Status of Agricultural Development in Gujarat and India Since 2000

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Status of Agricultural Development in Gujarat and India Since 2000

DEEPAK KUMAR BEHERA*

Abstract

This paper analyses the status of agricultural development in terms of growth rate of output and performance of various food & non-food crops from the year 2001-02 to 2010-11. Its primary interest is to compare the agricultural scenario of both Gujarat and India since 2000 because it has been asserted miracle performance of agriculture in Gujarat. There have been a structural shift of crops pattern form traditional to modern crops and production of cotton, rabi wheat, groundnut (commercial crops); fruits, vegetable and milk (high value products) grown rapidly. These crops performance has always better than India during the period but the fluctuation of state domestic product in agriculture is more in Gujarat as compared to India. The agricultural schemes that have been initiated in both Gujarat and India are based on same goals but it has proved to be beneficial in the case of Gujarat agriculture. This study has based on secondary source of information obtained from various governmental publications and existing literature.

Keywords: Agricultural Growth, Gujarat, Crop, Production and Schemes

1. Introduction

Agriculture development is an important component of inclusive growth approach which was the main aim of 11th five year plan and also continuing in the 12th five year plan. The Plan had targeted 4 percent growth in agriculture as one of major challenges out of the 27 monitorable targets relevant for inclusiveness but which had been missed in the Eleventh Plan, must be achieved in the Twelfth Plan as it is critical for inclusive growth. The growth of agriculture and allied sectors is still a critical factor in the overall growth performance of the Gujarat economy. In 2011-12(Q), it accounted for 11.3 percent of the state domestic product compared to 11.4 percent in 2010-11(Socio Economic Survey of Gujarat, 2012). As compared to Gujarat the growth of agriculture and allied activities in India continues to be a critical factor in overall performance of Indian economy whose share in GDP was at 14.1 percent in 2011-12 while the growth in GDP was 3.6 percent during the same year (Economic Survey, 2012).

In the present day in India there are three problems in the agriculture and allied sector such as reducing real agricultural GDP and land productivity, food insecurity and rising food inflation. These problems can solve by the accelerating growth of the agriculture through technical changes in agricultural policy such as continuous location specific generation and transfer of land augmenting and labour using technical change, generating mass professional human resources, increasing public expenditure, revamp the pricing system of farm input and reorient the existing model and organization (Desai et al., 2011). Chand (2010) explained that achieving 4 percent growth rate in agriculture, there is necessary to using more fertilizer, technology, more area under fruits and vegetable, public and private investment and terms of trade in agriculture.

Dholakia (2002) examines that during the period 1980 to 2001, economic reforms and development strategy of India as well as Gujarat has more emphasized to open their economy and higher priority given to industrial activities and private players and less importance to primary sector and service sector. Bagchi et al. (2005) explained that during the period 1970-2000, agriculture was stagnant and other sector grew very well. Dikit (2009) explains that agriculture is playing a major role of Gujarat’s high growth story. Shah et al. and Gulati et al. (2009) represent that the Gujarat has high and steady growth since 2000 and this growth has driven by endogenous factors and role of government. These endogenous factors are market access, agricultural research and extension, infrastructural development in terms of power and road and irrigation including ground water irrigation, canal irrigation. The sources of growth are wheat production, Bt cotton expansion, high value product including livestock, fruits and vegetables etc. Shah at al. (2009) represented the region wise analysis of growth pattern of agriculture performance after 2000 has driven by massive expansion in Rabi wheat cultivation and rapid expansion in Bt cotton area and yield.

In this above background the specific objective is to analyse the pattern of agricultural development in both Gujarat and India from the period 2001-02 to 2010-12. The study has used secondary source of information for the analysis of agricultural situation of Gujarat and India since 2000. The data has been obtained from Socio-Economic Review of Gujarat State, Economic Survey of Government

of India, Agricultural statistics report from the ministry of agriculture of Gujarat and India as well. The analysis has been conducted for the production, productivity and areas of various crops i.e. cereals, pulses, total food grains, wheat, oilseeds, cotton and groundnut; and high value crops i.e. fruit, vegetable, milk, egg, fish and wool etc during the period.

This paper has been divided into five sections, section 1 provides the introduction. Section 2 recapitulated some of the important features of agricultural development record i.e. the growth rate of agriculture and allied sector in Gujarat and India in term of production, productivity and area coverage of various food and non-food crops. Sections 3 and 4 have discussed the recent policy initiatives of the government in the perspective of agricultural development and inclusive growth. Concluding observations are made in the last section.

2. Agricultural Development of Gujarat Since 2000

Agriculture is a state subject and its development and achievement is based on the respective state Government. In Gujarat, the agriculture growth has been rapidly increasing than India as a whole since 2000’s. Agricultural development means all the components of agriculture and allied activities such as food crops, non-food crop, horticulture and animal husbandry etc. The production, area and productivity of these components of agriculture sector are increasing during the period. The table 2.1 data shows that from the period 2001-02 the growth of agriculture has achieved miracle performance. This achievement in agriculture growth has been influenced by some exogenous and endogenous factors which have promoted faster and more inclusive growth in agriculture. The exogenous factors is common to everyone in India which are good monsoon or good rainfall, high MSP of wheat, cotton and other crops. The endogenous factors are the role of Government’s innovative agricultural planning strategy. The major driving policies of Gujarat agriculture are improved farmers market access through the Agricultural Produce Marketing Committee (APMC) Act, Promote diversification to high value crops, especially fruits and vegetables through offering capital subsidy directly to the farmers; Research and extension support through its annual Krishi Mahotsav campaign, Farm credit through agricultural loan payment of Government; Management of large canal irrigation project like Sardar Sarover Project on Narmada which irrigated mostly the districts of South and North Gujarat; Management of ground water irrigation, rain water harvesting schemes and micro-irrigation technologies especially best irrigated in Saurashtra and kachchha region and North Gujarat; Providing 24/7 power supply to farmers through Jyotigram Yojana and better road connectivity both rural and urban Gujarat (Shah et al.; Gulati et al.,2009 and Socio-Economic Review of Gujarat).

2.1 Agricultural Growth of Gujarat and India since 2000

In the year 2001-02, the annual growth rate of Gujarat agricultural was highest at 34.99 percent where as India the growth was just 6.25 percent. In the same way in the year 2003-04 the agriculture growth were 44.43 percent of Gujarat and 9.96 percent of India respectively.

<table>
<thead>
<tr>
<th>Year</th>
<th>Agricultural Production (Rs. crore) GSDP of Gujarat</th>
<th>Agricultural Growth (Annual Growht in %) Gujarat</th>
<th>GDP of India</th>
<th>Agricultural Growth (Annual Growht in %) Gujarat</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001-02</td>
<td>21720</td>
<td>34.99</td>
<td>554114</td>
<td>6.25</td>
</tr>
<tr>
<td>2002-03</td>
<td>19964</td>
<td>– 8.08</td>
<td>513973</td>
<td>– 7.24</td>
</tr>
<tr>
<td>2003-04</td>
<td>28834</td>
<td>44.43</td>
<td>565152</td>
<td>9.96</td>
</tr>
<tr>
<td>2004-05</td>
<td>26746</td>
<td>– 7.24</td>
<td>565426</td>
<td>0.05</td>
</tr>
<tr>
<td>2005-06</td>
<td>33982</td>
<td>27.05</td>
<td>594487</td>
<td>5.14</td>
</tr>
<tr>
<td>2006-07</td>
<td>33616</td>
<td>–1.08</td>
<td>619190</td>
<td>4.16</td>
</tr>
<tr>
<td>2007-08</td>
<td>37155</td>
<td>10.53</td>
<td>655080</td>
<td>5.80</td>
</tr>
<tr>
<td>2008-09</td>
<td>33920</td>
<td>–8.71</td>
<td>654118</td>
<td>–0.15</td>
</tr>
<tr>
<td>2009-10</td>
<td>33544</td>
<td>0.30</td>
<td>656975</td>
<td>0.44</td>
</tr>
<tr>
<td>2010-11</td>
<td>41979</td>
<td>17.10</td>
<td>700390</td>
<td>6.61</td>
</tr>
<tr>
<td>2001-02 to 2010-2011 (Annual Average Growth)</td>
<td></td>
<td>10.92</td>
<td></td>
<td>3.10</td>
</tr>
</tbody>
</table>

Source : Various Year Socio-Economic Reviews of Gujarat, Department of Economics and Statistics, Gandhinagar; Economic Survey 2011-12, Govt. of India.
The growth rate Gujarat’s agriculture during the period 2001-02 to 2010-11 was 10.92 percent which three time of the growth rate of India’s agriculture (See Table 2.1).

2.2 Production of Various Crops of Gujarat and India

The data on annual average growth rate of production of crops for the decade 2001-02 to 2010-11 is presented in figure 2.2. In Gujarat all food crop production i.e. total cereals, Wheat, total pulses and non-food crop i.e. total oilseeds, cotton, groundnut and tobacco etc have rapidly increased in the period 2001-02 to 2010-11. As compared to Gujarat, the performance of India is very less or marginal. The total food grains production was 17.90 percent in Gujarat where as in India the total food grains production was only 1.34 percent. Gujarat is basically highest producing in groundnut, tobacco as compared to India since the period 2000. The groundnut has recorded the most impressive upsurge in average growth production which has reached at 224.85 percent where as in India the figure archived very low growth rate of 0.72 percent. Average growth rate of cotton, an important non-food crop, that performance is better in both Gujarat and India due to the introduction of Bt. Cotton (See Figure 2.2).

2.3 Productivity of Various Crops of Gujarat and India

Data on changes in the yield per hectare called as productivity in the ten years period are provided in the figure 2.3. During the 10 year period (2001-10) cotton had achieved peak average productivity in both Gujarat and India. The productivity oilseeds is equal both Gujarat and India after 2000’s.

2.4 Area coverage of Various Crops of Gujarat and India

During the period 2001-02 to 2010-11, the growth rate of area of cultivation of cereals, pulses, food grains, wheat, oilseeds, and tobacco has increased highly in Gujarat as compared to India. But the crops like total food grains and groundnut are in negative figure; also total pulses, total oilseeds are also lower area growth than India level (See Figure 2.4). Oilseeds have reduced due to the reduction of crops like castor, sesameum and rapeseed and mustard. The average area under cotton, a major cash crop of Gujarat, has fluctuated over the decades. However, the introduction of Bt. Cotton has led to a significant rise in its area from 15.93 percent in 2000-03 to 20.54 percent in 2005-08. Also it is because the Gujarat farmers have shifted their crop pattern in favour of horticulture crops and non-food commercial crops (Pathak and Shah, 2010).

Figure No. 2.1—Production, Yield & Area of Various Crops in Gujarat (1991-92 to 2001-02)

Source: Same as Figure 2.2
Figure No. 2.2—Growth Rate of Production of Various Crops (2001-02 to 2010-11) (Percent)

Source: Directorate of Agriculture, Government of Gujarat, Gandhinagar; Agricultural Statistics Report of Ministry of Agriculture, Govt. of India.

Figure 2.3—Growth Rate of Productivity of Various Crops (2001-02 to 2010-11) (percent)

Source: Same as Figure 2.2

Figure 2.4—Growth Rate of Area Coverage of Various Crops (2001-02 to 2010-11) (percent)

Source: Same as Figure 2.4

Agricultural Situation in India
2.5 Production of High Value Crops in Gujarat and India

Diversification of the agricultural production in terms of high value products such as livestock and horticulture is considered a way to enhance agricultural growth and reduce poverty (Birthal et al. 2012). Livestock is expected to play an important role in supplementing the limited income and employment opportunities in crop production sub sector of agriculture, particularly for the small and marginal farmers and land less agriculture labourers. Also the growing horticulture crops is now an ideal option to improve livelihood security, enhance employment generation, attain food and nutritional security, and increase income through value addition (Economic Survey, 2012).

2.5.1 Production of Fruits and Vegetables

The figure 2.5 and 2.6 have compared the production of horticulture i.e. fruits and vegetables between Gujarat and India. It has found that the production has increased rapidly since 2001-02. In 1990-91 the horticulture production in Gujarat was 37.72 lakh million tones but in 2012-13 has reached to 198.16 lakh million tones which have facilitated through the rapid production of both vegetables & fruits. In the same way India has also achieved success in the production of fruits & vegetables. So it enables to say that both Gujarat and Indian agriculture are going through the right direction from traditional crops pattern to diversified high value crops.

**Figure 2.5—Production of Fruits and Vegetables in Gujarat (Lakh Million tones)**

Source: Directorate of Horticulture, Gujarat State, Gandhinagar

**Figure 2.6—Productions of Fruits and Vegetables in India**

2.5.2 Production of Livestock

The table no. 2.2 and 2.3 and figure 2.7 have presented the production of major livestock products viz. milk, eggs, wool and meat in both Gujarat and India from 2000-01 to 2011-12.

**TABLE 2.2: PRODUCTION OF MAJOR LIVESTOCK PRODUCTS IN GUJARAT**

<table>
<thead>
<tr>
<th>Year</th>
<th>Milk (Million Tonnes)</th>
<th>Eggs (Lakh eggs)</th>
<th>Wool (Lakh Kg.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-01</td>
<td>53.17</td>
<td>3460</td>
<td>27.4</td>
</tr>
<tr>
<td>2005-06</td>
<td>69.6</td>
<td>5775</td>
<td>31.23</td>
</tr>
<tr>
<td>2006-07</td>
<td>75.33</td>
<td>7757</td>
<td>29.62</td>
</tr>
<tr>
<td>2007-08</td>
<td>79.12</td>
<td>8256</td>
<td>29.96</td>
</tr>
<tr>
<td>2008-09</td>
<td>83.87</td>
<td>12675</td>
<td>28.54</td>
</tr>
<tr>
<td>2009-10</td>
<td>88.43</td>
<td>12762</td>
<td>29.19</td>
</tr>
<tr>
<td>2010-11</td>
<td>93.21</td>
<td>13269</td>
<td>29.18</td>
</tr>
<tr>
<td>2011-12</td>
<td>98.17</td>
<td>14269</td>
<td>28.19</td>
</tr>
</tbody>
</table>


**TABLE 2.3: PRODUCTION OF MAJOR LIVESTOCK PRODUCTS IN INDIA**

<table>
<thead>
<tr>
<th>Year</th>
<th>Milk (Million Tonnes)</th>
<th>Eggs (Lakh nos.)</th>
<th>Fish (Thousand Tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-01</td>
<td>80.6</td>
<td>36632</td>
<td>5656</td>
</tr>
<tr>
<td>2005-06</td>
<td>97.1</td>
<td>46235</td>
<td>6572</td>
</tr>
<tr>
<td>2006-07</td>
<td>102.6</td>
<td>50663</td>
<td>6869</td>
</tr>
<tr>
<td>2007-08</td>
<td>107.9</td>
<td>53583</td>
<td>7127</td>
</tr>
<tr>
<td>2008-09</td>
<td>112.2</td>
<td>55562</td>
<td>7620</td>
</tr>
<tr>
<td>2009-10</td>
<td>116.4</td>
<td>60267</td>
<td>7914</td>
</tr>
<tr>
<td>2010-11</td>
<td>121.8</td>
<td>63024</td>
<td>8400</td>
</tr>
<tr>
<td>2011-12</td>
<td>127.9</td>
<td>66450</td>
<td>8700</td>
</tr>
</tbody>
</table>

*Source: Same as Figure 2.6*

**Figure 2.7: Productions of Milk of Gujarat and India**

Source: Based on Table No. 2.2 and 2.3.

India is the largest milk producer country among the world while Gujarat state has remarkable 5th rank with about 8 percent contribution in total milk production in all over the country in the year 2009-10 (28th livestock Survey report, Gujarat).

In the year 2011-12, the estimated milk production was 98.17 million tones which were only 53.17 million tons in 2000-01. Where as in India, the estimated milk production in 2011-12 was 127.9 million tones and 2000-01 it was only 80.6 million tones. The total egg production (Both Deshi and Improved poultry) in Gujarat state during 2011-12 is estimated as 14269 lakh eggs, showing an increase of 7.53 percent over the previous year’s production of 13269 lakh eggs. In India, during 2011-12 it is estimated as 66450 million eggs, showing an increase of 5.43 percent over the year’s production of 63.024 million eggs. In Gujarat the wool production for the year 2011-12 is estimated to 28.19 lakh Kg as compared to 27.01 lakh kg in the year 2000-01. Fish production is estimated as 8700 thousand tones in 2011-12 in India which is 53.81 percent increase from the 2000-01 to 2011-12 (See Table 2.2, 2.3 and Figure 2.7).

3. Major Policy and Programmes in the Agricultural Development of Gujarat

Gujarat has proved to be successful in implementing some of these policies and make agriculture growth miracle after 2000. The major policy and programme of vibrant Gujarat are Krishi Mahostav campaign for research and
extension support, Soil health card faculties for soil conservation, Jyotigram Yojana to provide 24/7 electricity, Sarda Sarvor Project for the construction of major and medium canal irrigation, Sujalam Suflam Yojana for interlinking rivers, Management of ground water irrigation under Sardar Patel Sahakari Jal Sanchaya Yojana etc. Other Policies include programme for horticulture development through Gujarat Horticulture mission, improved market access through Agricultural produce marketing committee etc. These policy performances are making Gujarat successful in agriculture and role model for the other states.

3.1 Irrigation Development Programme

Irrigation infrastructure is the most important factor in increasing agriculture production. The Government of Gujarat has established water resources development department which is estimating the irrigation potential and utilization of surface and ground water sources. The sources of irrigation from Surface water are major & medium irrigation canals, under Sujalam Suphalam Yojana, Minor irrigation schemes and indirect benefits through percolation tanks, check dams etc under the Sardar Sarovar project Yojana. The sources of ground water are government tube wells, tanks and other sources including khet talavadi, Boribandh and Checkdam etc. Surface water irrigation potential is 31.31 lakh hectares and maximum utilization is 23.20 lakh hectares; the ground water irrigation potential and maximum utilization are 0.87 lakh hectares and 1.20 lakh hectare respectively till 2011 (Socio-Economic Review, 2011).

3.2 Rural Electrification Programme

Gujarat’s agriculture growth miracle has been driven by improved rural power supply under the Jyotigram Scheme. Before this scheme, the mechanism was in bankrupt due to uncontrolled power subsidies to the farmers. To control power subsidies and overcome the debt problem of Gujarat Electricity Board, the Government started initiatives including reduced hours of three phase power connection used by the tube-well owners, providing 24 hours single or double phase power supply for domestic users and provide only single phase connection to the farmer who are using heavy motor-pumps. This decision of Gujarat Electricity Board had turned agriculture and farmer as the main looser customers.

In 2003, the Government of Gujarat implemented the Jyotigram Scheme or known as ‘Lighted Village Scheme’ through the cooperation of International Water Management institute (IWMI) and its main aim was to provide 24*7 three phase full power supply. But the implementation of this goal was depended on effective rationing system and imposed on those who are using illegal power consumption. Now this scheme is providing three phases full voltage power supply for agriculture and farmers among 18000 odd villages across Gujarat at the consistent time and scheduled (Gulati et al, 2009).

3.3 Krushi Mahostav Campaign Programme

It is a flagship programme which was started in 2005 in Gujarat. Krushi Mahostav is a programme of creating awareness among farmers through providing information on farming. The main objective is expansion of research, extension and technical support to the farmers and is called lab to land programme that gives knowledge to the farmers. In this programme large number of agriculture officers, researchers and scientists are engaged and they visit every village in the districts of Gujarat with ‘Krushi Rath’. It provides information on soil conservation though soil health card scheme. Water conservation through community based irrigation which is called as water harvesting, Organic farming etc (Socio-economic review of Gujarat and Department of Agriculture).

3.4 National Horticulture Mission

Gujarat is occupying 4th, 6th and 3rd places in India in production of fruits, Vegetables and spices respectively. In other wards horticulture crops are high value crops and demand of these crops is now increasing in the world market. This type of crop plantation will bring inclusive agriculture development. So the Government of Gujarat has implemented Nation Horticulture Mission from the year 2005-06 with a view to double the horticulture production and income of the rural poor (Socio-Economic Review of Gujarat).

Various programmes by the state Government are going on to boost the horticulture. The programme for horticulture development are Gujarat Horticulture Mission, Women Empowerment, upliftment of poor farmers, Input Subsidy for Horticulture, Establishment and strengthening nursery, Extension Activity, Exhibition and Competition of Horticulture crops and Financial Assistance etc (Report on horticulture in Gujarat, 2009). These programmes help to reduce rural poverty by increasing and also stabilize farmer’s income and bring inclusive agriculture development in Gujarat. The research and development work of horticulture crops are conducted in four agriculture universities situated at Anand, Junagadh, Dantivada and Navasari that have aim to solve farmers problem in the field of horticulture.

3.5 Improved Agricultural Marketing

The agricultural marketing is important component for inclusive agriculture development to deliver agricultural products directly from the farmers to the consumers. India agricultural marketing is being promoted through Agricultural Price Monitoring Committee (APMC Act). Gujarat is one of the leading states that have implemented this APMC Act since 2003 (Economic survey of India, 2012). There are different stages of reforms have been taking place in the APMC Act through Direct marketing, Contract farming and markets in private or cooperative sectors since 2007 in Gujarat (Gulati et al, 2009). These
reforms are helping farmers to directly sell their produce to wholesalers and exporters with a good profit margin and the government of Gujarat has also encouraged policies to promote sale of diversified high value crops (Shah et al, 2009).

4. Major Policy and Programmes in the Agricultural Development of India

The major schemes and programmes which have been implemented recently by the central government to boost the agricultural growth in the rural areas are discussed in below. All discussion relating to agricultural policies and programme has obtained from the economic survey of government of India.

4.1 National Mission for Sustainable Agriculture

The national mission for sustainable agriculture is one of the eight missions under the Nation Action Plan on Climate Change (NAPCC). It seeks to address issues regarding ‘sustainable agriculture’ in the context of risks associated with climate change by devising appropriate adaption and mitigation strategies for ensuring food security, enhancing livelihood opportunities and contributing to economic stability at national level. The mission promotes dry land agriculture; mission would expand its coverage to rain fed areas for integrating farming systems with live stock and fisheries, so that agriculture continues to grow in a sustainable manner.

4.2 Macro Management of Agriculture

The Macro Management of Agriculture (MMA) scheme is initiated for agricultural production, productivity and it provides opportunities relating to crop production and natural resources management. The MMA scheme has formula based allocation criteria and provides assistance in the form of grants to the states/UTs (Union Territories) on 90:10 basis except in case of the north-eastern states and Union Territories where the central share is 100 per cent. MMA assistance during 2010-11 has been used to treat 3.02 lakh hectare of land under the National Watershed Development Project for Rainfed Areas (NWDPRA) and 1.94 lakh hectare under River Valley Projects (RVP).

4.3 National Food Security Mission

The NFSM was launched in 2007-08 with a view to enhancing the production of rice, wheat, and pulses by 10 million tons, 8 million tons, and 2 million tons respectively by the end of the Eleventh Plan. The Mission aims to increase production through area expansion and productivity; create employment opportunities; and enhance the farm-level economy to restore confidence of farmers. The NFSM is presently being implemented in 476 identified districts of 17 States of the country.

4.4 The Rashtriya Krishi Vikash Yojana (RKVY)

The RKVY was launched in 2007-08 with an outlay of Rs.25,000 crores for the Eleventh Plan to incentivize states to enhance public investment so as to achieve a 4 percent growth rate in agriculture and allied sectors during the Plan. During the three year period 2007-10, an amount of Rs. 7895.12 crores was released under the RKVY. Out of the budget provision of Rs. 6722 crore for implementation of the RKVY in the states, an amount of Rs. 3986.76 crore has been released as on 25 November 2010.

Specific allocation has to be made for the following three new initiatives introduced under the in 2010 -11. First, Rashtriya Krishi Vikash Yojana Extended the Green Revolution to the eastern region of the country, covering the States of Assam, Bihar, Chhattisgarh, Jharkhand, Orissa, eastern UP, and West Bengal, with the objective of increasing the crop productivity of the region by intensive cultivation through recommended agricultural technologies and package of practices. Second, special initiatives for pulses and oilseeds in dry-land areas by organizing 60,000 pulses and oilseeds villages in identified watersheds where pulse and oilseed farmers are provided farm machinery and equipment on custom hiring basis. These initiatives dovetail with other schemes of the Government of India having components for promotion of oilseeds and pulses production. Third, implementation of the National Mission on Saffron for Economic Revival of Jammu & Kashmir Saffron Sector during 2010-11.

4.5 The Integrated Scheme of Oilseeds, Pulses, Oil Palm and Maize (IPOPM)

The ISOPM is being implemented in 14 major states for oilseeds and pulses, 15 for maize, and 10 for oil palm. The pulses component has been merged with the NFSM with effect from 1 April 2010. The Scheme provides flexibility to the States in implementation based on a regionally differentiated approach to promoting crop diversification. Under the Scheme, assistance is provided for purchase of breeder seed, production of foundation seed, production and distribution of certified seed, distribution of seed minikits, plant protection chemicals, and plant protection equipment. The Oil Palm Development Programme under the ISOPOM is being implemented in the States of Andhra Pradesh, Karnataka, Tamil Nadu, Gujarat, Goa, Orissa, Kerala, Tripura, Assam, and Mizoram. Its Maize Development Programme is under implementation in 15 States, viz. Andhra Pradesh, Bihar, Chhattisgarh, Himachal Pradesh, Jammu and Kashmir, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, and West Bengal.

From the above analysis, there has lot of new scheme and programme built for the solution of agricultural deficit and achieves four percent GDP growth in agriculture. But the performance of this new programme is not so good
which is known by the current agriculture production and productivity. For the better implementation and ensured optimum results from the ongoing agriculture and allied sector programme, there should be better implementation of public private partnership programme and further effective coordination and monitoring is required in the agriculture and allied programme.

5. Conclusion

The analysis of the status agricultural development from the year 2001-02 to 2010-11, the study has found some positive result in agricultural growth of output in Gujarat. It has achieved high level of production and productivity in the various crops i.e. wheat, total pulses, total food grains, total oilseeds, groundnut and tobacco which are very much higher than India's performance. In terms of high value crops i.e. production of fruits, vegetables and milk both India and Gujarat has facilitated diversification in order to give backup to the farmers at the time of lean season or crop failure for supplementing their incomes. Though the performance of both crop and non-crops have increased rapidly than India and this will increase income of the rural people and massive expansion of area and production of livestock product and horticulture product brings inclusive growth in agriculture.

This type of achievement in crops production (food and non-food crops) have facilitated by the innovating agricultural and rural development policies and programmes of the both state and central government. Gujarat has been successfully implementing all the policies relating to irrigation, rural electrification (Jyotigram Scheme), farmer awareness (Krushi Mahostav research & extension programme) etc. The performance of the above schemes or programmes needs to further analysis across district wise and their impact on agricultural status of the concerned area or region. India has too executed some of the programmes in order to boost agricultural production and achieved targeted 4 percent growth rate. But the performance of this new programme is not so good which is known by the current agriculture production and productivity.

For the better implementation and ensured optimum results from the ongoing agriculture and allied sector programme, there should be better implementation of public private partnership programme and require proper communication channel among the various stakeholder as well as government department in both state as well as central level.

REFERENCES


LIST OF PUBLICATIONS

Journal

Agricultural Situation in India (Monthly)

Periodicals

Agricultural Prices in India

District-wise Area and Production of Principal Crops in India

Agricultural Wages in India

Cost of Cultivation of Principal Crops

Year Book of Agro-Economic Research Studies

Land Use Statistics at a Glance

Farm Harvest Prices in Principal Crops in India

Agricultural Statistics at a Glance

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