## SUSTAINABLE GROWTH IN AGRICULTURE SECTOR: A CASE STUDY OF NALGONDA DISTRICT, TELANGANA STATE, INDIA

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#### **ABSTRACT**

Sustainable agricultural growth is a necessary condition for the economic growth of India. Agriculture growth is critical for poverty reduction and can be a powerful means of achieving economic growth.

India's agriculture sector is a key driver of rural income, offering livelihoods to the poor and bolstering food security and income diversity in vulnerable communities.

The study focuses on the Nalgonda district, approximately 75 per cent of the population depends directly or indirectly on agriculture in the district. The major growing crops are Paddy and Cotton.

As per the field observation, the district has the highest potential for crop cultivation and diversification due to the relatively gentle topographic condition, favorable soils and higher irrigation facilities of Krishna River.

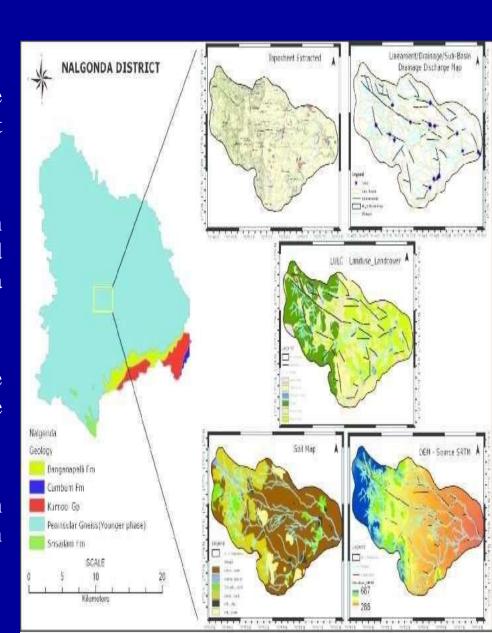
The present study shows that despite several challenges, such as an increase in built-up areas and scarcity of cropland in the study area, there has still been an increase in agricultural productivity in the last decade. sector.

#### INTRODUCTION

- The Indian economy greatly depends on the agricultural industry. Roughly one-sixth of India's national GDP comes from it, and nearly half of the labor force is employed there. It is essential for guaranteeing the country's food security and, through its forward and backward links, influences the development of the secondary and tertiary sectors of the economy (Singh, 2020).
- The present study aims to examine Sustainable growth in Agriculture in Nalgonda District, Telangana State.
- The Indian government is supporting agricultural operations through its policies in the meantime in an effort to expand and modernize the agricultural industry.
- Any region or state's agricultural modernization and development depends heavily on human abilities and attitudes. Therefore, socioeconomic elements like population, irrigation infrastructure, agricultural technology, size of land holdings, usage of chemical fertilizers, use of high yielding variety of seeds, etc., play extremely vital role for agricultural development.

#### **STUDY AREA**

- The Nalgonda district is situated in the western part of Telangana with highest number of Mandals.
- The district shares boundaries with Suryapet, Rangareddy, and Yadadri and Nagarkurnool districts and with Andhra Pradesh State.
- The Krishna River forms a border over the entire north, with the main Nalgonda range on the west and southwest.
- The annual average rainfall 6000 mm in the western part to 500 mm in the eastern part.



#### RESULT

Many farmers in the area continue traditional single-crop farming practices, especially in Nalgonda where paddy cultivation predominates, while Cotton is the primary crop elsewhere.

The research included experiments, field visits, and data collection. The study found that the district has the potential for crop diversification, with options like Paddy, Pulses, and Cotton in Nalgonda, and Ragi, Pulses, and Cotton in Nagarjuna sagar.

It is also possible to cultivate four crop combinations like taluk village getting cultivated four crops such as Paddy, Ragi, Pulses and Sugarcane are cultivated in Miryalguda, Pulses, Ragi, Cotton and Paddy cultivated in Nalgonda taluk. It can also be cultivated in five, six, seven and even eight combination corps in the study area. Examples of crop combinations are Ragi, Pulses, Paddy, Cotton, and Oil seeds, Sugarcane, Fruits and Ragi.

### **CONCLUSION**

- The study highlights significant potential for sustainable agriculture development in the area, with the capacity for farmers to cultivate up to 12 different crop combinations. to available irrigation, infrastructure, and agricultural resources.
- Farmers in Nalgonda remain hesitant to fully utilize the area's agricultural potential for sustainability. Additionally, there has been a shift in land use towards urbanization, leading to a decrease in cropland. Some farmers have also shifted to cultivating commercial crops like groundnut, cotton and pulses due to cropland scarcity.
- The study area was assessed for various crop combinations, ranging from two to twelve crops. However, widespread adoption of multiple crop combinations is limited as farmers are reluctant to take risks, despite favorable conditions in the district. Instead, they tend to prefer mixed crops and adapt their choices based on market prices.

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