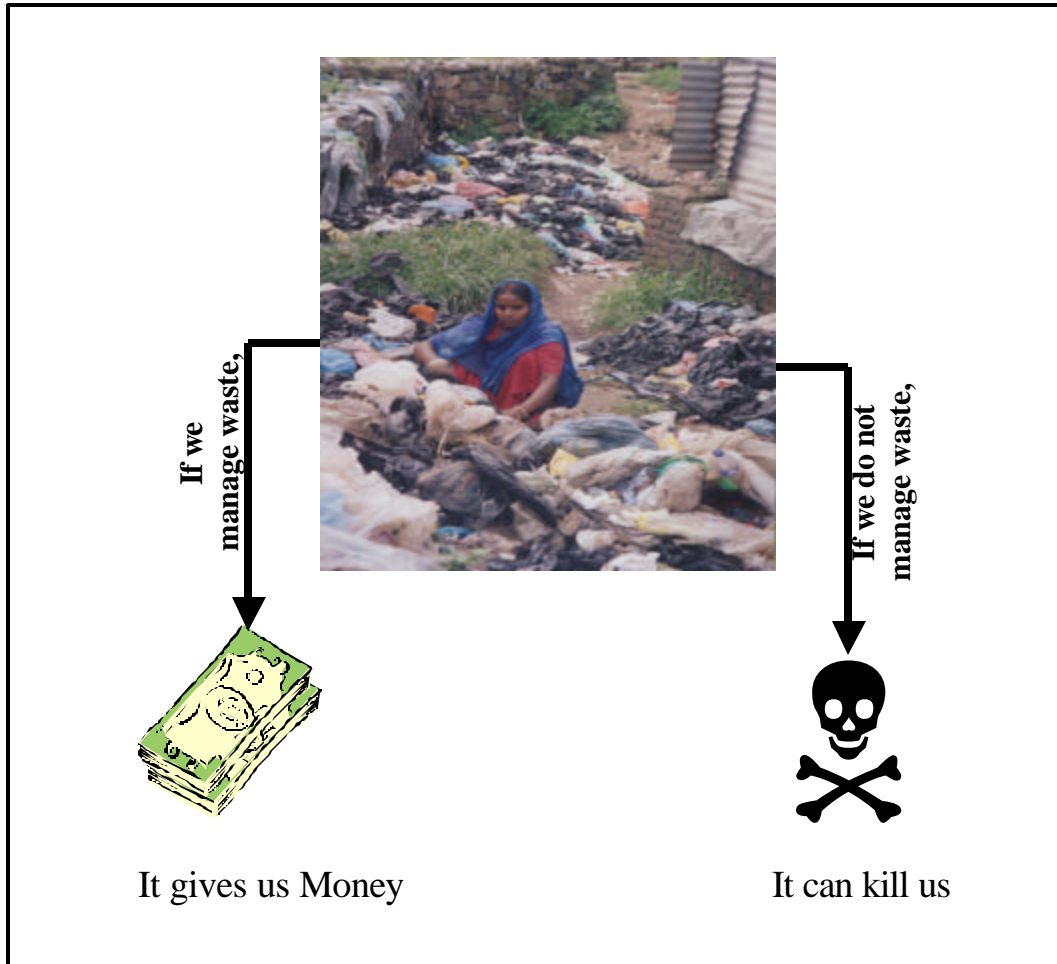


**Dissemination and Utilization of the Local Version of  
PLANET 3 "Waste Management" Materials**

**Final Report**



**Submitted to:  
Asia Pacific Cultural Center for UNESCO (ACCU)**

**National Resource Center for Non Formal Education  
(NRC-NFE/LRC), Nepal  
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## ACRONYMS

CBO	Community Based Organization
CLC	Community Learning Center
EnPHO	Environment and Public Health Organization
GO	Government Organization
LRC	Literacy Resource Center
NFE	Non Formal Education
NGO	Non Government Organization
NRC-NFE	National Resource Center For Non Formal Education
PLANET	Package Learning Materials on Environment
SOUP	Society For Urban Poor
VDC	Village Development Committee

# **Dissemination and Utilization of the Local Version of PLANET 3 "Waste Management" Materials**

## **Final Report**

### **I. Introduction**

#### **General Literacy Situation of Nepal**

Nepal is one of the countries in the world whose half population is illiterate. The literacy rate of Nepal was about 53.74% and illiterate rate was 46.23 % according to the National Census Report of 2001 amounting to 7654244 illiterate people. Among them the male literacy rate was 65.08% (total no of illiterate people were 2720234 people) and the female literacy rate was 42.49% (total no of illiterate people were 4934007 people). It is impossible to address all these illiterates through the formal education system only. So, Nepal has been conducting several literacy and non-formal education programs for a long time. But Nepal's literacy programs do not properly and effectively address the problem of waste management.

#### **Brief introduction of NRC-NFE**

Since the establishment in 1995, the National Resource Center for Non Formal Education (NRC-NFE), Nepal has been organizing different literacy and non-formal education program linking with income generating activities and other life skills promotion activities. It has also established network and coordination with different national and international agencies.

NRC-NFE has also set up a Literacy Resource Center (LRC) for Nepal working closely with ACCU. As the LRC, it has been developing/ adopting various literacy materials for neo-literates and also providing technical support to different agencies working in the field of literacy, material development and implementation of literacy and NFE programs.

Some of the main activities that the center had been carrying out are as given below:

- Development of Training Manuals and organization of Training in Nepal
- Organization of Training courses for literacy and continuing education personnel
- National Curriculum
- Textbook for the Second Level of Literacy Program
- Community Learning Centers (CLCs)
- Publication of Literacy Watch Bulletin
- Research and Study
- National and International Workshops
- Resource Library
- Conducting various training programs

As stated, National Resource Center for Non Formal Education/Literacy Resource Center (NRC-NFE/LRC) has been conducting different non-formal education programs through CLC in different parts of the country. Realizing the importance of inclusion of environmental issues, the center has been integrating such issues in its literacy programs. Regarding this issue, NRC-NFE has been working in cooperation with the ACCU in the field of raising environmental awareness by adapting and utilizing the ACCU PLANET materials. The NRC-NFE has already adapted and conducted different activities in the environmental issues through PLANET 1 (on Water) and PLANET 2 (on Forest) series. The NRC-NFE is now cooperating with ACCU to adapt and utilize the PLANET 3 materials on waste management.

### **Summary of the project:**

One of the problems of literacy program in Nepal is the lack of materials on different issues. If there are any materials, they are more technical and not useful for illiterates and neo literates. So is the case with environment education. Realizing the fact, in order to improve the standard of the environmental education raising the mass awareness and changing the attitude of the people of the country, the Center adapted, disseminated and utilized the PLANET series particularly the PLANET 3 "Waste Management" materials in local version.

The project was divided into 2 phases, the first phase being the adaptation and production of the material in local language and the second phase being the dissemination and utilization of the adapted materials.

### **First Phase: Local Adaptation of Package Learning Materials on Environment 3**

The first phase of the project was to adapt and produce PLANET 3 waste management materials in local context. The phase was conducted from October 2004 to February 2005.

For the adaptation of the PLANET 3 materials, consultation meetings with concerned agencies were done. Different field visits and thorough research on the waste management condition of Nepal was also carried out to help adapt the materials addressing the local context. After the adaptation and preparation of the draft version of the materials, they were field-tested for its practicability, reliability, understanding and language. After the field-testing, many corrections were made in the draft materials and materials were finalized then printed and published. Few copies of the finalized materials were then submitted to the ACCU.

### **Second Phase: Dissemination and Utilization of PLANET 3 Materials**

The main purpose of the second phase was to disseminate and utilize the PLANET 3 materials in different literacy classes, schools and community. The second phase of the project began with the consultation meetings with the external experts to plan the trainings and the ways to disseminate and utilize the PLANET 3 materials in an effective way. NRC-NFE chose the CLCs, schools and other functional/women groups as the effective and efficient delivery mechanism. NRC-NFE/LRC organized three facilitator/teacher trainings in different parts of Nepal to utilize the PLANET 3 materials

and also to do other different environmental activities. The 3 trainings covered 6 CLCs in Lumbini, 1 in Siddhipur, 1 in Khokana, and 1 in women groups of Kumbheswor. All together 74 participants of different level participated in training programs. After the trainings the materials were disseminated to the respective CLCs, schools and other women and functional groups. The materials were used in the literacy classes, schools and different groups. The trainings were followed by the continuous supervision and follow up by the CLC supervisors, facilitators, teachers and group leaders. At the end the NRC-NFE staff did monitoring and evaluation of the project. The result obtained was very exciting, effective and practical in many parts of the project sites.

### **Summative evaluation:**

The project has been a success for the NRC-NFE part as well as for the ACCU part in obtaining expected outcomes of the project.

The implementation strategy and the implementation structure adapted by NRC-NFE should be credited for the success of the project. The implementation strategy followed by the NRC-NFE; giving trainings on PLANET 3 "Waste Management" materials and other environmental issues for the selected CLC personnel, teachers, facilitators, women groups and other functional group leaders have been very rewarding. The trained personnel in turn trained other group members and community people thereby helping in changing the habit of community people as a whole toward the waste management.

From this project, changes in the local awareness on the waste management of the community people were found. To start with, the target groups and learners developed the basic knowledge, information on proper waste management. The participants were found taking concrete action for the proper waste management following the 3Rs principles. After the implementation of the project following major outcomes could be seen at community level:

- All together 18 literacy classes and 6 schools used the PLANET 3 materials benefiting 520 literacy learners and 180 school students directly. The learners broadened literacy skills and knowledge on waste related issues.
- 55 community people directly got the knowledge and skills on proper waste management and brought it into daily practice such as compost making, segregation of waste, making handicraft goods from the plastic waste etc.
- 24 literacy facilitators and schoolteacher were trained on utilization of the PLANET 3 materials, teaching methodologies, motivation and mobilization of local resources for waste management.

## **II. Objectives and expected outcomes of the Project**

The major objectives of the project were:

- To adapt the PLANET 3 "Waste Management" materials in Nepali language based in Nepalese context.
- To disseminate the materials to central level GOs and NGOs to grassroots level NGOs, CBOs and CLCs.

- To implement environment projects at grassroots level.
- Utilize the materials in literacy, post literacy, out of school programs, formal school system and other awareness building programs in the grassroots level.

The expected outcomes and impact of the program activities were:

- The target groups and learners would develop basic knowledge, information on proper waste management.
- The development of the idea of cooperation and living together for healthy living and maintaining better environment would occur in the community.
- The participants in the implementation activities would take the concrete actions for proper waste management following the 3Rs principles.
- Develop feeling of waste management for the prevention of health hazards from the waste.
- Create interest in reading, writing and communicating the proper way of management and environmental protection.

### III. Background Information and Conditions

For the second phase of the project that is dissemination and utilization of the materials, different CLCs and other interested implementing agencies were selected. For this purpose following CLCs and groups participated in the program activities.

S.N	District	CLCs	Areas
1	Rupandehi	1. Madhubani CLC 2. Tenuhawa CLC 3. Khudabagar CLC	Rural
2	Kapilvastu	1. Patariya CLC 2. Fulika CLC 3. Rajpur CLC	Rural
3	Lalitpur	1. Siddhipur CLC 2. Khokana CLC 3. Kumbheswor women groups	Semi urban Semi urban Urban

#### General Situation of the project sites

The project sites are of great historical importance and are the world heritage sites. Lumbini (Rupandehi and Kapilvastu) is Lord Buddha's birthplace hence it has great historical and cultural value. But sadly the Lumbini dwellers are living in abject poverty. They lack opportunities and information hence is far behind in human development context. Lalitpur also has great historical and cultural importance. Khokana and Siddhipur are the outskirts of Lalitpur city whereas Kumbheswor lies within the core region of the city. Among the project sites, CLCs of Rupandehi and Kapilvastu districts were rural, Khokana and Siddhipur were semi urban and Kumbheswor was urban area. The socio-economic and educational situation of the sites varied accordingly. In the rural

areas there were obviously more illiterates, low economic condition than in the semi urban and urban areas. The project was implemented in the areas where the CLCs have been conducting the literacy programs and other community development activities.

Before implementing the project, specific target groups were identified in the project areas, the literacy class learners, different functional groups, ethnic minority groups, formal schools etc. In Rupandehi and Kapilvastu, the program was focused to the literacy class learners and other functional groups, where as in Siddhipur and Kumbheswor the program was focused to the vegetable farming groups, women groups and the ethnic minority groups.

Situations of waste in each of the areas were different accordingly. In the urban area like Kumbheswor, most of the waste generated by the local people were plastic waste, daily food waste etc., in the semi urban areas like Khokana and Siddhipur, most of the waste generated were straws, plastics, green waste from field etc., where as in the rural areas of Rupandehi and Kapilvastu, most of the waste generated were related to their livestock and medicinal waste like medicine bottles, syringe etc.

While implementing the project, numerous prospects and exciting resources were found. One of the major being the potential production of Biogas in Rupandehi and Kapilvastu areas. In such rural areas where nearly every household has at least one livestock, the excreta of the animals can be a big source to generate biogas power. The program has created awareness in the community people about the potentiality of their daily waste from the livestock. If given a little support, they will be able to utilize the waste to generate biogas power.



Biogas plant: Potential source of energy in rural areas.

A table of data shows the overall population and literacy situation of the project sites.

S. N	District	VDC	Population			House hold No.	Literacy Percentage		
			Male	Female	Total		Male	Female	Total
1.	Rupandehi	Madhubani	2670	2846	5516	824	59.64	32.43	46.49
		Khudabagar	2272	2321	4593	605	68.39	18.71	43.61
		Tenuhawa	4520	4731	9251	1193	44.04	24.35	34.58
2.	Kapilvastu	Phulika	2983	3255	6238	906	61.90	25.60	44.42
		Patariya	3333	3576	6909	964	35.12	18.39	27.28
		Rajpur	2041	2177	4218	604	31.91	16.95	24.30
3.	Lalitpur N.P Kumbheswor						88.37	72.87	80.9
		Siddhipur	2647	2919	5566	1193	75.19	55.86	64.98
		Khokana	2246	2296	4542	818	79.79	55.18	67.30

Source: Population Census Report 2001

## IV. Inputs of Resources

Before implementing the project activities, NRC-NFE developed a resource map of the communities with availability of human, physical and technical resources.

### Human Resources:

The schoolteachers, literacy facilitators, group leaders were the major human resources, which were used for the implementation of the project.

### Physical Resources:

During the implementation of the project, different trainings were conducted and the materials of schools and literacy classes were utilized. To conduct trainings and classes, CLC building, VDC building has been utilized. Also, community people provided classrooms in their own houses for the conduction of classes.

### Technical Resources:

The PLANET 3 materials were intensively used in the training programs. The materials were distributed to literacy classes and schools to be utilized in learning activities. Similarly, the materials produced by different agencies on waste management were also utilized in the training session.

### PLANET 3 Materials Distribution List

#### Booklet

S.N	CLCs	No. of Class	Booklet	Total
1	Lumbini CLCs	3 x 6 = 18	30 x 18	540
	Schools		30 x 6	180
			<b>Sub total</b>	<b>720</b>
2	Siddhipur CLC	1	30	30
3	Kumbhesor	1	30	30
			<b>Total</b>	<b>780</b>

#### Poster

S.N	CLCs	Poster	Total
1	Lumbini CLCs	10 x 6	60
	Schools	5 x 6	30
		Sub total	90
2	Siddhipur CLC	5	5
3	Kumbhesor	5	5
		<b>Total</b>	<b>100</b>

#### Video

S.N	CLCs	Video	Total
1	Lumbini CLCs	1x18	18
2	Siddhipur CLC	2	2
3	Kumbhesor	2	2
		<b>Total</b>	<b>22</b>

### Guide Book

S.N	CLCs	Guide Book	Total
1	Lumbini CLCs	1 x 18	18
2	Siddhipur CLC	2	2
3	Kumbhesor	2	2
		<b>Total</b>	<b>22</b>

Similarly, the materials were also distributed to different national and international agencies working on the literacy and environment education areas. (The distribution list is attached.)

## V. Implementation

In order to implement the project, a project implementation plan was prepared with the clear mentioning of the role and responsibilities of NRC-NFE, CLCs, stakeholders and learners. Based on the plan, following activities was undertaken to implement the project. (The implementation plan is attached)

### a) Discussion with CLC members, schoolteachers, learners and community people:

In order to generate the people's interest in environmental education classes and to brief on objectives of the project to the CLC and other community members, community meetings were held in each and every VDC with the representation of all sector of community. During the meeting project objectives and its procedure were discussed openly and the role and responsibilities of the CLC, NRC-NFE and other agencies to implement the project were developed.



Discussion with community people on project objectives.

### Role of NRC-NFE:

- Organize training programs for facilitators and community people
- Organize orientation program
- Coordinate with central and district level agencies
- Make availability of PLANET 3 materials to all the CLCs, schools and other concerned organizations.
- Monitoring and evaluation of the project activities.

### Role of CLC:

- Collection and selection of facilitators for training.
- Utilize the PLANET 3 package in literacy classes
- Supervise the project activities at grassroots level

**b) Conduction of training programs:**

Two types of training programs were conducted, one for literacy class facilitators and teachers on use of the materials in literacy classes and schools; and other one is directly to the community people. The date and the contents of the training programs are given below:

S. N.	Place	Date	Type	No. of Participants	Contents of training
1	Siddhipur	30 August to 1 September 2005	Community	25	<ul style="list-style-type: none"> <li>- Concept of waste materials and waste cycle.</li> <li>- Problems created by untreated waste.</li> <li>-Principle of 3Rs (Reduce, Reuse and Recycle)</li> <li>-Sources of waste materials.</li> <li>- Collection and segregation of waste materials.</li> <li>- How to reduce and recycle the waste.</li> </ul>
2	Kumbeswor	5- 7 September 2005	Community	30	" "
3	Lumbini with practical exercise in Madhubani VDC and Tenuhawa VDC	22 – 28 September 2005	Community + Facilitators	24	<ul style="list-style-type: none"> <li>- Study of PLANET 3 materials.</li> <li>- How to use PLANET 3 materials in the formal and non-formal classes by teachers and facilitators.</li> <li>- Adult and child teaching methodologies.</li> <li>-Concept of waste materials and waste cycle.</li> <li>-Problems created by untreated waste.</li> <li>-Principle of 3Rs (Reduce, Reuse and Recycle)</li> <li>- Sources of waste materials.</li> <li>- Collection and separation of waste materials.</li> <li>-How to reduce and recycle the waste.</li> </ul>

The detail report of the training was prepared and submitted to ACCU separately.



Training Participants busy in-group work



Resource person showing the use of PLANET 3 booklet in training.

**c) Distribution of PLANET 3 Packages:**

The PLANET 3 Package was distributed to the schools, CLCs, literacy classes to be used in their classes. The distribution list is attached.

**d) Organize environmental education classes in literacy and school classes:**

After the training the facilitators and schoolteachers organized environment education classes in their respective classes. All together 20 literacy classes and 8 schools used the PLANET 3 materials benefiting 500 literacy learners and 200 school students directly. The learners gained the knowledge and skill on waste management together with related literacy



Learners discussing on issues of waste management

skills. The classes helped the learners to change their attitude on waste from unwanted things to productive things.

**e) Integration of waste management issues in the literacy primers:**

In order to implement the PLANET 3 materials effectively, it was felt necessary to integrate the materials into the curriculum of Non Formal Education in OSP I, OSP II and Basic Adult Literacy of Nepal. To integrate such topics discussions were conducted with the active participation of learners, facilitators and schoolteachers. The waste management booklet "Waste Management for Better Life" and the poster "Waste Management, Our Village Can Do It" could be introduced while teaching following text books of the existing Basic Adult Literacy, OSP I and OSP II classes.

**Adult Literacy Basic: Naya Goreto (New Trail)**

S.N	Chapter	Title	Message of the chapter
1	2	Water	<ul style="list-style-type: none"> <li>– We should keep clean water springs.</li> <li>– We should keep our environment clean.</li> <li>– We should not drink unsafe water.</li> </ul>
2	3	Agriculture	<ul style="list-style-type: none"> <li>– Use of compost manure for better fertile soil</li> </ul>
3	8	Money	<ul style="list-style-type: none"> <li>– We can earn money by selling scrap metals.</li> </ul>
4	10	To sell	<ul style="list-style-type: none"> <li>– Income generation from compost manure.</li> </ul>
5	17	Waste, Housefly	<ul style="list-style-type: none"> <li>– Reuse of waste</li> <li>– Keep our surroundings clean.</li> <li>– Throw waste in a pit.</li> <li>– Separating organic and inorganic waste.</li> </ul>
6	18	Grass, Forest	<ul style="list-style-type: none"> <li>– Forest should not be destroyed.</li> <li>– We should protect forest by using biogas.</li> </ul>

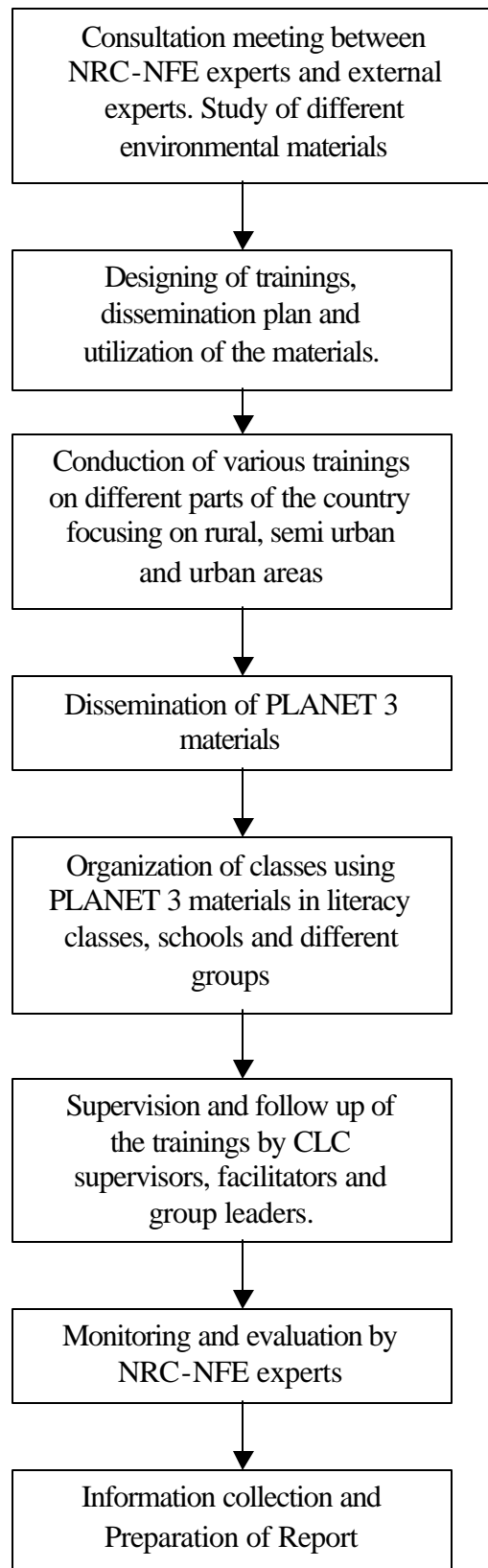
**OSP I: Naulo Bihan (New Morning)**

S.N	Chapter	Title	Message of the chapter
1	15	Clean	<ul style="list-style-type: none"> <li>– Keep our surroundings clean</li> </ul>
2	24	Cauliflower	<ul style="list-style-type: none"> <li>– Compost making from unwanted grass</li> </ul>
3	25	Kitchen	<ul style="list-style-type: none"> <li>– Separating different types of waste</li> </ul>
4	29	Diarrhea	<ul style="list-style-type: none"> <li>– Diseases and Problems</li> </ul>
5	30	Toilet	<ul style="list-style-type: none"> <li>– Environment cleanliness</li> <li>– Diseases</li> <li>– Biogas preparation</li> </ul>
6	47	Environment	<ul style="list-style-type: none"> <li>– Keep our surroundings clean</li> <li>– Keep our roads clean</li> <li>– Waste management</li> </ul>

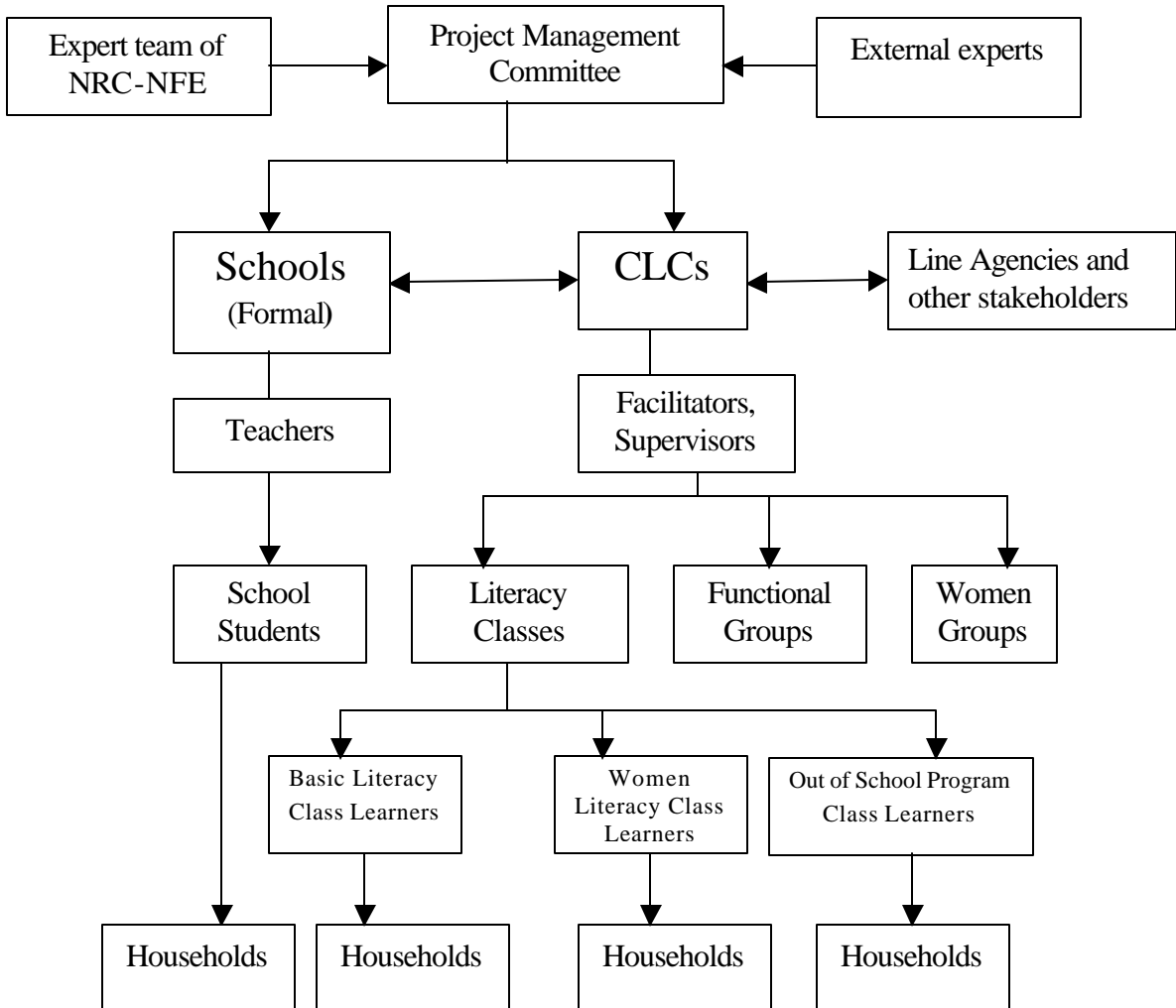
**OSP II: Naya Fadko (New Turn)**

S.N	Chapter	Title	Message of the chapter
1	2	Vegetable Farming	Making Compost manure from waste.
2	3	Nutritious food	<ul style="list-style-type: none"> <li>– Making Compost manure from waste.</li> <li>– Compost manure for better fertility.</li> </ul>
3	5	Discipline	<ul style="list-style-type: none"> <li>– Throwing waste in a fix place.</li> <li>– Preparing compost from waste.</li> </ul>
4	7	Animal Husbandry	<ul style="list-style-type: none"> <li>– Clean animal shade, preparing biogas</li> </ul>
5	8	Determination	<ul style="list-style-type: none"> <li>– Toilet cleanliness</li> <li>– Environment cleanliness</li> <li>– Diseases</li> </ul>
6	9	Business	<ul style="list-style-type: none"> <li>– Income generation from reuse of waste</li> </ul>
7	13	Compost manure	<ul style="list-style-type: none"> <li>– Preparing compost manure</li> <li>– Advantages of compost manure</li> </ul>
8	14	Environment	<ul style="list-style-type: none"> <li>– Different types of diseases</li> <li>– Pollution from misuse of plastics.</li> <li>– Advantages of waste management</li> <li>– Income generation from using compost manure.</li> </ul>
9	15	Health is Wealth	<ul style="list-style-type: none"> <li>– Health hazards from harmful insects like housefly, mosquitoes.</li> </ul>

## STAGES OF PROJECT DEVELOPMENT



## IMPLEMENTATION STRUCTURE OF THE PROJECT



## **VI. Evaluation**

The evaluation of the project was done from three different viewpoints, project management; delivery mechanism and impacts to the learners.

### **1. Project Management:**

While evaluating the project management, following major things were found:

- The project was managed in the participatory process. The community people, CLC members, school management were fully participated in the discussion process to prepare the roles and responsibilities of different stakeholders.
- At the central level, NRC-NFE had established coordination with SOUP, an NGO working on waste management to design and conduct the training program. The training program was well combination of waste management knowledge, skills and the literacy skills.
- The project was able to mobilize the field staff of Literacy and Non-Formal Education Project to supervise and monitor the project activities.
- Because of the constant direction from CLC, the facilitators were able to organize literacy classes in proper way. The materials were provided to each of the classes with the guidebook in time. The community people also helped to manage the literacy classes.

### **2. Delivery Mechanism:**

The delivery mechanism followed by NRC-NFE; giving trainings on PLANET 3 "Waste Management" materials and other environmental issues for the selected CLC personnel, teachers, facilitators, women groups and other functional group leaders have been very rewarding. The trained personnel in turn trained other group members and community people thereby helping in changing the habit of community people as a whole toward the waste management.

The implementation structure for the delivery mechanism designed by NRC-NFE by selecting the CLCs, schools and women groups as major organizations to conduct the activities was found very effective and efficient. The expert teams contributing the project management committee and then the project management committee advising the CLCs and schools for the implementation of the activities was found very effective. Then the CLCs and schools facilitating for the project activities were found very effective and efficient. From the CLC and the schools the intended message directly goes to each and every household of the learners, students and the group members.

### **3. Impacts of the Project:**

To see the impact of the project in the target groups and the local community people, a evaluation team from NRC-NFE visited all the project sites. In the evaluation mission, the expert team got many positive as well as constructive responses from the community people. The result obtained from the evaluation is given briefly as follows:

#### **Effectiveness of the program:**

As scheduled, the project implementation was focused mainly in 2 CLCs of Rupandehi district under Lumbini Project namely Madhubani CLC and Tenuhawa CLC and 1 CLC

each in Siddhipur and Khokana and women groups in Kumbheswor in Lalitpur district being effectively conducted. The effectiveness of the project observed in individual project sites are given below:

**a. Kumbheswor (Urban):**

The project site in Kumbheswor community was mostly covered by dalits especially Khadgi and Deula people. The women group "Mahila Cooperative Active Group" initiated the program with great enthusiasm. The group used PLANET 3 booklet and poster in orientation program as well as in NFE classes. The participants collected and segregated waste materials and also sold the saleable waste materials and collect fund for the group. The participants of the training program developed different types of materials like plastic rope, lady bags, cushion, flower, garland, key chain etc. in the limited way from the waste such as plastic bags, edible oil bags, mineral water container and so on. Some of the members have produced compost manure in plastic container as they were trained in the training. As they don't have kitchen garden and field they are using the compost manure in flowerpots and distributing to other members who needed the manure. In addition to this, the women group are conducting regular cleanliness campaign program once a month. For the campaign program, the group received materials from the municipality. Thus the community people realized the importance of environmental protection and are keeping their surroundings clean and safe.

**b. Siddhipur CLC (Semi urban):**

Siddhipur is one of the focus areas of the project activities. The training participants and other members from this area are preparing compost manure in local earthen pot as instructed. The compost manure preparation as instructed is not so much applicable in this area due to their agricultural business as they need more quantity for their field use. The participants are demanding the plastic container in compensation from the project.



Evaluation team observing temporary compost pit in Siddhipur

They have used booklet and poster in the orientation and NFE program. As they were busy in straw mat knitting, they lack time to make different items from the waste materials. Even then, some of the members of the group produced cushion materials to use in taking bath and cleaning domestic utensils. The women group, saving group and facilitator are playing key role in project activities. Siddhipur community are presently interested in ecological sanitation program as they receive more qualitative manure for their field and they found the eco-san program more effective in keeping the surrounding clean and safe.

### **c. Khokana CLC (Semi urban):**

Khokana VDC was one of the dirty places in the Lalitpur district. Now the community people are making the area clean and protected from pollution from the waste. They managed to raise awareness on waste management in the community people by orientation program using PLANET 3 materials like booklet and poster, which were also used in NFE programs. The community people have not produced compost manure individually as instructed because of insufficiency of the product for the use in the field. At least they developed the habit of segregating the waste materials and put in different pits. At present the community people are interested in ecological sanitation program as they get more qualitative manure and helps to keep the locality clean and attractive. The ecological sanitation program was launched with the help of Environment and Public Health Organization (EnPHO). The program was initiated by Jan Kalyan Sangh in the VDC.

### **d. Madhubani CLC (Rural):**

Madhubani CLC in western Nepal was found very interested in waste management activities. The CLC was successful in organizing mass awareness program in waste management in the community. The organization used PLANET 3 materials: video, booklet and posters in different activities. They considered orientation program, teaching in NFE programs, practical



Demonstration on compost preparation by facilitators

works etc. in effective implementation of program. They prepared community compost pit and used separate pit for segregation of waste materials in different wards of the VDC. In the CLC site, they prepared compost pit for demonstration. The poster and booklet were used for teaching in NFE classes in an integrated manner with NFE lessons. The CLC also launched cleanliness campaign in different villages.

### **e. Tenuhawa CLC (Rural):**

Tenuhawa CLC is another CLC, which initiated the waste management in western Nepal. It emphasized in community waste management by collecting and segregating the waste materials, organizing various committees and arranging the pit systems for collection of materials. It developed compost preparation and used in vegetable farming. It introduced teaching in NFE classes as well as formal classroom situation using booklet and poster prepared under PLANET 3 materials. The CLC conducted orientation program to raise awareness, the effect of which made the community people keep the surrounding clean and safe. The community people developed the habit of waste management and prepared compost pit, which resulted in the higher production of vegetable in vegetable farm leading to the satisfaction of the group members.

## **VII. Lessons Learnt and Future Work Plan**

### **Lessons learnt:**

- The problem of waste and its level in urban areas, semi urban areas and rural areas are quite different. So, designing training program these things should be considered.
- Preparation of Biogas and Eco san are some of the innovative and more productive activities that were visited during the implementation of the project. Integrating with such program with PLANET 3 was much more effective.
- Since CLC is directly accountable to the community, it is a very good delivery mechanism at grassroots level.
- Establishing coordination with different program and mobilizing the existing resources helped decreasing the cost of the project.

### **Future plan:**

- To raise the awareness of the community people on waste management, it is planned to continue the use of the PLANET 3 materials in the literacy classes, schools and different functional and women groups.
- For better and wide dissemination of the PLANET 3's message, it is planned to broadcast the video "Mina's Village Says Yes to Waste Management" in national television.

### **Suggestions and Recommendations:**

After the implementation of the project for last one and half year and based on the evaluation finding of the project, following suggestions and recommendations are made:

- Field based trainings should be provided at the project sites.
- Compost manure preparation container should be supplied to the group members to prepare compost manure from the daily waste for domestic use.
- Constant supervision and monitoring is required and for this CLC members should be trained.
- Cleanliness campaign should be enforced to keep the surroundings clean and safe.
- Project activities should be strengthen and regularized by the local community. CLC should take the initiation to regularize the activities.
- The program should be expanded to other areas.

## **VIII. Conclusion:**

### **Major findings**

Some of the major positive impacts observed in program activities at the project sites:

- Compost preparation from the daily waste.
- Organization of orientation programs.
- Cleanliness of surroundings.
- Segregating waste materials.

- Waste materials used in making different items.
- Multiplier effect of the trainings.
- Introducing waste management lessons in NFE programs and schools.
- 24 facilitators and schoolteachers trained on utilization of the PLANET 3.

### **Concluding remarks**

Though the program activities were focused in some of the selected CLCs and communities, chances were offered to other community people and CLCs as well to participate in the training programs. It was remarkable that most of the participating agencies in training programs developed compost preparation, orientation program, segregation of waste materials and also conducting cleanliness campaign. In general it was found that the community participants and CLC personnel emphasized the proper management of waste materials and developed the ideas of use of waste materials and also recycling the waste materials producing different interesting items from the waste. The difficulty is of producing of items in large quantity and selling of materials due to time consumption as well as cost strategy. As suggested by the participating CLCs and communities, the project has to supply the compost container in reduced price to regularize the project activities and also need monitoring and supervision constantly.

The PLANET package materials are of good quality and learners really liked it. It has tried to fulfill the lack of literacy materials for neo literate. The project is very much successful to generate interest of community people in waste management because it has also focused on how managing waste become their own good source of income.

### Implementation plan of the project

S.N.	Activities	Responsible Organization	Time frame
1.	Discussion with CLC members, schoolteachers, learners and community people a) Siddhipur b) Kumbheswor c) Lumbini	NRC-NFE, CLCs, Schools	July - August 2005  a) July 2005 b) July 2005 c) August 2005
2.	Conduction of training programs a) Siddhipur b) Kumbheswor c) Lumbini	NRC-NFE	a) 30 Aug- 1 Sept 2005 b) 5- 7 Sept 2005 c) 22 – 28 Sept 2005
3.	Distribution of PLANET 3 Packages	NRC-NFE	October 2005
4.	Organize environmental education classes in literacy and school classes	CLC, Schools	October - December 2005
5.	Integration of waste management issues in the literacy primers	NRC-NFE, CLC, Schools	
6.	Evaluation of the Project	NRC-NFE	January 2006
7.	Preparation and submission of final report to ACCU	NRC-NFE	January 2006

**Distribution list****Distribution List**

<b>S.N.</b>	<b>Receivers Name</b>	<b>District</b>
1	Non-Formal Education Center, MOE	Kathmandu
2	National Council for Non-Formal Education, MOE	Kathmandu
3	Non-Formal Education Section	Kathmandu
4	Ministry of Local Development Women's Development Section	Kathmandu
5	Cooperative Department	Kathmandu
6	Research Center for Education, Innovation and Development	Kathmandu
7	Integrated Institute for Development Studies (IIDS)	Kathmandu
8	NGO Forum	Kathmandu
9	World Education	Kathmandu
10	Nepal Women's Association	Kathmandu
11	Lumanti	Kathmandu
12	Nepal Rural Rehabilitation Association (NERRA)	Kathmandu
13	Nepal Red Cross	Kathmandu
14	Swavalambi Samuha	Lalitpur
15	Lalitpur Municipality	Lalitpur
16	Center for Cooperative Community Development (CCCD)	Kathmandu
17	Center for Director Management & Environment Protection,	Kathmandu
18	Center for Education & Environment Service (CEES)	Kathmandu
19	SEWA Nepal	Kathmandu
20	Society for Participatory Culture Education (SPACE)	Kathmandu
21	Society Of Urban Poors (SOUP)	Lalitpur
22	Support Activities Poor Producers of Nepal	Kathmandu
23	The Center for Consciousness Development	Kathmandu
24	Plan International	Kathmandu
25	Redd Barna	Lalitpur
26	United Mission to Nepal	Kathmandu
27	USC Canada/ Nepal	Kathmandu
28	The Center for Development & Population Activities	Kathmandu

**CLCs**

1	Budole CLC	Kavre
2	Mahendrajyoti CLC	Kavre
3	Mandalidevi CLC	Kavre
4	Ugrachandi CLC	Kavre
5	Jyotidaya CLC	Lalitpur
6	Sunakothe CLC	Lalitpur
7	Amarapur CLC	Lalitpur
8	Beluwan CLC	Lalitpur
9	Lidhansa CLC	Lalitpur
10	Siddhipur CLC	Lalitpur
11	Madhubani CLC	Rupandehi
12	Khudabagar CLC	Rupandehi

13	Tenuhawa CLC	Rupandehi
14	Fulika CLC	Kapilvastu
15	Patariya CLC	Kapilvastu
16	Rajpur CLC	Kapilvastu