

Role of Information Technology in Environment and Human Health

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Abstract:

When we talk about Information Technology, it has a significant hand in improving the status in the fields of environmental education and human health as compared to that of the other particular areas such as business, economics, and culture or politics. The developing growth of the internet services and facilities, geographic information system or GIS, and the data that gets transmitted through satellites, etc. have produced a higher affluence of the updated information on several aspects of the environment as well as health. When we look for the variety of software in the market, you will come across a number of them that created for the health and environment studies in a better way. They are fairly user-friendly and certainly help a learner to understand the respective subject with ease.

Keywords: Environment, GPS, Remote Sensing, GIS.

Introduction

Characterization of land resources and generation of geospatial information on land resources and crop production at village administrative unit enable to assess human carrying capacity. However, in many cases it is difficult for the local administration to implement the resource management plans at a time in the entire tehsil. Hence, prioritization (Dongare, et al 2013; Bhagat R. S. and Bisen D.K. 2015; Kudnar N.S., 2015; Zolekar, R. B. and Bhagat, V. S., 2015) Plays a key role in identification of critical areas based on the assessment of human carrying capacity in management of land resources on sustainable basis. Geospatial modeling in GIS enables to integrate the biophysical resources, crop production and consumption scenarios.

In the study, an attempt has been made to delineate distinct biophysical resource units, assessment of human carrying capacity and to prioritize the areas through geospatial modeling in GIS for sustainable management of land resource in Tirora tehsil of Gondia district, eastern Maharashtra, India (Lagad S. J., 2018); Kudnar N. S., 2019).

Database on the Environment System

Understanding the meaning of database is super easy and upfront; it is a collection of connected data on some subjects. It comes in a computerized form, and you can regain the data at any hour of the day whenever needed. The information of database can simply extract in a computer. When it comes to comprehensive databases, things that comprise in it are wildlife database, forest cover database, and conservation database, etc. the databases are also available for some diseases which comprise malaria, fluorosis, HIV/AIDS, etc.



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- National management information system (NMIS).
- Environmental information system (ENVIS).
- Remote sensing and geographical information system (GIS).
- Geographical information system (GIS).
- The World Wide Web (WWW).

Environmental Information System (Envis)

According to the ministry of environment and forests, the government of India has advanced an information system known as ecological information system or ENVIS. It has its headquarters based in Delhi and has its branches all over India. ENVIS established back in 1982, and since then, its main aim is to offer environmental information to all the decision makers, engineers, scientists, and policy planners that exist in all over the country (Bisen, D.K. and Kudnar N.S. 2019). The centers of ENVIS instrument the work hours in generating a new network for databases in areas such as clean technologies, pollution control, biodiversity, wildlife, environmental management, remote sensing, and renewable energy (Kudnar N. S., 2018; Ade Vikas, 2019).

National Management Information System (Nmis)

According to NMIS of the department of science and technology, it can comprehend that it has a database compilation that base on research and development projects, as well as information that is associated to research scientists and personnel, are included.

Geographical Information System (GIS)

GIS or geographic information system consider as one of the most effective tools in the entire environmental management topic (Bisen, D.K. and Kudnar N.S. 2013). It is a process of superimposing different thematic maps with the help of digital data on a large scale of interconnected aspects. The different thematic maps that contain digital information and database on various elements such as forest land, water resources, soil type, cropland, industrial growth, human settlement, and industrial growth, etc. are placed in a layered prospectus in the computer with the help of software (Kudnar, N.S. & Rajasekhar, M, 2020).

GIS helps in identifying some deadly and chronic diseases that come from the infested areas which are very much prone to vector-borne diseases such as schistosomiasis, malaria, etc. based on the geographical map of that area. There are some distribution information centers (DICs) in India that are interrelated with each other and with the central information network getting its access to the international database (Kudnar N. S., 2017).

They are also capable of availing information and facts about the atmospheric phenomena such as the upcoming monsoon, inversion phenomena, the depletion of the ozone layer, smog, etc. It is the reason why remote sensing and GIS play a significant role in resource mapping, management, planning, environmental conservation, and environmental impact assessment as well (Gadekar Deepak J, 2020).



Remote Sensing And Geographical Information System (Gis)

The process of remote sensing that accesses through satellites can be used to get through the ongoing alterations in the environment as well as to predict the natural hazards before time such as floods, droughts, volcanic eruptions, starvation, etc. It is one of the most useful techniques in exploring the availability of mineral deposits, crude oil, and locating other geothermal powerhouses (Kudnar N. S., 2015; Gadekar Deepak J, 2015.).

The World Wide Web (WWW)

With the availability of resources on each aspect, things like classroom activities, digital files of photos, web-exercises, animations, PowerPoint lecture presentations, and quiz competitions have proved to be further helpful for both the students as well as the teachers who pursue environmental studies (Rajasekhar, M., SudarsanaRaju M., Siddi Raju R., Ramachandra M., Pradeep Kumar 2018;Gadekar Deepak J, 2017;Salunke V. S. (2012).

Seeking Online Help for Information on Health

The online portals offer a wide range of information on various subjects such as human health and environment. You can access help from the national institute of occupational health as it avails electronic information on the professional and fundamental health of people who work in dangerous working conditions such as industries, etc. and offer safety measures as well.


Conclusion

The field of information technology has been cumulative rapidly with an explosion of some applications and new paths that are opening along with an active role in the field of education, planning, and management of health and environment. Information technology has been playing a noteworthy role in the areas of biometrics, genome sequencing, gene engineering, online medical transcription, preserving the DTA database for the betterment of human health, biotechnology, etc. The field also helps in classifying some deadly and chronic diseases that come from the verminous areas which are very much prone to vector-borne diseases such as schistosomiasis, malaria, etc. based on the geographical map of that area.

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