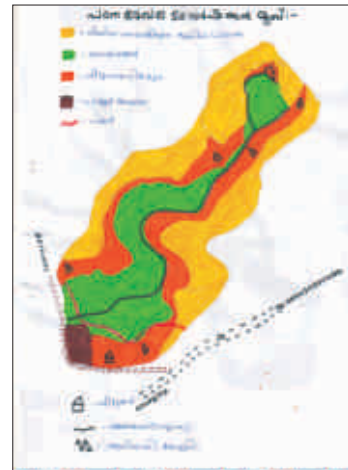


Issue of global warming and climate change are of grave concern to the environment today. Resulting from the human activities largely, climate change is reported to impact the human societies, other life forms and ecosystems on the whole. These problems can be minimised if each individuals take the responsibility for their actions. A small step in this direction has been taken by the students and teacher in-charge of the Love Green eco club of St. Anthony's Upper Primary School in Wayanad.

Thomas Stephen, the teacher in-charge, undertook series of activities along with the eco club members to create awareness on global warming among the school students and local community members. Activities were initiated at Karlad lake located near the school to understand and communicate issues related to global warming. The lake is spread over an area of about 7 acres. Mapping was undertaken by the eco club students to understand the physical changes over the past 50 years. Two maps were prepared – one depicting the present status and another showing a 50-year old scenario. Students walked a 5 km stretch along the lake and marked the vegetation, houses, fields, other physical features and drew the map showing the present status. In order to develop a 50-year old status map, a questionnaire was prepared to interview the older inhabitants residing near the lake to collect information of the past situation. Based on the information obtained, a map showing a 50-year old scenario was prepared. These maps were then analysed to understand the human influence on the local climate in the past 50 years. Students from their analysis found out that the microclimate has become warmer in these 50 years. Deforestation caused by human activities such as extension of agriculture and urbanisation, over use of fertilisers and synthetic pesticides could be some of the reasons for such a change, according to their analysis.



A map showing 50-year old status developed by students



Present status map of the area developed by students

It was time to find solutions and take actions to reduce the warming situation. Students organised a seminar 'Snehathinte Thannel Marangal' (Loving trees that cool the climate) and the findings of their study were discussed with the community, local Panchayat and Kudambasree members. After the seminar, 30 saplings were planted around the Karlad Lake. In the following rainy season, students started a major greening programme around Karlad lake. Around 2000 saplings in 4 acres around Karlad lake were planted. Local community and Kudambasree members, officials from



Planting at Karlad Lake

the local forest department, Sarva Shiksha Abhiyan wing and students from nearby schools – all participated in this programme. Nine species of plants, some of medicinal importance including gooseberry (*Phyllanthus emblica*), Mango (*Mangifera indica*), drooping Asoka (*Polyalthia longifolia*) were planted. Students also planted 16 species of bamboos (*Bambusa species*) in 1.5 kilometre stretch along Karlad Lake. Students also gave one sapling to each of the 240 households in the village and each student of the school (246 students) to plant. In addition, 1600 teak (*Tectona grandis*) saplings were distributed to each household. Students and the teacher formed squads and took up monthly monitoring of the plants to ensure better growth of these saplings. Two copies of the survey card were maintained – one by the household and other by the school. At the end of the year trophy was awarded to the household and the student who protected and took good care of the sapling. The record showed a survival rate of about 85% which was highly encouraging.



Exhibits of agricultural tools

Greening programmes also included vegetable garden in the school campus. Students also promoted kitchen garden in homesteads and monitored them at regular intervals. Vegetable garden programme has given birth to an agri club in the school. Apart from greening, programmes related to public awareness were organised. For instance, the seminar on the theme 'Environment protection and how to become soil friendly' organised by the eco club, inaugurated by the Forest Minister, Shri. Binoy Visham attracted nearly 600 community members and 200 students. This seminar focussed on climatic variations, changes in farming practices, bio farming and soil friendly practices. Researchers from the Agricultural Research Institute at Ambalavel held the sessions. An exhibition of agricultural tools organised as a part of the seminar displayed 87 types of agricultural implements which have been in use over the last 70 years. These tools were collected by the eco club students from the local households. Display had even the tools used by 'Tarvads', the original occupants of the region which were collected by the students. This exhibition at a later stage was taken to MSSRF, Wayanad as part of a national level science exhibition.

The tire less efforts of the teacher in-charge and the students have fetched them several awards - the Mikavu 2008 award from Sarva Shiksha Abhiyan, Vanmitra Award 2009 instituted by the State Forest department of Kerala, and a letter of appreciation from the State Forest Minister Shri Binoy Visham. The club also has received mementos from the Calicut Chapter of OISCA International, a Japanese NGO working in India for their outstanding work.



Monthly monitoring of plant growth

This greening initiative talks less about lectures and more about the much needed action to combat the warming climate. The vegetable garden experiment demonstrates self sustainability approach especially when the price of vegetables is sky rocketing. Greening the young minds and directing their energy towards green action through education certainly leads to sustainable development is the message given by this initiative.