

Education for Sustainable Development

Environment Education for Quality of Life Improvement and Sustainable Development

A Case Study



Submitted to:
Asia Good Practice ESD Practice Project (AGEPP)
National Resource Center for Non Formal Education
(NRC-NFE/LRC), Nepal
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ACRNYMS

ACCU	–	Asia/ Pacific Cultural Center for UNESCO
AGEPP	–	Asia Good ESD Practice Project
APPSP	–	Agriculture Perspective Plan Support Program
CBO	–	Community Based Organization
CLC	–	Community Learning Center
CLCMC	–	Community Learning Center Management Committee
DEO	–	District Education Office
DESD	–	Decade of Education for Sustainable Development
EFA	–	Education For All
ESD	–	Education for Sustainable Development
GO	–	Government Organization
IEC	–	Information, Education and Communication
IELP	–	Integrated Environment Literacy Program
INGO	–	International Non Government Organization
LRC	–	Literacy Resource Center
MDG	–	Millennium Development Goal
MoES	–	Ministry of Education and Sports
NFE	–	Non Formal Education
NFEC	–	Non Formal Education Center
NGO	–	Non Government Organization
NRC-NFE	–	National Resource Center For Non Formal Education
OSP	–	Out of School Program
PAF	–	Poverty Alleviation Fund
PLANET	–	Package Learning Materials on Environment
SIMI	–	Nepal Small Irrigation and Market Initiative
SOUP	–	Society of Urban Poor
TRPAP	–	Tourism for Rural Poverty Alleviation Program
UNESCO	–	United Nations for Education, Science and Culture Organization
UNESD	–	United Nations for Education for Sustainable Development
UNLD	–	United Nations Literacy Decade
VDC	–	Village Development Committee

Asia Good ESD Practice Project (AGEPP-2)

Environment Education for Quality of Life Improvement and Sustainable Development

[A] Executive Summary

National Resource Center for Non-Formal Education (NRC-NFE), Nepal a Non Governmental Organization dedicated for the promotion of Literacy and Non Formal Education(NFE) in Nepal had implemented the **“Integrated Environment Literacy Program (IELP) for Poverty Alleviation through Income Generation Program and Quality of Life Improvement of Girls and Women and Disadvantaged Population through Community Learning Centers (CLCs)”** Project with the support from **Asia/Pacific Culture Center for UNESCO (ACCU), Japan under the ACCU-UNESCO Asia Pacific Innovation Program for ESD.**

Environmental conservation should be part of people’s daily life and it should be directly linked up with the income generation and quality of life of the community people. The project converged the application of environmental friendly new technologies for improving their income together with increasing awareness among the community people. NRC-NFE/LRC (Literacy Resource Center), Nepal had organized various Literacy and NFE programs establishing Community Learning Centers (CLCs) in various parts of the country.

NRC-NFE is the pioneer to establish CLC in Nepal. So far it had established 22 CLCs in different parts of the country and at the same time it has been providing technical support to UNESCO Kathmandu and the Government of Nepal to set up and promotion of CLCs in Nepal. CLCs had already become the viable mechanism to conduct Literacy and NFE activities combining with different developmental issues and people’s quality of life improvement aspects. The Government of Nepal has made policy and national program on CLC all over the country. There is more than 600 CLCs in the country.

The main objectives of the project was to provide Integrated Environment Literacy Program (IELP) to the girls, women, out of school children, youth and disadvantaged population combined with income generating activities for the improvement of quality of life of the people in groups so that they become empowered to overcome poverty maintaining sustainable environment.

Main activity areas under the project were

- ii) Awareness raising programs on environment conservation, its relation with quality of life of the people and community;
- iii) Information dissemination through CLC Resource Center
- iv) Income generation activities

The project has helped to provide the following benefits to the community people.

- To promote literacy & non-formal education for out of school children, youth and adults especially for girls, women and disadvantaged population in the country.
- To empower them to earn more income and acquire knowledge and skills to improve their quality of life and conserve natural resources through environment friendly technologies
- To promote CLCs as local institutions for non-formal education and community development.

Some photos based under the activities of CLCs are given below:



Building of NRC-NFE



Literacy Resource Center of the NRC-NFE



Training to the literacy facilitators



Demonstration of gas stove from bio gas energy



Promoting education for children



Supporting for safe drinking water

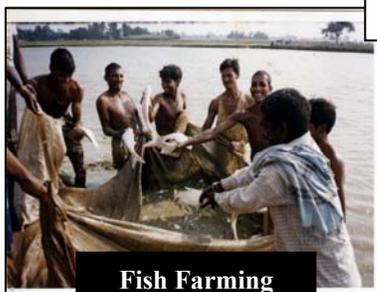


Chicken Raising



Vegetable Farming

Supporting for income generation programs



Fish Farming



Bee Keeping

[B] Attribution

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[C] Project Overview

1. Project Title:

Integrated Environment Literacy Program (IELP) for Poverty Alleviation through Income Generation Program and Quality of Life Improvement of Girls and Women and Disadvantaged Populations Through Community Learning Centers (CLCs).

2. Project Overview:

[I] Background:

National Resource Center for Non Formal Education (NRC-NFE), Nepal was established in 1995 and dedicated to promote literacy and Non- Formal Education(NFE) It firmly believes that Literacy Education Promotion is neither only teaching how to read, write and calculate to the out of school children, youth and adults nor it is schooling alone, but education must be designed and delivered to enable the people especially marginalized people to upgrade their living standard and quality of life. NRC-NFE also realized that to achieve this purpose, there should be a local people's organizations which can plan and implement the local need based programs and monitor the programs by itself. At present this task was done through Community Learning Center (CLC) in different places of Nepal. Therefore, the ACCU-UNESCO Asia Pacific Innovation Program for ESD was received by NRC-NFE with great enthusiasm and zeal. Under this program, NRC-NFE had shared the concept of sustainable development with Education Ministry and the National Commission for UNESCO, Health Ministry, Agriculture Ministry, Ministry of Industry, Cottage Industry Department, Municipalities, Village Development Committees, NGOs and CBOs through consultation and technical cooperation with those organizations.

Education for sustainable development had to be participatory, multidisciplinary, holistic approach etc by nature. It certainly promotes critical thinking and

participation in decision making in almost all activities at macro and micro levels. The appropriateness of the program was timely because the illiteracy was the biggest handicapped faced by the marginalized people in the Nepali society. In Nepal, the community people especially girls, women and poor men were not aware about environment conservation and waste management in the sustainable manner so as to cooperate for sustainable development. They could not adopt environment friendly technologies in their day-to-day life activities like in farming, water resource conservations, community forest planning and managements, biogas production, waste management, reducing and recycling of the waste materials etc. Cutting trees for fuels, throwing dirt & hazardous wastes anywhere, unmanaged using of chemicals (fertilizers and pesticides) in the farms, using energies without compromising for future generation etc. had become a big problem. This situation had risen due of lack of proper education, exploitation, marginalization and poverty of the people.

Realizing the need of the sustainable development education, the 2006-2007 ACCU-UNESCO Asia Pacific Innovation Program for ESD under the UNESCO/ Japan Funds-in-Trusts for the promotion of Education for Sustainable Development through National Commission for UNESCO of the country was implemented by the NRC-NFE since October 21, 2006. Under this program the NRC-NFE had promoting out of school (OSP) education program for the children not attaining the formal schools and post literacy, women literacy and basic literacy classes as comprehensive literacy education program for illiterate adults and youths at the community level through CLCs in the rural areas especially for girls and women for sustainable development.

[II] Objectives of the Project:

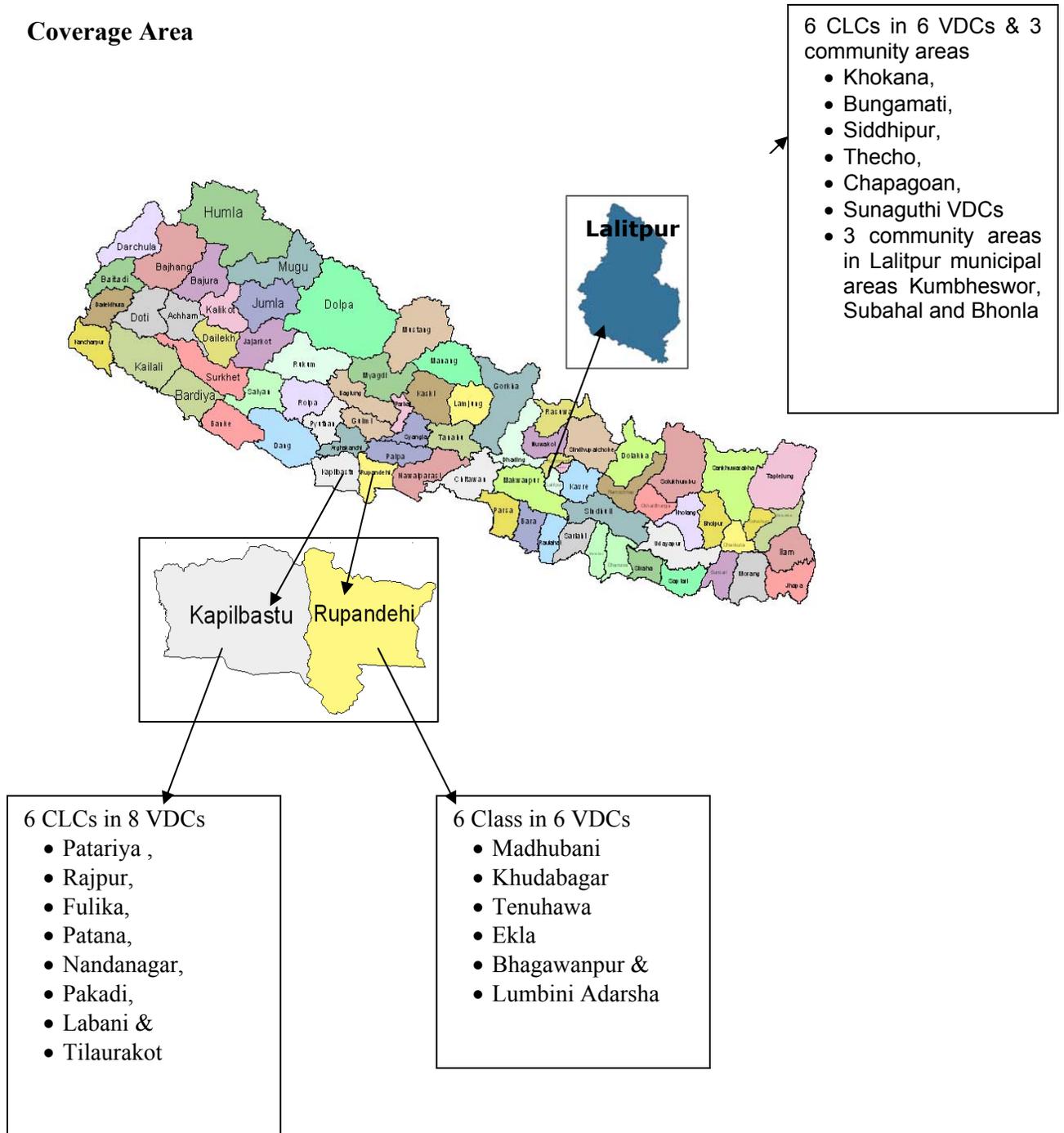
The specific objectives of programs were:

- To increase the awareness level of the girls, women and disadvantaged groups of the targeted areas of the project on environment conservation, its relation with quality of life of the people and community;
- To develop integrated curriculum and teaching learning materials on relation between human and environment managing the waste materials to understand health hazards due to degradation in quality of environment, income generation through alternative crop production / crop rotation and use of compost fertilizers and organic pesticides, effect of population growth on environment and take care of them.
- To integrate sustainable development issues in on going adult literacy, OSP and Women literacy programs and other NFE programs
- To improve the environmental status of the community through application of environment friendly technology based scientific education like management, green manure making, recycle, biogas production, community forest etc.

[III] Target Beneficiaries:

The target beneficiaries of the project were girls, women, out of school children, youth and other disadvantaged and ethnic groups of the villages, who were very poor and responsible for environmental degradations. The project has covered following 20 Village Development Committee(VDC) of Lalitpur, Rupandehi and Kapilvastu districts and 3 community areas of Lalitpur Municipality.

Coverage Area



[IV] Resource Inputs and Allocation

For the implementation of the project successfully, technical input had been provided from NRC-NFE as a whole. In the field level, various types of activities were conducted by the CLCs under the supervision of Field Office and NRC-NFE. The financial input had been provided by partly from ACCU and NRC-NFE and partly from local level. Similarly, the materials had been developed as per the results of the need assessment at local level. For this purpose coordination and cooperation with different line agencies were sought.

[V] Implementation Mechanism

In order to implement the project activities, Project Management Committee was formed under the leadership of Mr. T. M. Sakya at NRC-NFE since August 2006. The committee was comprised of five members including ESD experts. The committee prepared a detail action plan and developed implementation strategies. The activities to be carried out at different levels: central as well as community level were categorized and implemented as well as monitored accordingly. The CLCs were responsible to carry out different activities at local level. In Lumbini, the Field Office of NRC-NFE carried out the supervision and monitoring of the activities while in Lalitpur, NRC-NFE itself did supervision and monitoring of the activities.

[VI] Implemented Activities

a. Major program areas:

In order to achieve the project objectives, the project was implemented under major program areas were:

- i) Literacy and Non Formal Education programs integrated with ESD
- ii) Awareness raising programs on environment conservation, its relation with quality of life of the people and community;
- iii) Information dissemination through CLC Resource Center
- iv) Income generating programs

b. Project Activities :

Under these four major program areas various activities had been implemented in the project areas, which are described as follows:

Activity - 1. Consultation Meeting with Stakeholders & Expertise: August - October 2006

NRC-NFE had held collective and individual consultation meetings with the National Commission for UNESCO, the Education Ministry, Health, Agriculture, Industry, Cottage Industry Department, Municipalities, Village Development Committees, like NGOs and CBOs to discuss about the project strategies to be followed for effective implementation of the project.



Consultation meeting with expertise from different agencies.

Activity - 2. Needs Assessment : September - November 2006

In order to understand the knowledge and practice of the community people on environment and their needs & interest for sustainable development, need assessment was carried out with the active participation of the CLC members and community people. Need assessment was done on the basis of the sustainable development from environment, socio-cultural and economic perspective through discussion, meetings, workshop,



CLC members and Community people during Need Assessment

survey, document study etc.

Activity - 3. Curriculum Development : November - December 2006

Based on the result of the needs assessment, an integrated literacy curriculum was developed integrating ESD content areas with literacy skills.

For the development of the curriculum, the existing government literacy curriculum and related materials published by different agencies were studied and analyzed to identify the content areas to be included in the new curriculum to fulfill the needs of the target population. The supplementary contents based on the learning needs of the community people were then set into the curriculum.

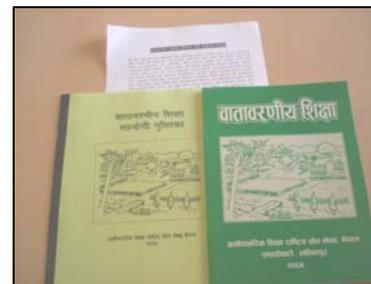
The curriculum developed by NRC-NFE containing ESD contents as chapter wise are given as follows :

Major Content Area	Contents & sub contents
Water is life	<u>Water is life</u> <ul style="list-style-type: none"> - Importance of water - Reasons behind dirty water resources - Water borne diseases and problems - Disadvantages of impure water - Purification of water - SODIS - Proper utilization of water
	<u>Latrine in every household</u> <ul style="list-style-type: none"> - Importance of latrine - Reasons behind pollution and its effect - Simple method of constructing latrine
Waste management for better life	<u>Waste management for better life</u> <ul style="list-style-type: none"> - Sources of wastes - Problems of wastes - Money from wastes - Waste management through 3R's - Our responsibility for waste management
	<u>Compost manure</u> <ul style="list-style-type: none"> - Technique of preparing compost manure & its use - Advantages of compost manure
Green forest, country's asset	<u>Green forest, country's asset</u> <ul style="list-style-type: none"> - Importance & need of forest - Deforestation & its effects - Forest conservation & its solutions - Advantages of forests
	<u>Community forest</u> <ul style="list-style-type: none"> - Definition of community forest, its need and importance - Community forest management - Tree plantation (Forestation) - Role of individual & community in forest management - Deforestation
Alternative Energy	<u>Alternative energy</u> <ul style="list-style-type: none"> - Different kinds of alternative energies - Bio-gas & its advantages

	<ul style="list-style-type: none"> • Smokeless stove /Improved cooking stove - Importance of smokeless stoves - Technique of constructing the stove - Types of stoves - Advantages of stove
Environment Conservation	Our responsibility towards Environment conservation <ul style="list-style-type: none"> - Reasons behind environment degradation - Pollution & effects caused by pollution - Bad effects caused by dioxin gas - Our responsibility in environment conservation
	Role of community for environment conservation <ul style="list-style-type: none"> - Participation of community in environment development - Role of CLC in development of community environment

Activity - 4. Teaching/ Learning Material Development: December 2006 - March 2007

Based on the curriculum, a learning material for post literacy level with major theme of "Environment Education for Sustainable Development" was developed in Nepali language with adequate illustration. The name of the book is "Environmental Education" (translated from Nepali i.e. "Vatawaraniya Shikshya").



ESD materials developed under the project

Before developing the learning materials, different materials about environment and the sustainable development issues published by different organizations were collected. After detail study, ESD contents were identified.

The book was then finalized and printed. A guidebook for facilitators was also developed containing the curriculum with the teaching learning activities, their steps, time allocation and example of detail lesson plan. This had helped to guide the facilitators to conduct the environmental literacy classes more effectively using appropriate methods.

Activity - 5. Integration of Sustainable Development Issues in ongoing literacy, OSP and Women literacy programs: October - November 2006

The exiting curriculum of the schools as well as the literacy program of the Government and different other NGOs and the learning materials used or developed for the ESD in all existing programs in the project areas like literacy program, OSP and women literacy programs were analyzed. Some of the programs already contained different ESD based contents, but in limited areas, which did not cover all the contents needed. So, the literacy curriculum integrated with environment education and learning



A facilitator introducing Environment literacy book to the learners.

material developed by NRC-NFE had been supplementary book for all the literacy programs.

The book developed by NRC-NFE were utilized in each of the literacy class organized by the CLCs and others to impart the knowledge and skills about the environment and other ESD based issues like water resources, waste management, compost manure, forest conservation, alternative energies, roles and responsibilities of community people and CLCs for sustainable development etc. The lessons from the book were also used as a supplementary material according to the needs and interests of the learners.

Activity - 6. Orientation/ Training to the existing facilitators on teaching ESD contents: November 2006

The facilitators of different literacy programs were oriented on teaching ESD contents utilizing different supplementary and complementary materials based on needs and problems of learners along with the teaching and learning techniques during respective facilitators training programs. Expertise from different organizations were mobilized to orient the facilitators about the environment and ESD contents.



A session by an Environment Expert during facilitators training

Apart from this, the Social Mobilizers (CLC Managers) were trained to conduct the classes using the ESD book and its guidebook. They were the key persons who lead other facilitators to operate the classes. They can provide guidance to the facilitators in the community who were conducting literacy classes with the support of government and other organizations.

Activity - 7. Orientation of CLC Management Committee Members and other Stakeholders on the project implementation: September - December 2006

Meeting/ discussion/ workshop with CLC personnel and social mobilizers were



Orientation for social mobilizers



CLC MC members discussing about the ESD program in Lumbini



Discussion with CLC members in Lalitpur

organized to orient them about the programs and activities of the project and to

discuss about the needs & problems related to ESD. During the meeting, need based and relevant programs for the benefit of the community people for sustainable development were also discussed.

Activity - 8. Training of Facilitators of Literacy Classes : Oct 2006

In order to build the capacity of facilitators to effectively conduct the literacy classes, different training programs were organized. The facilitators' training had focused on various teaching learning techniques, participatory approaches, localization of materials and use of various materials based on the learners' needs and methods of integrating ESD contents in the teaching learning process.

The trainings for facilitators, organized under the project, were given as follows:

- 12 days training for OSP I facilitators
- 9 days training for adult literacy facilitators
- 5 days training for post literacy facilitators in Lumbini
- 5 days training for post literacy facilitators in Lalitpur
- 3 days refresher's training for OSP I facilitators
- 3 days refresher's training for adult literacy facilitators
- 1 day refresher's training to the post literacy facilitators in Lalitpur
- 5 days training for Vegetable farming and literacy class facilitators



A facilitator analyzing the lessons where ESD contents can be integrated



Facilitators practicing teaching methods

The refresher's training had helped the facilitators to find out the solutions of the problems faced during class operation and they got opportunity to discuss about the difficult and complicated lessons in the books.

Activity - 9. Organization of Integrated Literacy Classes : Nov 2006 - July 2007

Different literacy classes at different levels were conducted based on the demand and needs of the literacy target learners. OSP I classes were conducted for illiterate and school dropout children while basic adult literacy were conducted for illiterate adults. Similarly, post literacy classes combined with vocational skills were conducted with special emphasis on the sustainable development.

There were total of 215 integrated literacy classes conducted with total no. of beneficiaries were more than 4500 and female participation is found to be more than 70%.



Adult Literacy Class in Lumbini



Use of PLANET 3 material in OSP class: Learners discussing on Waste management

Descriptions of the classes were given below:

Programs	No of Classes	No of learners	Target groups/place
Post literacy	16	410	Neo literate adult especially women from 6 CLCs established in 2002 in Rupendehi and Kapilvastu district
Vegetable farming literacy	12	240	Illiterate adults of 6 CLCs established in 2006 of Rupendehi and Kapilvastu district who are involving in vegetable farming
Adult literacy	3	68	Illiterate & semiliterate women
Post literacy	12	283	Semi-literate and neo literate women of 6 CLCs in Lalitpur
Adult literacy	89	1780	Illiterate adults of Rupendehi & Kapilvastu districts
Post literacy	47	940	Neo literate adults of Rupendehi & Kapilvastu
OSP I class	18	480	Out of school children and school dropout children of 6 VDCs of Rupendehi and Kapilvastu
Adult literacy	18	450	Illiterate adults of 6 VDCs of Rupendehi and Kapilvastu
Total	215	4651	

Note: Average number of learners in each literacy class is 20 – 25

Different textbooks were used according to the literacy programs, while the book "Vatawaraniya Sikchhya" developed by NRC-NFE was used in all the literacy classes as supplementary book. Likewise the PLANET materials on Water, Forest and Waste Management were also used as supplementary materials in the classes.

Activity - 10. Awareness raising activities : Nov 2006–July 2007

In order to raise the awareness among the community people on ESD components such as waste management, alternative energy, tree plantation and forest conservation etc, the CLCs had organized different awareness raising activities. Similarly, they had conducted international days celebration on literacy day, HIV/AIDS day, Environment day, Women's Day etc by organizing different awareness raising programs like mass meeting, song & dance competitions among the learners and groups, rally, quiz contest, street drama, cleanliness campaign etc.



Rally on Literacy Day

Those activities had helped a lot to make the community people aware for their own benefit and to improve the environment situation of the community. The CLCs were going to organize cleanliness campaign; rallies, video show program in the CLCs on the occasion of environment day of the year 2007.



Cleanliness campaign

Activity - 11. Strengthening of CLC Resource Center : Nov 2006 – July 2007

All of the CLCs had operated resource centers for information dissemination and continuous learning. So, to strengthen the resource center, they were equipped with different resource



Book exhibition in the CLC

materials relevant to the local context and situation. ESD related materials like PLANET series on water, forest and waste management, posters, booklets and other materials on alternative energy, eco-san latrine, bio-gas, compost manure, community forest, saving & credit scheme, vocational literacy materials etc, were provided to the CLC Resource Centers.

The CLCs had organized discussion and talk programs mobilizing locally available resource persons/ experts to discuss ESD related issues in the community.

In order to strengthen the resource center of the CLCs, NRC-NFE provided the basic computer knowledge & skill to the CLC personnel and facilitators of different CLCs through 10 day training program to enhance their capacity on utilizing computer technology for education, information dissemination and awareness raising among the community people. The trained participants had utilized their knowledge and skills on imparting literacy skills and functional knowledge to the learners in the literacy classes by using different informative VCDs and they also transferred their skills to other CLC personnel, group members and learners in the community. This way, the facilitators have become the important means for information dissemination through resource centers.



An agriculture expert explaining about organic vegetable farming



A group leader sharing his experience off-season



Computer Training Participant

Activity - 12. Training on Waste Management to the learners and different group members - July 2007

In order to raise the awareness among the community people on waste management, NRC-NFE has been organizing trainings on waste management for the literacy class learners, facilitators, functional group leaders, women group leaders and community people. As its aim, it has organized 3 days training on waste management for learners' group leaders, facilitators, social mobilizers and CLC personnel in Lumbini. The major contents discussed in the trainings were:

- Concept of waste materials,
- Problems created by untreated wastes
- Source of wastes



Participants of the training

- Principles of 3 R concept (Reduce, Reuse & Recycle)
- Management of organic wastes and preparing green manure
- Bio gas as an alternative energy

It was remarkable achievement that most of the participants in the training programs have started preparing compost manure with organic wastes. The community people & CLC personnel also emphasized the proper management of wastes materials & developed the ideas of use of waste materials & recycle of waste materials producing different interesting items form the wastes.

[VII] Timeline

Year 1 : October 2006 - September 2007

3. Process Documentation

[I] Community Formulation Process

In Western part of Nepal, especially in Lumbini i.e. Kapilvastu the people were very poor, illiterate and unaware of important of environment. Especially in those places Muslim community and other poor people were lagging behind due to the low level of literacy, low economic status and being the victims of social discrimination. Same is the case of the Lalitpur district of Central part of Nepal and so called untouchables of Kathmandu. They had wide spread poverty, illiteracy and socially discrimination.

NRC-NFE/LRC had helped the local people to be organized and to set up the CLCs by the local people and managed by them self to empower the community people. It especially focused on the education to the girls and women, out of school children, youth and other poor and disadvantage people both in side and out side Kathmandu. Most of the poor and disadvantaged children were deprived of formal school due to non-availability of schools or overload of works. On the effort from NRC-NFE, CLCs had taught them to read, write and calculate and productive education but also taught to use environmental friendly technologies to form vocational groups such as vegetables, fruits, egg, milk and milk products, honey etc. This had helped them to overcome extreme poverty. They could take care of their health, children and whole family in their day-to-day life.

There was a need of continued program on sustainable development so that the poor and deprived people of community could be involved in the environmental conservation through proper education. Since they were illiterates and lowly educated, they were not able to adopt environment friendly technologies in the farming, water resource conservations, community forest planning and management, biogas production from waste materials and recycling of the waste materials etc. For example, they were blamed for cutting trees for fuels, throwing dirt & waste every where even the garbage from agricultural products, vegetable wastes, husks, animal wastes, secretion of animal and other things were thrown everywhere making the environment so bad. The people were using chemical fertilizers and pesticides in their farms without knowing their impacts in the field and environment. Therefore their daily lifestyle had polluting the environment by using the resources in the unmanageable ways and providing negative impacts to all adjoining villages also.

[II] Factors of Promotion:

- Coordination with Non-formal Education Center, MOES at national level and District Education Offices for development of curriculum and materials.
- Integration of the sustainable development concept in the existing literacy and training programs.
- Cooperation from the Government and other International and National organizations for vegetable farming, agricultural technologies, forest conservation etc.
- Capacity building of the CLC Managers and other community leaders
- Instituting multiplier effect in each of the Follow-up activities for each of the project programs
- Use of various methods like general key word method, whole language method, reflects method, PRA method and constructive education method in teaching learning activities.
- Technical cooperation with different agencies GO, NGOs & INGOs
- New but improved technology in animal raising like cow, goats, pig etc. to be used. Information, Education and Communication (IEC) method had been used among computers and satellite communication.
- Design, operation and evaluation of the whole program from the local people. This is apparent that CLC was set up, managed and evaluated by the local people keeping in view the sustainability by themselves. This had raised awareness of the community people especially girls & women and disadvantaged population.

[III] Factors of Obstruction:

- The program coverage is very limited.
- The program period is not adequate. It should be up to five years.
- Some difficulties to get support from stakeholders

[D] Project Review

1. Social Relevance and Cultural Appropriateness:

Most of the ESD related problems were generated out of ignorance and greed. Education would be powerful to impress the children and adults that they cannot have short vision but have long-term vision. Such education had helped the people to practice sustainable development process. Education class on ESD to children and adults had empowered and educated them to make them aware of conservation, propagation, and recycling of environment friendly materials. Hence, education for sustainable development goals set by UNESD Decade could be achieved.

Integration of ESD component in the ongoing literacy programs and development of teaching learning materials on ESD and utilizing them in various literacy & NFE programs had been supporting activities of the project for sustainable development. The knowledge and skills gained by the learners of the literacy programs had empowered them to practice environment friendly technologies in their daily life for sustainable development.

The information on ESD had been accessed not only in English but in Nepali language too. Most of the community people who were educated understand Nepali language but the local learners didn't understand them. So, facilitators and social mobilizers helped them to transfer the messages even though there was lack of information about the materials in local languages which could be easily understood by all the learners in the rural areas

The main points can be pointed out as:

- Development of integrated environment literacy curriculum and learning materials
- Integration of ESD in on going literacy and NFE programs
- Dissemination of ESD concept through CLC Resource Centre through out the country.
- Improvement in literacy situation of girls, women and disadvantaged groups
- Improvement in environment around the community promoting capability of Waste Management, recycling of wastes, bio gas production, natural resource conservation, community forest etc.
- Improvement in income level of the community people by different income generating activities such as vegetable farming, fish farming, fruit farming, bee keeping etc.
- Improvement in health situation of the women and other vulnerable people.
- Eliminations of Social and Cultural evils.
- Active participation of women in environmental conservation
- Group work and sharing of works among the community people for sustainable development

2. Degree of Satisfaction of Stakeholders & Target Beneficiaries

In Nepal, the people are very poor, illiterate and unaware of importance of environment. Poor people are lagging behind due to low level of literacy, low economic status and being victims of social discrimination, exploitation and neglected by the power holders. It is so on and so forth, because of lack of proper education & environment education. NRC-NFE had helped the local community people under the project by providing literacy and NFE by using environment friendly technologies. This Innovative Project helped especially for girls, women and disadvantaged population to provide Integrated Environment Literacy Program. So, they became empowered to overcome poverty maintaining sustained environment and involved in different community level activities for sustainable community development.

Integrated literacy programs:

The project had helped a lot to improve the socio-economic level of the community people along with the literacy situation of the target area from various programs. Approach of integrated literacy program by developing specific curriculum and a supplementary book and associating learners into groups for continuous learning was the major innovativeness in the project.

Some of the success stories are also given below:

"The learners became aware of their personal hygiene and cleanliness of households and surroundings. So, they were regularly organizing cleanliness campaigns in the community area."

"The learners in Lumbini area learned the importance of latrine and simple method of construction. As a result, they started constructing latrines in their own and solved the problem of waiting dawn and night for resting (that is going to toilet)."



Simple Pit Latrine made by the learners themselves.

Associating learners into groups

In order to continue the learning process of the learners, they were associated in groups and provided different skill development trainings such as pickle making, candle making, vegetable farming, goat rearing etc. This helped for they could involve in income generating activity for additional income for themselves and for their family as well. Being literate only doesn't make a sense unless the learners become self reliant and self-dependent, applying the knowledge and skills gained for quality life is important. Income of his/her own however it is very little, makes a person much empowered and develops feeling of self-respect.

Both father and daughter benefited from the same literacy class getting knowledge on the environment conservation

Mr. Hariram Chaudhari of 46 years old and her daughter Sunita Chaudhari of 14 years old both are very happy to participate in the same literacy class conducted by Lumbini Adarsha CLC. Both of them became able to read, write and calculate now.



Ms. Sunita Chaudhari was influenced towards literacy as other adult women group members of the Saraswoti vegetable-farming group, who were much elder than her, were also joining the class; while her father Mr. Hariram had joined the class only to become literate. He had gained technical knowledge on vegetable farming as well along with literacy skills since the class was the integrated vegetable farming literacy class in which all the contents are based on vegetable farming. As a result, he could increase his income with the increase in the production of vegetables. Besides, other environmental contents were also discussed during class sessions.

A case of being a woman empowered and self-dependent

Mrs. Isarawati Mallah, illiterate woman of 32 years old lady was living in Mohammad Nagar Village of Rajpur VDC of Kapilvastu district. She became literate through a literacy class organized by Rajpur CLC. After becoming the member of Laxmi Jyoti Mr./ Mrs. Vegetable Farming Group, she understood the importance of saving for better life. She got support for 3 goats, 1 buffalo and 1 treadle pump and could involve in income generating activity from the CLC.



Apart from this, she used to check health in health camps organized by the CLC. She also learned about material health care, childcare, and nutrition for children and pregnant women from health education classes and health camps. She had been very much aware of personal hygiene too. So, she also constructed a permanent latrine for her family.



As she gained knowledge and skills on waste management from literacy class, she started making compost manure from the daily household wastes. She used the manure in her vegetable farm, which resulted in increase of production.



"Education brings learning, earning and living together"

Voices/episode of the beneficiaries:

- The Voices/episode of the beneficiaries especially the target groups of the project are given as below: The most enjoyable thing about participating in the project is the income generating activities as we could earn more for ourselves.
- The project gave confidence to us and ability to earn more not destroying the environment. We learned how to raise vegetable, fishes, bees and skills of reading, writing and calculating.
- We would like to share our knowledge and experiences with our friends, neighbors and community members.
- In the beginning, we feel very ashamed to tell our conditions. Now we frankly discuss about our problems and solving them. We feel very empowered.
- We hope we could participate in the similar projects which will benefit more people and in which we will take part in decision-making.

3. Social Impacts

- Illiterate girl/women, children became literate through the literacy classes
- The learners gained knowledge and skills on ESD contents which could be utilized for improving their daily life style.
- The learners were associated in groups and they have started saving in groups for their own benefit.
- Selected group leaders have received sustainable skill development training on different areas and the knowledge and skills were transferred to the learners and group members at community level through follow up training programs. Those follow up training programs have enhanced their skills and were influenced towards income generation.
- The learners started keeping their houses and surroundings clean and regular cleanliness campaign was organized by the CLCs mobilizing group members and the community people.
- Preparing compost from the organic wastes have been common job of the community people.
- Most of the group members were found to be interested in installing bio gas plant for their homes.
- Awareness raising activities and beneficial programs have brought changes in the perception of the community people towards CLC, sustainable development and other programs of similar nature.
- Participation of the community people in development programmes were found increased.

4. Project Sustainability

The project had been managed for the attaining the sustainability. Some strategies followed for the project sustainability are mentioned below:

- The project activities were implemented by the CLCs which were set up and managed by the local people
- There were combination of literacy, empowerment, poverty alleviation and environment conservation and improvement that are the main factors for sustainable development.
- The project was designed to impart literacy and numeracy skills as well as the application of scientific but environment friendly technology in farming of vegetables, fruits, crops, forest propagation and conservation.
- Local resource mobilization & community participation was emphasized for taking action through CLCs and monitoring the strengths and weakness of the CLCs involving local institutions and experts.
- The people income as well as their quality of life was improved through self-generated enterprises.
- In the developing the curriculum and teaching learning materials, the community people especially the learners and facilitators themselves were actively involved.
- The project had coordinated with different line agencies for the proper cooperation. The experts from such agencies were utilized during the project

implementation.

[E] ESD Implication

1. Implication as Sustainable issues:

- ESD has been the major concern in all over the world. So, integration of ESD contents in the literacy programs was felt need in the community for sustainable development. Environment is one of the major aspects for sustainable development. So, environment education and other related subjects were chosen for integration according to the present context in the locality.
- Integration of ESD component in Literacy Curriculum, development of teaching learning materials and utilization of those materials in on going literacy programmes have been very useful and fruitful to impart knowledge and skills on ESD to the community people. This Project was implemented to demonstrate the ESD components into existing literacy programs.
- Organization of different awareness raising programs through social and cultural activities like song & dance competitions, street drama, rally & mass meetings etc. were effective means for building awareness among the community people.
- The concept of sustainable development incorporated in various training programs like CLCMC Training, literacy facilitators and supervisors training programs, functional group members was found to be important part for the ESD project implementation.
- The CLC resource center/ library is one of the effective means for information dissemination and transformation of new technology based practices and methods to the community people.

2. Implication as Effective Communication and Decision Making

The project had helped to provide the Effective Communication and Decision Making process in the community of the target groups so as to fulfill the objectives of the project overcoming the following points:

- Disparity between rich and poor, urban and rural men & women have been widening, girls & women are generally poorer in respect to income, assets and access to basic social services.
- Barriers to more equitable gender participation result from biases informal barriers resulting from social norms.
- Traditionally organized and difficult to bring the changes in Community life.
- Most of the community people speak in their own local language and learners of the literacy classes don't understand the Nepali language. So, difficulty in communicating directly with them.

3. Implication as Transformative Education

Sustainable development is essentially about relationship between people and their environment. It is a socio-cultural & economic concern. But the developing countries pose short and long term problem for Education and Human Resource Development. The human Element is now widely recognized as the key variable in sustainable

development both in terms of reasons for unsustainable development and in terms of the hopes for sustainable development.

The following values should be considered for transformative education of the project:

- Relationship to Education, Training and Utilization of Human Potential for social and economic programs.
- New Teaching & learning methods and introducing new delivery mechanism systems
- Promotion of NFE in rural areas through CLC and Multi Media Center.
- Sustainability of rural institutions and CLCs for literacy and NFE development

4. Implication as Institutional and Civil Capacity Development

For the implementation of the project, there were mobilization of expertise and resource persons for workshops and trainings from different organizations working in the ESD-related field. Different kinds of teaching learning materials and resource materials published by such organizations were collected.

Compliance

All of these activities had been completed under the cooperation with organizations linked during the project are mentioned below:

- SOUP: Working for waste management in Lalitpur
- Lalitpur Municipality: Community development, waste management, skill trainings for girls and women,
- Health Department,
- Ministry of Education,
- Ministry of Environment
- District Agriculture Department Office
- Nepal Small Irrigation and Market Initiative (SIMI)
- Poverty Alleviation Fund (PAF)
- Agricultural Perspective Plan Support Program (APPSP)
- Tourism Development for Rural Poverty Alleviation Program (TRPAP)
- District Forest Department
- UNESCO Kathmandu
- National Commission for UNESCO etc.

5. Implication as Learning Process

- The CLCs and community people were involved in the project implementation from the very beginning of the project. Active involvement of local stakeholders as well as target beneficiaries from need assessment to planning, implementation and monitoring of the programs has resulted in the effectiveness of the project.
- Strong coordination with local development agencies and cooperation from district line agencies were also the substantial support for the project. Support of DEO for literacy programs and income-generating programs for groups have been very beneficial for the target beneficiaries.

- Implementing the project activities through the CLCs at field level have helped in building confidence among CLC personnel as well as in enhancing their capacity to handle different projects.
- The CLCs had motivated the learners, mobilized the locally available resources and local participation for the project. Local resource mobilization and community participation was the important strategy for developing peoples' positive attitude and ownership towards the programs.
- CLC itself was made responsible to monitor the programs at grassroots level. So, they are very familiar to the real situation and effects of the programs and aware about improving their situation by themselves.

6. Implication as a Linkage among International Educational priorities (DESD, EFA, UNLD and MDGs):

Education plays vital role for socio-economic development. If we are not aware on environment, we shall destroy environment in the development process. Therefore, we must promote inbuilt education program to educate people both children and adults under the Education for Sustainable Development program under UN ESD Decade. Education is the right of all children and adults. The government of Nepal has been launching Education For All by 2015. So integration of ESD into on going education programs are effective strategy.

[F] Further implementation and Recommendation

1. Further implementation

- Integrated curriculum and learning materials for literacy programs should be developed for the continuous literacy program
- Dissemination of Information on ESD to the community people through CLC Resource Center specially focus on the environment friendly technologies suitable for the rural resource mobilization
- Improvement in literacy situation of girls, women and disadvantaged groups such types of another integrated literacy programs
- Improvement in environment of the community promoting capability of Waste Management, recycling of wastes, bio gas production, natural resource conservation, community forest etc.
- Improvement in income level of the community people by different income generating activities such as vegetable farming, fish farming, fruit farming, bee keeping etc. without degrading the quality of rural environment
- Improvement in health of the women and other vulnerable people in the sustainable manner.
- Eliminations of Social and Cultural evils to uplift the socio economic level of the community people.
- Active participation of women in conservation of environmental indicators
- Group work and sharing of works among the community people for sustainable development by improving the quality of life of the target groups

2. Recommendation

In order to promote ESD the points that need to be discussed are:

- How does growing population affect ESD
- How the girls and women can protect and propagate to human rights and increase their active participation in the socio-economic and political processes.
- How to coordinate with different organizations and sectors which are organizing similar types of the programmes and how to get cooperation from them and how we can offer advice from those organizations for ESD.
- How to develop more ESD related materials for Education for Sustainable Development
- How to develop the integrated multi dimensional, holistic, value radiant, multi areas curriculum and how to implement them through participatory multi method system.