

<p style="text-align: center;"><b>AGENDA FOR THE 4<sup>TH</sup> MEETING OF THE TASK FORCE ON WATER FOR BIO-ENERGY AND FOOD (TF- BIO-ENERGY)</b> 03 October 2013, 09.00-10.30 hours Mardin, Turkey Strategy Theme: Basin <i>Presented by the Chairman</i></p>
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**Year of Establishment: 2010**

**Completion of the Mandate: 2013**

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

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

1. The Chairman may like to present a report regarding actions taken on the decisions made during the last meeting of the TF at Adelaide (2012).

**TF-BIO-ENERGY Agenda Item 2: Review of membership of the Task Force**

2. The existing membership of the TF and their attendance for the last two meetings is given at **Annex 1**.

**TF-BIO-ENERGY Agenda Item 3: Publications of the Task Force**

3. As per the mandate of the TF, it plans to develop a position paper on 'Water for Bio-Energy and Food' and for the purpose, an International Workshop on "*Country Policies and Developments of Water for Bio-Energy and Food*" was held at Adelaide (2012) where five country papers were received (**Annex 2**). In order to develop a position paper, the authors have been requested to suitably modify/edit/improve their papers following the structure given in the 'Scoping Document' (**Annex 3**). Amit Dutta (India) and Andre Roux (South Africa) have submitted their papers to Chair and responses from others are awaited. As such, to enrich the position paper, nominations and country papers were invited from Australia, Brazil, China, Iran and USA but unfortunately no response have been received so far.

The Chair may like to present the draft position paper based on papers received so far.

**TF-BIO-ENERGY Agenda Item 4: Tenure of the TF**

4. The mandate of the TF comes to an end in 2013 and as such the present TF will be wound up. Members may like to deliberate, if they would like to extend the tenure of the TF with strict time line and responsibility allocation for developing the position paper of the TF.

**TF-BIO-ENERGY Agenda Item 5: Any other business**

5. In order for the WGs and TFs to undertake exchange of information, organize discussions, hold consultation either with the whole group or a sub-group of members to carry out activities related to their mandates beyond the IEC face to face meetings, Central Office has made available facilities for Web based video-conferencing or audio / tele – conference. These newly introduced online features, without any cost to the participants can be explored by members to organize intermediate workbody meetings, conducting remote training programs, presentations, and introducing new products and technologies etc through Webinars. Members can contact Central Office with their requirement in terms of date and time and participants list to enable us to book the meeting slots and facilitate the conferences. More information on these facilities is available at [http://www.icid.org/co\\_whatsnew.html](http://www.icid.org/co_whatsnew.html)

6. Chair of the WG may like to plan such meetings in advance in consultation with other members present during the Mardin meetings and submit their request to Central Office Staff. This arrangement will also provide opportunity to contribute to the work of the WG to those members who are unable to attend face to face meetings. WG may like to take decision on the matter.

**Notes for Chairperson:**

1. Draft minutes of this meeting to be submitted to ICID Secretariat at Mardin after the meeting.
2. Chair to participate and present the TF report to PCTA meeting on 04 October 2013.

**Annex 1** [Appendix XIX, Item 1]

**TASK FORCE ON WATER FOR BIO-ENERGY AND FOOD (TF-BIO-ENERGY)**

**Attendance of Members at 2011&2012 Meetings**

Sl. No.	Members	Member from	2011		2012		Remarks
			Self	Contributed by mail	Self	Contributed by mail	
1.	Mr. Laurie C. Tollefson, Chairman, (Canada)	2010		•	•		
2.	Ing. Helvecio Mattana Saturnino (Brazil)	2010					
3.	Mr. Sanjay Belsare (India)	2010	•		•		
4.	Mr. Uttam Raj Timilsina (Nepal)	2012	--	--	•		
5.	Dr. Fuqiang Tian (China)	2012	---	--	•		
6.	Secretary General, ICID	2010	# <sup>1</sup>		#		

**Annex 2** [Appendix XIX, Item 3]

**LIST OF PAPERS RECEIVED FOR THE WORKSHOP IN JUNE 2012 AT ADELAIDE**

Sl. No.	Names	Country	Title of the Submission
1	Mr. Bashu Dev Lohanee	Nepal	Non-conventional method of irrigation for food security
2	Mr. Uttam Raj Timilsina	Nepal	The scope on production and usage of biofuels in Nepal
3	Mr. Amit Dutta	India	Country policies and developments of water for bio-energy and food – India
4	Mr. André Roux	South Africa	Crop production and water use for biofuels in South Africa
5	Mr. Laurie Tollefson	Canada	Biofuel production in Canada and opportunities under irrigated cropping systems

<sup>1</sup> # Represented

**TASK FORCE ON WATER FOR BIO-ENERGY AND FOOD (TF-BIO-ENERGY)**  
**SCOPING DOCUMENT FOR**  
**ICID POSITION PAPER ON BIO-ENERGY AND WATER**

**Objective**

Bio-energy production and use have both positive and negative environmental and socio-economic consequences, including those pertaining to water. Water, which is already a scarce resource in many parts of the world, will come under further stress providing competitive demand on water for food production. The expansion and intensification of bio-energy production could add to existing pressures on land and water management. Therefore, water resources management and adequate policies and strategies are needed to help ensure sustainability and balance different types of use in the short and longer term.

**Scope**

The position paper presents the collective views of the ICID community on bio-energy production and its impacts on food security. Some of the questions that should be attempted to be answered in the paper are:

- WHAT is the nexus between bio-energy, water and food production/food security?
- HOW are the production and use of bio-energy products likely to influence the future state of water resources?
- WHAT are its impacts on agriculture water availability and use?
- WHAT are the data and tools requirements for making required impact assessments?
- WHAT are capacity development needs for making better decisions in this respect?
- HOW can Irrigation Authorities prepare themselves where such policy decisions are taken by the national governments?
- HOW can society mitigate negative impacts of bio-energy production?

This is neither a research paper nor attempted to be a comprehensive state of knowledge document on the subject only summarizing background information and context. It is based on the existing works and state of knowledge and the reference list is intended to support further studies of the subject treated, in addition to supporting statements made. As such the Paper should/would be revised as fresh knowledge on this evolving subject is made available and is therefore, recommended to be reviewed every five years.

**Target Audience**

Main audience for this position paper are the National Committees and its members who might be called upon by their governments to advise on various facets of Bio-energy policies, its implications on water resources management, particularly on agriculture water management, production, and setting up regulatory mechanism .

**PROPOSED TABLE OF CONTENTS**

**1. Context and Background**

(Pressure on fossil fuels and increasing energy demands, increasing threat to food security and implications for irrigation management policies and practices. Objective, scope and the target audience of the Position Paper)

**2. Particularities of Water, Bio-energy and Food security Nexus**

(understanding water and bio-energy interaction, Land-water and soil-waterinteraction, appropriated scale, scope and resolution, embedded water, water footprints; Blue, green and grey water, implications for sustainable agriculture, land use and food production, understanding the risks and harnessing the opportunities)

### **3. Bio-energy Production**

{Feedstock (or agriculture) production and Industrial processing (or conversion)}

### **4. Issues and concerns**

(Future Bioenergy production will focus on intensified biomass production, put pressure on the existing natural resources and exacerbate an already alarming situation in many parts of the world unless it is undertaken after a clear understanding and assessment of its various impacts. The main concerns that need to be considered are:

- Food Security
- Water scarcity
- Land degradation
- Ecological degradation
- Inequity in development

### **5. Impact Assessment**

Impacts of bio-energy production depend on the state of the resource base that is drawn upon. Impact assessments should form the basis for decision-making. Given the complexity of the inter-linkages between bioenergy production, food production, land degradation, ecological impacts and water, an assessment framework is critical if operators and policymakers are to be able to evaluate the positive and negative effects of bioenergy development on water resources, problems with Macro-level analysis, spatial and temporal context, addressing uncertainties. The assessment framework needs to take into account the water intensity of proposed activities, the state of water resources, and impacts at a specific location.

### **6. Identified Risks**

Bio-energy production with its positive as well as negative effects has to be evaluated in terms of the net benefits by decreasing the risks, i.e. the probability of a negative consequence. These socio-economic and environmental risks are:

- a. Food security concerns:
- b. Water quality concerns: need to be addressed: point source and cumulative effects  
{Bioenergy systems can influence the quality of water nearby and over long distances, with resulting consequences for biodiversity and human needs. Impacts on water quality need to be considered at the project level (point source) and watershed level (non-point source or cumulative effects)}.
- c. Limitations on available Science and Tools: Need to enhance understanding of effect of bioenergy production on hydrological cycle, test and validate new techniques, identify new issues,
- d. Lack of public policies
- e. Lack of good scientific and analytical Assessment of the risks and the opportunities of different kinds of technologies and development choices
- f. Lack of regulatory framework

### **7. Mitigation of Risks**

There are ways to avoid or mitigate negative impacts, and in some circumstances bioenergy development may help improve the water situation. These are:

- a. Think hydrologically, simplistic approaches lead to perverse outcomes and unintended consequences. Take a holistic approach and a long-term perspective
- b. Base decisions on impact assessments to ensure sustainable water management

**Annex 3** [Appendix XIX, Item 3]

- c. Sustainable bioenergy development is not possible unless appropriate water resources management tools are applied
- d. Appropriate tools and the skills and data to support them need to be developed and made available
- e. Design and implement effective water-related policy instruments to help avoid long-term adverse consequences while maximizing potential benefits, can directly or indirectly influence how bioenergy production affects water availability and quality.
- f. Bioenergy-related water policy instruments need to be designed to be coherent with regard to instruments in related policy sectors and with existing water policy instruments, including those concerned with irrigation and other agricultural practices and industrial water use.
- g. Establish/support appropriate institutions and processes in order to intensify dialogue on the topic and on capacity building
- h. Conduct further research, fill data gaps, and develop regionalized tools,

**8. ICID Recommendation**

**9. Further readings**

1. Göran Berndes, (2008), "Water demand for global bioenergy production: trends, risks and opportunities" Göteborg, Berlin (2008). [http://www.wbgu.de/wbgu\\_jg2008\\_ex02.pdf](http://www.wbgu.de/wbgu_jg2008_ex02.pdf)
2. UNEP (2011), "The bioenergy and water nexus" <http://www.unep.fr/energy/bioenergy>
3. UNEP (2011), "Water and bioenergy", Issue Paper No 2, Bioenergy Issue Series, <http://www.unep.fr>

