



## Cropping Pattern and Agriculture Efficiency of Selective Villages in Mulshi Tahsil of Pune District in Maharashtra, India

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### Abstract:

*Agriculture is most important role for socio economic development and cropping pattern is important for the development of agriculture. Cropping pattern is depending on spatial and temporal variations and changes. It is depends on rainfall, climate, temperature, soil type, technological level of farmer and behavior of farmer.*

*The study was carrying out on the basis of primary and secondary sources. Primary data collect with the help of survey and secondary data collect through the Ggrampanchayat, Tashil office and local authority of Man & Marunji village. The research paper focus on variation of crops, area wise comparative analysis of crops, land use pattern & water sources of study area and its effects on rural development.*

**Keywords:** - Field Surveys, observations, spatial analysis and statistical techniques.

### Introduction:

Agriculture is largest and important sector in India. Near about 65% population in India are engaged in agriculture activities. Therefore the study of cropping pattern is important in agriculture sectors. Agriculture is helpfully for rural development, agriculture related occupation like transportation, animal rearing and increasing job like agriculture labors, open seeds stores and others and also it is supportive for Surrounding for development of agro base Industries like rice mill, cotton mill, dairy frames and other due to agriculture is responsible for the development rural.

### Objectives of study area.

1. To find out the Land use pattern in study area.
2. To calculate the crop combination and Agriculture efficiency in study area.

### Methodology:

The primary data and secondary data have been used for the research paper. The questionnaire has been prepared to collect the data. The statistical method has been used for data calculation these are follows.

### Crop combination use by weaver's methods:

$$\text{Formula: } V = (O-E)^2/n + \text{-----}n^{\text{th}}$$

### Agriculture Efficiency by Bhatia method:

$$\text{Formula: } Er = ya / yr \times 100$$

$$Cr = \text{Area under crop / Met shown area of same region} \times 100$$

$$Ei = (Er \times Cr_1) + (Er \times Cr_2) / Cr_1 + Cr_2 + Cr_3 + Cr_4 + \text{-----}n^{\text{th}}$$

