



ICID-CIID

**INTERNATIONAL COMMISSION ON IRRIGATION AND DRAINAGE**

**Special Seminar on  
Development and Financing Models for the Irrigation and Drainage Sector  
14 August 2018 from 13.30-17.00 hours  
Saskatoon, Canada**

**Concept Note**

**INTRODUCTION**

World population is projected to reach 9.1 billion by 2050; most of the growth will take place in the developing countries, which will lead to significant increase in demand for food and fibre. Projections show that overall food production would require to be raised by some 70 percent globally and by 100 per cent in developing countries by 2050. At present about 1.4 billion people live in extreme poverty and most of them are living in LDCs (Least Developed Country) in Asia and Africa. It is estimated that for about 70 percent of the world's poor, who live in rural areas in developing countries, agriculture and its related activities are their main source of income and livelihood. A focus on increasing agricultural productivity by sustainably increasing small holder yields and by ensuring access to irrigation will remain a key strategy for alleviating rural poverty and hunger. Depletion and degradation of land and water, uncertainty due to climate change and variability, and uneven distribution of both water and population throughout the world pose serious challenges to produce enough food and other agricultural products to sustain livelihoods, to meet goals on eradicating poverty and hunger, and to improve human nutrition without resource degradation.

Irrigated agriculture plays an important role in increasing yields as compared to rainfed agriculture. 40% of the global food supply is produced on the 20% of farmland that is irrigated. Therefore, it is of strategic importance to expand irrigated area by creating new irrigation and drainage infrastructure, and by restoring or improving existing schemes. It will also be necessary to set up means and methods to ensure efficient and reliable water service.

Extending irrigated agriculture involves large and long term investments and financing. Irrigation and drainage is a broad issue, for which requires a specific needs analysis for each component: Investment, operation, maintenance, renewal, rehabilitation and modernization, and ancillary services (training, etc.). Questions, and therefore answers, differ for infrastructure financing as opposed to paying for water service. Less costly infrastructure often results in higher operating and maintenance expenses in the long term. Adopting new technology often requires greater initial investment, but can allow significant savings of water.

It is evident that irrigation is the key component in increasing agricultural production, but it requires significantly large financial resources to create and maintain the infrastructure. New investment in the irrigation sector has been drastically reduced in the past few decades, resulting in lesser development as well as deterioration of existing infrastructure. In numerous countries all over the world, setting up new irrigation projects or rehabilitation/modernization of existing schemes is a component of economic policy. Therefore there is a long history of government financing of such projects within national or state budgets. Different development and financing models for the irrigation sector are used in different parts of the world. These include development and management by the public sector, public sector development with private sector management, development and management by the private sector, etc.

In most countries provision of formal irrigation water supply services is the responsibility of government agencies. These often fail to provide reliable and timely services in equitable manner to many stakeholders (especially the poor), or the services provided are of poor quality. Partnerships between public and private entities have a proven record for raising project financing, for bringing in technical expertise for infrastructure development projects, and for providing managerial expertise for better operation and management of the projects. They have also been seen as partner to accelerate solutions and to enhance operations and service. Thus it is thought that private sector participation (PSP) can be considered as one of the options for both developing irrigation infrastructure and for managing irrigation systems for effective service delivery. However, there is lack of interest by the private sector to participate in irrigation development and financing. This is mainly due to difficulties encountered in land acquisition, in managing a highly distributed system and in ensuring economic viability in light of long gestation periods with front loaded costs. In the case of existing systems, ongoing operation and management can have components which are not investment heavy and private players, coupled with the beneficiaries, can have possibilities of participating with limited investments. On the other hand, there are models of successful cooperative implementation and management of systems such as that witnessed at the Northern Colorado Water Management District. Similar models exist in the case of hydropower where there are a number of entities implementing and operating various projects for the generation and distribution of electricity. Similar experiences are not common in the irrigation sector. This special seminar will further debate on various aspects of irrigation and drainage investments and can lead to information exchange for the betterment of the sector.

In order to understand various options available for development and financing of irrigation infrastructure and its management, and to learn from the merits and demerits of models already in use, this special session on 'Development and Financing Models for the Irrigation and Drainage Sector' has been planned for the 69<sup>th</sup> International Executive Council Meeting and Conference at Saskatoon, Canada.

## **OBJECTIVES**

Public-private partnerships have been implemented throughout the world since the 1970s with mixed results. This is attributed to the lack of long run commitments from governments and other parties involved; a lack of scientific understanding regarding clear short-term and long-term potential biophysical and socio-economic, policy and legal consequences; and a lack of trust between the partners. (Khan, Shahbaz, Mushtaq, Shahbaz, 2009). Keeping the above in mind, the main objectives of the special seminar are:

- i. To provide a platform for the exchange of knowledge and experience on various development and financing models in use in different countries,
- ii. To understand the challenges and risks associated with private sector participation in the development and management of irrigation sector from their perspective, and
- iii. To understand what enabling environments in terms of legal and policy frameworks, etc. are required to promote private sector investment in the irrigation and drainage sector.

## **FORMAT**

Presentations from different National Committees (NCs) and the private sector, followed by a panel discussion and a plan for the way forward.

## **POTENTIAL PARTNERS:**

NCs- Australia, Brazil, Canada, China, Egypt, India, Morocco, Turkey, USA; World Bank: Private sector

## **COORDINATOR:**

Roger Hohm, President CANCID



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**Tentative Program**

**Date and Time : 14 August 2018 (13.30-17:00 hrs)**

**Venue : Salon C, TCU Place, Saskatoon, Canada**

<b>13:30-16:30</b>	<b>Session I</b>
13:30-13:40	Introduction about objective of Seminar by Roger Hohm, President CANSID
13:40-14:00	Address by Mr. U.P. Singh, Secretary, Ministry of Water Resources, River Development and Ganga Rejuvenation, Govt. of India ( <i>tbc</i> )
14:00-14:20	Key note speech: Overview of Development and Financing models by Mr. Francois Onimus, Sr. Water Resources Management Specialist in the Water Global Practice in the MENA region, World Bank
14:20-14:40	National Committee presentation: Canada by Jennifer Nitschelm and Jason Drury
14:40-15:00	National Committee presentation: Australia by Mr. Momir Vranes, Chairman, Australian National Committee
<b>15:00-15:30</b>	<b>Health Break</b>
	<b>Session II</b>
15:30-15:50	National Committee presentation: China by Dr. Gao Zhanyi, President Hon., ICID
15:50-16:10	National Committee presentation: India by Mr. K Vohra, Commissioner (State Projects), Ministry of Water Resources, River Development and Ganga Rejuvenation, Govt. of India
16:10-16:30	National Committee presentation: Morocco by Mr. Ahmed EL BOUARI, Director of Irrigation and Agricultural Land Planning at the Ministry of Agriculture, Fisheries, Rural Development and Forests
16:30-16:50	National Committee presentation: USA by xxxxxxxx
16:50-17:00	Discussions Way Forward and Wrap Up

**Contact:** Roger Hohm, President, CANSID