

**AGENDA FOR THE 25TH MEETING OF THE
EUROPEAN REGIONAL WORKING GROUP (ERWG)**

05 September 2019, 09:00-11:00 hours (Session-I)
05 September 2019, 11:15-13:15 hours (Session-II)
Bali, Indonesia

Presented by the Chairman

Year of Establishment: 1995

Mandate: The mission of ERWG is to promote awareness about critical ICID relevant water issues at all levels in Europe and to pay special attention to the environmentally sustainable water management in Europe.

Website: <http://erwg.icidonline.org/>

ERWG Agenda Item 1: Action Taken Report by Chair¹

1. The Chair of the WG will present report on the actions taken on the decisions and proposals of the European Regional Working Group at its 24th meeting held at Saskatoon, Canada in 2018.
2. ICID Central Office vide e-mail of 19 November 2018 to all Chairs/ Vice Chairs/ Secretaries suggested workbodies to make full use of web-ex platform for virtual meeting so as to ensure regular contribution from the WG members as well as discuss and initiate follow-up actions emerging from the minutes of the previous WG meeting and review the progress of the action points. In order to organize the WebEx Meetings, Webinars and e-Discussions, Chair of the workbodies were requested to send the 'Expression of Interest' to initiate the processes. No web-ex meeting of the WG could be arranged during the year.
3. No new nominations have been received from NCs during the year. Chairman 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. The Chair may provide further updates at the meeting.

ERWG Agenda Item 1.1: Strengthening the membership in Europe

4. During the Saskatoon meeting (2018), the WG felt the need for ICID to facilitate networking among specialists and contact with other relevant entities, such as FAO and other UN organisations to support member countries to address challenges posed by the repeated occurrence of extreme weather events in Europe. The RWG also felt that ICID 'value proposition' is no longer sufficiently attractive in the context of the European countries and there is need to discuss the issue of how to make ICID relevant to European countries in order to (i) retain current members; (ii) re-engage with the current associate member countries; and (iii) attract new member countries and/or individual members to ICID. WG will discuss these issues and Chair will brief the members of any proposed actions in the matter.
5. The Swiss National Committee of ICID under the Swiss National Commission on Agro-Systems and Land Improvement (CH-AGRAM) has been active member of ICID since 1951 and withdrawn their membership from ICID in March 2018 and dissolved its activities. During the Management Board (MB) meeting held on 12 April 2019 at Rabat, Morocco where Secretary General Er. Ashwin B. Pandya also attended the eleventh edition of Conference on Moroccan Agriculture on 15 April 2019 at Meknes, met Prof. Dr. Bernard Lehmann (Switzerland), Secretary of State for Agriculture/Director General of Federal Office for Agriculture (FOAG), Federal Department of Economic Affairs and discussed the issue of reactivation of Swiss National Committee. In this regard, SG wrote a letter to Prof. Dr. Bernard Lehmann giving details of Swiss National Committee with a request to take up matter with the relevant ministry for reactivation of Swiss NC. However, the reactivation of Swiss NC is yet to be realized.
6. Efforts are being made for reactivation of membership of the Spanish National Committee through Spanish Embassy in New Delhi, India. As a part of these efforts, the Deputy Directorate General of Irrigation at the Ministry of Agriculture, Fishery and Food, Spain has expressed interest in joining as a 'Direct Member' of ICID however, their membership form is still awaited. The Spanish Embassy in New Delhi agreed to provide ICID with services such as translation of ICID periodicals into Spanish for circulation among the Spanish speaking countries and uploading on ICID website. Since then few bulletins and concise ICID roadmap have been translated and circulated to Spanish speaking countries.

¹This will also include details of membership of WG as **Annex**

7. It has been observed that the member countries in Europe are gradually decreasing due to one reason or other, it is extremely important to reactivate the countries that have become Associate Members (*Inactive National Committees*) and bring them into ICID fold again. This issue was raised and discussed in the 25th meeting of the ERWG and 29th meeting of PCSO in August 2018 at Saskatoon, Canada leading to directions from 69th IEC vide Resolution IEC-2/69 to re-engage these with countries.

8. In order to strengthen the membership in the European countries, ICID Central Office requested Dr. Marco Arcieri (Italy) and Dr. Irena G. Bondarik (Russia), ICID Vice-Presidents (*In-Charge of Europe*) to take up matter with the respective European countries (*Associate Members and New countries*) in their assigned region to foster and encourage greater country participation in ICID activities. Vice Presidents Dr. Marco Arcieri and Dr. Irena G. Bondarik will provide latest status of their efforts in reactivation of associate members and bringing new members to ICID

SUPP: ICID Central Office received an email of 15 August 2019 from Engr. Natasa Milic, Acting Director, Water Directorate, Ministry of Agriculture, Forestry and Water Management, Serbia regarding reactivation of Serbia National Committee of ICID. In this regard, SG wrote a letter to Engr. Natasa Milic, Acting Director, Water Directorate, Ministry of Agriculture, Forestry and Water Management giving details of Serbia with the request to reactivate it. Any updates on the reactivation of Serbia National Committee will be provided in the meeting.

ERWG Agenda Item 2: Road Map to ICID Vision 2030 –Status of Activities relevant to European Region

9. At Saskatoon, the WG reviewed the Action Plan of Road Map to ICID Vision 2030 towards the milestones on the three goals, such as (i) **B1** - Supporting development of appropriate policies; (ii) **C3** - Promoting regional cooperation; and (iii) **F1** - Enhancing institutional capacity development in member countries. In line with the mandate of the WG and its action plan, the group encouraged its members to organise knowledge sharing events such as workshop, seminars and conferences. In this direction and in order to ensure better participation of European members, the group proposed to organize a workshop on agriculture water management alongside the Baltic region workshop in 2019 on evaluation of irrigation materials for certification on eligibility for inclusion in applications for subsidies for replacement of irrigation infrastructure for water saving to support regional cooperation and knowledge sharing. WG will deliberate on various activities of the Action Plan, review and update information regarding milestones for various activities and initiate actions to achieve outcome/feedback as per milestones indicated in the Action Plan.

ERWG Agenda Item 3: Seminar/Session of the WG related to Agricultural Water Management in Europe

10. During the Saskatoon meeting, the WG proposed to organise a workshop on the preparation of a legislative framework for mitigating drought in Europe during the Third World Irrigation Forum (WIF3) in September 2019 at Bali, Indonesia, which will help in developing a document, a guideline, or scoping document for a Task Force on Legislative Framework on Agricultural Drought Mitigation for European Region. Dr. Marco Arcieri (Italy), member of the ERWG, agreed to coordinate the development of activities and take lead for the workshop during the WIF3 in September 2019. As a follow-up, Dr. Marco Arcieri developed a concept note for the Task Force, details given under agenda item 7. WG Chair/VP Dr. Marco Arcieri will provide further updates/feedback at the meeting.

11. As informed during the Saskatoon meeting, *Association Fran'aise pour l'Etude des Irrigations et du Drainage* (AFEID), French National Committee of ICID would be organizing a two-day Conference titled "Water savings achieved with changes in irrigation equipment or practices" from 13-14 November 2019 at Montpellier, France. The objective of the conference are : (a) Exchange around the levers of water saving and efficiency improvements in irrigation; (b) Share the quantitative feedback on water savings achieved by a change of equipment or the adoption of piloting tools in the different EU countries; (c) Share the methodologies used in the various European countries for the ex-ante evaluation of potential water savings; present the French methodology, established by IRSTEA at the request of the Ministry of Agriculture; and (d) Promote exchanges between operational, institutional, technical and scientific actors. In June 2019, ICID Central Office has circulated the announcement of the Conference to NCs/members of the ERWG for wider dissemination which is available at <<https://watersaving.sciencesconf.org>>. Dr. Dominique Rollin, Secretary General of AFEID and member of the WG will apprise the members latest updates at the meeting.

12. The International Society for Horticultural Science (ISHS) and the University of Basilicata (DiCEM Department) in association with Italian NC (ITALCID) organized the "IX International Symposium on Irrigation of Horticultural Crops" at Matera, Italy during 17-20 June 2019. President Er. Felix Reinders delivered key note address on the topic "Water Resources: Challenges of the water-energy-food nexus" during session on "Climate and water resources perspectives: social and economic aspects". VP Dr Marco Arcieri will brief the members about the symposium and its outcome.

ERWG Agenda Item 4: Review of policy issues impacting irrigation and drainage sector

13. Review of the policy documents related to water resources impacting irrigation and drainage sector in Europe has been included in the Action Plan 2030 of the ERWG under **Goal B (Activity B2.1: Review of European / NC policy documents related to water resources that impact irrigation and drainage sector)**. During the Saskatoon meeting, VP Dr. Marco Arcieri (Italy) agreed to look at the history of the framework directive with the support of PH Bart Schultz (Netherlands) and VPH Laszlo Hayde (Hungary). VP Dr. Marco Arcieri/VPH Dr. Laszlo Hayde/PH Bart Schultz may apprise the members on any update in the meeting.

ERWG Agenda Item 5: Links with regional and trans-national organizations for co-operation

14. During the Saskatoon meeting, the WG reviewed the list of cooperating organizations, reducing the list to organizations with a reasonable expectation of collaboration in the coming years. ERWG included 7 National Water Management Associations, 5 European professional organizations and 5 European Water Management institutes in the list (**Annex 3**). The WG requested its members/NCs to strengthen linkages and cooperation with these regional and transitional organizations as well as to provide details of the contact person (s). WG will deliberate on actions taken up for interaction and cooperation with these regional and transitional organisations during the meeting.

ERWG Agenda Item 6: Activities of Focus Groups of ERWG

15. During Saskatoon meeting, ERWG decided to have following five Focus groups based on their relevance to Europe: (a) Focus Group on History (WG-HIST) led by VPH Laszlo Hayde; (b) Focus Group on Environment (WG-ENV) led by Mrs. Seija Virtanen; (c) Focus Group on Sustainable Drainage (WG-SDRG) led by Dr. Bernard Vincent and Dr. Irene Bondarik; (d) Focus Group on Water Related Risks led by Prof. Klaus Roettcher & Mr. Olli-Matti Verta and (e) Focus Group on Irrigation and Drainage in the States under Socio-economic Transformation (WG-IDSST) led by VPH Peter Kovalenko. Focus Group lead members will apprise the members of the ERWG on the latest updates/developments in respect of their respective Focus Groups at the meeting.

ERWG Agenda Item 7: Creation of a Task Force on Legislative Framework on Agricultural Drought Mitigation for European Regional (TF-DMD)

16. During the Saskatoon meeting, the WG proposed to establish a Task Force on Legislative Framework on Agricultural Drought Mitigation for European Regional (TF-DMD) which was approved by 69th International Executive Council meeting in August 2018 at Saskatoon, Canada (*Resolution IEC-2/69*). Vice President Dr. Marco Arcieri (Italy) has been requested to take lead in preparing a Concept Note, together with its proposed composition of membership etc. for circulation among the NCs while constituting the TF. In response, VP Dr. Marco Arcieri has shared the Concept Note, together with mandate, scope and objectives for creation of this TF (**Annex 4**). In this regard, the Management Board (MB) held its first meeting on 12 April 2019 at Rabat, Morocco and approved the mandate and the composition of the Task Force which may be drawn from ICID NCs worldwide. MB suggested to invite international and regional agencies such as The World Bank, International Fund for Agricultural Development (IFAD), Asian Development Bank (ADB), Islamic Development Bank (IsDB), besides representatives of Food and Agriculture Organization (FAO), International Water Management Institute (IWMI), International Center for Agricultural Research in the Dry Areas (ICARDA), European Union Commission and United States Army Corps of Engineers (USACE), and Dr. Christopher Neale of University of Nebraska-Lincoln, who is a member of Global Framework on Water Scarcity in Agriculture (WASAG) to join TF. The mandate of the TF will be (i) Improve drought risk management; (ii) Consider additional water-supply infrastructures; and (iii) Promote water efficient technologies and practices. The ERWG may like to deliberate on the mandate and composition of the Task Force keeping in view the mandate of Working Group on Managing Water Scarcity under Conflict Demands (WG-MWSCD) so as to avoid duplicity of the actions and activities.

ERWG Agenda Item 8: Dissemination of activities of WG

ERWG Agenda Item 8.1: Website of the Group

17. During the Saskatoon meeting, the group noted that the website of the ERWG <http://erwg.icidonline.org/> was updated with new membership list, agenda, minutes, paper presentations etc. In order to enrich the website of the ERWG, WG Chair Ian Makin requested the members of Group to provide interesting articles/information/short story/documents/papers/presentations related to the mandate of the WG for uploading on the ICID website for wider dissemination.

18. In order to enrich the contents of the ERWG website, PH Peter S. Lee (UK) presented the outcome of detailed review of the existing ERWG website, including the contents of the ICID website references of the Group and provided recommendations for reviewing of the WG website during the WG meeting. In January 2019, ICID

CO requested PH Peter Lee to share the latest update on upgradation of the website of the WG. WG Chair Ian Makin / PH Peter Lee will further apprise the members of the actions initiated/taken in this connection.

ERWG Agenda Item 8.2: Webinar / Web-based Seminar

19. During the Saskatoon meeting held in August 2018, the Group supported the organization of the webinars to promote sharing of vast expertise available with ICID fraternity with members of the NCs. It was noted that the French National Committee (AFEID) offered to present a webinar on findings of the studies presented in the conference to be held in November 2019 at Montpellier, France. ICID CO followed-up with Dr. Dominique Rollin (France) to provide the title of the webinar along with a brief concept note on the topic and identify a suitable expert who can act as a panellist during the webinar and may assist him in answering the questions raised by the audience. Dr. Dominique Rollin will provide further updates at the meeting.

ERWG Agenda Item 9: Any other business



MEMBERSHIP OF EUROPEAN REGIONAL WORKING GROUP (ERWG)

Sl. No.	Countries (Year of joining)	Present representatives (Year of Joining)	Remarks
1.	United Kingdom (1951)	Mr. Ian Makin (2014), Chairman, 2015	Attended the WG meetings in 2015, 2016, 2017 & 2018. PH Peter S Lee attended the meeting in 2017 and 2018 as Observers.
2.	Ukraine (1996) 2014	VPH Prof. Dr. Peter Kovalenko, Vice Chairman, 2005 (1999)	Attended the meeting in 2016 & 2017
3.	Finland (2000)	Mr. Olli-Matti Verta, Secretary, 2011	Attended the meeting in 2016 & 2017 Represented in the WG meeting in 2018
4.	Austria (1954)	Dipl. Ing. Frederick M. Cate (1998)	Withdrawn from January 2015
5.	Croatia (1993)	Dr. Davor Romic (2002)	No contribution during 2013, 2014, 2015 & 2016
6.	Czech Republic (1997)	Prof. Dr. Svatopluk Matula (1997)	Associate member from 2017
7.	Estonia (2001)	Mr. Hannes Puu (2015)	Represented in the WG meeting in 2015 and 2018
8.	France (1953)	Dr. Sami Bouarfa (2013)	Represented in the WG meeting in 2014, 2015, 2016, 2017 & 2018. Dr. Herve Plusquellec attended the meeting in 2018 as Observer.
9.	Germany (1957)	Mrs. Sabine Seidel, as Young Professional (2011) Dr. Klaus-Dieter Vorlop (2012)	Withdrawn from January 2015
10.	Hungary (1955)	VPH Dr. Laszlo Hayde, Ex-Chairman and member	Attended the meeting in 2016, 2017 & 2018
11.	Ireland (1978)	Dr. John Martin (2003)	No contribution during 2013, 2014, 2015 & 2016
12.	Italy (1950)	Mr. Marco Arciero (2015)	Attended WG meeting in 2016, 2017 & 2018
13.	Netherlands (1950)	Representative	PH Bart Schultz and VP Prof Charlotte de Fraiture from Netherlands attended the meeting in 2016, 2017 & 2018 as Observers
14.	Portugal (1954)	Mr. Pedro Eduardo da Cunha Serra (1996)	No contribution during 2013, 2014, 2015 & 2016
15.	Romania (1992)	Prof. Dr. Ion Nicolaesco (1996)	No contribution during 2013, 2014, 2015 & 2016
16.	Slovenia (1992)	Slovenia Representative	No contribution in 2016
17.	Spain (1955)	Spanish representative	No contribution in 2016
18.	Switzerland (1951)	Switzerland Representative	Mr. Petra Hellemann, Secretary of CH-AGRAM contributed by email in 2016 Switzerland withdrew from ICID membership in 2018
19.	Georgia (2017)	Georgian Representative	Dr. Givi Gavardashvili attended the meeting in 2017 as new country
20.	Russia (1955)	Dr. Irina G. Pankova, as Young Professional (2007) Dr. Irina Bondarik (2012)	No contribution in 2014, 2015 and 2016 Attended the meeting in 2016, 2017 & 2018
Ex-Officio Member			
1.	Russia	Mr. Peter Alexey Yurievich (2014), Chairman, erstwhile European Work Team on Drainage, EWTDRA	No contribution in 2016



ROAD MAP TO ICID VISION 2030 – ACTIVITIES RELEVANT TO EUROPEAN REGION

Goals	Activity	Outcomes/ Outputs	Milestone for Year 2017	Milestone for Year 2018	Milestone for Year 2019	Milestone for Year 2020	Milestone for Year 2021
Goal B: Be a catalyst for change in policies and practices							
Strategy B1 : Supporting Development of Appropriate Policies	1.7 Review of European/NC policy documents related to water resources that impact irrigation and drainage sector	Technical Report	Compilation of various policies related to water resources by Members in their country and start review few most important policy document	Draft of policy review report with recommendation	Finalisation and issue of policy review report Continuation of review of remaining policy document		
Goal C: Facilitate exchange of information, knowledge and technology							
Strategy C3 : Promoting Regional Cooperation	3.1 Organise workshops/ Seminar etc.	Proceedings of workshop/seminar	To decide on theme and sub-themes for the workshop/seminar to be organised as internal/international workshop in the WG meeting	Workshop/ Seminar	Workshop/ Seminar including publication of outcome/ recommendations from previous workshop	Workshop/ Seminar including publication of outcome/ recommendations from previous workshop	Workshop/ Seminar including publication of outcome/ recommendations from previous workshop
Goal F: Facilitate capacity development							
Strategy F1 : Enhancing Institutional Capacity Development in Member Countries	1.5 To launch from Europe an international e-Discussion on Water issues and/or Environmentally Sustainable Water Management from Europe for Young Professionals	Knowledge sharing and capacity development of YP	e-Discussion on Water issues and/or Environmentally Sustainable Water Management in Europe like as 'IYPeF'	e-Discussion on Water issues and/or Environmentally Sustainable Water Management in Europe like as 'IYPeF'	e-Discussion on Water issues and/or Environmentally Sustainable Water Management in Europe like as 'IYPeF' Organise a Side Event in WIF3	e-Discussion on Water issues and/or Environmentally Sustainable Water Management in Europe like as 'IYPeF'	e-Discussion on Water issues and/or Environmentally Sustainable Water Management in Europe like as 'IYPeF'

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



EUROPEAN REGIONAL WORKING GROUP (ERWG)

1. Profile

The European Regional Working Group (ERWG) of ICID was founded at the 46th IEC Meeting in Rome in September 1995 and is acting under the motto “Comprehensive land and water management in European river basins for the sustainable development of the rural landscape”. The tasks of ERWG can be summarized as follows:

- (a) Knowledge transfer and exchange of experience in matters of border crossing water and land management in European countries
- (b) Co-operation of experts and organisations engaged in national, supranational and international objectives of water management and irrigated agriculture
- (c) Development and promotion of border crossing projects and conferences
- (d) Members are the ICID National Committees of 16 European countries, as below:

Country Representatives			
Croatia	Prof. Davor Romic	Romania	Prof. Ion M. Nicolaescu
Estonia	Mr. Hannes Puu	Russia	Dr. (Mrs.) Irena G. Bondarik
Finland	Mr. Olli-Matti Verta	Slovenia	Representative
France	Dr. Sami Bouarfa	Georgia	Representative
Hungary	Dr. Laszlo Hayde	The Netherlands	Representative
Ireland	Dr. John Martin	United Kingdom	Mr. Ian Makin
Italy	Mr. Marco Arciero	Ukraine	VPH Prof. Peter Kovalenko
Portugal	Mr. Pedro Eduardo da Cunha Serra		

- Chairman** : VPH Ian Makin (UK)
Vice-Chairman : VPH Prof. Dr. Peter Kovalenko
Secretary (1) : Mr. Olli-Matti Verta (Finland)
Secretary (2) : Dr. (Mrs.) Irena G. Bondarik (Russia) *for Russian speaking countries*
Observer : Mr. Mohammed Benblidia (IME)

2. Countries with observer status

- (i). *Bosnia & Herzegovina* : Prof. Dr. Mihovil Vlahinic
- (ii). *Moldova* : Mr. Valeriu Catrinescu

3. Water Network

In addition to the European National Committees of ICID, the following organizations/association/institution has been incorporated in the ERWG Water Network:

A. Five European professional organizations

- (i) CIPR - Commission Internationale pour la Protection du Rhin
- (ii) EurAgEng - Special Interest Group on Soil and Water, European Society of Agricultural Engineers
- (iii) EWA - European Water Association
- (iv) EWRA - European Water Resources Association
- (v) TECHWARE - Technology for Water Resources

B. Seven National Water Management Associations

- (i) BSHE - Bulgarian Society of Hydraulic Engineers
- (ii) DWA - German Association for Water Management, Waste Water and Waste (Chair: Prof. Klaus Roettcher)
- (iii) DONBH - Society for Irrigation and Drainage of Bosnia & Herzegovina
- (iv) LZHIS - Lithuanian Association of Land and Water Management Engineers
- (v) MHT - Hungarian Hydrological Society
- (vi) RSRE - Russian Society of Reclamation Engineers

- (vii) SITWM - Polish Association for Water Plant Construction and Land Improvement Engineers and Technicians

Annex 3 [Continued]

C. Five European Water Management Institutes

- (i) ACVAPROJECT - Water Management Design Institute (Moldova Republic)
- (ii) DHI - Danish Hydraulic Institute
- (iii) IIDS - Institute of Irrigation and Development Studies, University of Southampton (United Kingdom)
- (iv) RIIDHE - Research Institute for Irrigation, Drainage and Hydraulic Engineering (Bulgaria)
- (v) IME - Institut Méditerranéen de l'Eau (France)

4. Work Results

- (i) ERWG Letter No. 1 to 20 (newsletters)
- (ii) Irrigation Sector Reform in Central and Eastern European Countries (project report book/CD)
- (iii) European Sector Vision on Water for Food and Rural Development (report)
- (iv) ICID Guide "How to work out a drought mitigation strategy" (guideline)
- (v) Water Resources Management in the Czech Republic, Hungary, Lithuania, Slovenia (book)
- (vi) Diffuse Entries in Rivers of the Odra Basin (research report)
- (vii) Proceedings of several European conferences
- (viii) First and Second CEE WFE Dialogue Reports (Dialogue on Water, Food and Environment – Dialogue on the implementation of the EU Water Framework Directive in Agriculture in the Central and East European Countries) (reports)
- (ix) Danube Valley: History of Irrigation, Drainage and Flood Control (book)

5. Projects

- (i) Flood risk mitigation by agricultural non-structural measures
- (ii) Drought mitigation strategies
- (iii) Implementation of the European Water Framework Directive
- (iv) Flood plain management on Odra, Nemunas and Vistula
- (v) Flood prevention strategies
- (vi) Point and diffused pollutants in the Odra basin
- (vii) Sustainable irrigation and drainage management under the conditions of transitional economy
- (viii) Dialogue on water for food and environmental security in Central and Eastern Europe



TASK FORCE ON DROUGHT RISK MANAGEMENT (TF-DRM)

April 8th 2019

1. Introduction

Drought and water scarcity are becoming increasingly frequent and widespread phenomena in many Countries of the European Union. While Europe has always been considered as having adequate water resources, the long-term imbalance resulting from water demand exceeding available water resources is no longer infrequent.

It was estimated that by 2007 at least 11 % of Europe's population and 17 % of its territory would have been affected by water scarcity, raising the cost of droughts in Europe over the past thirty years at EUR 100 billion. The EU Commission expects further deterioration of the water situation in Europe if temperatures keep rising as a result of climate change. Water is no longer the problem of a few regions, but now concerns just about all of the 500 million Europeans.

2. Relevance For ICID

One of the main goals of ICID Mission to be achieved within the Agenda 2030 is to enable higher productivity with less water and energy, under the constraint and uncertainty of climate change. Thus, mandate and objectives of this Task Force can greatly contribute to reach this goal, enhancing on the one hand role and visibility of ICID in a broader international context and, on the other, offering a substantial contribute to solve the problem.

3. Mandate and Objectives

Following the increasing droughts occurred in the past few years, several Countries have moved from crisis management to Drought Risk Management. The associated measures often result in comprehensive drought risk management plans with water stress area mapping, alert levels, warning systems, etc. The TF-DMD should have all the necessary flexibility to develop specific drought management plans in relevant river basins and, of course, in different area of the World also.

The Task Force on *Drought Management Framework* will offer a contribute to

4. Improve drought risk management

- (a) Set up of specific *Drought Risk Management Plans* to supplement WFD (*Water Framework Directive*) river basin management plans, where needed, in accordance with WFD provisions, in Europe and other areas of the World.
- (b) Conceive operational prototypes and set up of implementing procedures for an Early Warning System and, by the end of 2022, develop recommendations at National Governments level. This system will integrate relevant data and research results on drought monitoring, detection and forecasting on different spatial scales, thus making possible to evaluate future events.
- (c) Foster exchange of information and best practices on drought risk management, besides identify methodologies for drought thresholds and drought mapping.

5. Considering additional water supply infrastructures

- (a) Planning of additional water supply infrastructure such as storage of surface and/or ground waters in order to mitigate the impacts of severe drought events, taking into due account the cost-benefit ratio.
- (b) Analyze the possibility of realization of plants for use of alternative sources (brackish waters, desalinized or waste water). Any definitive position on these options will have to be based on further work on risk and impact assessment, taking into account the specific bio-geographical circumstances of Member States and regions.

6. Promote water efficient technologies and practices

Efficiency of water use in agriculture can still be considerably improved across the EU. In some regions, up to 30% of the volume of water consumed in agriculture could be saved, whereas leakages in agricultural water supply and irrigation networks can exceed 50%. In addition to improving technologies, the upgrading of irrigation management practices is a necessary instrument in all sectors where huge quantities of water are used

- (a) Develop techniques for rainfall harvesting
- (b) Promote the use of low water quantities in paddy fields - (rice dry cultivation)
- (c) Investigate the possible and different adaptation of agriculture to climate change.

7. Work Plan – 3 Years

- (a) Disseminate and facilitate the exploitation of the results of research on water scarcity and drought issues.
- (b) Establish working relationships and disseminate most relevant Drought Risk Management Action Plans in the ICID Community and in the broader International Network.
- (c) Create a water scarcity and drought information system throughout Europe
- (d) Provide Drought Risk Management training and capacity building for Government Officers

8. Potential Partners

All of the NCs that are willing to participate in the program will be joining together to present the lessons learnt.

