Socio-Economic Survey of Gotkhindi Village

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Abstract: In developing countries rural area covers an extensive majority of the population, throughout the world. The rural area in India consists of 70% of the total population. The individual from rural area migrates to urban area as a result of deficiency of livelihood opportunities, amenities and services in rural areas. The migration increases stress on urban amenities and services. So it’s essential to develop rural areas to improve the quality of lifestyle of people. The Government has launched Sansad Adarsh Gram Yojana (SAGY), to improve social and economic condition of rural area. This will be achieved by providing urban amenities and creating employment opportunities in rural areas. This will create satisfaction and a better standard of living in rural areas and decrease in migration of people from rural area to urban area.

The purpose of this study is to understand and identify the details of existing scenario in village. It also aims to obtain basic data on the deficiencies and gaps in infrastructure, amenities and services. The socio-economic survey was conducted in village to identify problems in the existing scenario. The report of socio-economic survey and problems identified are documented in this paper.

Keywords: Rural area, SAGY, Socio-economic survey, Gram Panchayat(GP).

Introduction:

In the developing countries rural area covers an extensive majority of the population, throughout the world. The rural area in India consists of 70% of the total population. It is estimated that by 2017, the rural market will overtop the urban market in India. So it’s essential to develop rural areas to improve the quality of lifestyle of people. The individual from rural area migrates to urban area as a result of deficiency of livelihood opportunities, amenities and services in rural areas. So to solve this problem the Government has launched various schemes. The objective of rural development is to improve social and economic condition of rural people.

The central government visualized idea of model villages through Sansad Adarsh Gram Yojana (SAGY). The idea is to develop villages as models that can be duplicated throughout the country. The main objective is holistic development of identified gram panchayat. It aims to improve standard of life by improving basic amenities, higher agriculture productivity, livelihood opportunities. Under this scheme, Member of Parliament has to select a Gram panchayat in the State from which he/she is elected. Hon. MLA Mr. Jayant Rajaram Patil has selected Gotkhindi Gram panchayat of Walwa taluka from Sangli District, Maharashtra for this scheme.

Methodology:-

The study comprises of a socio-economic survey of Gotkhindi village. The open ended type questionnaire survey was carried out. The socio-economic survey was conducted in village to obtain details of existing scenario.

Socio-Economic Survey:

An open ended questionnaire survey was conducted in village. The mother tongue of villagers is Marathi so questionnaire was prepared in Marathi. The survey was carried out in two stages. In the first stage, household survey was carried out to know details about demographic features. In second stage, village survey was carried out to know details about infrastructure and civic facilities.

Following is the report of socio-economic survey:

Household survey:

The household survey was carried out to know details about demographic features like population, number of households, and availability of facilities like water supply, electricity and toilets etc. The population of village is 7885 and number of households are 1572. The population of male is 4100(52%) and female is 3785(48%). The population of 0 to 6 age group is 876 out of which 473(54%) are male and 403(46%) are female (Table 1).
Table 1: Details of Population of Village Obtained from Socio-Economic survey

<table>
<thead>
<tr>
<th>No. of households</th>
<th>1572</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>7885</td>
</tr>
<tr>
<td>Male</td>
<td>4100 (52%)</td>
</tr>
<tr>
<td>Female</td>
<td>3785 (48%)</td>
</tr>
<tr>
<td>0-6 Age population</td>
<td>876</td>
</tr>
<tr>
<td>Male (0-6 age)</td>
<td>473 (54%)</td>
</tr>
<tr>
<td>Female (0-6 age)</td>
<td>403 (46%)</td>
</tr>
</tbody>
</table>

The consideration of population growth of the village is essential while designing the amenities in appropriate quantity. To find the growth rate of population, the details of population in previous decades is required. The following table shows population data for four decades from year 1980 to 2010, as per Sangli District Census Handbook. (Table 2).

Table 2: Population growth as per Sangli District Census Handbook

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>5313</td>
<td>2672</td>
<td>2641</td>
</tr>
<tr>
<td>1990</td>
<td>6041</td>
<td>3088</td>
<td>2953</td>
</tr>
<tr>
<td>2000</td>
<td>6793</td>
<td>3492</td>
<td>3301</td>
</tr>
<tr>
<td>2010</td>
<td>7592</td>
<td>3901</td>
<td>3691</td>
</tr>
</tbody>
</table>

Table 3: Population forecasted by method of varying increment.

<table>
<thead>
<tr>
<th>Year</th>
<th>Population forecasted</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>8388</td>
</tr>
<tr>
<td>2030</td>
<td>9220</td>
</tr>
</tbody>
</table>

The Fig. 2 shows the graphical representation of population growth from year 1980 to 2030. It also shows the recent population of village and population growth of village (Fig 2).

The data from table 2 is used to forecast population of next decades by using method of varying increment. The formula used is,

\[ P_n = P_0 + n x + \frac{n(n+1)}{2} \cdot y \]

Where, \( P_n \) = Population after \( n \) decades from present
\( x \) = Average increase of populations of known decades
\( y \) = Average of incremental increases of known decades

According to above formula, the population of village will be 8388 in year 2020 and 9220 in year 2030 (Table 3).

Fig. 1 Graph showing population details

Fig. 2 Population growth graph

Village survey:

The village survey was carried out to obtain details about economic resources, infrastructure and civic facilities like solid waste management, water supply system, drainage system, occupation etc.

Solid waste management practice:

1. Street Sweeping and Collection Points - The sanitary workers of GP collect waste during street sweeping and dump it to the nearest collection point. The household waste is also dumped in the nearby collection point. Approximately 10 collection points or temporary waste storage exist the village. Collections points are either open spaces or open containers or bins. Containers are not placed on the paved surface which results in mixing of fine materials like soil. At number of places, these bins are found
overflowing or underutilized. The location of these bins is not properly sited.
2. Secondary Collection/Transportation – The bins are emptied by collection vehicles. This collection is done once in 2 months or after receiving complaints from public, whichever is earlier. The collection system is poorly planned. The solid waste transportation is done by tractors or three wheelers. Most of the waste loading is done manually.
3. Final Disposal of MSW – The collected waste is disposed off at dumping area. The total area of the site is approximately 2 acres. Mixed solid waste is dumped in heaps without proper spreading and compaction, which causes unhygienic conditions. The waste is dumped without following by any segregation and applying soil covers.

Water supply system : –

The major source of water is ground water. The GP owns three wells, which are used for water supply. The water is supplied through pipeline system. The water is pumped from each well and supplied to houses through pipelines. Before pumping of water purification is done by mixing TCL (bleaching) powder in water. The ratio of powder mixing is 5gms of powder solution for 1000 liters of water. This method of purification is approximate and faulty.

Drainage system –

For collection of liquid waste generated in village open gutters are provided. The length of this system is approximately 3kms. As gutters are open, at many points the flow is interrupted because of accumulation of garbage in it. The collected liquid waste is discharged to stream at downstream side of village, without following by any treatment. At discharge point soak pits are provided. But age of these pits is approximately 10years, so there is need to reconstruct pits.

Agricultural scenario –

Agriculture is the major occupation in the village. About 75% of population gets their income through agriculture. The major kharif crops are jowar, sugarcane, soyabean, groundnut and rabi crops are wheat, gram etc. The methods of irrigation adopted are flood and drip irrigation. But large number of farmers adopt furrow and flood irrigation method. The village has 1582.05 ha of cultivable land out of which 1334.05 ha (84%) land is under irrigation. And out of irrigated land only 250 ha (18%) of land is under drip irrigation. The farmers who are adopting drip irrigation they are having more crop yield than farmers who are using flood irrigation method. Because of controlled drip irrigation method farmer now have more choice about crops that they want to produce.

Result:
1) The following are the detail numbers of families which do not have facilities like own water supply, own electricity connection and own toilets:
   a. 27(1.71%) families do not have any of above facilities.
   b. 27(1.71%) families do not have water supply, 123(7.82%) families do not have toilets and 12(0.76%) families do not have electricity connection.
   c. 54(3.43%) families do not have water supply and toilets.
   d. 10(0.60%) families do not have water supply and electricity connection.
   e. 12(0.76%) families do not have toilets and electricity connection.
2) The existing solid waste management system is in the primitive stage. Manual handling, unscientific and unhygienic practices like mixing of waste, no proper segregation, transportation in open vehicle, dumping of mixed waste, open dumping are practiced in the city. The existing vehicles, tools and available manpower are insufficient to manage the waste generated in village. Also the public participation in solid waste management is poor, which is basic principal of solid waste management. So there is need of proper solid waste management planning at gram panchayat level and also the public participation is also important for this planning and execution.
3) The method of mixing bleaching powder is adopted. This method is very approximate and improper. The proportion of mixing is determined approximately and treatment is done. This method does not purifiers water sufficiently. So there is need to stop practicing this method and adopt new purification method.
4) As open drainage system is facing problems like interruption of flow because of accumulation of garbage which public throws in it and creating unhygienic condition, they need to be covered. Also at disposal point reconstruction of soak pits is required as existing pits are 10year old i.e. they have completed their service life or adoption of any other technology to treat that water and reuse it for farming.
5) Most of the farmers are still using flood irrigation method. But recently they have started adopting drip irrigation. Presently few have adopted drip irrigation method and they are taking benefit of that method. Drip irrigation allows more choice of crops to be produce than traditional flood irrigation method.
Also it uses water efficiently, reduces maintenance cost, saves electricity, increase irrigable area, increase crop yield by 40% to 80%

Conclusion:

From the report of socio-economic survey and results, following conclusion can be made:

Total 267(17.69%) families do not have facilities like own water supply, toilets and electricity connection. According to the provisions in government schemes like Swatch Bharat Mission and National Health Mission, basic facilities should be provided to such families which do not have those amenities. Also there is need of efficient solid waste management, to stop practice of current method of water treatment and adoption of proper method for purification of water, providing covers for gutters. For all these planning of development, public participation plays important role.

References:


