JHARKHAND : STATE PROFILE

A. INTRODUCTION

The State of Jharkhand was created on 15th November, 2000, the birth anniversary of the legendary Bhagwan Birsa Munda to ensure all round social and economic development of the area and especially of the people belonging to the Scheduled Tribes.

The State accounts for about 37% of the country’s mineral deposits and is the sole producer of coking coal, uranium and pyrite. Administratively, the State is divided into 24 districts with 35 sub-divisions, 260 blocks and 32615 villages. The State is comprised of 95 towns and 3 municipal corporations.

The State has a population of 329.66 million (Census 2011). About 76 % of the total population of the State resides in rural areas as against India’s total rural population of 69% as per 2011 census. Furthermore, 59% of the total workforce is dependent on agriculture. Since the tribal population constitutes a significant portion of State’s demography, agriculture and forestry is not only the source of livelihood for over 70 % of the State’s population but it is a way of life for these people.

The State has a geographical area of 79.70 lakhs ha. About 23.6 lakh ha. (29.61%) is covered under forest and 38 lakh ha. is the area of cultivable land in the State. The net irrigated area is about 28% of the net sown area. The total area occupied for plantation and horticulture crop in the state is about 2.57 lakh hectares.

Jharkhand has great possibilities in Agriculture, Horticulture and Animal Husbandry. The Planning Commission has fixed a target of 7.53% annual GDP growth rate during the 12th Five Year Plan for Jharkhand. Agriculture sector is required to grow at 6.3%.

The Gross State Domestic Product (GSDP) at factor cost by industry of origin (current prices) of Jharkhand increased from Rs. 35,030.04 crores in the year 2001-02 to Rs. 83,169.90 crores in 2010-11 showing an annual growth rate of 14.13 % between the years 2001-02 and 2006-07. Some of the economic indicators have been shown for the State of Jharkhand as below:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Indicator</th>
<th>Jharkhand</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GSDP Growth Rate</td>
<td>12.08</td>
<td>8.2</td>
</tr>
<tr>
<td>2</td>
<td>Irrigation Coverage</td>
<td>28.00 %</td>
<td>67 %</td>
</tr>
<tr>
<td>3</td>
<td>Cultivable Area to Total Area</td>
<td>47.67 %</td>
<td>47.47 %</td>
</tr>
<tr>
<td>4</td>
<td>Net Sown Area to Total Area</td>
<td>29.63%</td>
<td>46%</td>
</tr>
<tr>
<td>5</td>
<td>Per Capita/Day availability of Food Grains</td>
<td>546 gms.</td>
<td>550 gms.</td>
</tr>
<tr>
<td>6</td>
<td>Forest Coverage to Total Area</td>
<td>29.61 %</td>
<td>23.57 %</td>
</tr>
</tbody>
</table>

Source: DES & Economic Survey GoJ, 2011-12

B. AGRICULTURE

Agriculture growth has a strong bearing on the growth of other sectors of the economy and consequently, the SGDP of the State. The State agriculture economy is characterized by the existence of a large number of small and marginal farmers. Nearly 83% of operational holdings are below 2.0 hectare, with 0.69% of holdings above 10 hectares which covers 9% of cultivable area.

Jharkhand has made significant progress in agriculture production in last two years. Approximately 85% of cultivated area is under different food crops as against 65% area at the National level. Rice is the major foodgrain crop of the State covering approximately 80% of the total cropped area. The paddy production has reached approx.4695 thousand tonnes sown over 1469 thousand hectares with a productivity of 3197 kgs./ha. Other important crops grown are maize, pulses, wheat, oilseeds and minor millets.
The new interventions in paddy production techniques like System of Rice Intensification (SRI) have significantly increased the rice production in rainfed areas. The Seed Replacement Rate for the hybrid varieties of paddy is 2% every year whereas the Seed Replacement Rate for improved varieties is 7-8%.

In last 5 years the pulse production has increased manifold as a result of Jharkhand registering highest productivity levels. The State has received “Krishi Karman Award by Union Government in 2012-13” for the pulses production & productivity.

Agriculture is largely rain fed and assured irrigation is available to approx. 28% of total cultivated area. The agriculture is highly dependent on rains but ground reality is changing fast.

C. HORTICULTURE

Jharkhand with its diverse agro-climatic conditions is much suited for the development of Horticulture based economy with ample scope of growth. The state of Jharkhand may be divided into six horticultural sub zones as far as the ecologcal specialties and suitability of different horticultural crops to them is concerned.

The wide product base, high volume of round the year production, strategic geographical location, abundant sunlight and high domestic demand automatically project horticulture as the thrust area of development. The horticultural produce including off-season vegetables from the state are being preferred in the neighboring states for their quality and time of availability. Following is the chart which shows the surplus and deficit of the State for the year 2010-11.

<table>
<thead>
<tr>
<th>Availability of Fruits and Vegetables in Jharkhand – 2010-11</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Fruits</td>
</tr>
<tr>
<td>Vegetables</td>
</tr>
</tbody>
</table>

Source: Directorate of Horticulture, GoJ, Ranchi

In view of the dismal productivity of food crops and the geographical situation of the state, horticulture, is no more an option but has become a compulsion in the state. The following table illustrates the strong emphasis being laid to the production of fruits and vegetables by NHM, Jharkhand.

<table>
<thead>
<tr>
<th>Target in '000 T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruits</td>
</tr>
<tr>
<td>Vegetables</td>
</tr>
</tbody>
</table>

Source: Directorate of Horticulture, GoJ, Ranchi

Fruits

Fruit crops were grown in an area of 84.55 (ha ‘000) in the State with a production of approx. 845.11(MT ‘000) for the year 2011-12. Major fruits grown in the State are Mango, Guava, Litchi, Lemon Banana, Papaya and Jackfruit. The productivity of fruits in the State is around 10.1 MT/ha.

Mango is grown all over the State, the major growing areas being Ranchi, Gumla, Lohardaga, Hazaribagh and Giridih. Litchi is grown in Dumka, Deoghar, Godda, Jamtara and Ranchi. Jackfruit is also one of the important fruit crops in the area and grown massively in West Singhbhum, East Singhbhum, Chatra, Simdega. Jackfruit is in high requirement in the neighbouring states of Bihar, West Bengal, Chattisgarh and also to Delhi and is traded extensively from Jharkhand.
Jharkhand is deficient in fruit production with more than two-thirds of its consumption requirements being met by other states, thus making it a net importer of fruits. Recent initiatives of the State Government & especially the National Horticulture Mission is indicative of strong focus and thrust to promote fruit cultivation and enhance the acreage under fruit in the State. Fruits like Litchi, Custard Apple, Lemon, Mango & Guava are being promoted for commercial cultivation.

There is a great possibility of establishing fruit processing units based on the fruits produced in the State. A few of the possible interventions in food processing could be in the following items: Aonla, Mango, Guava, Litchi, Jackfruit and Custard Apple.

**Cashewnut**

Jharkhand has emerged as new cashew nut growing pocket. Wild varieties of Cashewnut are produced in different pockets of the State which have been brought under the Area Expansion Program of National Horticulture Mission. It has been implemented systematically in districts of East Singhbhum and Pakur-SanthalPargana. The crop has emerged as one of the important crop in the State with increasing acreage and hence emerging scope of processing. Districts like Saraikela, East Singhbhum and West Singhbhum have the major chunk of the Cashewnut Plantation.

The area under cultivation of Cashewnut has increased to 10,155 hectares in 2011-12 and the production has grown 470 MT.

**Vegetables**

Vegetables were grown in an area of 287.532 (ha ‘000) with production of 4257.068 (MT ‘000) in the year 2011-12. Major vegetables grown are Potato, Onion, Brinjal, Tomato, Cole Crops, Pea, Okra, Chilly and Cucurbits. The productivity of vegetables in the state is 14.8MT per ha.

North Eastern Plateau region has maximum production as well as highest productivity of vegetables. The region also has the advantage of being an important sourcing hub for consumption markets like Patna, Kolkata and other parts of West Bengal. Ranchi has the largest production of vegetables in Western Plateau Region and has round the year cultivation of vegetables like Cauliflower, French bean and Brinjal. The region as whole ranks 2nd in terms of total production of Vegetables in the State.

South Eastern Region, being relatively smaller and fraught with soils with high iron content, overall does not record a high production. However, there are areas like Patamda and Chandil which are highly suitable for vegetable cultivation and contribute significantly to the region’s total vegetable production.

Most of the Vegetables grown in the State have good acceptability in fresh retail markets. Tomato and Potato are produced in abundance in the State which often causes glut situation leading to distress sale and high wastage as the surplus produce cannot be converted in to value added products. Because of the geographical diversity, Potato is available with an almost year round supply.

Thus, all the factors combine to give the State an envious potential in providing the necessary requirements for setting up of vegetable processing units. The unique location also provides a ready and serviceable market for the processed items.

**Spices**

Spices are grown over an area of 2.949 (ha ‘000) with production of 64.166 (MT ‘000) with the productivity of 21.75 MT per ha in the year of 2011-12. They are produced mainly in Hazaribagh, Dumka, Pakur and Ranchi with Ginger, Garlic and Coriander being the prominent crops. Spices are another focus area of the National Horticulture
Mission, as Jharkhand spices are known for their high quality and thus have strong market demand. Most of the spices produced are locally consumed.

**Flowers**

Floriculture has not yet developed with very small area under floriculture in Jharkhand. The total production of loose flowers and cut flowers (in numbers) in the State is estimated to be 22,000 tons and 17.11 lakh respectively. Flower cultivation is largely confined to Ranchi, Hazaribagh, Dumka and Deogarh.

**D. Allied Sectors**

**Meat**

Meat sector in the State predominantly operates mostly in an unorganized format. The state produced about 161.94 MT of meat during 2011-12. The per capita availability of meat is 7 gms/day whereas the total requirement of meat is 657 lakh ton leaving a deficit of 215.33 lakh ton (32.77%).

In spite of large livestock population, meat industry in State has not taken its due share. Very low processing level is one of the major concerns in the meat sector of the State. It is envisaged that modern slaughter houses with suitable processing and handling facilities and established backward and forward linkages can significantly boost the economy of this sector. Identifying the tremendous potential in the Meat sector, the State Government has taken an initiative to set up a modern abattoir for meat processing facilities in the State.

**Poultry**

The Production of eggs in the State during 2010-11 was estimated at 415.30 million as per the Directorate of Animal Husbandry, Govt. of Jharkhand. The per capita availability of egg is 25 eggs per annum against the National average of 51 eggs per annum. The States like Haryana and Punjab have per capita egg production of around 150 and Andhra Pradesh has per capita annum production of eggs more than 200.

Based on national average of per capita availability of 51 in 2010-12, the total demand for eggs in the State is estimated at 1143 million whereas the production in 415.30 million. Hence, there is a gap about 727.70 million eggs to raise the consumption levels to meet that national per capita average consumption needs. Further, poultry rearing is mainly a homestead activity in the state in unorganized sector. No value addition is currently taking place.

The Department of Poultry has established two Government farms i.e. State Poultry Farm in Bokara covering an area of 19.20 acres & Regional Poultry Farm, Hotwar, Ranchi covering an area of 14.50 acres with with the objective increasing availability of day old chicks. The Ranchi farm has 13,492 birds currently including ducks.

**Fisheries**

The State has great potential for development of inland fisheries. Fisheries are an integral part of rural households in Jharkhand more so, for the traditional fisherman whose livelihood is inseparably linked with fishing. An estimated 1.35 lakh fishermen in the State traditionally depend on fisheries. The State has a large number of vast and diverse water bodies, developed for multiple purposes supplementing and complementing agriculture and allied activities.

The state is blessed with 4.55 lakh ha of water spread area in the form of rivers (62%, 1800 kms), reservoirs (25%, 252 numbers ranging 20 ha. To 16,000 ha), tanks (12%, 0.55 lakh ha.) and a good number of check dam, water storage structures and other water bodies viz. Aharsetc due to which the State has registered a significant growth in inland fisheries.
The Fish production increased from 14,000 MT to 92,000 MT in last 12 years. It has been achieved with the help of State Government’s initiative and involvement of MatsyaMitra, a voluntary body in quality seed production which has increased from 9 crs. to 67 crs in last 10 years. The concept of MatsyaMitra has been accepted by NIRD as most innovative concept and one of the best practices. The fish seed distribution has greatly increased and is done throughout the State through an extensive network of NGOs. There are 36,000 MatsyaMitra in the State and about 24,000 families are dependent on fisheries activities for their livelihood.

**Dairy**

The milk production in the State is estimated at about 19.10 lakh tonnes which is just about 1.5% of the total milk production in the country. The density of milk production is 49 kgs./sq.km. whereas national average is 83. The per capita availability is just 159 gms./day against national average of 281. Thus, there is a huge deficit in the production of milk in the State as it produces only half of its requirement. The total milk requirement is 23.36 lakh tonnes and the State is deficit by 8.70 lakh ton (31.60%) milk every year.

About 83% of the milk producing animals in Jharkhand are non-descript and non-availability of better quality roughages and cattle feeds leading to nutritional deficiency and infertility. Local indigenous breeds are mostly draught purpose breed. Local breeds do not produce adequate milk due to poor nutrition, poor management, tropical heat and diseases. Hence there stands a huge potential of upgrading the genetic potential of the State’s milch animal population with the establishment of better quality feed.

The Breed Improvement Programme has been taken by the State Government in collaboration with BAIF-NGO and has developed 760 operational Dairy Cattle Development Centers for artificial insemination and so far 8,25,151 animals have been inseminated which has resulted in the success ratio in Jharkhand to be ahead of the national average at 3,82,951 artificial inseminations which works out to be 46.04 percent. The ratio between the male and female calves stands at around 50% each in the State.

Integrated Dairy Development is being given shape through the association of NDDB and State Government. The other programs which have been running in the State for the development of dairy ecosystem includes National Mission for Protein Supplement, Azolla Cultivation and Demonstration Unit, Heifer Rearing Programme & Fodder Conservation Programme. The initiative of Foundation Seed Production for Fodder has also been taken by the State Dairy Development Department which is showing a lot of promise.

Against the present consumption levels, about 25-30 % of the present demand is met by import of powdered milk from other parts of the country.

**E. Support Infrastructure**

**Act Governing Agriculture Marketing in Jharkhand**

Agriculture Marketing in the State is governed by the Jharkhand Agriculture Produce Markets Act 2000 and rules therein. The Act regulates the marketing of agricultural produce in the State. The Act provides for the levy of market fee at the rate of one per cent on agricultural produce bought and sold in the notified market area.

The State Govt. has undertaken the reforms proposed in the APMC Model Act, 2003 which has paved the way for private entities for direct procurement from the farmers as well as enter in to contract farming arrangement with growers.
Government Support

There is no Mandi Fee that is charged on notified agriculture produce, purchased for the use as raw material from outside the State by Food Processing Industry. The Government has also undertaken the following schemes for the growth of the sector.

- Under "KisanKhushaliYojna", the groups are allowed to experiment integrated agriculture development which includes livestock management
- Proposal for "Krishi Bazaar Samiti" marketing complex at Ranchi has come as a boon for farmers
- The integrated Co-operative Projects scheme aims to provide financial assistance to the Co-operative societies through state government in the form of loan as well as subsidy
- National Agricultural Insurance Scheme aims to provide financial security to the farmers
- Jharkhand State government has launched "MukhyaMantriKisan Credit Card Yojana" wherein Interest subsidy is provided to farmers who repay their loan within stipulated time
- The State Government has also proposed to improve the infrastructure for storage of seeds and fertilizers. Construction of office buildings for field offices and godowns too will be undertaken
- Work for setting up processing units in Co-operative societies is under progress. Some Co-operative societies work especially for welfare of SC/ST/OBC/Women. State government gives assistance in the form of Share Capital Contribution and subsidy/grants
- State Government provides Share Capital Contribution to the following State Level Federations:
  - JASCOLAMF : The Jharkhand State Co-operative Lac Marketing and Procurement Federation Ltd.
  - VEGFED : The Jharkhand State Vegetable Co-operative Marketing Federation
  - JHAMCOFED : Jharkhand State Minor Forest Produce Co-operative Development and Marketing Federation Ltd.

The State Government is trying to bring more area under irrigation, increase production by improving quality of seeds, fertilizers, agricultural tools and pesticides etc. Potential is being seen in horticulture, medicinal and aromatic plants which can be exported. Completion of major irrigation projects and renovation of old systems is being undertaken. Traditional irrigation systems like ponds, tanks and check dams, multiple cropping, horticulture and bio-fertilizers are being encouraged.

Agriculture Markets and Marketing Structure

APMC will promote up-gradation of storage capacity of their existing godowns. APMCs may enter into the joint venture or PPP mode for the development of accredited warehouse facilities / quality warehouse / cold storage / grading, sorting, packing facilities for the farmers in their market yards / land.

There are about 602 rural markets and haats in addition to 28 APMC Mandis and 192 Secondary APMCs in the State. The Cluster wise break is given below

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Marketing Infrastructure Available</th>
</tr>
</thead>
</table>
| Godda, Dumka, Pakur and Sahebganj | - 107 Rural Markets and Haats  
|                              | - 5 Major APMC Mandis with 1 each in the three districts and 2 in Sahebganj)  
|                              | - 18 secondary markets sub yards  
|                              | - 2 non-functional cold stores in Dumka                                                           |
State Profile

Jharkhand

Ranchi, Hazaribagh, Lohardaga and Gumla
- 160 rural markets and haats
- 6 APMC Mandis
- None of the Mandis have garbage disposal system, mechanical grader and mechanism for marketing intelligence
- Cold Storages: 13 in Ranchi, 9 in Hazaribagh, 5 in Ramgarh

Saraikela-Kharsawa, East Singhbhum and West Singhbhum
- 72 Rural Markets and Haats
- 5 APMC Mandis
- 2-3 Cold Stores in the Cluster with combined storage of 6000 tonnes

Palamau, Latehar and Chatra
- 72 Rural Market and Haats
- 3 APMC Mandis
- 1 Cold Storage – for Potato and Mahua

State Level Institution to Promote Food Processing Sector

Food Processing comes under the Department of Industries in Jharkhand. A special cell, National Mission on Food Processing (NMFP), Jharkhand has been established under the guidance of Secretary, Directorate of Industries. This body is being spearheaded by the Mission Director and supported by Deputy Director, Directorate of Industries. The State Government has also appointed SREI Infrastructure Finance Limited and Frontier Growth Advisors (SREI- FGAPL Consortium) as the Program Management Agency for the successful management, promotion and execution of NMFP in Jharkhand.

Food Park Initiative

Government of India is implementing a Mega Food Park in Jharkhand near Ranchi. The establishment of this mega food park is expected to give a significant boost to the food processing sector in Jharkhand. It is located in Getalsud Industrial Area, Ranchi and would have many facilities for different food processing units on an area of 56 acre where 32 food processing units are likely to be established.

State Government’s initiatives under Jharkhand Industrial Policy, 2012 - Food Parks may also be established on land acquired privately. Such parks will also be entitled for the same benefits as envisaged for other types of parks provided by the State under the policy. Other terms and conditions of establishing the private food parks can be negotiated by the investor. The Developer of Food Park on Government land / IADA land will be allowed to sub-lease the land to other food processing industries in consultation with Government / IADA.

Support to MSME

- MSME Cluster will be promoted under specific crop e.g. cashew, mango, jackfruits etc.
- The MSME Cluster will have a common facility center providing necessary infrastructure for storage of produce, grading, processing and packaging, cold storage extension and information counter. This would act as aggregation point for large processing units.
- It will be developed in SPV Mode as envisaged in MSME cluster schemes

Food Processing Sector in Jharkhand

Food processing in the State is at a nascent stage. Various reports suggest that there are around 1500 food processing units operational in the State. An overwhelming majority of these units are micro and small units engaged in production of tomato sauce, juices and concentrates, jams and jellies, papad, pickles, grain milling etc.
Promotional Support to Food Processing Industry under Jharkhand Industrial Policy 2012

- Promotion of setting up of new cold chain/cold storage or upgradations of existing facilities will be aggressively promoted under National Horticulture Mission for Horticulture produce whereas non-horticulture products like meat and poultry are covered under National Mission on Food Processing.
- No Mandi Fee (Market Fees) will be charged on notifies agriculture produce purchased for use as raw material from outside the State by the Food Processing Industries.
- Entrepreneurship Development Programmes will be promoted and conducted with focus on the State’s Agriculture, Horticulture, Animal Husbandry, Biotechnology & Agribusiness Management.
- Since Food Processing Industry is a seasonal industry, all units in Food Processing Sector will be eligible to get relief from minimum electricity charges during the non-seasonal period.

Opportunities in Food Processing

The agro-climatic conditions of the State are conducive for commercial cultivation of large varieties of fruits, vegetables, flowers and medicinal and aromatic plants. Plantation and Horticulture is one of the important sub-sectors of Agriculture having ample scope for expansion in the state of Jharkhand.

Different kinds of fruits are grown in Jharkhand. The crops grown in Jharkhand are Mango, Litchi, Stone fruit (Peach), Citrus (Lime/Lemon), Awla and Papaya in fruits, Chilli, Turmeric and Ginger in spices, Rose, Marigold, Gerbera, Carnation and Gladiolus among flowers, Lemon grass, Palmarosa and Rosa damascena in aromatic plants, Cashew, Coconut in plantation crops.

The Board has identified the State as high potential State for Coconut Cultivation as the average productivity of coconut palm is 36 nuts per palm, which is above the national average of 34 nuts. Cashew nuts popularly known as a gold mine of wastelands is very ideal for cultivation in wastelands and has been taken up extensively now and hence there is good potential for cashew processing especially in East and West Singhbhum districts. Tea Plantation in a small measure has been taken up in Ranchi district, which has a favourable climate for growing tea.

The promotion of Agro-based industries is among the priorities of the State Government. The state has assured supply of fruits & vegetables grown by applying scientific techniques, investment in post-harvest and good transport infrastructure. The National Horticulture Mission (NHM) in the Jharkhand State was launched in late 2005-06 initially in 10 districts with main focus on production of planting materials, vegetable seed production, establishment of new gardens, creation of water resources etc. Establishment of new gardens include perennial and non-perennial fruits, spices, floriculture, aromatic and medicinal plants. This scheme was 100 % sponsored by Central Govt. during 2005-06 and 2006-07 (Xth Five Year Plan). However, during 2007-08 and onwards (XIth Five Year Plan) this scheme has been implemented in 15 districts with the pattern of assistance as 85:15 by Central Govt. and State Govt. respectively.

Kavita Yadav, the owner of Padosan Masala, who bagged the Best Entrepreneur Jharkhand State Award last year was felicitated as the Best Women Entrepreneur for Small Scale Industries from Eastern Region at National level for 2012 on April 3, 2013 by President Pranab Mukherjee at RashtrapatiBhavan. Padosan Masala is one of the wings of RCPL which was established in 2004 under the PMEGP Scheme and is a successful story of entrepreneurship in food processing in Jharkhand.