

## BRIEF BIODATA OF Dr. S. K. GUPTA



**1. Name** : Dr. S. K. GUPTA

**2. Date of birth** : 30.09.1949

**3. Present Position and (postal, phone & email) address :**

Project Coordinator  
Management of Salt Affected Soils and Use of Saline water in Agriculture  
CSSRI, Karnal – 132 001 (Haryana) India  
0184-2292730, 84160-81613  
[skgupta@cssri.ernet.in](mailto:skgupta@cssri.ernet.in)

**4. Academic record (Bachelor's degree onward)**

Degree	University/ Institution	Year	Distinction, if any
B.Sc. Agricultural Engineering and Technology	Punjab Agricultural University, Ludhiana	1970	First Division
M.Sc. Agricultural Engineering and Technology	Punjab Agricultural University, Ludhiana	1976	First Division
Ph. D. Civil Engineering	JNTU, Hyderabad	1984	NA

**5. Research Experience:**

(a) Total (yrs): 36

(b) Year wise breakup with position

Employer	Period	Designation
Indian Council of Agricultural Research (ICAR)	June 2007	Project Coordinator, Mgt of salt Affected Soils and Use of Saline Water
ICAR	April 2002-May 2007	Head, Division of Irrigation and Drainage Engineering
ICAR	June 1998- March 2002	Head Indo-Dutch Network Project
ICAR	Nov. 1994- Nov. 1997	Head of Division Drainage/Water Management
ICAR	Jan. 86 – Nov. 1994	Principal Scientist
ICAR	July 1982- Dec. 1985	Scientist S-3
ICAR	July 1976- June 1982	Scientist S-2
ICAR	April 1972- June 1976	Scientist S-1
ICAR	June 1971-March 1972	Sr. Research Asstt.

**6. Specialization:**

a) Scientific capabilities and interests (3-5 Key words)

Land Reclamation, Irrigation and Drainage, Disaster management, Environmental impact assessment, Groundwater management, Use of saline/sodic waters

b) Salient Accomplishments (3 to 5 in bullet form)

- Management of irrigation, drainage and rainwater management in alkali lands
- Subsurface drainage technology for reclamation of waterlogged saline lands
- Management of Tsunami affected saline lands in coastal and island ecology
- Groundwater hydraulics and recharge through cavity wells
- Impact assessment of Ukai kakrapar project in Gujarat
- Use of saline/sodic water in crop production

c) International Exposure

Visited USA, Australia, Egypt, The Netherlands, Indonesia, Pakistan, China, Sri Lanka, Maldives

## 7. Publications

Sr. No.	Kind of Publications	Years (1971-1994)	Years (1995-2008)
1	Peer Reviewed Articles	80	38
2	Books	4	10
3	Bulletins/brochures	2	4
4	Papers in Seminar/Symp.	30	33
5	Scientific reviews/chapters	4	15
6	Popular articles	20	20
7	Reports (unpublished)	5	15
8	Extension Brochures	5	2
9	Compact Discs	0	5
	Total	<b>150</b>	<b>142</b>

b) Best 5 publications of last 10 years (to be appended)  
(Attached)

c) Best 10 publication of whole career (to be appended)  
(Attached)

8. Awards/ Special recognitions (Limit to the best five)

Name of the Award	Awarding Institution	Year
Rafi Ahmad Kidwai Award	ICAR	1999
Jawahar Lal Nehru Birth Centenary Award	Central Board of Irrigation and Power	1995
Recognition Award	National Academy of Agricultural Sciences	2001-2002
Fellow NAAS	NAAS	2000
Fellow Indian National Academy of Engineering	INAE	2004
KG Tejwani Award	Indian Society of Soil Conservationist	1994-1995

## 10 Publications

**Gupta, S.K.** and Pandey, R.N. 1979. Crop and water yield as affected by rainwater storage in rice fields; A field evaluation. Field Crops Research. 2: 365-71.

**Gupta, S.K.** and Singh, S.R. 1980. Analytical solutions and their interpretation during reclamation of saline soils. J. of Hydrology. 40: 133-148.

**Gupta, S.K.**, Chaudhary, T.N. and Pandey, R.N. 1982. Nitrate Movement in sandy soils under varying water and fertilizer management. *Aust. J. Soil Res.* 20: 225-32.

**Gupta, S.K.**, Pandey, R.N. and Batta, R.K. 1983. Estimating water application efficiency in irrigation checks. *Irrig. Sci.* 4 : 137- 46.

**Gupta, S.K.**, Ramadurgaiah, D. and van Der Molen, W.H. 1985. Leaching fraction beyond depth  $x$ , caused by percolation of soil profile with an initial salt accumulation at its surface. *J. Hydrology.* 79: 123-36.

**Gupta, S.K.** and Oosterban, J. 1987. Design of subsurface drainage disposal structures: assessment of storage capacity. *Irrigation & Drainage Systems.* 3 : 231-37.

Pandey, R.S. and **Gupta, S.K.** 1990. Drainage design equation with simultaneous evaporation from soil surface. *ICID Bull.* 39(1): 19-25.

**Gupta, S.K.**, Sharma, S.K. 1990. Response of crops to high exchangeable sodium percentage. *Irrigation science*, 11:173-179.

**Gupta, S.K.**, Singh, R.K. and Pandey, R.S. 1992. Surface drainage requirement of crops: Application of a piecewise linear model for evaluating submergence tolerance. *Irrigation & Drainage systems.* 6:249-261.

**Gupta, S. K.** 2002. A century of subsurface drainage research in India. *Irrigation and Drainage Systems.* 16: 69-84.

## **6 Publications**

Pandey, R.S., Bhattacharya, A.K., Singh, O.P. and **Gupta, S.K.** 1993. A numerical solution of Boussinesq equation incorporating hydraulic head dependent evapotranspiration function. *J. Irrig. and Drainage Div. ASCE* . 113: 382-396.

Singh, R.K., Prasher, S.O., Chauhan, H.S., **Gupta, S.K.**, Bonnel, R.B. and Madramootoo, C.A. 1996. An analytical solution of the Boussinesq equation for subsurface drainage in the presence of evapotranspiration. *Transaction ASAE.* 39: 953-960.

Verma, A., **Gupta, S.K.**, Singh K.K., Chauhan, H.S. 1998. Bi-level drainage: an analytical solution of the Boussinesq equation. *Agric. Water Management.* 37: 75-92.

Sharma, B.R. and **Gupta, S.K.** 1999. Regional salt and water balance modelling for eco-friendly sustainable irrigated agriculture. *Jour. of ICID.* 45-52.

Minhas, P. S., Tyagi, N. K., **Gupta, S. K.**, Dong, K. L., Cai, L. G. and Pereira, L. S. 2006 Assessing drainage water reuse options in Bojili Irrigation District, Shandong. *Irrigation and Drainage*, 55: 463-477.

**Gupta, S. K.**, Ambast, S. K., Singh, Gurbachan, Yaduvanshi, N.P.S., Ghoshal Chaudhuri S. and Raja, R. (2006). Strategies for Improved Agriculture in Tsunami Affected Andaman and Nicobar Islands and Maldives. Central Soil Salinity Research Institute, Karnal, p 88.