

Agenda for the First Meeting of the
WORKING GROUP ON SUSTAINABLE DEVELOPMENT OF TIDAL AREAS (WG-SDTA)
 Tehran, Iran
 17 October 2011: 09.00-12.30 hours
Strategy Theme: Basin

Year of Establishment: 2011

Completion of the Mandate: 2016

Mandate: (i) Identify sustainable management options of lowland, watershed, as well as sustainable development and management of water and land resources in tidal areas; (ii) To raise awareness of the increasing risk on tidal areas due to global climate change, stimulate discussion on impacts and mitigation, and find a balance between the preservation and development of tidal areas; (iii) 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; (iv) To review the progression of natural wetland conservation and constructed wetland development in tidal areas; (v) To join the international dialogue and organize international conferences to promote land and water management in tidal areas as well as evaluate the feasibility of tidal energy exploitation under global climate change; and (vi) To collaborate with other related working groups actively, and to exchange relevant experiences amongst NCs and support for developing, and least developed countries.

Members: (1) Dr. Park Sang Hyun, Chairman (Korea, Rep. of 2002); (2) Ir. Henk P. Ritzema, Vice-Chairman, 2009 (The Netherlands, 2002); (3) Dr. Ruey-Chy Kao, Secretary, 2009 (Chinese Taipei, 2007); (4) Vice President Hon. Prof. Cai Lingen (China, 2002); (5) Dr. Indreswari Guritno (Indonesia, 2002); (6) Dr. E.J. James (India, 2002); (7) Dipl. Ing. Bernd Probst (Germany, 2003); (8) Mr. Ueda Kazumi (Japan, 2003); (9) Mr. Teoh Weng Chaw (Malaysia, 2007); (10) Dr. (Ms.) Hsiano-Weng Wang (Chinese Taipei, 2010) as Young Professional; and (11) Secretary General, ICID.

Observers: (i) Dr. Jo Jin Hoon (Korea, 2009); (ii) Dr. Daesu Eo (Korea, Rep. of); (iii) Mr. Robiyanto Hendro Susanto (Indonesia); (iv) Mr. Harry Denecke (FAO/IPTRID); and (v) Dr. Dhimant B. Vyas (India).

Website: <<http://www.wg-sdta.icidonline.org>>.

Item 1 : Confirmation of the minutes of the 9th meeting of the erstwhile Working Group

The minutes of the 9th meeting of the erstwhile Working Group held at Yogyakarta (2010), Indonesia will be confirmed.

(A) Issues emerging from the erstwhile WG-SDTA

Item 2 : Publication of the Handbook on SDTA

At Yogyakarta (2010), the WG draft publication titled '*Towards Sustainable development of Tidal Areas: Some Principles and Experiences*' was presented to the members in a draft (final) shape for consideration. The concerned Chapters of the SDTA Handbook were discussed by the respective editors and reviewers.

Following the Yogyakarta meeting, the contributors/reviewers intensely considered the issues and concerns emerged from the discussion for almost the whole year and revised every chapter one more time including the cover design. This has resulted in even more improved contents. The final publication will be released during the Tehran Congress. This publication will assume all importance that it deserves and will remain as a benchmark publication in the history of ICID in the area of SDTA. The publication is a result of hard and untiring efforts from the Chairman and the members of WG-SDTA since 2001. Numerous other experts/ professionals and reviewers from many countries (listed in the publication) have contributed to this publication. The management of ICID places on record, its profuse acknowledgement.

Item 3 : A Special issue of ICID Journal on SDTA

At Yogyakarta (2010), it was decided by the members of the WG that a Special Issue of ICID Journal based on SDTA - publication will be published in 2011. It was also agreed that the National Committees represented in the WG-SDTA will sponsor the Special issue. A Special issue costs about US\$ 15,000 for about 10 papers which will be reviewed by Guest Editors. The 10 papers will be prepared by the members of the erstwhile WG based on the contributions to the SDTA - publication. The format of the Special Issue of the "Irrigation and Drainage" will be same as prescribed for the Journal.

The Chairman may apprise the WG members.

(B) Issues emerging from the New Mandate

At Yogyakarta (2010), the issue of the new mandate of the WG-SDTA was discussed and the tenure of the WG extended by 6 more years i.e. from 2011-2016. The draft mandate of the WG-SDTA, as given above, needs to be finalised and placed before PCTA/IEC for consideration.

The description of the mandate (draft) is available at **Annex**.

Item 4 : Review of membership of the Working Group

4.1 Continuing the membership

In order to maintain the continuity in the activities of the WG, it is proposed to continue the membership of the WG as before unless the concerned National Committee desires to replace the existing member considering the new mandate.

The Indian National Committee of ICID (INCID) has nominated (6 July 2011) Mr. T. Nagendra (India) in place of Dr. E.J. James for the membership of the Working Group. The CV of Mr. Nagendra will be available during the meeting for consideration.

At Yogyakarta (2010) Meeting, Mr. K. Ueda (Japan) informed that Prof. Hiramatzu (Japan), who has contributed significantly as chapter editor of the Handbook, will replace him. Formal nomination is awaited.

Dr. Park SH, Chairman of the WG desires to step down and proposes that a new candidate from Korea may replace him as a member in the WG. Nomination from KCID is awaited.

Dr. Indreswari Guritno (Indonesia) has informed that she will not be able to join the Tehran meeting.

Attendance of members at meetings in 2009 and 2010 will be presented during the meeting.

4.2 Election of Chair, Vice-Chair and Secretary

At Yogyakarta (2010) meeting, it was proposed that in view of new mandate, the issue of election of new Chair, Vice-Chair and Secretary be placed for consideration during the Tehran meeting (2011) of the WG.

The Central Office has requested (16 August 2011) all existing members to send an '*Expression of Interest*' for the Chair, Vice-Chair or Secretary of the WG for consideration during the Tehran meeting. Responses are awaited.

The WG may like to elect/nominate the new Chair, Vice-Chair and Secretary during the Tehran meeting.

Item 5 : Sustainable management options for lowlands

Scope needs to be developed.

Item 6 : Climate change and increasing risks on tidal areas

Scope needs to be developed.

Item 7 : Survey – past design and management systems, operational standards and rehabilitation methods

Scope needs to be developed.

Item 8 : Review the progression of natural wetland conservation and constructed wetland development in tidal areas

Scope needs to be developed.

Item 9 : Organize international dialogue / conferences to promote land and water management in tidal areas

Scope needs to be developed.

Item 10 : Internal Workshop of WG-SDTA, Tehran, Iran

The internal workshop of WG-SDTA titled “*Sustainable Water / Environment Management in Tidal Areas*” is scheduled to be held on 17 October 2011 (13.30-17.00 hours) together with the workbody’s regular meeting.

Theme: “Sustainable Water / Environment Management in Tidal Areas”

Scope: Tidal areas, with abundant ecosystems, are important interactive water-land environments. Due to the global climate change, tidal areas are threatened by rising sea levels, extreme flood and drought events. Water / Environment Management in tidal areas hence should involve multiple perspectives, such as water quality management, ecological resources management and flood management, with sustainability concerns. More studies and scientific opinions of Water / Environment Management are necessary. Water / Environment Management is based on the learning process in face of uncertainty. Among the integration of various achievements of monitoring, forecasting, assessing, and decision making which relate to the Water / Environment Management, innovative measures can be proposed, and feasible strategies of sustainable management of tidal area resources can be derived. Therefore, it is expected to synthesize and share valuable experiences and technologies in different parts of the world to enhance ‘Sustainable Water / Environment Management in Tidal Areas’ during the workshop. Select papers will find a place in the Special Issue of ICID Journal on SDTA in 2012.

Sub-themes:

1. Water Quality Management in Tidal Areas
 - Process of Waste Water Transport
 - Water Quality Monitoring and Improvement Measures
2. Ecological Resources Management in Tidal Areas
 - Strategies Monitoring and Forecasting
 - Risk Assessment / Management
3. Flood Management in Tidal Areas
 - Forecasting, Vulnerability Assessment
 - Impact and Mitigation of Climate Change
4. Engineering for Sustainable Development of Tidal Areas
5. Integrated Tidal Area Management and Decision and Policy Making

Ten abstracted papers have been received (May 2011) so far: Taiwan (3), Korea (4), The Netherlands (2), Indonesia (1). Out of ten abstracts, seven full length papers have been received and each paper has been delivered to three reviewers for review by end of August 2011. Depending on the review results, Integrated review will be carried out by WG Leaders including Prof. Henk, Prof. Ruey and Ms. Liu (Chinese Taipei) at WG Secretariat as well

as by Mr. Kim Ju Chang (Korea). Korean NC will support the printing of the workshop proceedings in cooperation with Prof. Ruey (Chinese Taipei), as ever.

The Chairman may apprise the WG members.

Item 11 : Work Plan / Future Activities

At the WG meeting held in Yogyakarta (2010), the Chairman proposed a new work plan for future activities of the WG-SDTA.

- Preparation of papers for Special Issue of the ICID Journal
- Preparation of new Principle and study items on sustainable management of Tidal areas
- Six-years rolling plan for WG activities
- Organization of Workshops
- Publications, concerned on Sustainable Management of Tidal Areas etc.
- Other issues

At the WG meeting in Tehran, detailed Six-years rolling plan will be prepared for future activities of the WG-SDTA.

Item 12 : Any Other Business

Award for the Best Performing Workbody (2011)

The WG-SDTA was established in 2001 and the Chairman nominated it for the 3rd Award for the Best Performing Workbody in 2011.

In nutshell, the WG-SDTA has given sincere efforts not only to improve irrigation and drainage problem in the farm land and flood prone agricultural area but also to expand ICID activities from farmland area to the tidal reclamation areas.

The Working Group members have devoted to publish Handbook on SDTA and organize International Workshops for 8 sequential years from 2002 to 2010, supported by numerous ICID National Committees and ICID leaders. The WG has contributed to provide valuable opportunities to transfer knowledge and experiences among WG members from developed countries, who have advanced technology, to developing countries, who need it.

WG-SDTA is in good harmony with International Organizations, such as Global Environmental Centre (GEC) who provided "Guideline on Integrating Wetland Conservation" supported by Ramsar, the Society of Agricultural Research on Reclaimed Lands and International Network for Water and Eco-system in Paddy Field (INWEPF) to exchange valuable information and to find distinguished authors and contributors to publish the Handbook and organize Workshop on SDTA.

In the future, we may face an extreme climate as a result of global climate change and we must deal with it. WG-SDTA will continue to share related technologies, valuable experiences and advanced knowledge to protect tidal areas while improving environment and preventing related disasters, during second phase of the WG (2011-2016).

It is a great pleasure to inform that Panel of Judges for the 3rd Award for the Best Performing Workbody (BPWA-3) has selected "Working Group on Sustainable Development of Tidal Areas (WG-SDTA)" for the 'Best Performing Workbody Award – 2008-11'.

The Chairman and all other members of the workbody are felicitated by ICID for their great efforts.

Following the usual practice, the Central Office would provide the award Citation with a Plaque to each member of the Workbody (*as per the latest membership composition but having served on the workbody for at least 2 years*).

The Chairman and all the Working Group members have been congratulated by ICID management for their untiring efforts.

Japanese booklet on SDTA

Vice President Hon. Dr. Shigetaka Taniyama (Japan) has informed (9 August 2011) that the Japanese National Committee of ICID (JNC-ICID) is preparing a small booklet for Japanese readers on Japan's role in the publication of WG-SDTA handbook. JNC-ICID has collected 20 original papers written by Japanese engineers and scientists which have been presented during various workshops organized by WG-SDTA. JNC-ICID intends to include the ICID position paper on SDTA (*ICID Journal on Irrigation and Drainage, Special Issue on 'Water for Food and Poverty Alleviation, February 2009, Supplement 1, Volume 59, Pages S22-S59*) written by Dr. Park San Hyun (Korea), Ir. Jonathan Simm (UK) and Ir. Henk Ritzema (The Netherlands) in the booklet. The booklet is also likely to include a list of technical reports, papers and materials on the subject from Japan since 1930.

Prof. Hiramatzu (Japan) / VPH Dr. Taniyama may apprise the members.

WORKING GROUP ON SUSTAINABLE DEVELOPMENT OF TIDAL AREAS (WG-SDTA)

Description of the Mandate (Draft)

Tidal areas, with abundant ecosystems, are important interactive water-land environments. Due to the global climate change, tidal areas are threatened complicatedly by rising sea level, extreme floods events and droughts and so on.

It is hence urgent to revisit the past design and management system, operational standards and rehabilitation methods of the existing irrigation and drainage facilities, and review the progression of natural and constructed wetlands in near shore, estuary, and tidal flat areas.

Aiming to reduce CO₂ and protect the ozone shield, green power generation such as wave or tidal current energy is adopted, hoping that by which measure we can slow down the climate change. However, as offshore energy infrastructures are being established increasingly, facilities such as offshore wind farms may occupy large areas and compete with other users of the maritime space. Offshore platforms than can combine many functions within the same infrastructure could offer significant benefits in terms of economics, optimizing spatial planning and minimizing the impact on the environment.

Hence, novel innovative designs for multiuse offshore platforms targeting ocean renewable energy and in particular offshore wind, aquaculture and the related services should be developed in tidal areas. Efforts need to be made to address the interaction between energy and other platform users, and to assess the economic viability and environmental impacts in Tidal areas. Also, in order to better understand the changing tidal area environment, we have to introduce enhanced survey techniques and systematic monitoring programs in the tidal area.

Under the pressure of human activities, tidal land area in many countries has been subsiding due to over-pumping groundwater. Problems such as sea water intrusion, land salinization, and decreasing land value could then occur in higher potential. While tacking with the extreme events, ICID WG-SDTA should initiate more discussions on and raise awareness of the increasing risk on tidal areas by joining international dialogues and organizing international conferences in cooperation with related WG, such as WG-DRG, WG-DRG, WG-CLIMATE and WG as well as WGENV, supported by each regional WG and NC who are concerned with Tidal areas.

The ultimate goal for WG-SDTA is to find a balance between the preservation and development of tidal areas, and thus provide relevant experiences to assist island, developing, and undeveloped countries.

WG SDTA will derive feasible strategies of sustainable management of lowland, watershed, and water and land resources to reduce the risk or appropriate exploitation of tidal and ocean energy to reduce carbon dioxide emissions should be formed.
