

## **Executive summary of the Minor Project**

### **A STUDY ON THE EFFECTIVENESS OF A COMPREHENSIVE RURAL DEVELOPMENT PROGRAMME FOR SUSTAINABLE ENVIRONMENTAL MANAGEMENT**

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**Introduction:** The rural environment has been straining to cope with anthropogenic demands on its services, both as a source and a sink, for the last few decades. On one hand, as human productive capacity has gone up, whether due to the green revolution or rapid industrialization, so has its ability to generate waste. On the other, there is a growing demand on nature's ability to provide life support as the population keeps growing and livelihood opportunities decline. We could look at this double squeeze on nature in the context of water resources. Excessive pressure on the environment leads to drought-proneness in certain areas owing to declining water table levels and flood-proneness in others owing to silting of reservoirs and loss of forest cover. Perhaps the most widely recognized environmental problem is the pollution of water resources by industrial discharge, household waste, sewage, and agricultural chemicals. Water scarcity induced by mounting population density and growing economic activity in the face of fixed resources, depleting water tables, and silting of reservoirs has led to rapid decline in the quality of life in rural India. India's biodiversity is gradually narrowing. Maintaining viable populations of species—whether plant or animal—is crucial in biodiversity conservation requiring the protection of important ecosystems, habitats, and the ecological processes of which they are a part.

Environmental awareness cannot be imparted adequately to the society through formal education system. Awareness can also be created through non formal education methods. People belongs to rural areas possess a great depth of perception on environmental issues. They have their traditional knowledge and very little formal information reaches the rural population. In the light of the above, the investigator likes to develop a comprehensive programme for the rural people in order to enhance their knowledge in environmental issues and their remedies and there by sustainable environment management.

**Statement of the problem:** Environmental management is most important, yet it is the most neglected discipline. It concerns life support system and is closely linked with

development and economic growth. At times, the two (development and environmental management) become irreconcilable. Today, we stand at the crossroads in choosing between environment and rural development. On this outset, the present study can be stated as ‘A Study on the effectiveness of a comprehensive rural development programme for sustainable environmental management’.

**Objectives of the study:** The major objectives of the study are,

- To initiate community oriented programme for the improvement of local environment and human resource development.
- Organize training programmes for developing the capacity of human resources to deal with environmental issues in the region.
- To develop environmental skills among the participants by imparting them with basic knowledge and experiences needed to support environmental conservation.
- To improve the environmental condition and quality of life of all groups of people in the village.
- To mobilize the people in developing eco-friendly materials and motivate to adopt an eco-friendly living.
- To improve the quality of life of rural people, it will in turn affect their local community, then by state level, then on the National level.

**Methodology in brief:** The investigator adopted survey cum experimental method for the present study. A community oriented programme based on the major environmental issues-local to the global has been designed.

The methodology framed for the study comprised three phases: Phase I includes, House hold Survey, Environmental Knowledge Test (Prior to the Programme), Attitude scale towards environmental protection (Prior to the Programme), Preparation of Write up and Brochure, Preparation of Video Clippings related to local environmental issues. Phase II covers Open Discussions, Clean Up campaigns, Orientation Lectures, Workshop on ecofriendly materials. And the last phase includes the evaluation of the impact of the programme based on the knowledge and attitude they gained.

The investigator selected 120 members from different self-help groups from Pathanapuram Taluk, Kollam district, Kerala state for the present study.

**Major Findings:** The summary of results is given in the following heads.

- A. Household Survey
- B. Programmes for Sustainable Environmental Management
- C. Impact of the Rural Development Programme

## **A. Household Survey**

- From the household survey it is found that a maximum of 56.6 % of the respondents of the selected area belong to the age group of 30 to 40 years. Among them majority of the respondents belong to nuclear family. This shows the reducing trend of joint family system and there by deteriorating the environmental consciousness of the people. Also it is revealed that 56.7% of the respondents were residing in rented house while the rest were living in their own house. This may be a factor that hinders the environmental cleanliness of the people residing in the selected area.
- In the case of health related information, 56% of the respondents have had illness during the last 12 months. Among them 10% had malaria, 62% had Viral fever and only few, i.e 8% met with accidents.
- In the case of environment related information about 30 % of the household members are of the opinion that the environmental cleanliness of the locality is not so bad. This may be due to the fact that the people dispose their wastes, domestic as well as other wastes in and around the locality where they are staying. In regards to the nature of the wastes in the locality, it is found that around 46% are domestic wastes. The problem of wastes in the locality is also because of the stagnation of wastes, according to 21% of the respondents. Also 18% of the people opined that industrial wastes are more in the area, whereas only 13% are of the opinion that plastic wastes create environmental problems in their locality. 53% of the respondents throw their household wastes outside the house, and 20% of them are disposing their wastes in the streets. Only 10% of the people keep the wastes in dust bins and properly managing the wastes. With regard to the source of drinking water, 60% of the people are depending on the municipal tap for drinking water and 31% of them are depending on well at their own home. Very few people depend on ponds and bore wells in the locality for their drinking water. And from the house hold survey it is also revealed that 90% of the people would like to adopt ecofriendly life style in their life.

## **B. Programmes for Sustainable Environmental Management**

Based on the problems faced and the areas of ignorance in management of household wastes, the training programme was framed and finalized to impart training and awareness programme in preparing ecofriendly materials and sustainable environmental practices. In the first session, awareness was given by distributing brochures. In continuation with the programme, training was given to the respondents in the preparation of ecofriendly materials.

### **C. Impact of the Rural Development Programme**

The impact of the training programme was evaluated in terms of knowledge gained and attitudes developed by the member of the selected. The major results are given as follows.

- 80 percent of the respondents expressed that after attending the programme they came to know that excessive use of pesticides will decrease ability of bacterial to decay humus and thereby reducing the yield. 50 % of the respondents got the awareness that the major producer of oxygen to the biosphere is green plants and climatic changes have resulted in global warming.
- 90% of the respondents are of the opinion that after attending the programme they came to now that increase in the number of vehicles is the one of the major causes of increase in accidents, which is a major threat to the environment. Sixty percent of the respondents are of the opinion that community participation programmes is an effective way to bring awareness among illiterate people.
- In the case of impact of programmes on developing the attitude of the respondents, it is inferred that 55 percent of the respondents have developed the attitude of regular collection of garbage, which is the only solution to environmental problem in their locality. This is due to the development programme they have attended. Also majority of the respondents are managing their house hold waste by segregating solid and liquid wastes separately. A significant proportion of the respondent, that is 63 percent, changed their attitude of preparing home compost to ensure the protection of environment and there by managing domestic wastes to achieve sustainable environment. And from the programme they got the attitude of using bio fertilizers to increase the agricultural yield.
- Also one of the impact of the rural development programme is that, the respondents developed the attitude of disposing solid wastes in landfills or pits. And they came to know that toxic wastes will harm the health of human beings.

**Suggestions for further Research:** Although a large sample would be needed for drawing more definite conclusions the study illustrated the fact that the rural development programmes in rural areas play a relevant role in increasing consciousness about the environment. Such programmes are seen to have a strong potential for developing the nation's ability to deal with biodiversity conservation especially those, which may have strong national implications. Techniques and elements that have been developed for this programme can be applied to other areas by making some modifications according to objectives.

- A study can be conducted to develop ecofriendly materials for different sections of society.
- Research can be conducted to develop appropriate technology for promoting environmental cleanliness among children, youths, women and decision makers in rural areas.
- Surveys can be conducted to analyse the present attitude of people towards the environment.
- Production of professional material on environment for wide dissemination among the public through media can be undertaken. Development of environmental awareness programmes for different sections of society is a useful attempt of study.
- Case studies can be planned for the solution about the environmental problems of a locality.

**Conclusion:** The reality is very much accepted that in India more than 50% of the total population do not get the opportunity of formal education, therefore, only formal system of education is not sufficient for creating environment awareness among the general public, efforts should be made to each illiterate youth and adults, boys and girls. Emphasis should be given to environmental problem of local and regional relevance. Mass media such as radio, TV, newspapers, periodical, feature films and documentaries etc. can be used effectively in the expansion of Environmental Education among masses. In the remote and rural areas the formal and non-formal education is not widely spread, environmental knowledge, appreciation, interest and skill can be developed among people through sponsoring interesting environmental programs on TV and Radio. This purpose can also be fulfilled by telecast and broadcast of various advertisements such as disasters of deforestation and conservation of forests, trees, plantation, different types of pollution –its causes and solutions etc. Thus only Environmental Education can develop awareness towards environment in teachers, students as well as community at large, so that quality of our environment will be maintained between present and future.