

# Chapter 70

## Sustainable Development in Agriculture: Past and Present Scenario of Indian Agriculture

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### ABSTRACT

*Agriculture is the prime source of livelihood for human beings, animals, and all living beings. Agriculture also plays a vital role in the economy of India. This chapter describes the importance of agriculture and factors affecting the development of agriculture. The international scenario of agriculture, current status of Indian agriculture, and position of Rajasthan (state in India) in agriculture are described in this chapter. The total production, total imports and exports, method of irrigation, net area of irrigation, types of crops, fertilization consumption, and highlight of Union Budget 2018-19 of Indian agriculture are described in this chapter. The geography of Rajasthan according to agriculture, production of crop, and consumption of fertilization are also elaborated in this chapter. This chapter is concluded with future perspectives of India agriculture.*

### INTRODUCTION

Agriculture is a science as well as an occupation which is mainly concerned with plough the field, growing seeds, irrigation of the crop, fertilizing, harvesting and livestock for food and commercial purpose. Agriculture is not only limited to cultivating but also extended to bee farming, poultry and dairy. Agriculture industry plays a vital role in economy of a country (Herrera, 1999). Agriculture also provides a large number of employment opportunities.

DOI: 10.4018/978-1-6684-5352-0.ch070

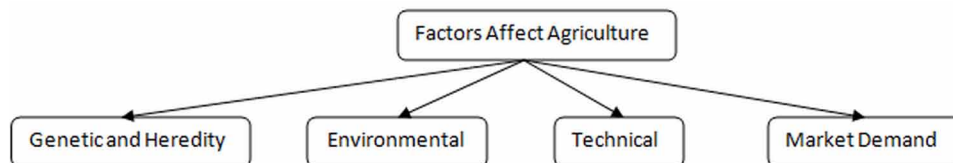
## IMPORTANCE OF AGRICULTURE

- **Prime source of Livelihood:** Agriculture is the main source of livelihood in most of the countries even if they are developed countries. Agriculture contributes around 70% in an economy, which is a heavy component indeed. India is the country of agriculture, in which agriculture products are directly used at farmer's kitchen rather than in the market.
- **Generate National Income:** Agriculture also used to generate income at national level. In India, many commercial commodities like tobacco, tea and spices etc. are exported which generate heavy national income.
- **Generate Employment:** Agriculture provides large number of employment. In India, there are so many people who do not have their own land for agriculture, but they are working on someone's land and they are maintaining their family well.
- **Maintain Ecological Balance:** Greenhouse effect and global warming are the well-known international problems. Plantation is only the solution of these problems. Orchards and gardens not only prevent Greenhouse Effect and Global Warming but also enhance the beauty of the earth.

## FACTORS AFFECT AGRICULTURE

As it is seen above, agriculture is very important for livelihood and to maintain economy of a country. There are so many factors that affect the growth of agriculture. Some factors are chemical & Biological in nature whereas some factors are technical and depend upon market demand (Factors Affect Irrigation, 2018). Factors affect agriculture is depicted in Figure 1.

*Figure 1. Factors affect Agriculture*



### Genetic and Heredity

There are so many genetic and heredity factors that affect the growth of agriculture like chemical compositions, tolerance of disease, early maturity, quality of straw and high yield ability. For example, wheat has several varieties like H1 1531, DBW 16, HD 2888, NIAW 917 and etc. H1 1531 yields 25-27 Q/H and DBW 16 yields 37-39 Q/H. So, if a farmer yields DBW 16, he will yield more amount of wheat.

### Environmental

The second category is environmental issues, in which there are large number of factors that affect a crop. All factors are listed below:

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