

Agro-Based Industry: Oilseeds Production and Processing Sector in Rajasthan

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Abstract Agriculture sector is the backbone of Indian economy. Oilseeds constitute the next big portion than food grains in agriculture production in India. Rajasthan is the state which constitutes the most important role in oilseeds production in India. In this paper the role of oilseed sector, progress of oilseed sector, problems of oilseed sector is discussed. The policy implication of technical support for oilseed production and effect of liberalizing trade in edible oil sector has been discussed.

Keywords Agro-based industry, Oilseeds production, Processing sector.

Introduction

Agriculture contributes nearly 14% of GDP in India and 69% of population live in rural area mainly depend on agriculture for livelihood. Major part of poor people lives in rural area and engages in agriculture. Nearly 50% of rural male workforce and three-fourth of rural female workforce is engaged in agriculture. The contribution of agriculture in Gross Domestic

Product (GDP) is continuously declining since independence but the work force engaged in agriculture did not show any significant reduction. The productivity in agriculture is low and the excess labor is employed in agriculture sector in India. The development strategy in India indicates that the structural change of development in agriculture in view of production happened but did not happen in employment. This is one of the big challenges to India development strategy. Agriculture sector is also important for providing raw material to the industry, providing demand for the industrial product and for providing investible surplus to the industrial sector. Agriculture sector has strong input market and saving investment relation with industrial sector. So until and unless agriculture sector developed the development of industrial sector is not possible in any country. The growth of agriculture sector was lower than the growth of GDP in India in during 7th plan. The growth of agriculture sector was 2.5% and the in growth of GDP was 7.1%. During 8th Five Year Plan the growth of agriculture Sector 3.1% and growth of GDP was 6.5%. During the 9th Five Year Plan growth of agriculture was 3.9% and the growth of GDP was 5.7%. During 10th Five Year Plan the growth of agriculture sector was 4% and growth of GDP was 7.6%. During the 11th Five Year Plan the growth of agriculture sector was 4% and the growth of GDP was 8%. During last six Five Years Plans the growth of GDP is higher than the growth of agriculture sector. The expansion of agriculture sector was lower than the expansion of aggregate economic activities in the country. This is why the contribution of agriculture in GDP is declining continuously in India.

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Oilseeds economy in India

India is the 4th largest producer of oilseeds comes after USA, China and Brazil in the world. It contributes 19% of cropped area under oilseed cultivation and only 2.7% oilseeds production in the world. India made significant progress in agriculture sector after Green Revolution. It achieved self sufficiency in food grains production. At the time of independence India was an important importer of food grain and imported food grains under PL480. Now after Green Revolution India became the exporter of food grains. One negative aspect of Green Revolution was that it was successful in case of few crops especially food grains. Initial part of Green Revolution was not spread in oilseeds, pulses and coarse cereals. Due to this India emerged as one of the biggest importer of edible oil. Near about 50% of domestic requirement of edible oil was fulfilled from import of edible oil in 1990s. India produces 10% of oilseeds and 7% of edible oil in the world. 26.5 million hectare area is under the cultivation of oilseeds (GOR 2008, Swain and Mrutyunjay 2013). This contributes 14.8% of Gross Cropped Area of the country and 9.8% of total value added in agriculture (Kumar et al. 2013). According to different agro climatic regions of the country India produces wide variety of oilseed crops. The main oilseed crops are rapeseed-mustard, soyabean and groundnut. These three oilseeds constitute about 90% of oilseeds in 2011-12. Sesamum, sunflower and safflower are other oilseeds produced in India. During 1960s India was a net exporter of oilseed and edible oil but between 1970 and 1980 India became the largest importer of edible oils. During 1990s the second most important item in Indian imports was edible oils ; the first was petroleum oil and lubricants. After that India started various policy interventions and technological supports to overcome the lack of edible oil and oilseeds production in the country. In these major initiatives National oilseed development project (NODP) in 1986, Technology mission on oilseeds (TMO) in 1986, (OPDP) for oilseeds and pulses started in 1991-92 are important. In 1986 Technology mission on oilseeds launched aiming to achieve self sufficiency in oil seed production with the help of spreading Technology and markets support to the oilseeds producers in India. Due to these policy intervention and technological support in oilseed production, it increased from

12.1 million tonnes in 1985 to 20 million tonnes in 1993-94. 1950-51 and 2011 the increase in oilseeds production in India was six times and that is higher than the grains production (50 million tonnes to 21 million tonnes, only four times) in during the same period (Hegde 2012). Oil seeds production has second position in agriculture production after cereals in India, in terms of production, area and economic value. The nine oilseeds crops in India are Soybean groundnut rapeseed-mustard sunflower, Sesamum, safflower, Niger castor and linseed. The productivity of oilseed production increased from 644 kg per hectare to 772 kg per hectare. The area under oilseed cultivation increased from 18.9 million hectare to 26 million hectare during the same period. After liberalization in 1991, oil seeds were excluded from the Open General Licensing and import duty reduced substantially continuously on edible oil, there was an increase of low price oilseed imports in India. The import component of edible oil consumption was 15% in 1995-96 increased to 53% in 2009-10 in India. The import of edible oil in India was 27,000 crore rupees in 2010 (Agricultural Statistics at a Glance 2010). Implementation of Technical mission on oilseeds decreased the quantity of imports of edible oil significantly. The import of the edible oil was 1945 thousand tonnes in 1987-88 declined up to 114 thousand tonnes in 1993-94 (GOI, Economic Survey). After implementation of World Trade Organization agreement the import of edible oil increased sharply. The import of edible oil in 1994-95 was 347 thousand tonnes increased to 8,034 thousand tonnes in 2009.

Available land utilization and cropping pattern provide less irrigated (mainly rainfed) and low productive land for the cultivation of oilseeds in India. Increase in productivity in oilseeds production is the only way to increase the production of oilseeds and to bridge the gap between the demand and supply of edible oils in India. Most of the oilseeds production belongs to the rainfed area, as only 25% cropped area under oilseeds is irrigated. Technological advancements, attractive prices and assured market could be some policy initiative to increase the production of oilseeds in India. The huge dependency on the import of edible oil is not sustainable for a developing economy like India. Demand of edible oil is increasing with 6% per annum and the increase in produc-

tion at 2% per annum. The gap between the demand for and supply of edible oil is increasing and so the import of edible oil (Jha et al. 2012). The demand for edible oil consumption increased rapidly from 5 million tonnes in 1991 to 14 million tonnes in 2010. This increases in demand what seed both in rural area and urban area.

Between 1951 to 2009 the annual compound growth rate of area, production and productivity under oilseed production was 1.5%, 3.05% and 1.45% respectively in India. Wide variations were observed in cropped area, production and productivity. The variations in production, area and productivity was 54.81%, 27.45% and 28.65% respectively. Price elasticity of demand for oilseeds in India is 0.55. The price elasticity of demand for oilseeds is inelastic indicate that the variation in production of oilseeds and then in price put oilseeds production farmer in distress.

The productivity is low for oilseed production in India. This low productivity is lower than the potential productivity. Lack of high yielding varieties, Weak research and extension linkages is keeping the oilseeds sector less profitable for the farmers growing oilseeds. Better and timely input availability, support price, terms of trade between oilseed produce and other cereals are some key area to look for the betterment of oilseed economy in India. The system of minimum support price aimed to protect the interest of producer and consumer of oilseeds and edible oil in India is available only for three oilseeds product namely Groundnut Rapeseeds - Mustard and Soyabean. Processing sector is pre condition for oilseed economy, which suffers from low in efficiency and low capacity utilization which turns in to high cost, low production and less competitive structure. A proper use of Technological, institutional and policy formulation is necessary for the increase in productivity in oilseeds production in India. Low import tariff and low price import harmed the oilseeds production and oil processing sector in India. Liberalization policies should according to the interest of oilseed economy in India.

Oilseeds economy in Rajasthan

Rajasthan has 10.4% geographical area, 5.67 popula-

tion of India and 13.7% of cultivable area (GoI 2011). Agriculture has important role in the economy of the state. Agriculture contributes 23% in net state domestic product (2011-12). 65% of state population depends on agriculture and allied activity for their livelihood. Agriculture forms the strong base for the agro based industry, reducing poverty, eradicating malnutrition and inclusive growth in the state. 65% of sown area in the state has not the assured irrigation facility. The nature of rainfall in the state is scanty and has high variations in distribution among different districts and geographical region of the state. In 2012 the draft on state agriculture policy identified major challenges in agriculture in Rajasthan. These are as follows: (1) regular presence of drought which affect not only agriculture production but the animal husbandry also, (2) global environmental issues like climate change and global warming, (3) lack of Technology suitable for the rainfed area, poor quality of soil health, improper use of fertilizers, deficiency of micronutrients and lack of organic content, (4) low productivity, distress sale and rising cost of cultivation, (5) moving sand dunes, (6) poor mechanism for export promotion not compatible with WTO agreements, (7) lack of integrated farming, (8) gender mainstreaming in agriculture and (9) poor research activity and extension service in agriculture.

Rajasthan recorded highest annual growth rate in area, production and productivity in oilseeds among Indian states during 1980 to 2009. It recorded 4.9% in area, 8.30% in production and 3.22% in productivity growth during 1980 to 2009. Between from 1980 to 2012 the major area of oilseed production in India shifted from the southern state to the Western States. The additional increase in oil seed production from 1980 to 2011 was mainly (near about 90%) was in Madhya Pradesh, Maharashtra, Rajasthan and Gujarat. Cropping pattern in the state since last two decade is in favor of oilseeds, pulses, and horticulture crops. This is progressive diversification (Dutta and Kapadia 2011). Agriculture and animal husbandry are related activity in Rajasthan.

Rajasthan's economy has major role in the production of oilseed in India. It has 10.8% area, and 14.5% in production in India. Rapeseed-mustard, Groundnut, Soybean sesamum are important oilseeds

crops in Rajasthan. In *kharif* season Groundnut and Soyabean and in *rabi* season rapeseed-mustard are major crops. 21 percent Gross Cropped Area in Rajasthan is under oilseeds cultivation (2010-11). Rajasthan contribute more than 48.6% in rapeseed-mustard production, 13.8% sesamum and 8% soybean in India (2007-08). Total cropped area under oilseeds cultivation in Rajasthan was 21% in 2011 increased from 15% in 1991.

The agriculture production and the oilseeds production in the state across all the agro climatic regions is facing challenge because of erratic and scanty rainfall behavior, long drought period and limited water resources availability (Jain et al. 2005). The yield gap between actual production and potential production is large in oilseeds production in Rajasthan. In a study it was found that in case of rapeseed-mustard this yield gap between (actual and potential yield) was found to be 5.6 q/hectare. The yield of oilseed production in Rajasthan can be increased by using high yielding varieties, efficient crop management and plant nutrition management strategies. Minimum support price for rapeseed-mustard was higher than the production coarse cereals. This is the reason why the production of rapeseeds-mustard increases continuously in Rajasthan. Timely unavailability of good quality inputs, high cost of inputs and poor extension services posing problems in oilseed production in Rajasthan (IIM). Efficiency in oilseed processing sector, proper marketing infrastructure, effective market intervention in oilseeds production and processing sector and to discourage unfavorable trade policy related to import of edible oil in India is required for the oilseed production and edible oil sector. The oil seed processing sector in Rajasthan is small, fragmented and suffer from low capacity utilization. An integrated (vertically) and efficient processing can increase the capacity of Processing Unit and profitability of edible oil sector in Rajasthan (Pahariya 2012).

Conclusion

Rajasthan contribute major part in oilseeds production in India. Oilseed production and processing sec-

tor suffers from various difficulties in the state. The productivity is far below than the potential. Most of the oilseed crops are sown in the area that is not equipped with assured irrigation. Although Rajasthan made a tremendous progress in oilseed production but the production and the processing sector in oilseeds in the state is suffering from both the technological problems and the policy problems. Technological problems are related to low productivity and the policy problems are related to support price, terms of trade between oilseeds sector and food grains sector in the economy and trade policy. The processing sector is small, fragmented and inefficient. Along with the challenges present to agriculture development in the state the challenges to oilseeds sector need to remove.

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