

PROFORMA FOR WAPDA WEBSITE

Name of the Office

INTERNATIONAL WATERLOGGING AND SALINITY RESEARCH INSTITUTE (IWASRI)

1. Location/Address of the office:

International Waterlogging & Salinity Research Institute (IWASRI), Near Muhammad Pura, Raiwind Road, P.O. Thokar Niaz Baig, Lahore 53700, Pakistan.

2. Incharge of the office:

Dr. Muhammad Mehboob Alam, Director General, Phone: +92 42 35303390, PBX: +92 42 35303391-92, FAX: +92 42 35303393, Email: iwasri@brain.net.pk

3. Brief History/Background:

The International Waterlogging and Salinity Research Institute (IWASRI) was established under Ministry of Water and Power (MOWP) Government of Pakistan in 1986 to conduct and coordinate research pertaining to waterlogging, salinity, irrigation and drainage. The administrative control of IWASRI was given under WAPDA. The Member (Water) WAPDA is Chairman of the Executive Committee of IWASRI. The Institute works under the general supervision and guidance of Board of Directors. The Secretary MOWP is Chairman of the Board.

4. Scope of Work/Job Description:

IWASRI has a mandate to conduct research pertaining to waterlogging, salinity, irrigation and drainage and water management. The basic objective of IWASRI is to unify and coordinate research; to develop economical solutions to problems of Waterlogging and Salinity and to disseminate these solutions to beneficiaries. The Institute forms the nucleus for research in the field of waterlogging and salinity and is now recognized as an International Research Institute. The broad objectives of the Institute are:

- (i) To establish working relationships with all the National and International Institutes dealing with waterlogging and salinity in order to bring together the latest research and experience for (i) review and dissemination, and (ii) to identify areas of fruitful research;
- (ii) To conduct and foster a comprehensive multi-disciplinary research program in a coordinated fashion on waterlogging and salinity problems, the solution of which would have a high potential for agricultural development and environmental improvement;
- (iii) To develop practical solutions to problems associated with waterlogging and salinity and to introduce them in real life situations.

- (iv) To manage and sponsor basic and applied research on water management problems associated with ground water and surface water relationships, crop yield, water uptake, drainage and salinity control;
- (v) To provide facilities for research workers and to train associated personnel, in techniques and methods for dealing with waterlogging and salinity problems;
- (vi) To determine the program of investigation, survey and research of the national organizations dealing with the subjects and to provide technical assistance to them; and
- (vii) To improve the capacity of community organizations to utilize waterlogged and salt-affected lands and to manage irrigation drainage system.

5. Studies/Research/Assignments Completed:

Since its inception IWASRI has completed a large number of research studies. For detailed information, the following documents may be seen.

- List of IWASRI Publications, Research Papers and Internal Reports, Internal Report No. 2010/1, IWASRI, WAPDA, Lahore, July 2010.
- Completed Studies of IWASRI (From 1984 to 2005), Internal Report No. 2006/01, IWASRI, WAPDA, Lahore, December, 2006.
- PC-II (2004-09). Eight research studies approved by the Ministry of Water & Power under PC-II have been concluded till June 2009 as given below.
 - Study 1: Change in Waterlogging Due To Drought in the Indus Basin and Its Impact on Crop Yields
 - Study 2: Rain Water Harvesting in Barren/Saline and Normal Lands
 - Study 3: Sustainable Re-Use and Disposal of Drainage Effluent
 - Study 4: Evaluation of Various Technologies for Improving Quality of Water and Soil
 - Study 5: Use of Saline Land for Development of Community Livelihood (Crops, Grasses, Trees, Fish Farming, Livestock and Honey Bees)
 - Study 6: Integrated Database Development and Management
 - Study 7: Determination of Canal Lining Life
 - Study 8: Development of National Research Agenda

Since its beginning through the development of the National Research Agenda, IWASRI has directed the national research efforts on waterlogging and salinity. As a result, since its creation, IWASRI has completed **230** research studies. The results of these studies were disseminated through workshops, seminars and conferences. IWASRI has arranged so far **6** international, 41 national and **177** in-house

seminars/workshops till June 2010. A total number of **43** proceedings were published. IWASRI has so far produced **230** publications, **465** internal reports, **449** technical papers and **66** issues of quarterly IWASRI News. The Newsletter is distributed to more than 150 international and national agencies working in the related fields.

IWASRI has been involved in a number of important national projects for conducting research, monitoring and evaluation. A useful research support has been provided for improvement and implementation of these projects. Detail of these projects is given below.

IWASRI Involvement in the National Projects/Programs:

S.No.	Name of Project/Program	Year	IWASRI Publication No.
1	Fourth Drainage Project	1990-97	12,29,39,42,47,50,92,107,132,145,181,182
2	Mardan SCARP	1990	42, 1990/03
3	East Khair Pur Tile Drainage Project	1990	42, 1990/02
4	Fordwah Eastern Sadiqia (South) Project	1992-2003	203,240,241,217,204,210,227,228,109,221,242,
5	CRBC Project	1994-98	196,1994/05,2006/08
6	Satiana Pilot project	1994-98	166,172,186,187
7	Khushab SCARP	1998-99	232,1998/28
8	Swabi SCARP	1998-2000	228, 229, 1999/12, 2000/09,234
9	SCARP-VI	1998-2001	241,1998/29,1999/03, 1999/16,2000/18,2000/21,2000/29,2002/11,2002/10
10	DG Khan SCARP (Saline Zone)	1998-2000	1993/01
11	National Drainage Program	1999-2005	241,250,261,263,264,257,258,275,2003/12,2005/10
12	LBOD	2000-02	2002/08
13	Pat Feeder	2000-02	2002/08
14	Drainage Master Plan	2003-05	276,268,269,270
15	National Land Use Plan	2003-06	273
16	Mirani Dam Project	2005	2005/01,2005/15
17	Subakzai Dam Project	2005	2005/07,2005/18
18	Investigation for Causes of Waterlogging and Remedial Measures along C-J Link Canal	2006-08	2006/04

6. Studies/Research/Assignment in Hand:

IWASRI conducts and controls its research program through four research management and development sections as given below.

- (i) Drainage Section
- (ii) Water Management & GIS Section
- (iii) Salinity & Environment Section, and
- (iv) Technology Transfer & Coordination Section.

Collaboration with other national and international research institutes has also been done.

On-going Research Program

Government of Pakistan has approved PC-II on “*Research Studies on Drainage, Land Reclamation and Use of Drainage Water*” in a CDWP meeting held on 30th April, 2009. Mona Reclamation Experimental Project, WAPDA, Bhalwal and Lower Indus Water Management (LIM) Project, WAPDA, Hyderabad are also participating research institutes along with IWASRI in this project. The scope of the research project is given below;

- Groundwater Management (Recharge Potential and Governance);
- Engineering Economics and Canal Lining;
- Reuse of Saline Water for Agriculture in RBOD and LBOD Areas;
- Studies Identified by Planning Commission from time to time, and
- Rehabilitation of IRI Nandipur.

Other activities of IWASRI include planning for future development of IWASRI including securing of new projects, formulation of research proposals for new areas of funding support, coordination of research activities and dissemination of research results to the end users, farmers and R&D organizations of Pakistan.



Farmer Field Day: Salinity Education to the Farmer



Farmers Participation in construction of Subsurface Drainage Sump