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Development of Khawa Industries in Bhoom Tahsil of Osmanabad District, Maharashtra State, India.

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Abstract

Ours rural economy basically depends on agriculture and related sector. If we increase the share of agriculture in GDP which is mere minimal as on date our economy will boost on larger scale. This can be achieved only by promoting the post harvesting activities and also scale up agro based and allied activities like milk and milk processing; fisheries, poultries etc. This can be achieved by systematic planning, supportive government schemes and continuous awareness and skilling not only on technical base but also focused on entrepreneurship development.

The case study of khawa cluster established in rural area of Osmanabad district in Maharashtra is a model for this rural development and planning. The khawa is basically a value added product of milk. The Bhoomtaluka and surrounding area of Bhoom is a largest milk producing area in the region. This is the major activity and source of livelihood of this drought prone area. As there were limitations on selling the milk, milk processing and producing khawa was emerged as the source of income. Gradually the area becomes the hub of khawa makers. The state government by implementing cluster programme added the technology by promoting collaborative approach. The all process in cluster interventions leading to major changes in the livelihoods of the local community due to increase in confidence. The paper will analyse this exemplary initiative of government and the local Agro-Entrepreneurs.

Key Words: *Agro based, systematic planning, Cluster, Agro-Entrepreneurs.*

Introduction:

India now has indisputably the world's biggest dairy industry at least in terms of milk production. Last year India Produces close to 100 Million tonnes of milk, 15% more than the U.S. & three times as much as the China (FSSAI, 2011). The Dairy Sector in India has shown remarkable development in the past decade and India has now become one of the largest producers of milk and value added milk products. If we increase the share of agriculture in GDP which is mere minimal as on date our economy will boost on larger scale De S. (1980). This can be achieved only by promoting the post harvesting activities and also scale up agro based and allied activities like milk and milk processing; fisheries, poultries etc. This all can be achieved by systematic planning, supportive government schemes and continuous awareness and skilling not only on technical base but also focused on entrepreneurship development.

The case study of khawa cluster established at rural area of Osmanabad district is a model for this rural development and planning. The khawa is basically a value added product of milk. The Bhoomtaluka and surrounding area of Bhoom is a largest milk producing area in the region. This is the major activity and source of livelihood of this drought prone area. As there were limitations on selling the milk, the milk processing and producing khawa was emerged as the source of income. Gradually the area becomes the hub of khawa makers. The state government by implementing cluster programme added the technology by promoting collaborative approach. The all process in cluster interventions leading to major changes in the livelihoods of the local community due to increase in confidence. The paper will analyse this examplary initiative of government and the local Agro-Entrepreneurs.

Study Region:

Physiography:

Osmanabad is an administrative district in the state of Maharashtra in India. It is in the Marathwada Region of India. The district headquarters are located at Osmanabad. This primarily rural district occupies an area of 7569 km2 of which 241.4 km2 is urban area and has population of 16,60,311 of which 16.96% were urban (as of 2011).

Osmanabad district lies in the southern part of state. It lies on the Deccan Plateau, about 600 m above sea level. Parts of the Manjra and Ternariver flow through the district. The district is located on the east side of the Marathwada regionsituated between the latitudes of $17^0$35' to $18^0$40'North, and longitudes of $75^0$16' to $76^0$40' East. On the north of Osmanabad district lies Beed District; to the northeast and east Latur district, to the east and south east, Bidar district of Karnataka; to the southeast and south Gulbarga district of Karnataka; to the south and southwest, Solapur district; and to the northwest, Ahmadnagar district. Most of the part of district lies in the hilly areas Balaghat ranges.

Bhoom Tahsil is a tehsil/taluka in Osmanabad district, Maharashtra on the Deccan Plateau of India. The town of Bhoom is the administrative headquarter of the tehsil. There are seventy-four panchayat villages in Bhoom tehsil. Bhoom was an under Nizam territory during the British raj in India. However, it was independently ruled by the Thorat Royal family. Shrimant Raje Vijaysinh Amarsinh Thorat is the present Raja of Bhoom. He was the president of Bhoom Municipal Council from 1991 – 2006.

In the 2001 Indian census, Bhoom tehsil had a population of 116,894, with 60,620 (51.9%) males and 56,274 (48.1%) females, for a gender ratio of 928 females per thousand males. The tehsil was 86.4% rural. The literacy rate in 2011 was 73.08% overall in Bhoom tehsil, with a rate of 82.86% for males and 62.45% for females.

Climate:

The rainy season starts from mid-June and continues till the end of September. The climate is humid in October and November and dry and cool from mid- November to January. From February to June the climate is dry and becomes increasingly hot. During summer the temperature of Osmanabad district is low compared to other districts of Marathwada region. The average annual rainfall in the district is 730 mm. Temperature is Max. 42.10 C; Min. 80C

Transport:

Air: Nearest airport is at Aurangabad (246kms). Aurangabad is linked to Mumbai by air. Pune is the other airport.

Rail: Not connected by rail. Nearest railway stations are Solapur (65kms) or Latur (84 kms). Pune is 292 kms and Mumbai is 452 kms away from Osmanabad.

The Miraj – Latur narrow gauge passes through Osmanabad for 30 kms via TerDhoki and Yedshi.

Road: State highways and roads from the district headquarters at Osmanabad link all 8 tehsils (subdistricts) and major towns. A national highway passes through the district from Solapur, connecting Karnataka to Andhra Pradesh.

State highways passing through the district and road services:

Two national highways pass through the district: Bombay- Pune-Solapur-Naldurg –Umarga to Hyderabad; and Bombay–Pune-Solapur-Tuljapur-Osmanabad-Yedshi-Yermala-Bid –Aurangabad.

Apart from these, the following state highways pass through the district: No 2, Vasai- Kalyan – Ahmednagar – Bhoom; No. 7A, Nagpur –Bori – Ardhapur- Tuljapur; No. 33, Daund- Barshi – Osmanabad – Borfar – Ausa; No. 50A, Malkapur- Solapur; No 60, Miraj- Pandharpur –Barshi – Latur; No 100, Deogaon – Pathri – Majalgaon – Dhoki; No. 110, Ausaa – Umarga- Kasagi.

Objectives:

1. To study about the khawa making industries in Bhoom Tahsil.
2. To understand the problems of Khawa making units.
3. To analyse how government initiative and the local agro entrepreneurs develops rural economy by proper planning.

Methodology:

This study makes use of both the primary and secondary sources of data. Primary data has been obtained from the industrial survey in the study area. 150 khawa making industries have been surveyed who are the members of khawa cluster. To comprehence the socio-economic conditions and nature of government initiative and its impact on traditional khawa making industries.

The work also has been supplemented by secondary sources of data. Relevant secondary data have been generated from various government reports, publications, district handbooks, books, articles,local authorities of the study area.

In order to understand the ground realities and update scenario field survey was carried out. Information collected with the help of questionnaires, observations, discussions with key persons, & stakeholders. The investigation based on quantitative and qualitative data analysis which is carried out employing proper quantitative and computer techniques.

Khawa industries in Bhoom:

Khawa industries is one of the most vital sector of the Bhoom economy in terms of employment generation and also giving significant contribution in the local development. This sector also plays a vital role in nurturing entrepreneurial talent as well as spreading wealth at grassroot level. Recognizing the contribution of the sector in promoting balanced and equitable growth in the Bhoom economy, Government has laid special emphasis on the growth and progress of this sector. The total 150 registered khawa making units are found in this area. Many unregistered units are there in Bhoom block/BhoomTahsil. Government aiming for facilitating development and enhancing the competitiveness of these units/enterprises. The sector which produces wide range of items employing traditional technology. Products produced by the sector is well demanded by all over the world. Besides employment generation ability of the sector, it plays Vital role in the regional development of the country. One of the characteristics of khawa units is that these enterprises are less capital intensive and more labour intensive. The khawa units have been increasing steadily. Registration level of units has remained low because of the lack of awareness regarding registration. Government launched the simple procedure of the unit registration that is udyogadhar portal is developed by the government for online registration.

Bhoom has highly productive human resource with positive work culture, excellent khawa productive units. The huge and supportive environment for the production of khawa. Khawa making units plays significant role in the development of the region. Bhum is a largest and strongest khawa making hub of the BhoomTahsil/Osmanabad district. The industrial area mainly producing the khawa. There are great opportunities of growth of khawa units related to production, employment generation and export. There is good scope for further development. Government policies are favourable to the khawa units. So considerable growth has taken place.

Table 1: Khawa Units Information

Total Units	Total investment in plant &Machinary(Rs. In Lakhs)	Turnover (Rs. In Lakhs)	Employment in	Production per day
150	390.20	4742.00	1444	12.37 MT

(Source: Field Survey)

Table 2: Registered Units

Micro	Small	Total
149	01	150

(Source: District Industries Centre)

Table 3: Category wise Units

Category	Units
SC	10
ST	00
Women	10
Minority	02
Open	128
Total	150

(Source: District Industries Centre)

Problems of Khawa Industries before government initiative:

The study shows that Bhoom has the solid base of khawa units having more than 150 registered micro and small units. This micro and small sector plays vital role in socio-economic aspect and development of the region. Khawa units are more flexible and cater the local needs contributing effectively in overall development of the region. Bhoom which is now a well known khawa hub of the district is mainly due to the khawa production, but there are certain issues and problems of khawa industries.

1. Non availability of testing lab:

Milk is supplied by the farmers from the local area. Around 1200 to 2000 litre milk supply by local farmers. And around 300 to 400 kg khawa made by bhatti maker. The primary raw material for khawa making is Milk. This material is mainly procured from local farmers. The entrepreneurs purchase milk (raw material) with the belief on the milk suppliers about the quality. Entrepreneurs are unable to know the exact quality of the milk purchased. There is no any facility of checking the milk content and quality of the milk; therefore it affects the quality of the khawa; the khawa quality is not remain the same.There is need of awareness in the farmers and the khawaunits regarding the production of quality milk so that same quality khawa is produced. It is necessary to have testing lab facility for raw material as well as finished goods testing. If testing lab is available, the khawa units will be ableto confirm accurate quality of the milk and khawa produced.

2. Traditional Manufacturing process and Technology:

The manufacturing process of khawa has remained mostly traditional. As a result, the quality & productivity is fluctuating. Still many of the units have been working with the traditional manufacturing techniques which are conventional. There is hardly any change in technology. As a result, the quality and productivity of the khawa units is very low. There is a lack of awareness in khawa unit holders about using improved machinery for various processes. They are using the traditional process for processing of milk that is the manual process. This was done manually with the help of labours on daily wages. Because of manual process there are many errors in making khawa; same quality of khawa cannot be produced. For minimizing these errors proper training & technology upgradation is needed.

Manual processing using kadhai, ultani ,bhata, & Bhatti or chula for making khawa. There is no advance technology. Following problems created because of this technology or working style:

a. Quality of the product: The quality of khawa is not up to the mark.

b. Time consuming process: This process takes long time & produce less production of khawa.
c. Hygiene problem: This process is not at all hygienic, so it affects the quality of khawa.
d. Production Quantity: The production of khawa is very slow and low or not up to the mark.
e. Hard work: There is so much hard work involved in this process; compared to the hard work, the production of khawa is not that much.
f. Fuel: There is lot of fuel requirement in such kind of process to make khawa.

3. No hygienic conditions are maintained:

In many cluster unit holders modern packing facilities are not available. Also there is a lack of hygienic conditions during the production of khawa.

4. Lack of proper packaging system:

The khawa is wrapped in a plastic sheet, which is then covered in a gunny bag. It is then transported by ST bus often being kept on the ST bus roof. The packaging is also not uniform; thus branding is not possible. In addition to this packing is not hygienic. Packing machine for the value added products is needed. The availability of a proper packing facility will overcome these problems.

5. No value addition to the product:

Majority of the units are engaged in khawa making. There is no value addition in the product because of the lack of advance technical support and skill. The final product of the khawa making units is only khawa in bulk quantity. All khawa is sold in other cities or local market with no value addition. Value ddition can be done if Pedha ,Basundi, Barfi& other sweets are made from this khawa. Very few khawa producers do this value addition. There is an urgent need to set up the value added services at Bhoom. This will not only enhance domestic & export market potential, competitiveness of the units but also open new avenues for growth of khawa units.

6. Time consuming & Hard Work process:

Traditional manufacturing procedure is applied by the khawa units. Manual processing is occurred, using Kadhay, Ultani, Bhata and Bhatti or chula for khawa making. This process takes long time and produce less khawa and quality of khawa is also not remain same. This Process is not at all hygienic; so that it affects the quality of khawa.

There is so much hard work involved in this process; therefore, young generation is not interested to come in this field. As compared to the hard work, the production of khawa is not that much.

7. Fuel Requirement and environmental issues:

There is lot of fuel requirement in traditional khawa making process. Generally, Chula is used for khawa making process. Forest material, wood is used as a fuel. Therefore Deforestration and related issues are found in this area.Due to use of chula same quality of khawa is not produced. There is a need of induction machine or any other system for khawa making.

8. Non availability of cold storage facitity:

Khawa is a perishable product. Due to its perishable nature, it has to be sold quickly or stored into a cold storage. Its quality declines with every passing hour, unless refrigerated. Due to lack of cold storage facility in Bhoomkhawa makers sold it to the traders in very cheap rate & then traders transport that khawa to the cold storage of Pune, Sangali, Solapur&Beeddistrcts. There is need of common cold storage facility, where the khawa; that is prepared, can be stored until it can supplied to sweet homes & other consumers as per the demand. Refrigerated khawais viable for six months to one year. If cold storage facility is available at Bhoomkhawa makers sold it as per their requirement or as per their will; and they can achieve good prices.

9. Lack of availability of cold van/refrigeration vanfacility:

In general, khawa is wrapped in a plastic sheet, which is then covered in a gunny bag. Then it

is transported by ST bus. It is often being kept on the roof of the ST bus. Similarly it is also transported in jeeps and tempo.Khawa is perishable item & its quality declines with every passing hour, unless refrigerated. Due to this scenario there is wastage of khawaor decline its profit margins. Thus, there is a need of refrigerated van, which will help the khawa units to transport the khawa to other cities in a hygienic manner as well as the quality of khawa will be maintained.

Government Initiative & Establishment of CFC Centre:

Government of Maharashtra and some khawa making entrepreneurs take the initiative and change the whole scenario of the area. Under the MSI-CDP scheme (Maharashtra State Industrial Cluster Development Programme) Government gave the support for establishing CFC (Common Facility Centre) in Bhoom. Government of Maharashtr gave the Grant –in-aid for establishing the Common Facility Centre. The total project cost is Rs. 640.42 lakhs out of the total project cost Government gave the 80% cost as a Grant-in—aid under the MSC-CDP scheme. It helps the khawa makers to overcome the various problems as mentioned above.

CFC Facilities:

1. Cold Storage Facility
2. Testing Lab
3. Pedha Making Facility
4. Packaging Facility
5. Boiler- (500 kg/hour steam requirement of the above sade machines)

1. Cold Storage Facility:

Since khawa is perishable product, its quality declines with the time. As such, the khawa units have to sell their product without right value for it. Many times khawa units are exploited by the traders in the region due to perishable product. Due to the cold storage facility khawa makers keep their khowa for a long time & sold it as per the demand of the market at good cost. Only good Quality product can fetch good price & without cold storage facility it is not possible. Considering the 12.37 MT per day khowa production of cluster units the cold storage facility of 880 MT is made available in CFC.

2. Testing lab:

Good quality raw milk is required to make good quality dairy products. Once raw milk is defective, it cannot be improving during processing & defects often become more pronounced. Provision of testing lab at CFC make the khawa units to confirm the accurate quality of milk &khawa produced. The facility in testing lab at CFC meet requirement for testing quality of milk &khoa& other khowa based products. Hygiene is also nmaintained.

3. Pedha Making Facility:

The final product of the khawa makers is khawa. Due to Pedha making facility in CFC it is possible to khowa units to make value addition to the existing product. At CFC, the khowa received from the khawa units & is converted in to pedha by using steam operated pedha making machine. This facility not only enhance domestic & export market potential, competitiveness of the units but also open new avenues for growth of khawa units.

4. Packaging Facility:

In general trade practice, khawa producersdo not employ any packaging for khowa. By employing proper packaging of khowa & khowa based products will not only increase its shelf life but also make it easy for the consumer convenience in product buying & use & also it become hygenic.

Benefits of establishment of CFC:

1. The establishment of CFC along with facilities achieve the objectives of Maharashtra State Industrial Cluster Development Programme. It helps to improve productivity of khawa units in the cluster.
2. It promote export opportunities for the units in the cluster as their product is of good quality. Well processed and properly packed products meet CODEX standards for export.

3. The cold storage facility at CFC reduce the losses of Khowa& exploitation of khawa makers by the traders & thus enhance the profitability of the khawa units.
4. The processing technology reduce production time because the one batch of conventional khowa manufacturing process is of 20 lit but this equipment has batch capacity of 200 lit. At the same time, conventional process involves loss of energy & it is very hectic to control the operations, this is overcome in the new processing technology at CFC.
5. Testing lab help to identify quality of the raw material as well as produced khawa. Hygiene is also maintained.

Suggestions:

Need of skilling:

To promote processing centres to collect milk from farmers; Primary producers, small scale businesses, women entrepreneurs, self-help groups or any other group for developing various value added products and by products and to assist, promote, guide, educate them in the field of branding, quality maintenance, products standardization, packing & to explore new avenues, there is need of skilling centre.

To Promote R & D:

There is a need of R & D wing to promote & carry out research & development activities & scientific research, knowledge, analytical studies in the field of milk products & to conduct seminars, workshops, study circles, review courses, conferences, meetings, live events, lecture series, materials, distance education modules, online programs through audio or video or other eleronic media for imparting guidance, training & education in the field of milk products & to prepare, print, publish & circulate books, magazines, papers, periodical, circulars & other literary undertakings, dealing with or bearing any relations to or for promoting the objects of the company of institutions connected therewith for attaining the main object.

To develop cost effective technologies:

To create awareness to overcome various challenges faced by milk industries such as production constraints due to resource constrains, high cost of production; by development of suitable milk production technologies, to maximize the productivity under varied agro-climatic conditions & assessing & mitigating the climate change impacts, developing cost effective technologies to make milk production more sustainable.

Provision of Refrigerated van:

Provision of Refrigerated van at CFC which needs to be fulfilled. Unsanitary & uncontrolled temperature transport conditions lead to the westage of khawa& thus declines profit margin. Hence there is a strong need of refrigerated van. The provision of refrigerated van will increase CFC's effectiveness.

Brand Making:

The interested units in the khawa cluster can start working under Umbrella Brand Marketing concept. Units of cluster can sell their khowa & khowa based products under single brand which will be developed by interested units with help of CFC centre or State Government. The product will get brand name only if it meets the standards of quality prescribed by the food regulations bodies.

Training centre:

For making unit owners aware about the various latest processing & preservation technologies available of khowa, it is proposed to establish one training centre at CFC having all the facilities. Faculty fron the reputed dairy institute like college of Dairy Technology, Udgir shall be called for giving the lectures & undertaking practical processing.

In case if not possible to develop training centre; reputed institute having training cell with experience of training programme shall be selected & group of unit owner may be deputed to institute for taking training on khowa&khowa products.

Conclusion:

There are running 150 registered units of khawa manufacturing located in Bhoom. Since khawa is perishable product, its quality declines with time. As such, the khawa units have to sell their product without right value for it. Khawa makers are exploited by the traders in the region due to perishable product. The establishment of CFCalongwith facilities like Cold Storage, Testing Lab, Pedha Making& Packaging Facility benefits units for enhancing quality of products, certification and also competitiveness of the units. It promote export opportunities for the units in the cluster as their product is of good quality. The establishment of CFC along with facilities certainly achieved the objective of Maharashtra State Industrial Development Programme. Khawa cluster established at rural area like Bhoom is a model for rural development and planning. The all process in cluster intervention leading to major changes in livelihood of the local community due to increase in confidence.

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