
   In the given paper author focused on the change detection of major dam in Nigeria with the help of RS and GIS techniques. In this paper author gives ideas about the constructions of dam, site of new dams, catchment area and with the help of RS and GIS techniques.


   The research of Agricultural activities and crops combination and concentration which is analyzed the agricultural land use pattern. The study is based on secondary data collected from secondary records.

3. Agricultural statistics at a glance (2001)

   Directorate of economics and statistics department of agricultural and co-operation Ministry of Agricultural. Govt. of India. The department of agricultural and co-operation ministry of agricultural govt. of India has research of agricultural statistics data provided by the statistics at a glance to the researchers.


   The author stated that, the water quality of major springs in the Yar- Mouk basins experience degradation due to rapid urbanization and industrialization so the author analized the thirty-six water samples of different elements of cations and anions.
5. Barkade A.J., Dr. Tonape L.B. & Dr. Lokhande T.N.et.al (Feb 2011) “Agricultural landuse pattern in satara district of Maharashtra. International refered Research journals feb 2011-

The study of this paper is the crop data has been computed with the help of viewer’s techniques of crop combinations. The agricultural cropping patterns give an idea about the crop combinations and agricultural topology. Agricultural income of a region to advocate suitable device for planning improvements in the under develop regions. The present study is based on primary and secondary data sources.


The study of this paper by authors to focused on the variety of crops in Jammu and Kashmir. Cultivation of crops is the dominant occupations in the state directly or indirectly supports about 81% of total population of the state. In the view of this paper the general pattern of rain fed farming is different from irrigation farming involving crops which are dependent on rainfall. Here rice cultivation is dominant.


In the given paper the review of various aspects of this water abstractions problem, we employ a dynamic pool fisheries model to simulate the effects of abstractionof fish production. Simulations indicate the problem is indeed very serious,with every hectare of
surface water based irrigation reducing total fish catch in modeled area by 272 kg., and abstraction to irrigate more than 500 hectare.


   This paper review perceived of the water resources management and nations of the relationship between catchment and land use and international irrigation management will necessary to the agricultural land use and cropping patterns.


   In this case study of agricultural geography by author in the state of Rajasthan author gives idea about the agricultural land use density is very less due to lack of rainfall, scarcity of irrigation facilities and water resources dams in various part of the Rajasthan state.


   The author stated that, the land use pattern in Assam is different region for agricultural cropping pattern than other regions. The land use pattern in Assam is depend on rainfall and changing climatic conditions, soil types, relief features, undulating landscape etc. Concludes with the agricultural cropping pattern.

11. Das P. “Cropping pattern (Agricultural and horticultural) in different zones, their average yields in compassion to national average/critical
Gaps/reasons identified and yield potential. Indian council of agricultural research New Delhi.

The paper studied of agricultural cropping has been estimated that more than 250 double cropping systems are followed throughout the country and based on rotational spread of crops in each district in the country.


The main focus of the article is to established of watershed development projects. The economically, socially, and agricultural development and ground water depletion. On the basis of watershed technology has been made in analyzing the spatial differentiation of agricultural development.


In this paper the author has focused on the Indian farmer’s activities and their agricultural cultivation practices, rotation of crops, intense of agricultural cropping patterns and to use the irrigation technology and modern techniques.


According to author Sangali district which falls in drought prone area of Maharashtra is selected for study area. The major crops
of the Sangali district are jawar, bajara, maize and mixed crops. So the
author to study of the crop combinations in Sangali dist. of
Maharashtra drought prone zone. There is rainfall average is very less
than the other district in Maharashtra.

15. Francis C.A. “Multiple cropping systems”.

In this review of the multiple cropping system or mixed
cropping system studied by scientist has been used by farmers for
centuries. Multiple cropping systems were organised agriculture. This
book by several authors explores present systems and the potential of
complex, intensive cropping systems for the feature.

16. Gadage S.B., Gorantiwar S.D., Virendra Kumar & Mahesh Kothari
et.al.(2011) “Optimal Cropping Pattern For Adoption Of Micro-
Irrigation Methods In Canal Command Area-A Case Study”

In the present study of the paper currently the micro irrigation
methods are mainly adopted on form with irrigation from tube wells
or dug wells. However, in view of increasing scarcity of water for
irrigation and need to increase food production, it is important to
adopt in canal command areas. The objective function of the model
was subjected constraints such as total available and land during
different irrigation periods.

17. Gupta Ajay Kumar, Kishor Kumar & Madaswami Moni et.al.,(2010)
“Minor Irrigation Census Computerization: A Step towards ICT For
Micro Level Planning in Water resources Management and Planning to
Achieve Rural Prosperity”
In his above research paper have been remarkable developments of water resources. The national water policy 2002 has addressed the issues related to develop, conserve, utilized and manage these important natural resources in this Millennium. There are approximately 20 million Minor irrigation structures in the country.


In this reference of Ph.D. thesis have been review of the irrigation cropping patterns, Indian agricultural has undergone see changes with the introduction of irrigation is specially the public funded irrigation projects. Karnataka is known for development of irrigation infrastructure to wet its drylands viz, The Krishnrajasagar dam, Hemavati, Kali River, Thungabhdra and upper Krishna projects.


The extensive review suggests that there are strong linkages between irrigational poverty. These linkages are both direct and indirect. The direct linkages opraete via localized and household effects. The indirect linkages opraete via regional, national and economic-wide effects.

The author focused on the performance of irrigation projects & their impacts on poverty reduction and its empowerment in arid environment. There is significant positive impact of the irrigation infrastructures of the dam, for ex. literacy rate has increased from 41% (per project) to 74% in 2006. Similarly significant improvements were observed in health care, sanitation, education and other scopes.


In the present study paper highlighten on the patterns of crop diversification have been on the basis of the changes in terms of crops, primarily on economic considerations Indian agricultural is increasingly getting influenced is more and more economic factors. Because of irrigation expansion, infrastructure, penetration of rural market.


The present study monitors the ground water quality and uses GIS Techniques for showing the spatial distribution of various programmers in river linking area of Jalgaon district.

The present paper address the rationale of various watershed planning approach and aims at identifying the major drawbacks of the water shed planning and suggest future way of watershed planning in India.


According to author, the agricultural management and development has been focused on this paper on rural womens participations in agricultural activities and play a vital role in farming in Pakistan. The actively participate in a range of activities related to crop production and live stock management.


The author stated that, the new agricultural technology and conserving of state farms into individual and small household plots has bough changes in the traditional cropping pattern in Uzbekistan.


The objective of present study was to developed comprehensive multi criteria model for selecting adequate cropping pattern in an irrigation district under water scarcity condition.

   The author focused on the study of impact of watershed project on the cropping intensity, pattern of the respondent in Sangamner Tahsil. The data collected from 200 randomly selected respondents revealed that 40% belonged to above 80-160% changes in their cropping pattern category.


   The study of crop combination was focused on basis of agricultural regenerations. The data collected were proceed and analyzed by using simple stastics the results are cartographical represently Weavers (1954) crop combinational analysis and Rafiullahs (956) maximum deviation methods of crop combinations.


   The author stated that, the crop diversification patterns, concentrations have great relevance in the agricultural land use studies. Crop diversity is an important component of the crop geography of a region.

The author focused on the spatio-temporal changes in the cropping pattern of Konkan region. The physical factors influenced more on land use than any other factors on the earth.

31. Shahidullah SM, Talukder MSA & Kabir MS, Khan et al. (2006) “Cropping Pattern in the South East Coastal Region of Bangladesh”.

The author focused on the cropping pattern researchers should be given priority in these fields. Single boro area, especially of Begumganj and Chatkhil is the most potential for fish cultural after the harvest of boro rice.


According to author, the cropping system can be defined as the cropping patterns and their management to derived maximum benefits from a given resource base under specific environmental conditions. Multiplicity of cropping has been one of the main features of Indian agriculture.


The author stated that, an attempt is made to analyzed the pattern of cropping system in inter regional framework and identify how this patterns have changed over a period of time in Jhabua tribal district in MP.
34. Swadesh Pal “Intensive Agricultural Development vis-a-vis Ground water Depletion-An overview. Kandi Block, Murshidabad Dist West Bengal”.

The author focused in the article is to establish a positive relationship between development and ground water depletion. The study is based in the Kanadi block of Murshidabad dist. which is a ‘morbiding beel’.

35. Teshome Yirgu Bayu (2012) “Perennial Based Cropping Pattern in the Western Hills of Lake Abhaya, Gamo Highland, Ethiopia”.

The author stated that, the long term changes in cropping pattern and rural household economy asses’ human carrying capacity of perennial crops mainly inset and cereals in the area.


The authors stated that, the analysis of the agricultural land use pattern at micro level in Solapur dist. The study is based on secondary data collected from secondary records.


The author stated that, the optimization techniques can be used for deciding cropping pattern for an agricultural land. In the present study an alluvial tract between two rivers in Northern India is considered for such a study.
The present paper proposes a model of multi-objective Fuzzy linear programming based on Fuzzy parametric programming to solve the problem of optimal cropping pattern in an irrigation system.