

**AGENDA FOR THE 7TH MEETING OF THE
WORKING GROUP ON WATER FOR BIO-ENERGY AND FOOD (WG-BIO-ENERGY)**

8 November 2016: 09:00-11:00 hours
Chiang Mai, Thailand

Strategy Theme: Basin

Presented by the Chairman

Year of Establishment: 2010

Completion of the Mandate: 2015

Mandate: Evolve "ICID's position on Water for Bio-Energy and Food"

Website: http://www.icid.org/tf_bio_energy.html

WG-BIO-ENERGY Agenda Item 1: Action Taken Report by Chair

1. During the last International Executive Council (IEC) all the Committees were requested to make use of the video-conferencing facilities now being made available by the Central Office which enables monitoring of the actions taken on the decision of the WG. A virtual meeting through video conferences also provides opportunity of participating in the activities of the WG for those members of the WG who are unable to attend the meeting physically and to continue their membership. WG may please take note. The Chairman will present report on the actions taken on the various decisions/proposals of the Working Groups since Montpellier Meeting in 2015.

WG-BIO-ENERGY Agenda Item 2: ICID Action Plan 2030: Activities on Bio-Energy

2. The 66th International Executive Council (IEC), vide Resolution IEC-4/66 has approved the new Vision, Mission and six Organizational goals of ICID (http://www.icid.org/vision_2030.html). In order to develop action plan, the Consultative Group (CG) requested inputs from ICID Work Bodies in prescribed format in May 2016 to identify actions to achieve the Organizational Goals in their area of activities which would form part of ICID Action Plan for Vision 2030.

3. WG Chair prepared a draft action plan and shared the same with ICID Central Office (**Annex 1**). The group will discuss the draft action plan and finalize it during the Chiang Mai meeting and provide its input to PCTA. The updated activity plan incorporating all the comments will be submitted to the CG for incorporation in the ICID Action Plan for Vision 2030. WG Chair will provide further updates at the meeting.

WG-BIO-ENERGY Agenda Item 3: Publications of the Working Group

4. During the Montpellier meeting held in October 2015, the WG has decided to bring out an e-publication of the Technical Report titled 'Water for Bio-Energy' and place it on WG website. In this connection, the Group made a synthesized technical report on Water for Bio-Energy along with the country papers received from Brazil, Canada, China, India, Nepal and South Africa. Prior to bringing out e-publication of the WG, the Chairman of the group was requested to review and send his consent on technical report in consultations with the members of the WG. After approval of the report from the Chair, report has been uploaded on the WG website http://www.icid.org/tf_bio_energy.html for its wider dissemination. Chairman may apprise the members about the e-publication of the Technical Report of the WG during the meeting.

WG-BIO-ENERGY Agenda Item 4: Updating Multilingual Technical Dictionary (MTD)

5. At the 65th IEC, it was decided that ICID Central Office will bring out an online version of the MTD and make it available through ICID website. In this connection, Central Office is collecting the terms available with different NC in their respective languages, based on 2010 version of MTD. During Montpellier meeting in October 2015, the Permanent Committee for Technical Activities (PCTA), considering this an important input to working towards SDGs, recommended setting up of new workbody to review/ update the existing MTD. Accordingly, a Task Force on MTD has been proposed to be set up with WG Chair/ nominee as members along with members from various experts' international organizations (Refer PCTA Agenda Item 4, page 82).

6. Since PCTA would require a feedback from each of the WGs as to how they plan to review / update the terms that fall within their respective scope of activities, the group will discuss this issue and nominate a suitable expert as a nodal person for reviewing the terms related to the activities of the group. To achieve this goal, it is proposed that WG undertake the review of the concerned terms depending on their domain of expertise

suggesting changes / modification and addition of new terms, along with contributing pictures, links and videos related to respective term.

WG-BIO-ENERGY Agenda Item 5: Closure report and revised mandate of the WG

7. During the last meeting, the WG completed its mandate in 2015 and developed a 'Scoping Document' (SD) for a new WG. The Group nominated Dr. Fuqiang Tian (China) as Convener and VPH Laurie C. Tollefson (Canada) as member of the 'Core Group' (CG) for preparing 'Scoping Document' of the WG. Accordingly, Core Group has prepared revised 'Scoping Document' of the new Working Group on 'Water for Bio-Fuel and Food' with revised mandate, which has been circulated to the members of the WG for providing their comments/suggestions. Since no comments were received from the members, the revised SD was sent to all National Committees in May 2016 for their comments/suggestions, as well as to nominate suitable experts for the new WG. The draft scoping document (revised) of the WG prepared by Core Group is available at **Annex 2**. The Group will discuss and finalise the SD during the meeting and forward it to PCTA/IEC for its approval for establishing new WG.

8. As decided in the WG meeting at Montpellier, the Chairman of WG finalized the closure report of the WG providing details of background, activities undertaken, conclusion and recommendations and way forward. This closure report after review by the Central Office has been circulated to the members of the WG and uploaded on the WG website.

WG-BIO-ENERGY Agenda Item 6: Dissemination of activities of WG - Website of the Group

9. Members are requested for their active participation in the activities of the WG and facilitate exchange of information, knowledge and experience, as well as networking on the topic in order to keep themselves up-to-date with new developments in the field of bio-energy. Members are also requested to provide information, papers, presentation made on topics related to scope of work of the WG to the ICID Central Office for uploading on the web site of the WG. Members will discuss and evolve methodology for sharing of information and updation of WG website. In order to ensure regular contribution of the members, WG is encouraged to make full use of Web-Ex platform for virtual meetings in between face to face meeting during IEC.

WG-BIO-ENERGY Agenda Item 7: Presentation of new advance on bio-energy

10. To share the knowledge of new advances on bio-energy in different member countries, the WG will invite a couple of presentations from the field experts. WG Chair suggested to invite Hydro and Agro Information Institute (HAI) or Royal Thai Navy to make one such presentation. WG members may deliberate on the issue and suggest make suggestion from experts in the field during the WG meeting.

WG-BIO-ENERGY Agenda Item 8: Review of membership of the working group

11. In order to increase the efficiency and functioning of the Working Group during annual face to face meeting and avoid spending a lot of time on administrative matters, it was decided by the Management Board (MB) that the admission of new members or discontinuation of the membership of the group will be dealt by Chairman in consultation with Vice Chair, Secretary and ICID Central Office prior to the meeting itself through emails/ web conference.

12. The Indian National Committee on Surface Water (INCSW) and Sudanese National Committee, ICID (SNCID) have nominated Mr. Rajiv Kumar (India) and Dr. Salih Hamad Hamid (Sudan) respectively for the membership of the group. The existing membership of the WG and new nominations are given at **Annex 3** (see the electronic version for the latest list). Any new nominations for the membership received during the meeting will be dealt suitably after the meeting.

WG-BIO-ENERGY Agenda Item 9: Any other business

SUPP: Webinar/ web-based seminar

Webinar/ web-based seminars are organized on web platform using video conferencing. This platform is used to organize workshop, seminar, presentations, etc. Many international organizations are using this platform to disseminate their knowledge. In order to share vast expertise available with ICID fraternity with Members of the NCs, it is proposed to organize on average about 2 webinars per month with the support of WG experts. WG will discuss and suggest 5-6 topics, based on the mandate of the WG, on which webinar can be considered along with name of the relevant experts who could be contacted to develop webinars.



NOTES FOR CHAIRPERSON:

1. Draft minutes of this meeting to be submitted to ICID Secretariat at Chiang Mai (Thailand) after the meeting.
2. Chair to participate and present the WG report to PCTA meeting on 11 November 2016.

ICID ACTION PLAN VISION 2030 – ACTIVITIES BY WORKBODIES

Name of the Chairman and members filling this questionnaire: Dr. Fuqiang Tian (China) and members filled-in the questionnaire

Dated:

		Outcomes/ Outputs	Milestone for Year2017	Milestone for Year2018	Milestone for Year2019	Milestone for Year2020	Milestone for Year2021
Goal 1: Enable higher crop productivity with less water and energy			Milestone 1	Milestone 2	Milestone 3	Milestone 4	Milestone 5
	WG Activity 1.1						
Goal 2: Be a catalyst for change in policies and practices	2.1 Position paper or updated technique paper	Position paper			Release at IEC		
	2.2 Technical report of the WG on bio-energy	Technical report on Water for Bio-energy	Finalisation and dissemination of technical report				
Goal 3: Facilitate exchange of information, knowledge and technology	3.1 Organize workshops, seminar, or symposium	Compilation of proceedings	Inputs to Congress		International workshop		
	3.2 Review of policies and publications	Condensed overview of		Release of overview of		Release of overview of first	

	related to mandate of the WG	national policies and relevant publications on the topic		first set of policies and publications		set of policies and publications	
		Outcomes/ Outputs	Milestone for Year2017	Milestone for Year2018	Milestone for Year2019	Milestone for Year2020	Milestone for Year2021
Goal 4: Enable cross disciplinary and inter-sectoral engagement	WG Activity 4.1						
Goal 5: Encourage research and support development of tools to extend innovation into field practices	WG Activity 5.1						
	WG Activity 5.2						
Goal 6: Facilitate capacity development	WG Activity 6.1						

**WORKING GROUP ON WATER FOR BIO-FUEL AND
FOOD (WG-BIO-ENERGY)**

DRAFT SCOPING DOCUMENT (REVISED)

1. Background

- 1.1 Rising energy prices, geopolitics and concerns over the impact of greenhouse gas emissions on climate change are increasing the demand for biofuel production. Over the last two decades, biofuel production has increased dramatically. For example, bioethanol output experienced an increase from 16.9 to 72.0 billion liters while biodiesel grew from 0.8 to 14.7 billion liters between 2000 and 2009. At present biofuel production is estimated at 35 billion liters, accounting only for a small part (2%) of the 1200 billion liters of annual gasoline consumption worldwide. But the contribution of biofuels to energy supply is expected to grow fast with beneficial impacts including reductions in greenhouse gasses, improved energy security and new income sources for farmers. However, biofuel production and use have both positive and negative environmental and socio-economic consequences. Specifically, biomass production for energy will compete with food crops for scarce land and water resources, which is already a major constraint on agricultural production in many parts of the world.
- 1.2 With the emerging new challenges for agricultural water management, ICID established a Task Force (TF-BIO-ENERGY) in 2010 headed by Dr. Laurie C. Tollefson to evolve its position on Water for Bio-Energy and Food¹. The task force was renamed as WG BIO-ENERGY at the 64th IEC meeting, Mardin, 2013. The chair and other core members completed a technical report with contributions from all group members at the 22nd ICID Congress and 65th IEC meeting, Gwangju, 2014. The report presents a holistic review of the state-of-the-art of bio-energy production and policies in different countries, the intertwined linkage among bio-energy, water, and food, a summary of the perspectives from all contributing country members. In view of the importance of the bio-fuels in reducing emission of green-house gases, the members of WG BIO-ENERGY and PCTA felt the need to develop an awareness and understanding among the national committees regarding bio-energy issues so that they are able to better understand various facets of bio-energy production and their impacts on the water availability for food production and ensure their participation in the deliberations on the issue of bio-energy within their country and contribution in the policy dialogues. Accordingly, continuation of WG was recommended and WG was requested to develop a new Scoping Document to reorient its objectives and the scope of its activities.

2. Objective and Mandate

2.1 Relevance of the Working Group (WG)

- 2.1.1 The expansion and intensification of biofuel production is growing fast, which could add to existing pressures on land and water management. The technology of biofuel production is also developing fast, which will recast the nexus among biofuel, water and food. As stated above, therefore, the objective of the working group is to stimulate discussion and raise awareness of water and food security issues associated with biofuel. Specifically, the relevance and mandate of the WG can be specified as follows:

- (a) To enhance understanding of the nexus between bio-energy, water and food production/food security among the ICID community;
- (b) To explore and analyze the implications of existing and new biofuel technologies on water resources availability, food production and rural development;
- (c) To enhance discussions on appropriate promotion policies for biofuel production and its use with due considerations to the countries need to balance food and energy, urban and rural, carbon and economy, etc.;
- (d) To join the international dialog on the nexus among biofuel, water, and food.

2.2 Relevance of the Working Group to the scope of the Thematic Area

- 2.2.1 For the relevance of the WG to the scope of the Thematic Area, the same argumentation is applicable as shown under the relevance. One of key objective is to better understand nexus of water-food and energy including implications of bio-fuel on diversion of land and water from food production to bio fuel production in the context of food security.

¹ Task force is completing its mandate with extended period in 2015.

2.3 Existing gap that the Working Group is expected to fill

2.3.1 ICID working group (WG-Crop) has mandate to investigate use of energy crops for bio-fuel production but there is a gap in dealing with nexus of water-food-energy specifically implication of diversion of lands and water for bio-fuel production on food security. This group is proposed to fill this gap.

3. State of knowledge on the topic

3.1 *Other International Organisations that are working on the subject*

3.1.1 There are several other International Organisations that have programs and activities on this topic. This especially concerns the:

- (a) Food and Agriculture Organisation of the United Nations (FAO);
- (b) International Fund for Agricultural Development (IFAD);
- (c) United Nations Environment Programme (UNEP);
- (d) World Agroforestry Centre (ICRAF);
- (e) Organisation for Economic Co-operation and Development (OECD)
- (f) Professional international associations, like: International Petroleum Industry Environmental Conservation Association (IPIECA), etc.

3.2 *The niche that ICID is expected to fill in this area*

3.2.1 The specific niche that this WG can fill on the issue highlighted under “Scope” can be formulated as follows:

- (a) to exchange information and network on the issues in order to be up to date with new developments, methods and approaches;
- (b) to review and prepare a condensed overview of existing literature and other relevant publications on the issues;
- (c) to prepare and present reports and/or case studies on recent development in the countries that are represented in the WG;
- (d) to organise international workshops, seminars or symposia on the issue;

3.2.2 This can be the basis to present recommendations and if mature a position paper on key issues of bio fuel production and its impact on food security in different countries and paper on the topic for publication in *Irrigation and Drainage (IRD)*.

3.3 *How is the Working Group expected to collaborate with the other International Organisations?*

3.3.1 International Organisations can contribute to the activities of the WG by nominating Permanent Observers (PO). On the other hand, presentations of the work and achievements of the WG can be presented at the occasion of events organized by International Organisations.

4. Work Plan

4.1 *Scope*

4.1.1 The working group is expected to investigate, analyze, and disseminate information on new developments and to formulate recommendations with respect to:

- (a) the assessment, monitoring and predictions of impacts of biofuel production and usage policies on water-food-energy nexus and especially agriculture water management,
- (b) the national policies for biofuel and its consideration for water-food-energy nexus and especially agricultural water management in different countries,
- (c) the strategies which agriculture and irrigation authorities can adopt to support biofuel promotion policies of their government,
- (d) the international dialogue on biofuel and agricultural water management between regions and countries.

4.2 Target Audience

4.2.1 The target audience for this working group will be the National Committees and its members who might be called upon by their governments to advise on various facets of biofuel policies, its implications on water resources management, particularly on agriculture water management, food production, and setting up regulatory mechanism.

4.3 Outputs

4.3.1 The following outputs are expected from this working group:

- (a) sharing knowledge and experiences by representatives of National Committees, and disseminating this knowledge within their country;
- (b) presenting condensed overview of national policies and relevant publications on the topic;
- (c) organizing or co-organizing at least one workshop, seminar or symposium in every two years at occasion of an international ICID meeting; and
- (d) distributing ICID experiences in practice for countermeasures for water and land competition from biofuel production.

4.4 Timelines

4.4.1 Biofuel production is in a fast development and the nexus among biofuel, water and food is rather complex. Therefore, it is recommended that the term of this working group be set at 4 years. The timeline would have to be based on the scope of work and the expected outputs. Details of the timeline would have to be formulated and refined at the meeting of the working group.

4.5 Collaborators and dissemination strategy

4.5.1 The working group would have to base its activities on an open attitude with a clear scope for invitation of outsiders that are interested in the topic.

4.5.2 The dissemination strategy would have to be based on reaching those who can apply the findings and recommendations of the working group in their research and especially in policy development, decision making and implementation in practice.

6. Core Group

6.1 The draft has been circulated among the members of WG-BIO-ENERGY. Comments received from the members of the WG have been included in this scoping document. The Core Group consists of:

Convenor: Fuqiang Tian
Member: Laurie C. Tollefson

7. References

- (i) D Rajagopal, S E Sexton, D Roland-Holst and D Zilberman. Challenge of biofuel: filling the tank without emptying the stomach? *Environ. Res. Lett.* 2 (2007) 044004 (9pp). doi:10.1088/1748-9326/2/4/044004
- (ii) Giovanni Sorda, Martin Banse, Claudia Kemfert. An overview of biofuel policies across the world. *Energy Policy* 38 (2010) 6977–6988.
- (iii) Charlotte de Fraiture, Mark Giordano and Yongsong Liao. Biofuels and implications for agricultural water use: blue impacts of green energy. *Water Policy* 10 Supplement 1 (2008) 67–81.
- (iv) UNEP (2011), "The bioenergy and water nexus" <http://www.unep.fr/energy/bioenergy>
- (v) UNEP (2011), "Water and bioenergy", Issue Paper No 2, Bioenergy Issue Series, <http://www.unep.fr>
- (vi) Göran Berndes, (2008), "Water demand for global bioenergy production: trends, risks and opportunities" Göteborg, Berlin 2008. http://www.wbgu.de/wbgu_jg2008_ex02.pdf



A. Members and their attendance at 2014 and 2015 Meetings

Sl. No.	Members	Member from	2014		2015		Remarks
			Self	Contributed by mail	Self	Contributed by mail	
1.	Dr. Fuqiang Tian (China), Chairman (2015)	2012	•		•		Nominated as new Chair of WG
2.	Mr. Laurie C. Tollefson, Member (Canada)	2010	•		•		
3.	Mr. Sanjay Belsare (India)	2010	-		-	•	Contribution in 2015 and 2016
4.	Mr. Uttam Raj Timilsina (Nepal)	2012	•		-		
5.	Mr. Mortaza Yazdkhasti (Iran)	2015			•		Accepted as Provisional Member
6.	Mr. André Roux (South Africa)	2015			•		
7.	Secretary General, ICID	2010	# ²		#		
Observer							
8.	Mr. Bassam Hayek (Jordan)	2015			•		

B. New Nomination received from the National Committee

S. No.	Name	Country	Remarks
1.	Mr. Rajiv Kumar	India	Recommended as member, subject to his presence else provisional member
3.	Dr. Salih Hamad Hamid	Sudan	Recommended as member, subject to his presence else provisional member

² # Through representation