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Grass root leader's perception on global warming – A case study

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Abstract

India achieved independence in 1947 after about two hundred years of British rule. Soon thereafter, in 1951, the country initiated the process of planned development to raise the living standard of its people and to open them new opportunities for a richer and more varied life. As a result of sustained efforts, considerable progress has been made in many sectors of its economy. A largely agrarian feudal economy during the time of independence has been transformed into one based on a well-developed and highly diversified infrastructure that has immense potential for industrialization. The country has made much progress in the economic sector a result of the new wave of liberalization set in motion on June 1991. Further, the government has made significant changes in environmental policy in the past two decades. Consequently, the quality of life has improved. However in spite of impressive progress in certain areas, the country still faces problems.

Keywords: Global Warming, environmental policy

INTRODUCTION

India is among the few countries of the world that refer specifically in their constitution to the need for environmental protection. Chapters on Directive Principles of State Policy and Fundamental Duties explicitly enunciate the national commitment to protect and enhance the quality of the environment. Article 48A and 51A (g) to the forty-Second Amendment laid the foundation for sustainable development. The "State shall endeavor to protect and improve the environment and safeguard the forests and wildlife of the country" (The Constitution of India 1994:79). It is the duty of the citizen "to protect and improve the natural environment including forests, lakes, rivers, and wildlife and to have compassion for the living creatures" (The Constitution of India 1994:81). Our earth is estimated to be 5 billion years old and it has been nurturing biological species for more than 3.5 billion years. Environment means "surrounding", the external conditions influencing development or growth of people, animal or plants, living or working conditions.

It is now a day a burning issues that each and every person should be conscious about environmental issues. In this manner the role of local government is much assented in promoting environmental awareness to the people. In general, environment issues could be addressed only through government and voluntary organization. The study carries out an empirical research over the members in what ways they provide environment awareness to the people and to their panchayat. This intakes the quest of improving and making them aware of what is environment and in what ways they carry out the duty of protecting the living environment and the problems faced in the village panchayats, has it been recovered out of this, what is the environment of the members and the people to raise their voice when the environment is being polluted out of this has it contributed in safeguarding the properties of our environment in not order of polluting it. The present research paper makes an attempt integrating the grassroots leaders to involve in the activity of having the knowledge of environment and how they provide it to the people.

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Study Area and Methodology

This study is based on field survey research. It mainly focuses on the data collected by canvassing interview schedules from among the select representatives of village panchayats in Gangavalli block of Salam district. The primary data have been collected through an interview schedule by the research with the village representatives. The Stratified Random Sampling procedure, the respondents for the study has been selected.

Gangavalli Block comes under Salem District of Tamilnadu. Gangavalli is probably named after the western Ganga Dynasty. There were two major forces ruling in the neighborhood, Aragalur (Nadu of Magadai Mandalam) and Thedavur. Gangavalli block in the recent days has been split from Attur taluk to make its own taluk. As of 2001 India census Gangavalli had a population of 10,584. Males constitute 50 percent of the population and females 50 percent. Gangavalli has an average literacy rate of 60 percent, higher than the national average of 59.5 percent, Male literacy is 68 percent and female literacy is 51 percent. In Gangavalli 11 percent of the population is less than 6 years of age. Gangavalli is one of the taluks in Salem district since 2000. The following village panchayats are in Gangavalli block:

1. Anaiyampatti 2. Belur 3. Goodamalai 4. Jangama Samudram 5. Kadambur 6.Kondayampalli 7. Krishnapuram 8. Manmalai 9. Naduvalur 10.Nagiyampatti 11. Othiyathur 12. Panchamalai 13. Thagarappudur 14. Ullipuram.

The global warming is the result of "Green House Effects" created by green house gases. The earth receives energy from the sun and it is heated by sunlight and also Ultra Violet (UV) rays

coming along with the sunlight is filtered by the Ozone layer. The sun's heat reaches the earth through the atmosphere, some of the heat observed by the earth and remaining heat is radiated back into the space by the earth. Some gases in the lower atmosphere, acting like glass in a green house, allow the solar radiations, but do not allow the earth to re-radiate. A part of the heat trapped by the gases is re-emitted again and again to the earth surface. The net result is the heating of the earth's surface and the globe becomes warmer and warmer. This is called "Green House Effect". The main green house gases are Carbon dioxide, Methane, Chlorofluorocarbons, ground level Ozone and climate change. We are emitting more carbon monoxide and dioxide by motor vehicles and chlorofluorocarbons in AC, Industrial pollution and transport vehicles pollution and transport ships pollution (oil transport). The Crude oil is transported through ship, suppose, oil will leak in ocean or sea all the fish and other water living things are affected.

Effect of Global Warming

The global temperature will increase three to five centigrade due to extreme heat, the polar ice caps; icy mountains will melt resulting in rising of the sea level by 1.5 to 3.5 Meters. So by 2100 A.D the sea levels will increase 7 feet or so, which means many islands will be submerged under sea and USA will suffer loss of nearly 80 percent of its coastal wet land. In India, coastal cities like Chennai, kolkatta, and many parts of India and most of the place in the world will be affected by flood, Hurricanes and other calamities. Human beings are affected more because UV rays are harmful, UV rays causes skin cancer and other effects, "Glacier milt ice caps." The report," Global Glacier Changes: facts and figures; was published by UNEP and WGMS in September 2008. The previous record loss in the year 1998 was already exceeded three times in the years 2003,2004, and 2006, which has the losses in 2004 and 2006 being almost twice as high as the previous 1998 record loss. The global average annual mass loss of more than half of meter during the decade of 1996 to 2005 represents twice the ice loss of the previous decade (1986-95), overall, the 2008 report provided mounting evidence that climate change is triggering a shrinking and thinking of many glaciers worldwide, which may eventually put at risk water supplies for hundreds of millions of people (Nairobi, 21 January 2010).

Table 1.1: Main Pollutants

S.NO	POLLUTANTS	SOURCES
1.	Carbon Monoxide(Co)	Burning of coal, auto exhausts etc.
2.	Nitrogen oxides	Auto exhausts, coal industries.
3.	Sculpture oxides	Oil and coal combustion industries.
4.	Hydrocarbon	Auto exhausts, fuel combustion.
5.	Chlorofluorocarbons	Refrigerators, Air Conditioners plants
6.	Carbonyl chloride	Chemical industries

Source: Environmental and People

Table 1.2: Pollutant and their effects on human health

S.NO	POLLUTANTS	EFFECT ON HUMAN HEALTH
1.	Benzedrine	Causes bladder cancer
2.	Benzopyrene	Bone cancer
3.	Carbon Monoxides	Decreases oxygen carrying capacity of blood
4.	Oxides of Nitrogen	Respiratory ailments, lung disease
5.	Hydrogen Sulphide	Causes irritation of eye parts, throat ad nausea.

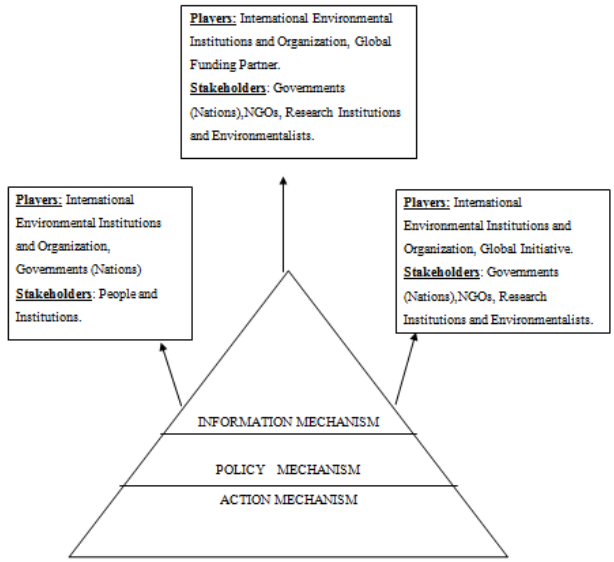
Source: Environmental and People

Table 1.3: Type of waste and time needed for bio-degradation

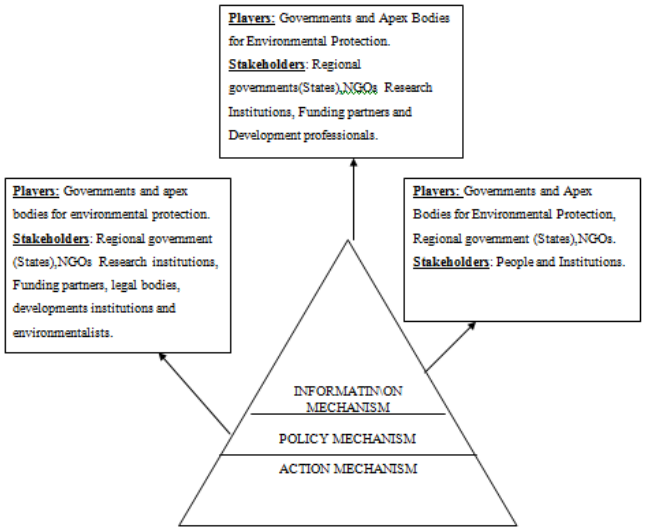
S.NO	TYPE OF WASTE	TIME NEEDED FOR BIO-DEGRADATION IF UNTREATED
1.	Litter paper	2 to 4 weeks
2.	Cotton rag	1 to 5 months
3.	Orange peels	6 months
4.	Woolen socks	12 months
5.	Filter lip cigarette	10 to 12 years
6.	Leather shoe	24 to 40 years
7.	Aluminum can	200 to 500 years
8.	Plastic bag	100000 years

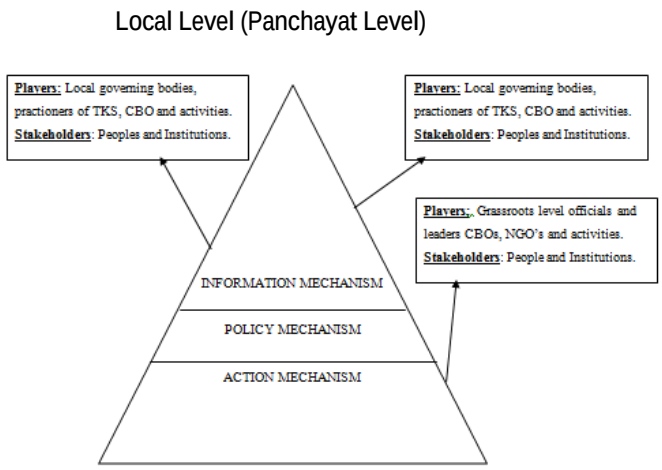
Source: Environmental and People

Global level



National level





India basically a country of villages about 80 percent of country's land is village and while over 76 percent of population are villagers. India is basically an agriculture country where majority of its people depend on forest, land and water resources in rural areas plays a crucial importance. Rural people are so close to natural environment. Generally environmental degradation directly affects the villagers. The main causes of environmental degradation in rural areas are poverty, illiteracy and lack of proper planning and knowledge and state's irresponsibility.

Table 1.4: Millennium development goals [mdg] and the role of panchayats

MDG	ELEVENTH SCHEDULE SUBJECT	SUB COMMITTEES OF GRAMA PANCHAYAT	STANDING COMMITTEES OF BLOCK PANCHAYAT AND DISTRICT PANCHAYAT
To ensure environment sustainability	Social forestry and farm forestry, non conventional energy sources.	Agriculture and animal resource development.	Public health and environment small scale industry, electricity and non conventional energy.

Role of Panchayats in Environmental Management

1. Collection, collation, storage, retrieval and dissemination of panchayati raj and environment related issues and information to various user groups especially to the panchayat bodies of the country.
2. Development of comprehensive databases on various panchayat bodies in all the States/Union Territories of the country in a phased manner.
3. Dissemination of information on the locale specific issues prevailing in the panchayats of several districts of the states, for preparation of developmental plans of concerned panchayats.
4. To establish electronic linkages with all information sources working in the field of panchayat raj in various states of the country in order to evolve the relevant parameters for designing the profile of information requirement of panchayat bodies especially on environmental issues.
5. To develop a comprehensive resource base in the form of books, reports, journals, CDs, databases etc., in varied subject areas in order to disseminate environmental information and to respond to the queries received from several panchayat bodies.
6. To establish electronic linkages with various other ENVIS nodes throughout the country for exchange of information on periodic basis in order to avoid duplication of efforts.
7. To publish newsletter for dissemination of necessary information in printed form and to appraise the panchayat bodies about existence of this centre on "Panchayat Raj and Environment" in order to get the desired information by them as and when needed. (Indian Environmental Society).

Technology Advancement and Development of Panchayats

The prime role played by the technology in bringing about economic and social changes in the development of a country is well known from the days of industrial revolution. Therefore the technological development of panchayats is necessary and the Indian constitution has listed 16 subjects out of 29 like agriculture, sanitation, animal husbandry, protection of water sources, irrigation and water supply etc. which are technology oriented. Panchayats are solely responsible for the development and technological advancement of the village. To perform this function village panchayats ensure the assistance from states. The assistance is financial as well as technical to develop the village. Though, the fund available are insufficient to fulfill the need but still some activities related to village sanitation, irrigation, water shed management etc., can be carried out by the village panchayats themselves as they don't need much finances. Panchayats can also help the local people to get the finance available at cheap rates through some financial institutions, for the use of technology in the village to make work simple, quick and environment friendly, which will help in

development of the village. Some of the activities or areas of technological advancement and development in which panchayats can help by overcoming the financial limitation are awareness creation, installation of community biogas plants, rain water harvesting, social forestry, waste water disposal etc.

Table 1.5

Distribution of Respondents by Category wise			
S.NO	CATEGORY	NO.OF.RESPONDENTS	PERCENT(%)
1	Village President	3	10
2	Vice President	3	10
3	Ward members	24	82
	Total	30	100
Distribution of Respondents By Age wise			
S.NO	CATEGORY	NO.OF.RESPONDENTS	PERCENT(%)
1	25-35	8	26.67
2	36-50	20	66.66
3	50 above	2	6.67
	Total	30	100
Distribution of Respondents by Gender wise			
S.NO	CATEGORY	NO.OF.RESPONDENTS	PERCENT(%)
1	Male	17	56.67
2	Female	13	43.33
	Total	30	100
Distribution of Respondents by Marital status wise			
S.NO	CATEGORY	NO.OF.RESPONDENTS	PERCENT(%)
1	Married	29	96.67
2	Unmarried	1	3.33
	Total	30	100
Distribution of Respondents by Educational Status wise			
S.NO	CATEGORY	NO.OF.RESPONDENTS	PERCENT(%)
1	Illiterate	4	13.34
2	Primary	3	10
3	Secondary	22	73.33
4	U.G	1	3.33
	Total	30	100
Distribution of Respondents by Caste wise			
S.NO	CATEGORY	NO.OF.RESPONDENTS	PERCENT(%)
1	S.C	5	16.67
2	S.T	6	20
3	MBC	5	16.67
4	BC	14	46.66
	Total	30	100
Distribution of Respondents by Religion wise			
S.NO	CATEGORY	NO.OF.RESPONDENTS	PERCENT(%)
1	Hindu	30	100
2	Christian	-	-
3	Muslims	-	-
	Total	30	100

Source: Computed.

Table 1.5 shows the Distribution of Respondents by President, Vice President, and Ward members. According to the table 1.5 10 percent of the respondents belonged to Village President and another 10 percent of the respondents belonged to Vice President. Remaining 80 percent of the respondents are belonged to the Ward members. Majority of respondents are Ward members. Distribution of Respondents by Age wise varies from 25 to 35 years, 36 to 50years, and above 50. Among 30, 26.67 percent of the respondents belonged to 25 to 35 years and another 66.67 percent of the respondents belonged to 36 to 50years. Remaining 6.67 percent of the respondents belonged to the above 50years.Majority of the respondents are from the age group of 36 to 50 years. The respondents by gender wise from the total 30.56.67 percent of the respondents were males, 43.33 percent of the respondents were females. Majority of the respondents are males. The respondents by marital status from the total 30. 96.67 percent of the respondents were married, 3.33 percent of the respondents were unmarried. Majority of the respondents are married. The respondents by educational status from 13.34 percent of the respondents were illiterate, 10 percent of the respondents were finished the primary level education, 73.33 percent of the respondents were finished the secondary level education. 3.33 percent of the respondents were finished the UG level education. Majority of the respondents are from the secondary level education. The table 1.5 clearly reveals that 16.67 percent of the respondents belonged to scheduled caste, 20 percent of the respondents belonged to ST, 16.67 percent of the respondents belonged to MBC, remaining 46.66 percent of the respondents belonged to BC. Majority of the respondents are from Backward Class respondents. The table explains that thirty respondents were selected. Among them 100 percent respondents are Hindus. Majority of the respondents are found to be Hindus.

Table 1.6: Perception

Distribution of Respondent's Knowledge in Climate Change			
S.NO	CATEGORY	NO.OF.RESPONDENTS	PERCENT(%)
1	Yes	24	80
2	No	6	20
	Total	30	100
Distribution of Respondent's Knowledge in 2100 A.D. The Sea Level will Increase 7 Feet			
S.NO	CATEGORY	NO.OF.RESPONDENTS	PERCENT(%)
1	Yes	4	13.33
2	No	26	86.67
	Total	30	100
Distribution of Respondent's Knowledge in Environment Pollution			
S.NO	CATEGORY	NO.OF.RESPONDENTS	PERCENT(%)
1	Yes	30	100
2	No	-	-
	Total	30	100
Distribution of Respondent's Knowledge in Water Pollution			
S.NO	CATEGORY	NO.OF.RESPONDENTS	PERCENT(%)
1	Yes	22	73.33
2	No	8	26.67
	Total	30	100
Distribution of Respondent's Knowledge in Noise Pollution			
S.NO	CATEGORY	NO.OF.RESPONDENTS	PERCENT(%)
1	Yes	2	6.67
2	No	28	93.33
	Total	30	100
Distribution of Respondent's Knowledge about Ozone Layer			
S.NO	CATEGORY	NO.OF.RESPONDENTS	PERCENT(%)
1	Yes	11	36.67
2	No	19	63.33
	Total	30	100
Distribution of Respondent's Knowledge in Causes of Forest Degradation			
S.NO	CATEGORY	NO.OF.RESPONDENTS	PERCENT(%)
1	Yes	2	6.67
2	No	28	93.33
	Total	30	100
Distribution of Respondent's In any Environmental Protection Activities			
S.NO	CATEGORY	NO.OF.RESPONDENTS	PERCENT(%)
1	Yes	11	36.67
2	No	19	63.33
	Total	30	100
Distribution of Respondent's Knowledge of Schemes for Environmental Protection or create awareness			
S.NO	CATEGORY	NO.OF.RESPONDENTS	PERCENT(%)
1	Yes	1	3.33
2	No	29	96.67
	Total	30	100

Source: Computed.

The table 1.6 explains that thirty respondents were selected. Among them 80 percent of the respondents say they are aware of climate change, remaining 20 percent of the respondents say they are not aware of climate change. Majority of the respondents have the knowledge of climate change. The table 1.6 explains 13.33 percent of the respondents say "Yes" about knowledge in 2100A.D the sea level will increase 7 feet. Remaining 86.67 percent of the respondents say "No". Majority of the respondents have knowledge about Environment Pollution. The above table shows that thirty respondents were selected among them 93.33 percent of the respondents say "Yes". Remaining 6.67 percent of the respondents say "No". Majority of the respondents are aware of Air Pollution. Table 1.6 shows the respondents awareness about water pollution. 73.33 percent of the respondents say "Yes". Remaining 26.67 percent of the respondent shows are say "No". Majority of the respondents are aware about water pollution. The table 1.6 explains 36.67 percent of the respondents say "Yes". Remaining 63.33 percent of the respondents say "No". Majority of the respondents are not aware of Ozone Layer. The table reveals 50 percent of the respondents say "Yes". Remaining 50 percent of the respondents say "No". Majority of the respondents are not aware about the Causes of Forest Degradation. The table clearly shows that 36.67 percent of the respondents say "Yes". Remaining 63.33 percent of the respondents say "No". Majority of the respondents are not doing any environmental protection activities. The table shows that 3.33 percent of the respondents say "Yes". Remaining 96.67 percent of the respondents say "No". Majority of the respondents are not aware of schemes for environment protection.

CONCLUSION

In finding the knowledge of village panchayat representatives in Gangavalli Block, Salem District of Tamilnadu the researcher has

succeeded in several ways and also served the village panchayat representatives.. Village panchayat representatives are not aware of environmental issues like deforestation, climate change, members should be sensitized that they should protect the environment and government should create awareness, training programmes on environment issues. Further it is the role of the citizens as well as the policy makers should have the concern of training new perspective on environment protection and stringent laws should be amended for those who violate or dwell the environment in the destruction of wildlife and nature.

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