

# IRRIGATION AND ECONOMIC DEVELOPMENT



*Edited by*

**Dr.S. THEENATHAYALAN**  
**Dr.P. KANNAN**



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Published by

**L ORDINE NUOVO PUBLICATION**

[lonpublication@gmail.com](mailto:lonpublication@gmail.com)

[www.nuovopublication.com](http://www.nuovopublication.com)

**Book Title :** **IRRIGATION AND ECONOMIC DEVELOPMENT**

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**Book Subject :** Economics  
**Book Category :** Edited Volume  
**Copy Right :** Editors  
**First Edition :** November 2021  
**Book Size :** B5  
**Paper :** 21 kg, Maplitho NS  
**Price :** Rs.500/-  
**Published by :** **L ORDINE NUOVO PUBLICATION**  
E-mail: lonpublication@gmail.com  
www.nuovopublication.com  
Mobile:99442 12131.

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*ISBN Assigned by*  
*Raja Ram Mohan Roy National Agency for ISBN, New Delhi – 110066 (India)*

**ISBN: 978-93-92995-08-8**

ISBN 939299508-3



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## CHAPTER 18

# SOURCES, IMPORTANCE, METHODS OF AGRICULTURAL IRRIGATION AND ECONOMIC DEVELOPMENT

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### **Abstract**

*Irrigation is that the artificial manifest application of water to land for the aim of agricultural production. Effective irrigation will influence the whole growth process from seedbed preparation germination root growth nutrient utilization plant growth and regrowth yield and quality. The key to maximizing irrigation efforts is uniformity. The producer features a lot of control over what proportion water to provide and when to use it but the irrigation system determines uniformity. Deciding which irrigation systems is best for your operation requires a knowledge of kit system design plant species growth stage root structure soil composition and land formation. Irrigation systems should encourage plant growth while minimizing salt imbalances leaf burns erosion and water loss. Losses of water will occur because of evaporation wind drift run-off and water (and nutrients) sinking deep below the idea zone.*

*Read Also: Artificial Irrigation, Growth, And Nutrient Utilization.*

*Keynote: Manifest, Indigenous Irrigation, Germination, and Erosion.*

*Keywords: Irrigation, growth, water, plant, root, soil, systems, system, uniformity, land.*

### **Introduction**

Indigenous irrigation facilities to be employed by the Indian farmers for the rationale to develop the agricultural activities for the aim of satisfied needed for the nutrient food. Irrigation is that the artificial manifest application of water to land for the aim of agricultural production. Effective irrigation will influence the whole growth process from seedbed preparation germination root growth nutrient utilization plant growth and regrowth yield and quality. The key to maximizing irrigation efforts is uniformity. The producer features a lot of control over what proportion water to provide and when to use it but the irrigation system determines uniformity. Deciding which irrigation systems is best for your operation requires a knowledge of kit system design plant species growth stage root structure soil composition and land formation. Irrigation systems should encourage plant growth while minimizing salt imbalances leaf burns erosion and water loss. Losses of water will occur thanks to evaporation wind drift run-off and water (and nutrients) sinking deep below the idea zone. Fertilisers need to be 'watered into' rock bottom so on best facilitate plant growth. to use areas which may preferably be 'less productive'. Irrigation can allow farmers to open up areas of their farms where it'd preferably be 'too dry' to grow pasture/crops. This also gives them the potential to



## About the Editors



**Dr.S. THEENATHAYALAN** is presently serving as Associate Professor and Head, Department of Economics and Centre for Research in Economics of The Madura College (Autonomous), Madurai, Formerly Member – Syndicate and Member Convener Committee, Madurai Kamaraj University. He has credibly maintained consistent academic records in his post graduate studies with a University Rank. He started his teaching career in July 1991 with a passion for teaching for more than 3 decades. He has produced 11 Ph.Ds, 32 M.Phil and published 15 books.

He was also the organizing secretary of 10 National Seminars, 1 National Conference and 3 International Conferences. In addition, he has delivered 80 plus invited lectures at the UGC HRDC and keynote addresses in Economics in National, International conferences and radio talks. His research contributions are also outstanding. Under his guidance, eleven students got their Ph.D. degrees. 31 M.Phil graduates and many PG students have completed their projects under his guidance. At present, 7 Ph.D Scholars and one post-doctoral fellow are working under him.

He has published 15 books, 34 research papers and reviews in national and international journals of repute. His academic contributions involve membership and chairmanship of Board of Studies of various institutes. He was also recipient of "Best teacher award", "Best NSS Programme Officers Award", "Senior Economists award" and "Eminent Academician award". Besides he served as NAAC Coordinator, IQAC Coordinator and Dean of Academics and Research in the college.



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Published by  
**L ORDINE NUOVO PUBLICATION**  
lonpublication@gmail.com  
www.nuovopublication.com

ISBN 939299508-3



9 789392 995088