

Chapter No. 3

Impact on Environment

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Chapter No. 3

Impact on Environment

3.1 Introduction :-

Before becoming the 'Nirmal Gram', Kavathepiran village was neither clean and calm nor developing and progressing. There were so many problems regarding the infrastructure facilities, drinking water, sanitation, environment, health and hygiene etc. After 1999 under the leadership of wrestler **Shri Bhimrao Mane**, the people have changed the village drastically especially they have solved almost all above problems.

3.2 Need for Clean Environment

There is nothing beyond nature, behind nature and other than nature. The key to man's health lies largely on the environment. The purpose of environmental health is to create and maintain ecological conditions that will promote health and thus prevent diseases. The renewable natural resources should be conserved for maintaining and improving the human standard of life. Soil, water, air, plants and animals are renewable natural resources. Following are some essential things which deserve timely protection to conserve the environment.

1. To avoid dangerous consequences of deforestation.
2. To save water and its resources.
3. To reverse the degradation process and restore the region to its former munificence.

It is necessary to start massive people's movement ensuring the active participation of local community for the above.

The United Nations Conference on Environment and development June-1992 concluded the following principles.

Principle 10 : "Environmental issues are best handled with the participation of all concern citizen at the relevant level. The state shall facilitate and encourage public awareness and participation by making information concerning the environment (that is held by public authorities including information about hazardous materials and activities) widely available."

Principle 15 : "In order to protect the environment, the precautionary approach shall be widely applied by states according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost effective measures to prevent environment degradation."

Principle 20 : "Women have a vital role in Environmental management and development. Their full participation is therefore essential to achieve sustainable development."

Principle 21 : "The creativity, ideals and courage of the youth of the world should be mobilized to achieve sustainable development and ensure a better future for all."

Principle 22 : "Indigenous people and their communities and other local communities have a vital role in environmental management and development because of their knowledge and tradition practices. State should recognize and duly support their identity, culture and interests

and enable their participation in the achievement of sustainable development.”

3.3 Environmental Changes in Kavathepiran :-

Under the programme, Kavathepiran has made lot of changes in the village. The Gram Panchayat members have put their full efforts to implement the Central Rural Sanitation Programme (CRSP). Only because of active participation of the villagers, women, youth clubs, school teachers, health workers and doctors, the implementation could be effective one with a grand success. The following activities are undertaken towards a neat and clean environment.

3.3.1 Sanitary Management :-

It is very essential for the problem of health, hygiene and personal cleanliness. In Kavathepiran there are 1894 total families in the village. With the present status the Private toilet users are 1650 whereas Public toilet users are 244 only. The following table shows the status of the private toilet constructions before and after Campaign.

The photographs below shows the toilet blocks constructed in the village Kavathepiran.

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Table No. 3.1
Private Toilet Construction

Sr. No.	Year	Toilet Construction	Quantity
1	Upto1997	Total	660
2	1997-98	Through subsidy	89
3	1998-99	Through subsidy	56
4	1999-00	Through subsidy	103
5	2000-01	Own-Expenditure	140
6	2001-02	Own-Expenditure	220
7	2002-03	Own-Expenditure	160
8	2003-04	Own- Expenditure	222
		Total	1650

(Source:- Report of Kavathepiran; 2003-04)

The Researcher has revealed the fact that, upto1997 there are 660 toilet constructions in Kavathepiran. During *Swachhata Abhhiyaan* the total number of toilet constructions was 248 toilets were constructed up to the year 2000. Under the *Abhiyaan* 990 toilet constructions were completed by the villagers through their own expenditure. Now the total constructions of toilets are 1650 in the village.

The Gram Panchayat has encouraged the villagers by public toilets constructed at various suitable places across the village and the following table shows the statistics about the same. Tale 3.2 gives an idea of public toilets.

Table No. 3.2
Public Toilet Construction

Sr. No.	Public Toilet	Total No. of Seat	Male	Female
1	5 units of 5 seats	25	1	4
2	17 units of 3 seats	51	9	8
	Total	76	10	12

Source:- Report of Kavathepiran

3.3.2 Plantation :-

The most admirable programme being undertaken by the village is plantation. The following are the major achievements.

- Plantation of record breaking 1 Lakh trees across the village
- Plantation of around 1 Lakh trees under "Sampoorna Gramin Rojgaar Yojana"
- Plantation of trees by every side of the farm by every farmer
- Every family has planted around 25 to 50 trees surrounding their houses along with their individual garden.
- Plantation of 20,000 trees by both sides of each and every road in the village.
- Oxygen Park consisting of Tulsi and some other Ayurvedic plants in the campus of Primary Health Centre
- Total five separate gardens on the public plots.

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3.3.3 Solid Waste Process and Disposal Management :-

The Gram Panchayat is very successful in making the villagers aware of the environment and teaching them the good habits of hygiene. The villagers also responded very well and learned the lessons of cleanliness; moreover, they all started to clean the entire village. The Gram Panchayat encouraged the villagers by arranging total 96 solid waste collector units (1 unit among 25 houses) at each and every lane across the village. This solid waste is totally picked up by the tractors belonging to Gram Panchayat itself for the Bio-fertilizer Projects. In order to manage this solid waste, the Gram Panchayat had been effectively establish the various projects such as bio-fertilizers, sanitary management, drainage management and Gardening on waste water etc. under CRSP. Moreover, some projects such as drinking water supply, sanitary mart, and sanitary park are also successfully implemented. The details of these projects which were established under the Total Sanitation Campaign are as follows.

1) Wormy Compost :-

In the village, there are 110 private wormy plants and 2 public wormy plants utilizing the solid waste by the household cattle. The Gram Panchayat also support and encourage the villagers to start this activity at individual level. Needless to say that this has added to their individual income.

The photographs below show the Training Camp conducted by the Gram Panchayat of Kavathepiran.

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2) Nedap Project :-

It is an important disposal method to manage the solid waste. Kavathepiran has 45 private Nedap units and 10 units have under the ownership of Gram Panchayat. The sample one is as shown in the photograph below.



3) Human Waste Management :-

It is one of the important types of bio-fertilizer prepared out of human waste. The Gram Panchayat of Kavathepiran utilized this fertilizer for plantation and planted trees as well. Of course, it is a good source of income. This income is used for the various developmental activities of the village.

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These above mentioned 3 plants are a good source of income for the Gram Panchayat. And this income is used for the various developmental activities of village. Gram Panchayat also financially supports the private peoples to establish wormy compost and Nedap compost plants.



4) Drainage Water Management :-

Gram Panchayat has constructed its own drainage system measuring around 22 Kilometers length drainage in the village. This drainage system is divided into two kinds i.e. closed drainage system and open drainage. The open drainage is running 19950 meters drainage is long whereas the closed one is of 2050 meters are of closed drainage. More than 2010 houses are directly linked to this drainage system. The construction of this drainage system is with total contribution of the villagers and a little financial aid from 'Yashwant Gram-Samruddhi Yojana'.

The waste water from the drainage system is collected outside the village and utilized for various purposes. Around 170 families have developed gardens utilizing this drainage water and some of them took production of flowers like marigold, rose etc. , vegetables like Methi, Shepu etc., Spinach, Corn Fodder, Eucalyptus, Myrobalan, Drumstick and many more. The purified waste water is also used for planted trees, a banana garden and other five gardens at five different places located at-

- i) Chandoli Vasahat
- ii) Behind Gram Panchayat Office
- iii) Near Primary Health Centre
- iv) Siddhartha Nagar
- iv) Near Mahadeo Temple.

5) Drinking Water Supply :-

During the survey the researcher had found that there is regular and safe drinking water supply by Gram Panchayat. The Gram Panchayat has provided 14 public water supply outlets providing clean and purified water free of cost to all. The water lifted from the river through jack well is purified and treated before supply. Moreover, there are 10 bore well units with hand pump facility free of cost to all.

6) Development of play-Grounds :-

Gram Panchayat has also developed the five playgrounds at various places: i) near by *Khan* ii) at Desai Plot iii) at Chandoli Vasahat iv) Siddhartha Nagar and v) Gandhinagar. These grounds play a vital role in inspiring the youngsters to develop their outdoor sport-skills.

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3.4 Use of Untraditional Energy Resources :-

The traditional fuel energy used for cooking and other purposes was major wood and minor coal and *Shenkut*. All these are producing hazardous smoke affecting women health and polluting the environment

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on large scale. Moreover, the trees are the major victims for almost all fuel purposes cutting which cause major loss to the nature and environment and deforestation too. The people at Kavathepiran have developed a very good attitude towards the environment and as a result most of the families are now using Biogas plants and non renewable resources as well. The following statistics shows the usage of untraditional resources avoiding pollution in the environment.

- Families using Smokeless stoves – 646
- Families using LPG Cylinders – 1354
- Families using Biogas – 131
- Families using Solar Cooker – 22
- Families using Solar lamps – 12
- Families using Solar Home Light unit – 3
- Families using Solar Water Heater – 3
- Families using Solar Electric Battery - 3

Moreover, the Gram Panchayat is also encouraging the villagers for the usage of untraditional resources for day today needs by providing subsidies and or incentives for purchasing or implementation of concerned plants or units. The Gram Panchayat has arranged 10 public Solar Street Poles enlightened with 37 Solar Lamps. It also has started Distilled Solar Water Treatment Plant and it is well maintained till date. Around 10 public Bio-Gas Plants are implemented and used by the Gram Panchayat.

The photographs below shows the aw campaigns held to demonstrate the usage of solar cooker to the villagers.

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3.5 Women and Environment:-

Women have a vital role in environment management and development. Their full participation is therefore essential to achieve sustainable development.

It is true that women are important natural managers and users. They play an essential role in the economic progress and its sustainability. It is said that no one knows the realities of overexploitation of the land than women who till it, carry its water, use its trees for food, fuel, harvest forest for healing herbs and medicinal plants and use their traditional indigenous knowledge for the benefit of the community, in preserving species and ecosystems.

The women in the village Kavathepiran has become very alert towards the healthy environment after understanding its vital role for improving the overall standard of living. And in due course they started participating “Sampoorna Swacchhata Abhiyaan” and it resulted in cleanliness around every house and lane in the village. Women in the village played a vital role in the plantation and conservation of the planted trees. Almost 170 families have developed their backyards utilizing their own waste water and all these backyards are managed well by the women as revealed in the research. Women help the Gram Panchayat by separately storing the daily solid and liquid kitchen waste properly. Women demanded, started the usage of smokeless stoves for cooking. They also play a major role in maintaining their individual Bio-Gas Plants.

3.6 Role of Teachers in Environmental Education :-

“Nature can meet all the needs of men, not the greed” Mahatma Gandhi said. “Real education is possible only in the lap of the Nature”, said Roussau. The greedy nature of man has disturbed the whole environment. Hence there is an urgent need for people to understand the intricacies of nature and create ardor for conservation and preservation of nature. Obviously, it is the prime responsibility of creating this awareness to the society which lies on educational institutions and teachers. Through environmental education, the slogan “Think globally and act locally” must be taught among the people so as get rid of the environmental problems. Interdisciplinary approach is suitable for environmental protection.

To make the students aware of environment teachers must arrange elocution competition in the schools. They celebrate Environment Day every year by planting trees in surrounding areas. The students of the village area were not very much aware about the global environmental problems because of lack of mass media facility. Hence it becomes the responsibility of rural teacher to make the awareness on environmental protection and preservation. The teachers should teach the topics like environment pollution, types of pollution, causes of pollution, nature of pollution, natural imbalance, natural disasters, acid rains, depletion of ozone, impact of overpopulation etc. Such duties are done by the teacher in Kavathepiran successfully. For effective implementation the teachers:-

1. Needs to both knowledgeable and practical
2. They should be a friend, guide and philosopher and should motivate the students to take active part in the environmental protection measures.

3. The teacher should devise teaching strategies involving environment as component. Local environmental issues should be discussed with the students.
4. The teacher should canalize the energy of students to create an atmosphere free of pollution.
5. Teacher should plan the environmental activities co-related to the customs and traditions of the society.
6. Arrange guest lectures to motivate students so as to develop hygienic conditions around them and have to maintain good healthy habits to prevent the diseases.
7. Celebration of important days relating to environment viz. World Forest Day, World Population Day, World Conservation Day is to be made a practicable.
8. Inspire the children and give training as soldiers for environmental protection.

Environmental education is not teaching-learning transaction alone. It has to become a way of life of all the stakeholders in the school, and also in the community. Therefore, the process needs to permit the school system and be reflected both in the physical environment of the school (water and sanitation facilities, garbage management, green school campuses, energy conservation etc.) the attitudes and actions of all those who are part of the school education system be altered towards this end.

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In view of all this, the teachers of all the schools of Kavathepiran have played a very important role in the overall change in the village. There are two primary schools in Marathi medium, one in Urdu medium and a High School comprising of total 56 teachers. The teachers from all these schools organized and conducted various camps and programs making their students and the villagers aware of the environment and cleanliness. They actively organized and participated in the different rally's, Padyatra, Prabhatpheri and Dindi propagating the messages about environment and attracting people attention towards the same. They also organized some shows and orientation films about environment. They encouraged the students and villagers by displaying wall posters and pictures about the necessity of environment on school walls. Moreover, they started plantation in the school premises and later on they encouraged their students for plantation across the village. They taught their students many lessons about the protection of environment through the plantation or forestation, conservation of wildlife, conservation of natural resources and their proper uses, sanitation, awareness about reducing pollution also about the Indian culture.

The photographs below show the active participation of the teachers in making all the students and villagers aware of cleanliness, environment and sanitation.

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All these sincere efforts put by all the teachers resulted in active participation of the youth students for each and every activity under TSC. The village could plant record breaking number of trees i.e. more than one lakh across the village only with the help of student community.

3.7 Concluding Remark :-

The village Kavathepiran has achieved a grand success in implementing TSC and it stood first in 'Nirmal Gram Purskar' by the state. The villagers have understood the need for clean environment very well and many environmental changes have taken place as a result. The village is successful in the implementation of various projects such as Sanitary management, Plantation, Solid and liquid waste management etc. The Gram Panchayat has is now able to provide clean and safe drinking water to all villagers. It has succeeded in making use of untraditional energy sources. The research revealed found out that the village is properly maintaining the various implemented environmental projects.

The women in Kavathepiran are very aware about the care and cleanliness of their surrounding environment. The use of Bio-Gas plants, smokeless stoves and solar energy ensures the pollution free environment in the village. Researcher has come to know that the women are carefully keeping not only their kitchens but also the entire village very clean and neat. It seems very pleasant and happy while taking round to the village which maintains a very good cleanliness and all the roads decorated by trees on both of its sides.

Chapter No. 4

Impact on Health

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Chapter No. 4

Impact on Health

4.1 Importance of Health :-

The health status of the population reflects the socio-economic development of the country. It is shaped by various factors such as population, the level of income, standard of living, housing, sanitation, water supply, education, employment, health consciousness, personal hygiene and also by the coverage, availability, accessibility and affordability of health care, delivery services etc. It is widely accepted that the poor health status is a product of inadequate nutrition, lack of a safe water supply, overcrowded and unsanitary housing conditions. These conditions lead to air borne diseases, local atmosphere related diseases, water-borne diseases and many more deficiencies. The relationship between health and poverty or health development is complex, multifaceted and multidimensional.

4.2 Need For Rural Health Infrastructure :-

Health is the key element in rural human development. Government gives priority to the health and nutrition services to the weaker section of the urban as well as rural area. It is concentrating more on health facilities to the rural area for improving the health status of the country. It is strengthening the rural health infrastructure for improving the capacity of productivity of men, women and child development of the rural economy. According to the *Human Development Report, 2002*, 'Safe Drinking Water and Sanitation facility is one of the significant determinants of health status of the population.' Around 64%

of the total population is living in the rural area where the people are poor, addicted to various bad habits and there is no standard of health and living at all. This fact has become the root cause of economical backwardness of rural India. Hence it is very essential to concentrate on the health status and provide fundamental health facilities to improve the overall health status of the villages. Under the Total Sanitation Campaign, Government wants to develop the awareness of health and hygiene practices in rural region. To achieve the same, it has started to implement CRSP through its states by considering District as a unit.

4.3 Current Health Scenario :-

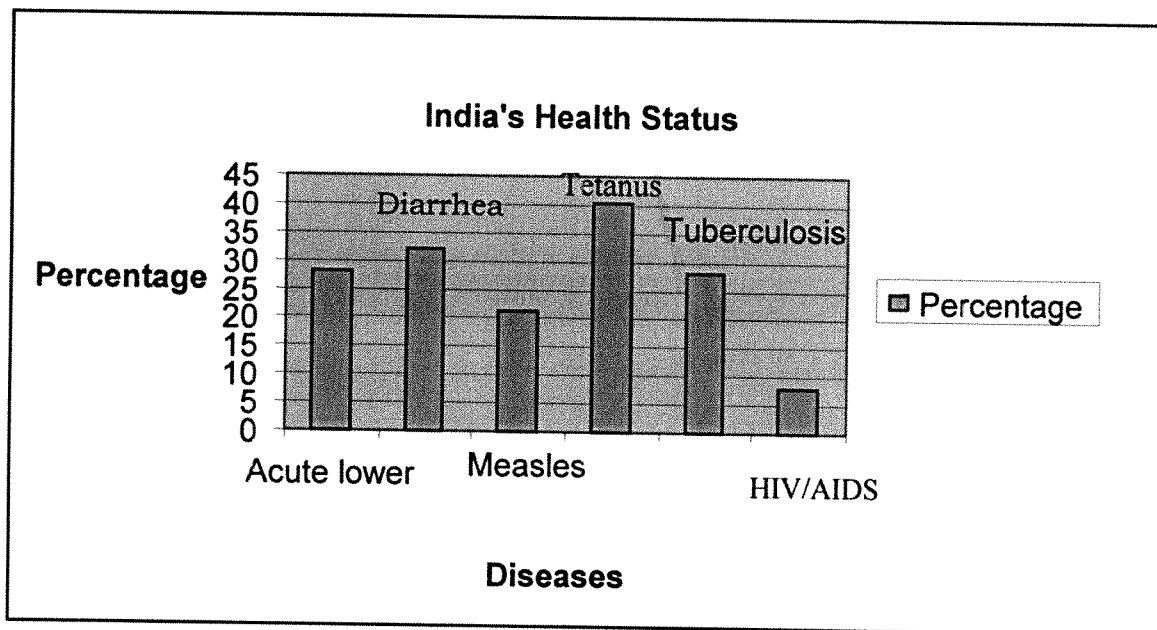
India is pioneer in health service planning over the last five decades. Massive infrastructure manned by a large number of medical and paramedical provisions has been created by the Government. Voluntary and private sectors provide primary, secondary and tertiary level health care services to urban and rural population. India was ranking as low as 138th among the 174 countries in terms of human development index. Health is an indicator of human development. Finance Minister of India, *P. Chidambarum* recently made a provision of 21.9% in the budget of 2007-08 for healthcare (Ref. The Economic Survey 2006-07 Dated 28-02-07).

The Health status outcome by comparing India's trends in mortality, fertility, malnutrition and illness. Is demonstrated in this chapter Table 4.1 and graph below shows India's (which is 17% of world's population) health status as per Social Development Report 2006.

Table No. 4.1
India's Health Status

Diseases	Percentage
Acute lower respiratory infection	28.1
Diarrhea	32.1
Measles	21.4
Tetanus	40.3
Tuberculosis	28.1
HIV/AIDS	7.8

(Source:- India: Social Development Report 2006, Pg.20)



Health is one of the important of aspect of human economic development. Poor health status is an outcome of unsanitary housing conditions, polluted water, unsanitary housing condition etc. these causes many diseases. To improve all these, government of India has introduced health care centers. India has proving the health facilities to

the people by health centers. Following data shows total quantity of health centers. The Table below shows the statistics of health centre throughout the country.

Table No. 4.2
Health Infrastructure of India

Health Centre	Quantity
Central Health Centre	2935
Primary Health Centre	22975

(Source:-India: Social Development Report, 2006, Pg. 26)

4.4 Health Status of Kavathepiran Before TSC :-

Kavathepiran has one Primary Health Centre. It is located at main area of the village. Total number of working staff in the 'PHC' is 13 out of which 2 are MBBS doctors, 2 health assistants and health workers are 9. This 'PHC' has 3 bedding facility. Doors of the centers are open for all the villages.

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Before implementation of TSC, the villagers were not aware of the importance of clean environment, sanitation, waste management, and health and hygiene practices. Consequently, men were addicted to bad habits drinking wine, cigarette and bidi smoking, chewing of tobacco etc. This was directly affecting their individual health and family was suffering with many problems due to poverty. The major health problem of the village was open defecation by the villagers which is a root cause of many diseases. There was no proper drainage management system constructed and maintained by Gram Panchayat resulting in offensive and bad smell across the village. The sewage everywhere enables production and survival of different troublesome ingredients like mosquitoes spreading various diseases such as Malaria in the village. There was no proper system to manage the solid waste which was spreading foul smell and putrid all over the village. Thus cleanliness neglected at public places was the reason behind many diseases among the people in the village. Moreover villagers were keen to ignore the

common healthcare and hygiene practices such as washing hands after toilet, before eating, cutting nails regularly etc. All these factors were directly and indirectly affecting in the poor health status of common villagers in Kavathepiran.

4.5 Implementation of TSC and Health in Kavathepiran :-

The Sarpanch Shri Bhimrao Mane became aware of all above facts in his village. He started the mission right from himself. He gave up all of his own addictions to bad habits and then started to insist all others to follow the same by this or that way in the village. Within 24 hours he closed all the paan shops and wine shops in the village. He then decided to implement Central Rural Sanitation Programme for the development of the village. Under his leadership this Programme conducted the various activities related to following health aspects as described therein.

4.5.1 Health Awareness :-

The Gram Panchayat with the help of Zilha Parishad and IEC unit conducted various health awareness Programmes such as **Padyatra, Swacchhata-Dindi, Prabhat-Pheri** etc. for making the villagers aware of health and hygiene practices. The different seminars and speeches were also organized by Gram Panchayat and PHC for public health awareness. They conducted a series of special programmes for women and children in the schools teaching the common health and hygiene practices to them. Moreover, a series of Physical check up camps was also conducted by Gram Panchayat at **Primary Health Center (PHC)** with the help of Doctors and Health workers. The Gram Panchayat successfully informed the villagers the importance of cleanliness, sanitation, solid and liquid waste management and good health and hygiene practices.

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Following were some activities conducted under the implementation of the Programme.

- 1) Free eye check-up
- 2) Blood donation camp
- 3) Camp for medical checking of all diseases
- 4) Testing Leprosy
- 5) Upbringing camp/Programme for mother and child
- 6) Seminars on health awareness and hygiene
- 7) Nutritional diet guidance

The photographs below show the response to the free health checkup and Eye checkup camps conducted by the Gram Panchayat.

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4.5.2 Cleanliness of Public Places :-

The Gram Panchayat insisted villagers to collect all the daily solid waste in 96 Nedap compost units at different places from the entire village with the help of 'Ghanta Gaadi'. The villagers put their efforts in cleaning all the public places such as ST stand, chowk, PHC, Temples, Masjids etc. The women contributed in the Abhiyaan by cleaning their front side and backyards surrounding their houses. The public wells were cleaned and repaired with active work participation of villagers. The Gram Panchayat started cleaning of all wards and drainage system on daily basis.

4.5.3 Total Sanitation :-

The Gram Panchayat has constructed total 22 Public Sanitary Complex units comprising 76 seats facilitating the villagers at different places. There are two latrines in the market area. All the four schools and Anganwadis have their own toilet facilities. The administrative buildings of Gram Panchayat, PHC, all the institutions in the village also have their own toilet facilities. The Gram Panchayat has insisted and encouraged the construction of private toilet blocks which resulted in total 1650 units for 1814 families and only 244 families are depending on public toilet blocks. It has encouraged the BPL people for construction of private toilet blocks by providing incentives. In this way the village is successful in becoming a Nirmal Gram in a true sense.

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4.5.4 Drainage Management

In order to dispose the waste water, the Gram Panchayat has constructed total 22000 meters long drainage system comprising 19950 meters of open and 2050 meters of closed drainage to which around 1050 houses are connected directly. Enough care to drain the rain water through the same is taken while constructing this drainage system. The waste water is collected outside the village, treated and then used for planted trees and Banana Garden.

4.5.5 Solid Waste Management : -

The *Ghanta Gaadi* plays a very important role in collecting the solid waste which is then brought to the Bio Fertilizer units implemented outside the village. The Gram Panchayat has implemented various Bio-Fertilizer Projects for the proper management of solid waste. These Projects such as Worming Compost, Nedap Compost, Human Waste Compost, Bio Gas are erected and being maintained still properly and are also acting as a source of income to Panchayat.

4.5.6 Hygiene Practices

The villagers are now keen to good hygiene and health practices during their day today activities. This the result of the slogans and banner displayed all over the village while making the propaganda of health and hygiene. The women have played a vital role in this practice. They are now keen to all the good habits and practices regarding cleanliness in their kitchens and surroundings of their houses too. They usually maintain their children disciplined in all manner of health and hygiene.

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4.5.7 Drinking Water :-

The villagers are now alert about the quality of drinking water and the related diseases and hence they are able to take enough care of it for their good health and hygiene. The sources of drinking water are kept neat and clean by all the villagers. NO body is allowed to pollute the river water by any means. Even the *Ganapati Visarjan* takes place in a separate water tank prepared temporarily instead of river. According to the union budget, 2006-07, finance minister proposed to increase the provision for ***Rajiv Gandhi National Drinking Water Mission*** from Rs.3645 corers to Rs. 4680 corers. Further, it announced to increase the provision for sanitation campaign from Rs.630 corers to Rs. 720 corers. This fund is being utilized by the Gram Panchayat for constructing a separate water tank for the village.



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To achieve a grand success to all the above activities, the various ingredients such as Zilha Parishad, Gram Panchayat, villagers, Women, Teachers, Ladies clubs, youth clubs, Doctors and Health workers have effectively participated.

4.6 Impact Of TSC On Health in Kavathepiran :-

Under the implementation of Central Rural Sanitation Programme, the villagers have collectively worked hard. During the research work they strongly stated that they could get more information about the health and personal hygiene by IEC only because of the Campaign and also aware about the need of environmental cleanliness. The seminars, speeches, health camp, and medical check-up etc. arranged by Gram Panchayat encouraged them to implement the TSC. The ideas of Panchayat were implemented successfully only with the cooperative nature and active work participation of the villagers. The Ladies clubs and Youth clubs gave a notable contribution for making the awareness of health and hygiene.

4.6.1 Changing Health Status Of Kavathepiran :-

The successful implementation of TSC has resulted in reducing number of patients in the hospitals. The neat and clean surrounding, fresh and pollution free environment has resulted in the good standard of health of common villagers. The research revealed found out that the common diseases are decreasing and villagers are now spending almost nothing on their health expenditure. The Table below describes the statistics of different diseases in the village.

Table No. 4.3
The Health Condition of Kavathepiran

Sr. No.	Name of Diseases	2000-01	2001-02	2002-03	2003-04	2004-05
1	Cholera	Nil	Nil	Nil	Nil	Nil
2	Dysentery	53	63	43	21	49
3	Diarrhoea	533	518	363	246	403
4	Gastroenteritis	3	2	2	1	-
5	Viral Hepatitis	22	20	13	13	10
6	Malaria	-	2	-	-	1
7	Worm infection	23	21	11	9	8
8	Vitamin Deficiency	9	7	7	9	15
9	Fungal infection	3	3	4	6	5
10	Dermatitis	15	9	14	13	10
11	R.T.I./S.T.I.	875	791	645	625	710
12	Anemia	163	57	51	53	65
13	Measles	2	3	2	-	-
14	Leprosy	3	2	2	1	1
15	Family Planning	495	550	589	619	509

(Source: Report of Kavathepiran 2004-05)

[R.T.I.:- Reproductive Tract Infection S.T.I.:- Sexually Transmitted Infections]

Comparative study of health status of Kavathepiran from 2000-01 to 2004-05 prevails continuous improvement in health of the villages. There was no person suffering from cholera. In last 5 years, number of people suffered from dysentery was 49 in 2004-05 as against 53 in

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2000-01. Patients possessed by diarrhea were come down to 403 in 2004-05 from 533 in 2000-01. On the other hand, patients affected by gastroenteritis also constantly reduced. Village affected by viral Hepatitis was 22 in 2000-01 and 10 in 2004-05. Only one patient was founded of malaria, during the campaign. People suffered by warm infection 23 in 2000-01, decreased to 8 in 2004-05.

But there was some what increase in number of patients of vitamin deficiency and fungal infection. It stands at 15, 5 in 2004 - 05 against 9, 3 in 2000 - 01 respectively. Dermatitis was affected 15 patients and reduced to 10 during the time of study a many all disease R.T.I/S.T.I. was very high even thought it decreased. The people affected by anemia were 163 in 2000 - 01, highly reduced to 65 within 5 years. There was constant number of patients of measles in 2000 - 01, 3 persons were stricken with leprosy which was reduced to 1 in 2004 - 04. Peoples were participated in family planning Programme was 495 in 2000-01 and was increased to 509 in 2004-05.

In short, there is good improvement in health conditions of the villagers as Kavathepiran village got relief from communicable diseases.

4.6.2 Health Status of Women in Kavathepiran :-

There is very good impact of TSC implementation on women health in the village. The following Table reflects Health status of women in Kavathepiran.

Table No. 4.4
Health Status of Women in Kavathepiran

Sr.No.	Human Index	Maharashtra	Sangli (Dist)	Miraj (Tal)	Kavathepiran
1	Birth-rate	22.3	21.23	20.16	18.6
2	Death-rate	7.6	7.44	6.55	7.1
3	Child Death Rate	49	27	19	22
4	Mother-Death Rate	1-2	1-2	1-2	0
5	Population – Growth Rate	22.57%	16.25%	12.5%	11.4%

(Source:- Report of Kavathepiran Gram Panchayat 2003-04)

The above mentioned data status that birth rate 2003 – 04 in Kavathepiran was 18.6%, on the other hand death rate was 7.1%, child death rate was around 22% but the mother death rate was zero and which is one of the good indicator of the health status. Population growth was 11.4% in 2003 – 2004.

4.7 Concluding Remarks :-

The research revealed found out that there is a very good impact of Total Sanitation Campaign on the entire village. The TSC has made a positive impact in the standard of health of all villagers. The respondents told that the health expenditure of their family is also reduced drastically. With the good health, villagers are now able to concentrate on

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their overall development. And hence they have started alternative employment adding to their annual family income.

The total Sanitation campaign is having a good impact on Kavathepiran. The Health status of women has been changed. It indicates a good health for future generation. More than 75% of women gave a good response for family planning.