# **CONTEMPORARY RESEARCH IN INDIA**

A Peer-Reviewed Multi-Disciplinary International Journal Indexed in Indian Citation Index, Impact Factor: 4.58 (CIF)

NAAS Score 2021: 3.23

**SPECIAL ISSUE: 15<sup>th</sup> & 16<sup>th</sup> May, 2021** 

One Day International Conference on

"Rebuilding Humanities in Post-Covid Scenario" and

"New Paradigms of Commerce and Management: Opportunities and Challenges"

Organised by

Shri Sant Damaji Mahavidyalaya,

Mangalwedha, Dist. Solapur (Maharashtra, India)



# **CONTEMPORARY RESEARCH IN INDIA**

A Peer-Reviewed Multi-Disciplinary International Journal Indexed in Indian Citation Index, Impact Factor: 4.58 (CIF), NAAS Score 2021 : 3.23

129/498, Vasant Vihar, Near Old Pune Naka, Solapur-413001 (Maharashtra, India) e-mail: researchspectrum@gmail.com, website: www.contemporaryresearchindia.net Cell: 09637335551, 07020828552

## **DEPARTMENT OF ENGLISH**

One Day International Conference

on

## "Rebuilding Humanities In Post-Covid Scenario"

**Special Issue Editor** 

Dr. N. B. Pawar

Principal, Shri Sant Damaji Mahavidyalaya, Mangalwedha Dist. Solapur

**Co-Editors** 

Prof. H. R. Nagtilak

Head, Department of English Shri Sant Damaji Mahavidyalaya, Mangalwedha Dist. Solapur

Dr. S. S. Shivsharan

Department of English Shri Sant Damaji Mahavidyalaya, Mangalwedha Dist. Solapur

Organized by

Shri Sant Damaji Mahavidyalaya Mangalwedha

Dist Solapur (Maharashtra, India)

## CONTEMPORARY RESEARCH IN INDIA (ISSN 2231-2137): SPECIAL ISSUE : MAY, 2021

|    | Act 1 CC + D1 C + D1 C + D + C   | 242 |
|----|--|-----|
| 8  | A Study of Customer Relationship Management & its Role in Customer Retention  Mr. Subming S. Shote and Drin Dr. S. K. Datil                  | 213 |
| 9  | Ms. Supriya S. Shete and Prin. Dr. S. K. Patil  Derformance Analysis of Companience Clean India with Reference to Sanali District            | 217 |
| 9  | Performance Analysis of Campaining Clean India with Reference to Sangli District  Miss. Prajakta Patangrao Lad and Miss. Jyoti Mahadeo Patil | 217 |
| 10 | Revolutionary Schemes in Banking Sectore: A Case Study of Lead Bank Scheme   | 223 |
|    | Mr. A. S. Patil  | -   |
| 11 | Green Marketing and Sustainable Development  | 228 |
|    | Shri. Parashram Gangadhar Kandekar   |     |
| 12 | Service Marketing  | 231 |
|    | Shri. Parashram Gangadhar Kandekar   |     |
| 13 | Contribution of Management Thinkers Inmanagement thought and Contemporary  | 235 |
|    | Management   |     |
|    | Dr. Shivanand S. Bhanje  |     |
| 14 | Case Study on Marketing Strategies of Tea Franchise Business with Special Reference  | 241 |
|    | to Yewale Tea  |     |
|    | Mrs. Savita D. Uppalli   |     |
| 15 | Export Potential of Onion in India   | 242 |
|    | Dr. Mrs. Chougule H. A.  |     |
| 16 | A Study on Trend of Business Income Tax Returns in India   | 246 |
|    | Mr. Vikrant Raju Rangdal and Prin. Dr. S. K. Patil   |     |
| 17 | Importance ERP in Higher Educational Institutions  | 250 |
|    | Sujitkumar H. Karande and Dr. Shankarrao K. Patil  |     |
| 18 | To Study the Satisfaction Level of Students Regarding Online Shopping: A Case Study  | 254 |
|    | of Colleges in Kolhapur City   |     |
|    | Mr. Umesh D. Dabade  |     |
| 19 | Recent Development and Role of Information Technology in Banking Sector  | 260 |
|    | Ms. Mugdha Mahesh Jagadale   |     |
| 20 | Case Study on Review of Literature of Green Human Resource Management  | 267 |
|    | Mrs. Geetanjali Anil Khade   |     |
| 21 | Agricultural Development and Strategies for Agricultural Development in India  | 274 |
|    | Mr. Yogesh Balbhim Mane  |     |
| 22 | A Study of Digital Marketing in India: A Special Reference to Agriculture Produce  | 284 |
|    | Mrs. Sarika Suresh Kedar   |     |
| 23 | भारतीय कृषी अर्थव्यवस्था व तिचा विकास  | 290 |
|    | डॉ. आर. बी. गावकरे   |     |
| 24 | दुष्काळातही व्यवसायाची संधी निर्माण करणाऱ्या तरूणाची कथा : 'तहान'  | 295 |
|    | प्रा. राजकुमार श्रीधर पवार   |     |
| 25 | कोरोना वायरस — एक वैश्विक महामारी  | 298 |
|    | प्रा. डॉ. अनिल प्रभाकर कांबळे  |     |
| 26 | नीरजा माधव की कहानियाँ और नौकरीपेशा नारी   | 300 |
|    | प्रा. जगताप नवनाथ रघुनाथ   |     |
|    |  |     |



# AGRICULTURAL DEVELOPMENT AND STRATEGIES FOR AGRICULTURAL DEVELOPMENT IN INDIA

Mr. Yogesh Balbhim Mane, ICSSR Doctoral Research Fellow, Department of Commerce and Management Shivaji University, Kolhapur

Abstract: The word agriculture is derived from the Latin words Ager and Cultura. Ager means land or field and cultura means cultivation. Therefore the term agriculture means cultivation of land. Agriculture is the backbone of Indian economy. Agriculture sector contribute large share of the countries national income though the share of agriculture sector was steadily declining. India has a second rank in farm output. Agriculture and allied sectors contribute 14.2% of the GDP (at constraint prices of 2004-05), 58 % population employed (as per 2001 census). Agriculture sector is still the largest economic sector and plays a significant role in the overall development of India. Hence the development of Indian agriculture is considered necessary condition for inclusive growth. But now a day's agriculture sector facing so many problems i.e. Small and fragmented land holding, Availability of Seeds, Problem of irrigation, Manures, Biocides and Fertilizer, Soil Erosion, Lack of mechanization, Inadequate storage facility, Lack of cheap and efficient means of transportation, Problem of agricultural marketing, Instability in agriculture, Scarcity of capital, Cropping pattern, Cost and availability of agriculture labour etc. To solve this problem researcher has conducted a study on agricultural development and strategies for agricultural development in India.

#### 1. Introduction:

The word agriculture is derived from the Latin words Ager and Cultura. Ager means land or field and cultura means cultivation. Therefore the agriculture means cultivation of land. Agriculture is the backbone of Indian economy. More than 2/3 workforce of the country engaged in agricultural activities. Agriculture sector contribute large share of the countries national income though the share of agriculture sector was steadily declining. In the year 1960-61 the share of agriculture in GDP was 47.6%, in the year 1970-71 41.7%, in 1980-81 35.7%, in1990-91 29.5%, in 2000-01 22.3%, in 2010-11 14.4%, in 2012-13 17.3%.'(www.pib.nic.in) India has made remarkable progress in the agriculture sector from independence. India has gone through the phase of green revolution, white revolution, yellow revolution and blue revolution. India is largest producer of milk, fruits, cashew nuts, coconuts, and tea. India is a second largest producer of wheat, vegetables, sugar, and fish and third largest producer of tobacco and rice. Majority of people live in rural area and depends on agriculture for their livelihood.

India has a second rank in farm output. Agriculture and allied sectors has contribute 14.2% of the GDP (at constraint prices of 2004-05), 58 % population employed (as per 2001 census). Agriculture sector is still the largest economic sector and plays a significant role in the overall development of India. Hence the development of Indian agriculture is considered necessary condition for "inclusive growth". In the process of agricultural development adoption of modern technology has an impact and reduces many risks in agriculture. Agriculture sector helps the people to meet their basic needs. Hence, agriculture is the most important sector in the world. Agriculture is a productive unit free gifted by nature. Agriculture includes livestock, poultry farming, pisciculture (rearing of fish), dairy, sericulture, nurseries, rearing of sheep Agriculture provides food, feed, fiber, fuel, furniture & raw materials to industries. Agriculture consists of growing plants and rearing animals in order to yield produce and thus it helps to maintain a biological equilibrium in nature.

## Importance of Agriculture Sector in Indian Economy:

- Source of Livelihood: In India agriculture is the main occupation of people. Near about 58 per cent of our population engaged in agriculture sector.
- 2. Supply of Food and Fodder: Agriculture sector provides food to people and fodder for livestock. Cow and buffalo provide protective food in the form of milk and they also provide power for farm operations. It also meets the food requirements of the people.

## 3. Contribution of Agriculture Sector in National Income:

Agriculture sector contribute large share of the countries national income though the share of agriculture sector was steadily declining. In the year 1960-61 the share of agriculture in GDP was 47.6%, in the year 1970-71 41.7%, in 1980-81 35.7%, in 1990-91 29.5%, in 2000-01 22.3%, in 2010-11 14.4%, in 2012-13 17.3%.

## 4. Large contribution to employment:

More than 2/3 workforce of the country engaged in agricultural activities. India is agricultural economy. More number of peoples in India depends on agriculture sector. Agriculture sector provides employment to 58% of country's workforce and is the single largest private sector occupation.

## 5. Important Source of Industrial Development: Agriculture sector play an important role in

Agriculture sector play an important role in development of industrial sector because various industries find their raw material from agriculture sector. Cotton, jute, textile industries, sugar, vanaspati, etc. are dependent on agriculture sector. Handlooms, spinning, oil milling, rice thrashing, etc. are various small scale and cottage industries, which are depending on agriculture sector for their raw material. This highlights the importance of agriculture in industrial development.

## 6. Importance in International Trade:

India's foreign trade is associated with agriculture sector. Agriculture sector accounts 14.7 % of the total export earnings. Besides that goods made with the raw material of agriculture sector also contribute about 20% in Indian exports.

#### 2. Review of Literature:-

The researcher has conducted review of literature regarding the selected research problem. He has reviewed some published articles, journals, magazines, research papers related to research study.

- 1. Bethu Sudhakar (2016) has studies on Sustainable Agriculture Development in India: Issues & Challenges. The main objective of the study is to study the issues and challenges with status of the agricultural sector and trends. He observed that for a growing country like India the practice of sustainable agriculture is of quite importance as it accelerates the productivity, efficiency, employment, and providing guidance to reduce the practices which affect the quality of soil, water resources and degradation of other natural resources.
- 2. Sharma (2011) India's Agricultural Development under the New Economic Regime: Policy Perspective and Strategy for the 12th Five Year Plan. He observed that the growth in agriculture in the 11th Plan is likely to be around 3.2 percent per year, which is higher than 10th Plan growth rate but lower than the target for 11th Plan. The 12th Plan target growth rate for agriculture is 4 percent with food grains growth at about 2 percent and non-food grains sector growing at about 5-6 percent.
- 3. Behera (2015) has conducted a study on Agricultural Development and Inclusive Growth in India: A Case Study of Gujarat. The main objective of the study is to examine the agricultural growth performance of Gujarat and India. He found that the growth of agriculture was higher than 10 per cent for Gujarat during the year 2001-02 to 2010-11 while economic growth was also high at 10.21 per cent.

The researcher has gone through the earlier studies and it is found that the various studies have been conducted related to the subject such as issues challenges in sustainable and agricultural development, agricultural development under new economic regime and agricultural development and inclusive growth in India etc. Researcher found that there is less studies on selected research problem. The researcher has been found gap in the study of development and strategies agricultural agricultural development. So the researcher has decided to study on "Agricultural Development and Strategies for Agricultural Development in India".

#### 3. Statement of The Problem:-

Majority of people live in rural area and depends on agriculture for their livelihood. Agriculture is the backbone of Indian economy. The more workforce of the country engaged in agricultural agriculture allied activities. and Agriculture sector contribute large share in the countries national income but the share of agriculture sector was steadily declining. In India the farmers are facing so many problems like small and fragmented land-holdings, heavy cost of seeds, heavy cost of manures, fertilizers and biocides, lack of mechanization, agricultural marketing, etc. Recently government of Maharashtra has declared an exemption of loan to farmers on certain conditions. Considering overall situation of agriculture sector and farmers the researcher has come across to the following investigative questions.

- 1. What are the strategies for agricultural development?
- 2. What is the agricultural development in India? So, to answer this question researcher has undertaken a study on Agricultural Development and Strategies for Agricultural Development in India.

#### 4. Objectives of The Study:-

The main objective of the study is to study the agricultural development and strategies for agricultural development and specific objectives are as follows-

- 1. To know the strategies for agricultural development in India.
- 2. To study the agricultural development in India.

## 5. Research Methodology:-

## I] Data Collection:-

Researcher has used secondary source of data for the present study. The researcher has collected necessary information from the Books, Journals, Magazines, Internet, Newspapers, Articles, M. Phil dissertations and Ph. D Theses related to selected research problem.

## II) Data Analysis:-

Researcher has used appropriate Statistical techniques for analysis of data.

### III) Parameters Of The Study:-

Following parameters are used to study the agricultural development and strategies for agricultural development.

- 1. Agricultural Development in India
  - i) Share of Agriculture in GDP
  - ii) Land Holding in India. (In hectors)
  - iii) Area by Operational Holding
- 2. Strategies for agricultural development

## 6. Scope of The Study:-

**a)** Topical scope: The present study is on Agricultural development and strategies for agricultural development. Researcher has under taken contribution of agriculture in GDP, area under cultivation in India and strategies for agricultural development in India.

#### b) Analytical scope:-

For the analysis of present research study the researcher has used MS Excel.

## c) Geographical scope:-

Geographical scope of study is whole India because the researcher has taken contribution of agriculture in GDP, area under cultivation in India and strategies for overall agriculture development in India.

## d) Periodical scope:-

The data has been collected from the 1660-61 to 2017-18.

### 7. Significance Of The Study:

Agriculture is the backbone of Indian economy. More than 60% workforce of the country is engaged in agricultural activities. Agriculture sector contribute large share of the countries national income though the share of agriculture sector was steadily declining. Majority of people live in rural area and depends on agriculture for their livelihood. Agriculture sector is still the largest economic sector and plays a significant role in the overall development of India. Agriculture sector provides food, fodder, and raw materials to industry. Hence the development of Indian agriculture is considered necessary condition for "inclusive growth". In the process of agricultural development adoption of modern technology has an impact and reduces many risks in agriculture. Indian farmers facing so many problems like draught, pricing, natural calamities, small and fragmented land holding, heavy cost of seeds and fertilizers, lose their land for the industrial purpose and for the development of road ways and railways. Recently the Government of Maharashtra has declared an exemption of loan to farmers on certain conditions. Considering overall situation of agriculture sector and farmers researcher has conducted study on agricultural development and strategies for agricultural development. This study may be helpful to farmers to solve their development problem. This study will also useful to government for policy formulation and their implementation. This study will also useful to the industrial sector because industrial sector more depends on agriculture sector for raw materials. Last but not list this study will also useful to overall development of India because agriculture sector play an important role in Indian economy.

### 8. Limitations Of The Study:

- 1. This study is based on secondary data only.
- 2. This study is limited to selected topic it does not cover other aspect of agriculture.

### 9. Data Analysis And Interpretation:

## A) Agricultural Development In India:

#### 1. Share of Agriculture in GDP-

For the Purpose of measurement of agricultural development researcher has considered share of agriculture in GDP at current prices. The table given shows the decade wise share of agriculture in GDP of India form the year 1650-51 to 2010-11.

| Sr. No. | Year    | Contribution in GDP | % change |
|---------|---------|---------------------|----------|
| 1.      | 1950-51 | 51.81%              | 0        |
| 2.      | 1960-61 | 47.6%,              | - 4.21   |
| 3.      | 1970-71 | 41.7%               | -5.9     |
| 4.      | 1980-81 | 35.7%               | - 6      |
| 5.      | 1990-91 | 29.5%               | - 6.2    |
| 6.      | 2000-01 | 22.3%               | -7.2     |
| 7.      | 2010-11 | 14.4%               | -7.9     |

(**Source**- http://statisticstimes.com)

The above table shows the contribution of agriculture sector in GDP. From the above table it was observed that in the year 1950-51 agriculture sector contribute 51.81% in GDP, in 1660-61 47.6%, in 1970-71 41.7%, 1880-81 35.7%, 1990-91 29.5%,

2000-01 22.3%, 2010-11 14.4%. So from the above table it was found that share of agriculture sectors in countries national income was staidly declining. Share of agriculture sector in GDP was decreased from 51.81% in 1950-51 to 14.4% in 2010-11.

#### 2. Land Holding in India. (In hectors)

| Sr. No. | Year    | Land holding |
|---------|---------|--------------|
| 1.      | 1970-71 | 2.28         |
| 2.      | 1976-77 | 2.00         |

| 3. | 1880-81 | 1.84 |
|----|---------|------|
| 4. | 1985-86 | 1.69 |
| 5. | 1990-91 | 1.55 |
| 6. | 1995-96 | 1.41 |
| 7. | 2000-01 | 1.33 |
| 8. | 2005-06 | 1.25 |
| 9. | 2010-11 | 1.15 |

(Indian agricultural census 2011)

The above table shows the average land holding in India. From the above table it was observed that in the year 1970-71 average land holding was 2.28 hectors, in 1976-77 it was 2.00, in 1980-81 it was 1.84, in 1985-86 it was 1.69, in 1990-91 it was 1.55, in 1995-96 it was 1.41, in 2000-01 it was 1.33, in 2005-06 it was 1.25 and in the year 2010-11 it was 1.15 hectors. So from the above table it was found that average land holding in India decreasing year by year. The average size of land holding has been continuously decreasing on account of

increasing number of land holders From an average of 2.28 hectares in 1970-71, it went down to 1.15 hectares in 2010-11.

## 3. Area by Operational Holding-

The table given below shows the area by operational holding. The farmers who hold below 1 hector are marginal farmers, holder of 1 to 2 hectors are small farmers, holders of 2 to 4 hectors are semi medium farmers, holders of 4 to 10 hectors are medium farmers and holders of above 10 hectors are large farmers.

| Sr .No | Size group                    | % of number of operation holding to total | % of area operated to total |
|--------|-------------------------------|---|-----------------------------|
| 1      | Marginal (below 1.00 ha.)     | 67.10                                     | 22.50                       |
| 2      | Small (1.00 - 2.00 ha.)       | 17.91                                     | 22.08                       |
| 3      | Semi-medium (2.00 - 4.00 ha.) | 10.04                                     | 23.63                       |
| 4      | Medium (4.00 - 10.00 ha.)     | 4.25                                      | 21.20                       |
| 5      | Large (10.00 ha. & above)     | 0.70                                      | 10.59                       |

(Indian agricultural census 2011)

The above table shows the percentage of number of operation holding to total and percentage of area operated to total. From the above table it was observed that in India out of total land 67.10 % land are hold by marginal farmers out of 22.50% are operated to total, 17.91% land hold by the small farmers out of which 22.8% are operated, 10.04% land hold by semi medium farmers out of which 23.63% operated, 4.25% land hold by medium farmers out of which 21.20% operated, 0.70% land hold by large farmers out of which 10.59% land operated to total. So from the above table it was found that large (67.10%) portion of the land is hold by the marginal farmers.

## B) Problems of Agriculture In India-

## 1. Small and fragmented land holding-

In India small and fragmented land holding is the major problem faced by the farmers. Average size of land holding is decreasing year by year. Average size of land holding in the year 1970-71 was 2.28 hectares it went down to 1.15 hectares in 2010-11.

- 2. Availability of Seeds- good quality seeds is not available to the small and medium farmers because of heavy prices. Seed is a critical and basic input for attaining higher crop yields and sustained growth in agricultural production.
- 3. Problem of irrigation- though the India is second largest irrigated country in the world only one third cropped areas is under irrigation. In India rainfall is uncertain, unreliable. So the Indian farmers facing the problem of irrigation.
- 4. Manures, Biocides and Fertilizer- Indian soils have been used for growing crops over thousands of years without taking much care for replenishing. This led to depletion and

exhaustion of soils and that again lead to resulting in their low productivity. The average yields of almost all the crops are lowest in the world. This is a serious problem which can be solved by using more manures and fertilizers. Cow dung provides the best manure to the soils but its use is limited because much of cow dung is used in kitchen as fuel in the shape of dung cakes. Chemical fertilizers are costly so the use of that is beyond the reach of the poor farmers. So the fertilizer problem is very complex.

- **5. Soil Erosion-** Large fertile land suffers from soil erosion by wind and water. This area must be properly treated and restored to its original fertility.
- 6. Lack of mechanization—most of the agricultural operations are carried on by human hand using simple and conventional tools and implements like wooden plough, sickle. Little or no use of machines is made in ploughing, sowing, irrigating, thinning and pruning, weeding, harvesting threshing and transporting the crops by small and marginal farmers. It results in huge wastage of human labour and in low yields per capita labour force. So there is urgent need to mechanize the agricultural operations so that wastage of labour force is avoided and farming is made convenient and efficient.
- 7. Inadequate storage facility-Storage facilities in the rural areas are either not available or inadequate. Under such conditions the farmers are compelled to sell their produce immediately after the harvest at the prevailing market prices which are bound to be low. Such distress sales lead to their legitimate income.
- 8. Lack of cheap and efficient means of transportation lack of cheap and efficient means of transportation is major problem yet faced by the farmers in India. Even at present situations lakhs of villages which are not well connected with main roads or with market centers. Most of the roads in rural areas are bullock- cart roads and become useless in the

rainy season. Under these circumstances the farmers cannot carry their produce to the main market and are forced to sell it in the local market at low price.

## 9. Problem of agricultural marketing-

Agricultural marketing is in bad condition in rural India. In the absence of marketing facilities, the farmers have to depend upon local traders and middlemen for the selling of their farm produce which is sold at low prices. In most of the cases these farmers are forced under socio-economic conditions to sale of their produce. In the small villages farmers sell their produce to the money lender from whom they usually borrow money. So the availability of market and exploitation by middlemen is also major problem faced by the farmers.

- 10. Instability in agriculture- there is instability in agriculture due to natural hazards. In India draught, unseasonal rain, crop diseases lead to instability in agriculture. Instability in agriculture leads to instability in agricultural income.
- 11. Scarcity of capital- like industrial sector agriculture sector also requires the capital. For the purpose of agricultural development capital is essential thing. This capital is invested by farmers for development of irrigation facility, purchase of agricultural equipments, construction of well, tube well etc. generally farmers raise their capital from money lender. Money lenders charge high interest on capital. Now a day's banks are issuing loan to the farmers but they are unknown about that and they have lack of knowledge.
- **12. Cropping pattern-** changing cropping pattern is also one of the problem faced by the farmers. After a periodic interval cropping pattern are changed. So the farmers have lack of knowledge of different cropping pattern so they suffer loss.
- 13. Cost and availability of agriculture labour now a day's educated people are not ready to work in farm. So, the agriculture sector facing the problem of availability of labour. Due to shortage of labour cost of labour is also

increasing year by year. Generally family member of farmer is also considered as labour but they are actually been not working in farm. This one is wastage of labour.

## C) Strategies For Agricultural Development-

### 1. Consolidation of Land Holdings:

Small and fragmented land holding is major problem faced by the farmers in India. Average size of land holding is decreasing year by year. Marginal farmers are more in India. They hold more operational land. Small and fragmented land holding is not profitable for farmer because of many of the area used for construction of house and cultivating small land holding is not possible for farmers due to cost of cultivation. If this land is cultivated and due to natural hazard farmer suffers the loss then the farmer is not ready to take crop in next session due to loss and non availability of capital. To solve this problem consolidation of land holdings is better solution. At village level farmer can come together and do the farming activity collectively and whatever profit or loss may suffer from agriculture may be distributed among the all farmers.

## 2. Improved Variety of Seeds

Use of improved variety of seeds is best strategy for increasing the yield from the crop. But the availability of improved variety of seeds is very costly for small and medium farmers so, government should make the provision of availability improved variety of seeds to farmer and that is at low cost. Generally farmers use previous year's seeds for next year's crop which was not improved variety seeds, that seeds have less productivity as compared to improved variety seeds. So use of improved variety of seeds is essential for agricultural development.

## 3. Greater Intensity of Cropping:

The new agricultural strategy is not only related with increasing yield but also with increasing intensity of cropping. Therefore, crop rotations have been made possible by developing short duration varieties of crops which are suited to different agro-climatic conditions. Grater cropping intensity is also one of best strategy for agricultural development.

### 4. Extension of Irrigation:

Irrigation is the sole of agriculture. Production of agriculture is depending on the availability of water. For the agriculture availability of adequate water is essential. So there is necessity to provide adequate water supply in draught prone area by the various schemes such as Magal Tyala Shet Tale, loan for construction of wells and tube wells etc.

### 5. Modern Farm Machinery

Use of modern equipment for agriculture is essential for agricultural development. Use of modern machinery like tractors, pumping sets, harvesters, tube-well, any other modern is essential for agricultural equipment development. Traditionally bullocks are used for farming instead of that use of tractors is essential for improving quality of soil and that also increased production.

#### 6. Role of Public Institutions:

Role of public institutions is very important for agricultural development. public institutions like National Seeds Corporation, Agro Industries Corporations, National Co-operative Development Corporation etc. have been set up to promote services to the cultivators at door steps. Such type of institute provides the loan to farmers for adoption of modern technology.

#### 7. Guaranteed Minimum Prices:

Guaranteed minimum support prices are essential for agricultural development. In order to advice the government for suitable price policies for agriculture, agricultural price commission was set up. Like that Food Corporation of India was also established to purchase the food grains. But minimum support prices are not declared for all crops. So it was essential to declare minimum support price for all the crops as per area of crop because cropping pattern is different in different area.

#### 8. Agricultural Research and Education:

For the development of agricultural research is essential. Real situation of agriculture is only studied by way of research. In India agricultural universities have been set up in the most of states but now a day's also in some of the states there is no agricultural universities. So establishment of agricultural universities and colleges and doing research are essential for agricultural development.

#### 10. Plant Protection Measures:

Protection of plant from pests and diseases is required for agricultural development. Pests and diseases have been causing severe damage to crops. Plant protection has been considered another major component of new agricultural strategy. Plant protection measures include seeds treatment, intensive aerial and ground spraying against insects, weed control and rodent control. By protecting plant agricultural development is also possible.

### 11. Availability of transport facility-

In rural area there is a problem of transportation. In rainy season rural farmers facing the problem of transportation due to bullock- cart roads. Even in present situation villages are not connected with main roads or with market centers so they are unable to sale their goods in market and it was sold in local places at low prices. So availability of transportation facility is essential for agricultural development.

### 12. Availability of storage facility-

Availability of storage facility is essential for agricultural development. In many of the situations farmer are forced to sale there goods at prevailing market price and farmers has no option instead of selling. So to receive better market price it was essential to have storage facility at market yard or at village level to take the advantages of better market price.

## 13. Agricultural loan facility-

Agricultural sector also require capital. Some of the banks provide loan for agriculture but they charge high interest. Now a day's also some of the farmer unaware about the agricultural loan facility so it was essential to make awareness among the farmers. And it was also essential to make compulsion to rural bank to provide certain percentage of fund as an agricultural loan.

## 14. Awareness among educated people about the agriculture-

Awareness among educated people about agriculture as profession is essential. Most of the educated people shy to do the agricultural activity. Educated people can do the well agricultural activity. They can better use the modern equipments and technology for agricultural development. So to make awareness among educated people is require for agricultural development.

## 10. Findings-

- 1. It was found that share of agriculture is steadily declining year by year. In the year 1960-61 the share of agriculture in GDP was 47.6%, in the year 1970-71 41.7%, in 1980-81 35.7%, in1990-91 29.5%, in 2000-01 22.3%, in 2010-11 14.4%.
- 2. It was found that average land holding in India decreasing year by year. The average size of land holding has been continuously decreasing on account of increasing number of land holders From an average of 2.28 hectares in 1970-71, it went down to 1.15 hectares in 2010-11.
- 3. It was found that large (67.10%) portion of the land is hold by the marginal farmers.
- 4. It was found that Indian agriculture facing so many problems like Small and fragmented land holding, Availability of Seeds, Problem of irrigation, Manures, Biocides and Fertilizer, Soil Erosion, Lack of mechanization, Inadequate storage facility, Lack of cheap and efficient means of transportation, Problem of agricultural marketing, Instability in agriculture, Scarcity of capital, Cropping pattern, Cost and availability of agriculture labour etc.

#### 11. Suggestions-

- 1. Use modern equipments, machinery and improved verity seeds in agriculture to increase yield per hector.
- 2. Training programme should be introduced to farmers for the use of modern equipments and technology in farming.
- 3. Agriculture sector facing the problem of irrigation, so government should make the provision of irrigation by subsidies under different schemes like farm ponds, well, tube well to the needy farmers.
- 4. Marginal and small farmers are more in India. Agriculture activity is not profitable for marginal and small farmers so it was suggested to do Consolidation of Land Holdings at village level and do the farming activity.
- 5. Improve the cropping intensity. Crop rotations have been made possible by developing short duration varieties of crops which are suited to different agro-climatic conditions. Grater cropping intensity is also one of best strategy for agricultural development.
- It was suggested to declare minimum support price to all principal crops and as per area of crop because cropping pattern is different in different area.
- 7. Use of Manures, Biocides and Fertilizer is essential for agricultural development but the cost of manures, biocides and fertilizer is very high so it was not possible to marginal and small farmer to use it so it was suggested that the government make intervention in prices of such manures, biocides and fertilizer and minimize the prices and charge less tax on it so it was become possible to farmers to use it for agriculture.
- 8. It was suggested to make awareness among educated people about agriculture as new profession because educated peoples are not ready to work as a farmer.
- 9. It was suggested to take plant protection measures. Protection of plant from pests and diseases is required for agricultural development.

10. In rural area there is a problem of transportation. In rainy season rural farmers facing the problem of transportation due to bullock- cart roads so it was suggested to government to construct the roads in rural areas.

#### 12. Conclusion-

Agriculture is the backbone of Indian economy. More than 2/3 workforce of the country engaged in agricultural activities. Agriculture sector contribute large share of the countries national income though the share of agriculture sector was steadily declining. In the year 1960-61 the share of agriculture in GDP was 47.6%, in the year 1970-71 41.7%, in 1980-81 35.7%, in1990-91 29.5%, in 2000-01 22.3% and in 2010-11 14.4%.

The average land holding in India is decreasing year by year. The average size of land holding has been continuously decreasing on account of increasing number of land holders From an average of 2.28 hectares in 1970-71, it went down to 1.15 hectares in 2010-11. Large (67.10%) portion of the land is hold by the marginal farmers. Indian farmers facing so many problems like Small and fragmented land holding, Availability of Seeds, Problem of irrigation, Manures, Biocides and Fertilizer, Soil Erosion, Lack of mechanization, Inadequate storage facility, Lack of cheap and efficient means of transportation, Problem of agricultural marketing, Instability in agriculture, Scarcity of capital, Cropping pattern, Cost and availability of agriculture labour etc. to solve this problem researcher has conducted study on strategies for agricultural development. These strategies are Consolidation of Land Holdings, Improved Variety of Seeds, Greater Intensity of Cropping, Extension of Irrigation, Modern Farm Machinery, Guaranteed Minimum Prices, Agricultural Research and Education, Plant Protection Measures, Availability of transport facility, Availability of storage facility, Agricultural loan facility, Awareness among educated people about the agriculture etc. for the development of agriculture it was necessary to implement new strategies.

## CONTEMPORARY RESEARCH IN INDIA (ISSN 2231-2137): SPECIAL ISSUE: MAY, 2021

#### 13. References-

#### Books-

- 1. R. K. Lekhi & Joginder Singh (2013), Agricultural Economics- an Indian Perspective, 9<sup>th</sup> Edition, Kalyani Publishers, New Delhi.110002.
- 2. V. K. Puri and S. K. Misra (2008), Indian Economy, Himalaya publishing house 33<sup>rd</sup> revised edition.

### Research Articles/ Papers-

- 1. Bethu Sudhakar (2016) Sustainable Agriculture Development In India: Issues & Challenges, Paper Published In Paripex Indian Journal of Research ISSN 2250-1991 Volume: 5 Issue: 7 PP- 293-295.
- 2. Sharma (2011) India's Agricultural Development under the New Economic Regime: Policy Perspective and Strategy For the 12th Five Year Plan Published by Indian Institute of Management Ahmedabad-380 015 India, W.P. No. 2011-11-01 PP- 1-49.
- 3. Behera (2015) Agricultural Development and Inclusive Growth in India: A Case Study of Gujarat, International Journal of Food, Agriculture and Veterinary Sciences ISSN: 2277-209 x (Online) 2015 Vol. 5 (1) January-April, PP. 41-52/Behera.

#### Websites-

- 1. www.translate.com
- 2. www.newagepublishers.com
- 3. www.yourarticlelibrary.com
- 4. http://statisticstimes.com
- 5. http://www.yourarticlelibrary.com