further updates, if any, at the meeting.

<sup>1</sup> This will also include details of membership of WG as **Annex**

7. During the first virtual meeting of the WG, it was noted that the mandate of WG-SDTA will expire in November 2023, but unfortunately, based on the original plan many events of great significance cannot not be held as scheduled. Further, the WG will deeply review and discuss it with members of the group in the next meeting of WG in November 2023 to postpone scheduled events and extend the upgrade of the new mandate, and strengthen the dissemination of new technologies and knowledge. In the virtual meeting, Chair has explained the latest situation and he will work with the Vice-Chair and Secretary of the group to further develop a draft of future new mandate, and consult members of the group and provide further updates in the WG meeting in November 2023. Chair will apprise the members during the meeting.

8. In order to publish the Special Issue on SDTA, Prof. Hsiao-Wen Wang (Chinese Taipei Committee) presented a detailed procedure for the paper submission and review process for the Special Issue of the WG. Further, Prof. Wang has informed that the process of review and editing work of the papers are going on. She sent an invitation to people who participated and presented their paper in the workshop in Bali 2019 and to submit their papers for a Special Issue after she had a thorough discussion with PH Prof. Bart Schultz and Chair Dr. Ruey-Chy Kao. Prof. Hsiao-Wen Wang/WG Chair will provide further updates during the WG meeting.

### **WG-SDTA Agenda Item 3: Upcoming WG Events**

#### **WG-SDTA Agenda Item 3.1: International Workshop on 'Integrated Solution for Irrigation and Drainage Tails and Land Subsidence in Tidal Areas' in 2022 at Adelaide, South Australia**

9. As part of the Action Plan 2030, the WG is organising the International Workshop on “**Global Challenges of Land Subsidence in Tidal Areas and the Integrated Solutions**” during the 74<sup>th</sup> IEC meeting & 25<sup>th</sup> ICID Congress in November 2023 at Vishakhapatnam (Vizag.), Andhra Pradesh, India. The main objective of the workshop is to bring together the practitioners, researchers of scientists, managers, and decision makers and obtain input from the member countries of exploring practical problems, discussing the current state of knowledge and experiences, and exchanging solving strategies, to respond to the urgent need. The sub-topics of the workshop are – (i) Adaptation measures and strategies strengthening irrigation, drainage and flood prevention facilities in tidal areas; (ii) Case studies, and knowledge and experiences towards the better understanding of practical issues; and (iii) Institutional management and stakeholders' participation to address pressing challenges.

10. In response, 7 abstracts have been received from the authors for the WG workshop. The Review Committee of the group has evaluated these abstract and selected the abstracts to invite full papers and suggested the ICID CO to invite authors to submit full length papers for the WG workshop. WG Chair will provide the updates during the meeting.

#### **WG-SDTA Agenda Item 3.2: Short Course titled 'Tidal Prediction and Land Subsidence Prevention and Reclamation' in 2023**

11. During the virtual meeting, it was noted that the WG will organise a Short Course titled '*Tidal Prediction and Land Subsidence Prevention and Reclamation*' in 2023 at National Cheng Kung University, Taiwan. Basically, this short course will be planned for one-week and will not exceed ten days, including indoor lectures and on-site visits. Considering the amount of funding, support conditions and the number of participants, after consultation with the sponsoring organization, it is scheduled to be held after the 74<sup>th</sup> IEC meeting & 25<sup>th</sup> ICID Congress in November 2023, India. That is, at the end of 2023 to avoid repeating the original schedule in 2020 and 2021 Due to COVID-19, the event could not be held as scheduled, which caused the problem that the fund has been allocated but idle and does not meet the budgetary regulations. The Chair will actively request the support of sponsoring agencies again and announce the planned content as soon as possible. Chair will provide further updates during the WG meeting.

#### **WG-SDTA Agenda Item 3.3: Side Event of the Working Group on SDTA**

12. During the first virtual meeting of the group, it was noted that the Side event usually focus on the pilot studies conducted at field level and discusses more on scaling and policy level planning. At present, from WG-SDTA there is no such pilot studies conducted any member directly or indirectly. So, Dr. Vijay K. Labhsetwar (India) suggested for cancelling of the event in the performance of the working group in other activities is too slow. Chair and other members accepted the recommendation and the side event has been cancelled. Chair may apprise the members during the member.

#### **WG-SDTA Agenda Item 3.4: Web-based seminars and e-Discussions**

13. In order to promote the webinars of the WG, an interesting topics of the Webinar on 'Tsunami / Tidal Wave Protection in Japanese Case' and 'Low Land Development in Indonesia' were delivered on 19 April 2023 and 22 December 2022, respectively. Dr. Hiroki Minakawa, Dr. Takeo Tsuchihara and Dr. Katsushi Shirahata (Japan) were Speakers of the Webinar on 'Tsunami / Tidal Wave Protection in Japanese Case' ([https://icid-ciid.org/inner\\_page/233](https://icid-ciid.org/inner_page/233)) and Prof. Budi Santoso Wignyosukarto (Indonesia) & Prof. Em. Dr. Bart Schultz (Netherlands) and Vice President Ir. Hisham Ghazali (Malaysia), Vice-Chairman and Mr. Paavan Kumar Reddy (India), Secretary of the WG-SDTA were also Speakers & Panellists of the WG webinar on 'Low Land Development in Indonesia' ([https://icid-ciid.org/inner\\_page/231](https://icid-ciid.org/inner_page/231)). WG Chair will apprise the members during the meeting.

**WG-SDTA Agenda Item 4: Ground Water and the Land Subsidence on the Coastal Areas**

14. It was noted that problems related to groundwater and land subsidence in coastal areas will become more important and can no longer be ignored. During the virtual meeting of the WG, it was noted that the relevant topic of Ground Water and Land Subsidence on the Coastal Areas will be continued as themes for future papers. Further, Chair informed that he will identify the lead person from university professors for how we can take it forward in the next few months. This topic will be planned for the 2023 WG-SDTA workshop in India and the newly extended mandate. Chair will provide further updates during the meeting. This topic will be planned for the 2023 WG-SDTA workshop in India and the newly extended mandate.

**WG-SDTA Agenda Item 5: Dissemination of activities of WG**

15. The WG updated the website [http://icid-ciid.org/inner\\_page/109](http://icid-ciid.org/inner_page/109) with new membership list, agenda, minutes, paper presentations, publications etc. It was noted that the members of the WG agreed to provide at least one-page of materials / articles / papers / presentations / reports. Accordingly, WG Chair requested the members of the WG to share information, knowledge & experiences and provide papers, presentations, articles, reports etc. related to scope of the WG to ICID CO for uploading on the WG website for wider dissemination and knowledge enrichment. Accordingly, the ICID CO has followed-up with the members and requested to provide the materials (papers, articles and documents) related to the mandate of the group. In addition, members are requested to participate and contribution the activities like online meetings, webinars etc. WG members may deliberate on evolving mechanism for sharing of information on regular basis.

**WG-SDTA Agenda Item 6: Updating Multilingual Technical Dictionary (MTD)**

16. At Adelaide meeting (2022), the group discussed about updating Multilingual Technical Dictionary (MTD) which have to be introduced properly to newly elected members of the group because they did not know how to contribute, if templates are available. In March 2023, ICID Central Office has requested Vice Chair VP Dr. Nor Hisham bin Mohd Ghazali to get in touch with VPH Dr. Ding Kunlun, Chair of the Task Force on MTD for further clarifications. As a Nodal person of the MTD of the WG, we have also requested him to share your views to Secretary Paavan Kumar Reddy Gollapalli, who is assisting the data pooling of MTD and WG Chair Dr. Kao. In this regard, Chair has suggested Vice Chair Dr. Nor Hisham bin Mohd Ghazali and Secretary Paavan Kumar Reddy Gollapalli to keep track of the implementation progress of the MTD. Chair/Vice-Chair/Secretary of the WG will provide further updates on MTD during the meeting.

**WG-SDTA Agenda Item 7: Two-page 'Country Note' – Sustainable Development of Tidal Areas**

17. During the Adelaide meeting (2022), it was noted that the NCs – Japan, Korea, Malaysia, Indonesia, The Netherlands, India and Chinese Taipei Committee have already shared two page country papers for the group. Accordingly, NCs of China, Egypt and Thailand have requested to send their country notes (two pages) to Chair of the WG, with a copy to ICID Central Office. In this regard, a questionnaire in a format for the two-pages 'Country Note' (**Annex 3**) have already been shared to other NCs for preparing the document as discussed during the 1<sup>st</sup> virtual meeting of the WG. Chair will provide further updates at the meeting.

**WG-SDTA Agenda Item 8: Any other business**

18. **ICID Members' Profile Section:** At the Adelaide meeting (2022), Chair informed the members about the new initiative of ICID providing WG members to access their profile section using their dedicated account. Further, he informed that ICID CO vide email of 9 July 201 <<https://icid.bmeurl.co/C7D4D2E>> informed all members on how to access their account and change their password to maintain accuracy. Chair encouraged members to review and update their information using their credentials. Accordingly, ICID Central Office has requested all members of the WG to access their profile and update the same. Chair will further requests to all members about the importance of assessing Members' profile for reviewing and continuous updating of their respective information.

20. **Register on World Irrigation and Drainage Schemes (WI&DS):** In addition to information given at the Adelaide meeting held in 2022, Chair will further brief about ICID's initiative to document the development of irrigation projects in the world by establishing an online Register on "World Irrigation and Drainage Schemes (WI&DS)". WI&DS will fulfil the need for a much-awaited global repository of information in systematic irrigation and agricultural water management. Irrigation projects having 5000 Hectares and above of Gross Command Area can submit their information for inclusion in the register. The irrigation projects approved by National Committee/ ICID Central Office for inclusion are entitled to Certification. Chair will encourage members to urge all irrigation and drainage scheme owners, managers, and researchers across the world and especially in our member countries for contributing to the register. Chair will also inform the members that as per ICID Central Office, this facility is also extended to non-member countries if the information is received from an authorized agency. The review process and other details are outlined on the portal <<https://wip.icidevents.org/>> in detail.

21. **Restructuring of the Working Group:** At the 73<sup>rd</sup> International Executive Council (IEC) meeting in Adelaide, it was decided by the IEC to look into the possibility of integrating WGs of similar/ close mandate. With consultation of PCTA, PCSO, Secretary General of ICID and the ICID Central office, a tentative new structure was developed. Among the existing 18 groups, nine of them will complete their mandate in November 2023. The remaining working groups are proposed to be structured into 11 new working groups under four themes: (1) Irrigation and Drainage Water

Management (Long-term activities); 2. Natural Resources Management (Medium-term activities); 3. Water Management under Climate Change & Water Scarcity (Medium to long-term activities); 4. Sustainable Development and Management: Capacity Building, History, Institutional and Socio-Economical Aspects of Irrigation and Drainage Schemes. (Long-term activities). Proposed restructuring and new structure of the WGs will be deliberated during PCTA and IEC meetings of the 74<sup>th</sup> IEC meetings to be held from 1-8 November 2023 at Vizag, India. Under these four themes, the WG-SDTA Sustainable Development of Tidal Areas has been included in **theme 2 (Natural Resources Management)** which is proposed to be integrated with Working Group on Adaptive Flood Management (WG-AFM). If the proposed restructuring of the WG is approved by IEC, then, the name of WG-SDTA will need to change to a new name to reflect the newly added Working Group. And hence, the mandate of the new WG will be modified to reflect the newly added on topics of the amalgamated working group (s). WG Chair will provide further updates during the meeting. A report on the restructuring of the working groups is given in **IEC Annex 5, page 23**.

**NOTES FOR CHAIRPERSON:**

1. Draft minutes of this meeting to be submitted to ICID Secretariat at Vizag., Andhra Pradesh, India after the meeting.
2. Chair to participate and present the WG report to PCTA meeting on 07 November 2023.



**A. Members and their attendance at 2021 and 2022 Meetings**

| Sl. No.                              | Members  | Member from (Year) | 2021 |             | 2022 |             | Remarks            |
|--------------------------------------|--|--------------------|------|-------------|------|-------------|--------------------|
|                                      |  |                    | Self | Contributed | Self | Contributed |                    |
| 1.                                   | Dr. Ruey-Chy Kao (Chinese Taipei Committee), <b>Chairman</b>         | 2017               | •    |             | •    |             |                    |
| 2.                                   | Ir. Hj. Nor Hisham bin Mohd Ghazali (Malaysia), <b>Vice-Chairman</b> | 2017               | •    |             | •    |             |                    |
| 3.                                   | Mr. Paavan Kumar Reddy (India), <b>Secretary</b>                     | 2017               | •    |             |      | •           | Young professional |
| 4.                                   | Dr. (Ms) Hsiao-Weng Wang (Chinese Taipei Committee )                 | 2017               |      | •           | #    |             | Young Professional |
| 5.                                   | Prof. Budi SantosoWignyosukarto (Indonesia)                          | 2017               | •    |             |      | •           |                    |
| 6.                                   | Prof. Zhang Zhanyu (China)   | 2017               | •    |             |      | •           |                    |
| 7.                                   | Dr. Jeongryeol Jang (Korea)  | 2017               | #    |             | #    |             |                    |
| 8.                                   | Dr. Vijay K. Labhsetwar (India)                                      | 2018               | •    |             | •    |             |                    |
| 9.                                   | Dr. Surat Thanusin (Thailand)  | 2018               | #    |             | #    |             |                    |
| 10.                                  | Dr. Dina Saleh (Egypt)   | 2021               |      | •           |      |             | Provisional Member |
| 11.                                  | Mr. Alok Paul Kalsi (India)  | 2021               |      | •           |      |             | Provisional Member |
| 12.                                  | Dr. Hiroki Minakwa (Japan)   | 2021               | •    |             | •    |             |                    |
| 13.                                  | Ir. LIU Zhitong (China)  | 2022               |      |             |      | •           | Provisional member |
| 14.                                  | Secretary General, ICID  |                    | #    |             | #    |             |                    |
| <b>Observers/Permanent Observers</b> |  |                    |      |             |      |             |                    |
| 15.                                  | Ir. Henk Rizema (Netherlands)  | 2020               |      |             | #    |             |                    |
| 16.                                  | Dr. Jo Jin Hoon (Korea)  |                    |      |             |      |             |                    |
| 17.                                  | Mr. Harry Denecke (FAO)  |                    |      |             |      |             |                    |

**A. New nomination received from the National Committee**

|    | Name                         | Country    | Remarks  |
|----|------------------------------|------------|--|
| 1. | Ms. Mona Liza F. Delos Reyes | Philippine | Recommended as member, subject to his/her presence else provisional member |

<sup>1</sup> Through representation



**ROAD MAP TO ICID VISION 2030 – ACTIVITIES OF WG-SDTA**

|  | Activity  | Outcomes/ Outputs  | Milestone for Year 2017                              | Milestone for Year 2018  | Milestone for Year 2019   | Milestone for Year 2020                           | Milestone for Year 2021   | Milestone for Year 2022   | Milestone for Year 2023  |
|--|---|--|--|--|---|---|---|---|--|
| <b>Goal B: Be a catalyst for change in policies and practices</b>  |   |  |  |  |   |   |   |   |  |
| <b>Strategy B1 :</b><br>Supporting Development of Appropriate Policies                                       | 1.1 Promoting Sophisticated water-saving irrigation development with IOT and water-saving irrigation model techniques exchanges | Technical report, workshop proceedings and water industry web site | Preparing: Promoting demonstrative plan              | Site tests demonstration: Hardware construction and software tests | Site tests demonstration: Hardware, software and system control integrating process | Site tests plan: Workshop observation             | Examination Plan results & improvement  | Examination Plan results & improvement                                      | Examination Plan results & Improvement; expand to other areas          |
|  | 1.2 Promoting up-to-date water-saving experience exchange   | As above   | As above   | As above   | As above  | As above  | As above  | As above  | As above   |
|  | 1.10 Sustain-able drainage management experience exchange   | Internet of Things Water industry workshop                         |  |  |   |   | Web-based seminars on SDTA  | Web-based seminars on SDTA  | Internet of Things Water industry workshop                             |
| <b>Goal C: Facilitate exchange of information, knowledge and technology</b>                                  |   |  |  |  |   |   |   |   |  |
| <b>Strategy C4 :</b><br>Compile, Collate and Share Knowledge and Experiences                                 | 4.26 Special Issue of ICID Journal on SDTA  | Special issue of IRD   | Announcement of special issue, inviting authors etc. | Setup Review Committee for selected papers based on the workshops  | Submission of final drafts  | Review Papers: 2019 International workshop papers | 1. Publishing Special Issue of IRD<br>2. 2021 International workshop "Integrated Solution for Irrigation and Drainage of Drainage Tails and Land Subsidence in Tidal Areas" | Review Papers: 2021 International workshop papers                           | Publishing Special Issue of IRD  |
| <b>Strategy C5 :</b><br>Dissemination of Data, Information, Tools, Knowledge & Know How                      | 5.8 Develop and maintain the ICID web site as a knowledge hub   | On-line  |  |  |   |   | Develop and maintain the ICID web site as a SDTA knowledge hub  | Update and maintain the ICID web site as a SDTA knowledge hub               | Update and maintain the ICID web site as a SDTA knowledge hub          |
| <b>Goal E: Encourage research and support development of tools to extend innovation into field practices</b> |   |  |  |  |   |   |   |   |  |
| <b>Strategy E3 :</b><br>Develop and Promoting Tools for AWM  | 3.2 The application for output of development tools from academic institutions  |  |  | Prepare tidal prediction and typhoon wave model                    |   | Prepare Short Course (2021)                       | Prepare "Tidal Prediction and Land Subsidence Prevention and Reclamation"   | Prepare "Numerical Simulation of estuary and drainage flood in Tidal areas" | Prepare "Numerical Simulation of estuary flood and coastal flow field" |

|  | Activity  | Outcomes/<br>Outputs  | Milestone for<br>Year 2017   | Milestone<br>for Year<br>2018 | Milestone<br>for Year<br>2019                       | Milestone<br>for Year<br>2020 | Milestone<br>for Year<br>2021                        | Milestone<br>for Year<br>2022    | Milestone for<br>Year 2023                        |
|--|---|---|--|-------------------------------|---|-------------------------------|--|----------------------------------|---|
| <b>Goal F: Facilitate capacity development</b>   |   |   |  |                               |   |                               |  |                                  |   |
| <b>Strategy F3:</b><br>Technical<br>Training of<br>Young Professionals from<br>Member<br>Countries | 3.7<br>workshop/Training<br>Workshop on<br>Sustainable<br>Development of<br>Tidal Areas | Technical<br>transfer and<br>internet<br>information<br>short course<br>/training<br>workshop | Scope, theme<br>and<br>announcemen<br>t                            |                               | Short<br>Course/Train<br>ing<br>Workshop<br>on SDTA |                               | Short<br>Course /<br>Training<br>Workshop<br>on SDTA | Web-based<br>seminars on<br>SDTA | Short Course<br>/ Training<br>Workshop on<br>SDTA |
|  | 3.8 To launch e-<br>Discussion on<br>Sustainable<br>Development                         | E-discussion  | E-discussion<br>on<br>Sustainable<br>Development<br>of Tidal Areas |                               | e-Discussion<br>on SDTA                             |                               | e-Discussion<br>on SDTA                              | e-Dis-<br>cussion on<br>SDTA     | e-Dis-<br>cussion on<br>SDTA                      |

(Source: Consultative Group (CG) Report: A Water Secure World Free of Poverty & Hunger: A Road Map to ICID Vision 2030)







**DRAFT FORMAT FOR 'COUNTRY NOTE'**

**Title:**

- Country Note – Sustainable Development of Tidal Areas in .....???
- Name of the country)

**Author(s)**

- Name, \_\_\_\_\_
- Designation, \_\_\_\_\_
- Organization, \_\_\_\_\_
- E-mail ID \_\_\_\_\_

**CONTENTS:**

- (1) Introduction
- (2) Topography/soils and natural characteristics'
- (3) Climate and rainfall
- (4) Sea conditions in front of the coast and river regimes
- (5) Sustainable development and management options in tidal areas (design criteria for drainage and flood protection provisions)
- (6) Risk on tidal areas due to changes in land use, land subsidence and impacts of global climate change (rainfall, river regimes, drought)
- (7) Potential challenges and opportunities for development and management of tidal areas
- (8) ...

**Page limitation:** Roughly 2 pages (1500 words) + 1 page for the table

**Note:** (1) Please correct above items (add/delete) and improve as much as possible. (2) An informative table may be generated to show important SDTA related statistics to get a glimpse of the SDTA in the country. The draft table is shown on the next page. (3) The Format for the Country Note is developed by Dr. Vijay K Labhsetwar in consultation with Prof Dr Bart Schultz.

Please see next page.



**Table: Important characteristics on SDTA in \_\_\_\_\_ (Name of the country)**

*Note: Please fill-in the information as much as possible and leave out the rest*

| Sl. No.           | Particulars   | Situation in 2020 | Expected in 2050 | Comments, if any |
|-------------------|---|-------------------|------------------|------------------|
| 1                 | Topography: <ul style="list-style-type: none"> <li>• area in ha</li> <li>• surface level in m+ MSL</li> </ul>   |                   |                  |                  |
| 2                 | Population  |                   |                  |                  |
| 3                 | Value of public and private property  |                   |                  |                  |
| 4                 | Rainfall in mm: <ul style="list-style-type: none"> <li>• annual</li> <li>• 1 day 1* per 10 year</li> </ul>  |                   |                  |                  |
| 5                 | Sea level: <ul style="list-style-type: none"> <li>• low tide</li> <li>• high tide</li> <li>• storm surge</li> </ul>   |                   |                  |                  |
| 6                 | River water level <ul style="list-style-type: none"> <li>• low flow</li> <li>• average flow</li> <li>• peak flow</li> </ul>   |                   |                  |                  |
| 7                 | Land use in %   |                   |                  |                  |
| <i>Urban area</i> |   |                   |                  |                  |
| 8                 | Landfill or polder  |                   |                  |                  |
|                   | Drainage system: <ul style="list-style-type: none"> <li>• percentage of open water</li> <li>• discharge sluice and or pumping station</li> <li>• capacity</li> <li>• preferred conditions</li> <li>• design conditions</li> </ul> |                   |                  |                  |
| 9                 | Flood protection: <ul style="list-style-type: none"> <li>• risk of failure</li> </ul>   |                   |                  |                  |
| <i>Rural area</i> |   |                   |                  |                  |
| 10                | Landfill or polder  |                   |                  |                  |
| 11                | Drainage system: <ul style="list-style-type: none"> <li>• percentage of open water</li> <li>• discharge sluice and or pumping station</li> <li>• capacity</li> <li>• preferred conditions</li> <li>• design conditions</li> </ul> |                   |                  |                  |
| 12                | Flood protection: <ul style="list-style-type: none"> <li>• risk of failure</li> </ul>   |                   |                  |                  |

