

BIO DATA

| | | | |
|-----|--|---|--|
| 01. | Name in full (In Block Letters) | : | V. KUMAR |
| 02. | Father's / Husband's Name | : | Thiru. R.VELUSWAMY (Late) |
| 03. | Date of Birth | : | 16.02.1955 |
| 04. | Place of Birth and Nativity (District and State) | : | Rajapalayam Virudhunagar Dist, Tamil Nadu |
| 05. | Designation (Past) | : | Former Professor & Head Agricultural College & Research Institute Madurai - 625 104, India |
| 06. | Address for Communication including Telephone No. /Mobile No. /Fax No. & E-Mail ID | : | V. Kumar, #7, Nethaji Main Road Third Stop, Tirunagar, Madurai-625006 Tamil Nadu Telephone (R) : 0452 - 4367104 Mobile : 0-9894829701 kumarkncsaga@gmail.com |

| 07. Educational Qualification (University Education) : | | | | | |
|--|---------------------------|-----------------------------------|----------------------------------|-------------|---------------------------------|
| S. No | Degree / Diploma obtained | Year of Degree / Diploma obtained | Institutions studied | OGPA | Specialization |
| (1) | (2) | (3) | (4) | (5) | (6) |
| i. | Ph.D | 2005 | TNAU, Coimbatore | 9.24 / 10 | Soil & Water Conservation |
| ii. | M.S | 1993 | Utah State University Logan, USA | 3.33 | Civil & Environment Engineering |
| iii. | ME (Ag) | 1979 | TNAU, Coimbatore | 3.54 / 4.00 | Soil & Water Conservation |
| | BE (Ag) | 1977 | TNAU, Coimbatore | 3.27 / 4.00 | Agri. Engineering |

08. Employment details

| S. No | Name of the University | From | To | Total Service |
|-------|------------------------|------------|------------|---------------|
| 1 | Assistant Professor | 14.03.1980 | 08.05.2006 | 26 |
| 2 | Associate Professor | 09.05.2006 | 08.05.2007 | 01 |
| 3 | Professor* | 09.05.2007 | 28.02.2015 | 08 |

*with retrospective effect

09. Professional Experience

| S. No | | Place of work | From | To | Total | | |
|-------|-----------------------|---|------------|------------|-------|----|-----|
| | | | | | Y | M | D |
| i. | Teaching* | | | | | | |
| | Under Graduate | Dept. of Soil and Water Conservation, Coimbatore | 10.05.1985 | 14.09.1987 | 02 | 04 | 04 |
| | | Agricultural Engineering College, Kumulur | 05.06.1994 | 19.05.2005 | 10 | 11 | 14 |
| | | Dept. of Agronomy, AC&RI, Madurai* | 20.05.2005 | 31.05.2011 | 05 | 00 | 11 |
| | | Dept. of Agronomy, AC&RI, Killikulam | 01.06.2011 | 17.04.2013 | 01 | 10 | 17 |
| | | Dept. of Agricultural Engg., AC&RI, Madurai* | 17.04.2013 | 28.02.2015 | 01 | 10 | 11 |
| ii. | Research* | Dept. of Soil & Water Conservation Engg. Coimbatore | 14.3.1980 | 13.3.1983 | 03 | 00 | 00 |
| | | RRS, Paiyur* | 14.3.1983 | 30.4.1985 | 02 | 01 | 17 |
| | | Dept. of Agronomy, AC&RI, Madurai * | 20.05.2005 | 31.05.2011 | 05 | 00 | 11* |
| iii. | Extension* | RRS, Paiyur* | 14.3.1983 | 30.04.1985 | 02 | 01 | 17* |
| | | Dept. of Agronomy, AC&RI, Madurai * | 20.05.2005 | 31.05.2011 | 05 | 00 | 11* |
| iv. | Administration (Head) | Dept. of Agricultural Engg., AC&RI, Madurai | 30.06.2014 | 28.02.2015 | -- | 08 | 00 |
| | | Total Experience | | | 25 | 03 | 01 |

10. Co-curricular activities:

| S. No | Place of work | From | To | Total | | |
|-------|---------------------|------|----|-------|----|----|
| | | | | Y | M | D |
| i. | Farm Manager | -- | -- | -- | -- | -- |
| ii. | AP / Assoc. Prof. / | | | | | |

| | | | | | | | |
|--------------|--------------------------|-------------------|--------------|--------------|-----------|----------|----------|
| iv. | Coordinator | AECRI, Kumalur | 1994 | 2002 | 08 | -- | -- |
| v. | Others: Staff Advisor | | Feb, 1997 | Feb, 2000 | 03 | -- | -- |
| Total | | | | | 11 | 0 | 0 |

| | |
|-----|---|
| 11. | Research Projects / Schemes completed and undertaken at present. (Give the title, sponsor one page under each heading) |
|-----|---|

i) Research Project Completed

| Project No. | Title | Sponsor | Years |
|----------------------|--|-------------|-------------|
| R.8.Ag.Engg.201 | Water management of saline sodic soils of Krishnagiri reservoir project | TNAU | 1983-1985 |
| R.8.Ag.Engg.201(ORP) | Water harvesting techniques in drylands for small farmers | TNAU | 1983-1985 |
| R.8.Ag.Engg.202 | Evaluation of performance of seed drills and bedformers under dryland conditions | TNAU | 1983-1985 |
| ACMD-MDU-WTC-04-009 | Assessment of groundwater quality and fluctuations in quantity at basin level in Periyar Vaigai Command Area and classification of water quality for irrigation | ICAR & TNAU | 2004 – 2007 |
| ACMD-MDU-WTC-05-012 | Evaluation of water use and productivity of rice under system of Rice Intensification under different hydrological environments | ICAR & TNAU | 2005 – 2007 |
| ACMD-MDU-WTC-05-013 | Operational Research Project on improving water use efficiency in rice culture, promotion of multiple use of water, conjunctive use of groundwater and recycling waste water for irrigation in canal and tank command areas of PVC | ICAR & TNAU | 2005 – 2009 |
| ACMD-MDU-WTC-05-014 | Impact of fertigation with organics through micro irrigation system on crop and system performance | ICAR & TNAU | 2005 – 2006 |
| ACMD-MDU-WTC-05-015 | Drip fertigation in high intensity cropping system for balanced nutrition and profit maximization | ICAR & TNAU | 2005 – 2007 |

| | | | | | | |
|-------|---------------------------|---------|--------|--------------------|----------|--|
| 12. | Schemes obtained | | | | | |
| S. No | Title | Sponsor | Period | Total outlay (Rs.) | Position | |
| 1 | Land Drainage Planning in | | | | | |
| 3 | | | | | | |

| | | | | | |
|---|---|---|---------|-----------------|------------|
| 2 | Design and Development of field drainage system for oil palm trees-Students Project Scheme | Tamil Nadu State Council for Science & Technology | 1 year | Rs.5000 | PI & Guide |
| 3 | Scaling up of Water productivity in Agriculture for livelihood through Teaching cum Demonstration, Training of Trainers and Farmers | ICAR | 5 years | Rs. 124 lakhs | Co-PI |
| 4 | Demonstration cum Training on Drip Fertigation for Cotton based cropping system(Cotton-Pulse-Maize) | NADP | 1 year | Rs. 25.27 lakhs | Co-PI |

13. Faculty Improvement:

a. Training undergone

| S. No | Title of the Training | Place | Period | Sponsor | Expertise developed or learnt |
|----------------------|---|-------------------------------|--------------------------|------------------------|-------------------------------|
| INTERNATIONAL | | | | | |
| 1 | Simulation of flow and transport | Penn State University, USA | 1993 | Self | Modeling |
| 2 | Geographic Information for Water Resources | Auburn University, USA, 1993 | 31.10.1992 to 01.11.1992 | Self | New Tools |
| 3 | Geographic information systems in groundwater modeling | Colorado School of Mines, USA | 02.11.1992 to 06.11.1992 | Self | Modeling |
| 4 | Irrigation Water Management | IRRI, Philippines | 25.08.1986 to 03.10.1986 | Government of India | New Technologies |
| NATIONAL | | | | | |
| 1 | Applications of Geo-Informatics and Crop Simulation Models in Agricultural Management | NAARM, Hyderabad | 13.03.2012 to 26.03.2012 | NAIP (ICAR), New Delhi | Simulation Modeling |

| | | | | | |
|----|--|--|--------------------------|----------------------------------|------------------|
| | management for sustainable agriculture | | | | |
| 3 | Programme on Data Mining and GIS for Decision Support in Agriculture | Indian Institute of Management Lucknow | 28.03.2011 to 08.04.2011 | MDP, ICAR | Data mining |
| 4 | Water management training | PWD Complex, Madurai | 06.01.2011 to 07.01.2011 | Central Ground Water Board, GoI | Water management |
| 5 | IT based decision support systems for geospatial knowledge management for sustainable livelihoods security | NAARM, Hyderabad | 19.01.2009 to 29.01.2009 | NAIP- (LCB Programme), New Delhi | Modeling |
| 6 | Water management under limited supplies for efficient crop production in command area | ICAR Parisar, Patna, Bihar | 10.03.2008 to 15.03.2008 | CADWM, MoWR, New Delhi | Training |
| 7 | Technical training on SRI | AC&RI, Killikulam | 04.08.2007 | WTC-TN-IAMWARM | SRI |
| 8 | Agricultural water management for enhancing water productivity | ANGARU, Hyderabad | 22.01.2007 to 11.02.2007 | Alterra-ILRI | Water management |
| 9 | Groundwater flow and mass transport modeling for the assessment and management of aquifers | WTC, Coimbatore | 13.10.2005 to 30.10.2005 | DST, GOI, New Delhi | Using software |
| 10 | Watershed Planning | CSWCRTI, Ooty | 08.05.2002 to 17.05.2002 | NATP, ICAR | Planning |
| 11 | Hydrology of small watersheds | CWRDM, Kozhicode | 08.03.2001 to 28.03.2001 | NRDMS, DST, GOI | Modeling |
| 12 | Designing | | | CAS in | |

| | | | | | |
|----|---|----------------------------|--------------------------|---|-------------------------|
| 13 | Development of database & information system | IASRI, New Delhi | 10.01.2001 to 30.01.2001 | CAS in Agril Statistics and Computer Applications | Database development |
| 14 | Automation of pressurized irrigation system | IDE Division, CIAE, Bhopal | 20.11.2000 to 30.11.2000 | MASHAV, Israel | Automation |
| 15 | Summer school on methods in agroclimatic analysis | CRIDA, Hyderabad | 22.05.2000 to 01.06.200 | ICAR | Agro climate analysis |
| 16 | Remote sensing technology and its applications | NRSA, Hyderabad | 07.02.2000 to 18.02.2000 | AHRDP | New course developed |
| 17 | Faculty development programme in education technology | NAARM, Hyderabad | 11.08.1997 to 27.08.1997 | AICRP | Education technology |
| 18 | Assessment and modeling of soil and crop growth parameters by Remote Sensing and GIS | IARI, New Delhi | 09.07.1997 to 29.07.1997 | ICAR | Modeling |
| 19 | Electronics for Agricultural Field Investigations | CIFT, Cochin | 12.02.1997 to 20.02.1997 | ICAR | Automation |
| 20 | Remote sensing in agriculture with special emphasis on inventory and management of soil resources | IARI, New Delhi | 27.11.1995 to 21.12.1995 | ISRO | Modeling |
| 21 | Summer institute on Conservation techniques for denuded lands in the Hill Region | CS&WCR&TI, Dehradun | 03.06.1985 to 22.06.1985 | CS&WCR&TI, Dehradun | Conservation techniques |

13. b. Training organized

| S. No | Title | Duration | | Sponsor |
|-------|---|------------|------------|---------|
| | | From | To | |
| 1 | Micro computer application in land and water management | 01.07.1999 | 10.07.1999 | ICAR |

| | | | | |
|---|---|---|------------|---|
| 3 | Micro Irrigation and Fertigation | 13.02.2006 | 17.02-2006 | Sir Ratan Tata Trust and Water Technology Centre, Coimbatore. |
| 4 | Dry farming Technology Training-In-situ moisture conservation | 19-2-2005 | 25-03-2006 | Govt. of Tamil Nadu |
| 5 | Chief Scientists' Meet-2008 of AICRP on Water Management | 10-06-2008 | 13-06-2008 | DWM, Bhubaneswar |
| 6 | Drip Fertigation to Sugarcane | 27-11-2008 | 27-11-2008 | AICRP-WM |
| 7 | Scaling up of Water Productivity in Agriculture through teaching cum training. Trainers Training and Farmers | 2005 | 2011 | ICAR |
| 8 | Scaling up of Water Productivity in Agriculture for livelihoods through Teaching cum demonstration, Training of Trainers and Farmers" | 2007 | 2012 | Directorate of Water Management, Bhubaneswar |
| | | Farmers Training : 27 Nos. Trainers Training : 04 Nos. | | |

Publications

| | |
|---|--|
| 1 | Ranjit Kumar M, Meenambal T & Kumar V, 2017. Macropore Flow as a Groundwater Component in Hydrologic Simulation: Modelling, Application and Results. Current Science V112(6) pp. doi: 10.18520/cs/v112/i06/ |
| 2 | S. Chandran, M. Karmegam V. Kumar & M. Dhanasekarapandian. 2017. Evaluation of groundwater quality in an untreated wastewater irrigated region and mapping—a case study of Avaniyapuram sewage farm, Madurai. Arab J Geosci (2017) 10:159; DOI 10.1007/s12517-017-2900-9 |
| 3 | M. Dhanasekarapandian, S. Chandran, D. Saranya Devi, V. Kumar. 2016. Spatial and temporal variation of groundwater quality and its suitability for irrigation and drinking purpose using GIS and WQI in an urban fringe. Journal of African Earth Sciences. V.124.p.270-88. http://dx.doi.org/10.1016/j.jafrearsci.2016.08.015 1464-343X/© 2016 Elsevier Ltd. |
| 4 | U. Surendran, Rama Subramoniam, P. Raja, V. Kumar, & V. Murugappan. 2016. Budgeting of major nutrients and the mitigation options for nutrient mining in semi-arid tropical agro-ecosystem of Tamil Nadu, India using NUTMON model. Environmental Monitoring and Assessment, V188:250. DOI 10.1007/s10661-016-5202-x |
| 5 | Ranjit Kumar M, Meenambal T & Kumar V, 2016. Unified Framework for Water |

| | |
|----|---|
| 6 | Ranjit Kumar M, Meenambal T & Kumar V, 2016. Simulation Model for Predicting the Effects of Changes in Land Use on Watershed Hydrology. Indian Journal of Science and Technology , V9(2), DOI: 10.17485/ijst/2016/v9i2 /86356 |
| 7 | Ranjit Kumar M, Meenambal T & Kumar V, 2015. Implications of inter-relationships between evaluation criteria on calibration of hydrologic models', International Journal of Earth Sciences and Engineering , V08(02), pp. 80-87. |
| 8 | Ranjit Kumar M, Meenambal T & Kumar V, 2015. Pedotransfer functions in hydrologic modelling for predicting the effect of changes in soil types on watershed hydrology. International Journal of Earth Sciences and Engineering , V08(02), pp. 201-211. |
| 9 | Ranjit Kumar M, Meenambal T & Kumar V, 2015. Simulation model for predicting the effects of changes in climate parameters on watershed hydrology', International Journal of Applied Engineering Research , V10(53), pp 87-96. |
| 10 | Ranjit Kumar M, Meenambal T & Kumar V, 2015. Unified Framework for Water Balance and Hydrologic Simulation: Part II - WAPROS Model Application and Model Closure Error", International Journal of Earth Sciences and Engineering , V08(02), pp. 640-652. |
| 11 | Ranjit Kumar M, Meenambal T & Kumar V, 2014. Areal average rainfall estimation model for application in WAPROS model. Journal of Agrometeorology, Special Issue . V16. |
| 12 | U. Surendran, Ramasubramoniam, P. Raja, V. Kumar, & V. Murugappan. 2014. Modeling based fertilizer prescription using NUTMON–Toolbox and DSSAT for soils of Semi Arid Tropics in India. Journal of Agrometeorology, Special Issue . V16. |
| 13 | P.P.Mahendran, A.Gurusamy, S.Krishnasamy, V.Kumar and R.Babu.2011. Optimization and nutrient management for higher productivity in maize based cropping system under drip fertigation system. Strategic resource management for sustainable food and water security, ISWAM. |
| 14 | M.V.Rangaswami, K.Arunadevi, P.K.Selvaraj, V.Kumar.2006.Optimal irrigation and fertigation scheduling on mulberry yield and water use efficiency.7 th International micro irrigation congress. ICIT, New Delhi. P:1-14. |
| 15 | V.Ravikumar, G.Rengaraju, V.Kumar, S.Santhana Bosu and S.Vijaya baskaran.2004. Irrigation scheduling for drip irrigated cotton. Crop Res. 27(2&3):177-181. |
| 16 | V.Ravikumar, S.S.Bosu and V.Kumar.2001. Drip irrigation system design by energy gradient line approach for non –uniform outflow. Agricultural Engineering Journal .10(3&4): 181-190. |
| 17 | R.K.Sivanappan and V.Kumar.1987.Status and development for drip irrigation. Seminar Proceedings.P:3-18. |
| 18 | V.Kumar and R.K.Sivanappan.1980.Salt distribution in drip irrigation. Reprinted from Intern. Symp. Salt-Affected Soils, Karnal, India.Paper-5.6 (265 -268). |
| 19 | V.Kumar, D.Tamilmani and A.Narayanan.1986.Effect of drainage on Rice yield in Krishnagiri river project area. TNAU News Letter.Vol.16 No.2 Page No. 1- 4. |

| | |
|----|---|
| 21 | R.K.Sivanappan, O.Padmakumari and V.Kumar.1987 .Drip irrigation. Published by Keerthi published Company. pages.224. |
| 22 | S.Mahendran, V.Ganesaraja, V.Kumar, S.Krishnasamy, S.Sakthivel. 2007. Precision farming in sugarcane (Tamil).AICRP-WM, Technical Bulletin No.1. pages.40. |

Books written (with ISBN number):

| Authors Name | Title | Year of publication | Publishers Name | ISBN No. | No. of Pages |
|---|-------------------------|---------------------|----------------------------------|-------------------|--------------|
| Dr.R.K.Sivanappan Dr.M.V. Rangaswamy Dr.V.Kumar | Drip irrigation (Tamil) | 2010 | New Century Book House,, Chennai | 978-81-234-1766-7 | 44 |

Books chapter (With ISBN Number)

| | Author Name | Title | Year of Publication | Publishers Name | ISBN No. | No. of Pages |
|---|--|--|---------------------|---------------------------------------|------------------------|--------------|
| 1 | U.Surendran, V.Kumar K.Madhava Chandran & E.J. Joseph | Water and Nutrient Management in Drip Irrigation in India: Review | 2016 | Apple Academic Press, Inc. USA | 9781771883641 | 325pp |
| 2 | K. Arunadevi, P.K. Selvaraj, and V. Kumar | Nutrient Management through Drip Fertigation to Improve Yield and Quality of Mulberry Crop | 2016 | Apple Academic Press, Inc. USA | 9781771883641 | 325pp |
| 3 | P. Thanabalan R. Vidhya and V. Kumar | Temporal Trend Analysis of LST, NDVI and soil moisture over Indian Summer Monsoon season | 2016 | Scientific Publishers | ISBN 978-93-86102-72-0 | p. 401-407 |
| 4 | M. Dhanasekara pandian, S. Chandran K. Mutheeswaran and V. Kumar | Identification of Groundwater potential zone in Girudhumal River sub basin using the | 2016 | Scientific Publishers, Jodhpur | ISBN 978-93-86102-72-0 | p. 408-418 |

| | | | | | |
|---|---|--|------|-------------------------------|-------------|
| | M.V. Rangasami and V.Kumar | Analysis for cage fish culture in irrigation canals | | Nations University, Sri Lanka | |
| 6 | M.V. Rangha swami, V. Rajendran and V.Kumar | Role of soil and water conservation measures in improving the productivity of watersheds | 2004 | IERC, Japan | pp: 173-176 |
| 7 | M.V. Rangha swami, V. Rajendran and V.Kumar | Effective technology transfer for watershed development | 2004 | IERC, Japan | pp: 169-172 |

| Technical Bulletin/Booklets/Reports Published: | Year |
|--|------|
| Geographic Information System Application for Non-point Source Pollution Management | 1993 |
| Methods of Construction of Open and Tubewells and Deepening the Existing Open wells under Quicksand Condition to Increase the Yield. V. Kumar and R. K.Sivanappan. Department of Soil and Water Conservation Engineering, College of Agricultural Engineering, Coimbatore-3 | 1983 |
| Identifying Soil and Water Conservation Measures for the Watershed in Thuraiyur block under DPAP. Dr. S. Santhana Bosu, Er. C. Mayilsami, Er. V.Kumar, Dr. V. Ravikumar Er. R. Lalitha, Dr. P. Masilamani, Soil and Water conservation Engineering Division, College of Agricultural Engineering Tamil Nadu Agricultural University Kumulur 621712, Tiruchirappalli District | 1983 |
| Soil Conservation Measures For Ayyalur Interface Forests, Dindigul District Based On Universal Soil Loss Equation. Soil and Water Conservation Engineering Division, College of Agricultural Engineering, Kumulur, 621712. | 1997 |
| Micro computer Application in Land and Water Management | 1999 |
| Irrigation Design Tool Box Using Microsoft Visual Basic- 5. Soil and Water Conservation Engineering Division, College of Agricultural Engineering, Kumulur, 621712 | 2001 |
| Reference ET Estimator. Soil and Water Conservation Engineering Division, College of Agricultural Engineering, Kumulur, 621712. | 2001 |
| Reference Crop ET with minimum Climatological data. Soil and Water Conservation Engineering Division, College of Agricultural Engineering, Kumulur, 621712. | 2001 |
| Water Harvesting for sustainability in Agricultural and Domestic use | 2002 |
| Recent trends in Mathematical modeling and Computer Simulation of Biological Systems | 2004 |
| Pit method of sugarcane cultivation under drip fertigation system | 2008 |
| Subsurface drip fertigation system for mechanized sugarcane cultivation. | 2008 |

| | | |
|----------|--|---|
| Advisory | PG | Ph.D |
| | (Served as Advisory committee member for two students) | (Served as Advisory committee member for one student) |

| Membership in Professional Bodies / Societies | | |
|---|---|--|
| i. International | : | Member. ISHS, Belgium |
| ii. National | : | Life Member (L 317)- Indian Association of Soil & Water Conservationists, Dehradun |
| | | Life Member- Indian Society of Remote Sensing, Dehradun |
| | | Life Member- Association of Agrometeorologists, Anand |
| | | Life Member- Indian Society of Water Management, New Delhi |
| | | Life Member (L 542)- Indian Society of Geomatics, Ahmadabad |
| | | Life Member- Indian Society of Soil Survey & Landuse Planning, Nagpur. |
| | | Life Member(8842) - Ulavarin Valurum Velanmai-TNAU, Coimbatore |

| | | |
|----------------------------------|---|--|
| Academic Awards/ Medals obtained | : | <ol style="list-style-type: none"> 1. TNAU Medal – 1980 2. National Overseas Scholarship – Government of India – 1986 3. IGWMC Scholarship – 1992 |
|----------------------------------|---|--|