



Package Learning Materials on Environment (PLANET) 3 “Waste Management”

Production and Utilisation Scheme in Uzbekistan

Implemented by

**National Commission of the Republic of
Uzbekistan for UNESCO**

and

**Asia/Pacific Cultural Centre for UNESCO
(ACCU)**

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I. INTRODUCTION

Educational situation in Uzbekistan

The Republic of Uzbekistan is situated in Central Asia and it has the largest population within sub-region (about 26 million people). About 60% of the populations are living in rural areas. Half of the total population is under 25 years of age. Almost 100% of the population is literate.

There are more than 10,000 general secondary schools, 63 high educational and 539 technical vocational institutions in the Republic of Uzbekistan. In order to provide necessary sources for reforms of the education system, the government is spending about 7,8 % of its GDP.

The concept of continuous education is priority task for social-economic development of the Republic of Uzbekistan. Continuous education satisfies the economic, social, scientific-technical and cultural requirements of every personality, local community and state as whole. Continuous education creates the necessary conditions for creative, socially active, spiritually rich personality and overcoming the training of skilled, competitive staff.

Brief information about the Organization

The National Commission of Uzbekistan for UNESCO was main performer of the project PLANET 3 in Uzbekistan.

Since the very beginning of its foundation in December 1994, the National Commission of Uzbekistan for UNESCO, as independent governmental organization, is endeavoring to fulfill one of the priorities of its long term activity, namely promotion of national, regional and international intellectual cooperation in the field of UNESCO's competence: service for peace and development, and for the strengthening the mutual respect among nations and cultures. Moreover, enormous efforts have being exercised in introducing of UNESCO's programs and projects in Uzbekistan as well as in involvement of national capacities in these activities.

The following are the objectives of the National Commission:

- to participate in the UNESCO's activities on maintenance of peace and human security in the Earth,

- to promote partnership through involvement of various governmental and non-governmental organization into the UNESCO's activities,
- to play an important role in preparation, coordination and implementation of UNESCO's programs.

Summary of the Project

Solid and liquid wastes are an acute challenge in Uzbekistan, affecting the whole society. Currently, there are around 160 municipal solid waste dumps and landfills in Uzbekistan and they are estimated to receive some 30 million cubic meters of waste annually.

The government acknowledged the seriousness of waste management and the "Law on Waste Management" was adopted in 2002 and its application should improve the situation.

The project PLANET 3 was divided into two 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: Translation and Adaptation

The project of ACCU on waste management - PLANET 3 materials – was translated into Uzbek and adapted during the first phase. The implementation of the project started on September 2005 by translation and adaptation process of the ACCU learning materials on "Waste Management", which was completed by January 2006. For realization of these activities experts from national universities have been invited. In order to be very close to the original English text, translators selected phonetically close peoples' names in Uzbek: for example Mina - Minavvar, Nora - Anora, Jai - Jasur, etc. Clothes and environment were adapted into the local context. Pilot field test was organized after the completion of the adaptation and preparation of the draft version of the materials.

On the basis of the field test the preliminary draft local version of the PLANET 3 was revised by the experts of the National Commission of Uzbekistan for UNESCO and Ministry of Public Education of Uzbekistan.

Since the higher printing cost, the revised learning materials were published as package kit of 110 copies, which contains facilitator guide, booklet, poster, VHS

format and CD-format cartoons. Ten copies of adaptation version of PLANET 3 were submitted to the ACCU in accordance with concluded contract.

Second Phase: Dissemination and Utilization

The aim of the second phase of the Project was to disseminate and utilize the PLANET 3 materials among target beneficiary groups (via training programs in schools, Community Learning Centers (CLC), Youth Educational Camp as well as during National Seminars and Internet On-line Forums on the issue of waste management).

First training seminar was on utilization of the PLANET 3 was organized in Shakhrisabz CLC in January 2006, which bring together experts from formal and non-formal education sector. The heads of 10 Community Learning Centers of Uzbekistan, representatives of the Ministry of Public Education, experts from Adult Education Center and community members were attended the seminar. The learning package was distributed among all 30 participants.

Second seminar on “Raising Public Awareness on Waste Management” has been held on 3 March 2006 in Tashkent. It was organized in cooperation with UNDP Office in Tashkent and the State Committee of Uzbekistan for Nature Protection, which provided funds for additional publication (200 copies) of the learning package. After presentation the package on “Waste Management” was disseminated among 100 participants (educators, mass media representatives, leaders of youth organizations, NGO’s). The publication of additional copies of the PLANET 3 was carried out within joint European Union/UNDP Project on “Enhancement of Living Standards in Karakalpakstan and Namangan Region” and National Waste Management Strategy Project, which was supported by UNDP Office in Tashkent, New Zealand’s International Aid and Development Agency, State Committee of Uzbekistan for Nature Protection.

Next stage of dissemination of the PLANET 3 was organized during official launching of the United Nations Decade on Education for Sustainable Development (Tashkent, 11 May 2006). Learning package on “Waste Management” was distributed among 50 participants of the Conference. During the Conference the modalities of accommodation of the PLANET 3 into the formal curriculum was discussed.

In order to setup nation-wide links of collaboration with policy makers in education, the PLANET 3 learning package was distributed among 14 regional

educational branches of the Ministry of Public Education of Uzbekistan during annual meeting in Tashkent in July 2006.

National Forum on Education for All, which was held in Tashkent in 18 August 2006, had a special session devoted to the presentation and dissemination of the PLANET 3 learning material. About 50 experts from various governmental and non-governmental organization participated in the Forum.

Special training on utilization of PLANET 3 was organized for 200 participants of the Youth Educational Camp (17-27 August 2006). As follow up activity the numbers of trainings in formal schools and CLC's were held during March-September 2006. In order to meet demand for learning package the National Commission of Uzbekistan for UNESCO, within second contract, published additional copies of the PLANET 3 (230 copies of booklet and facilitator guide, 130 copies of VHS-format video cartoons and posters) and partner organizations, such as UNDP is currently printing additional 100 copies of the booklet and facilitator guide in the nearest future.

Summary of the evaluation

The overall implementation of the project was successful and met favorable consideration of government officials, stakeholders, community members, teachers, and learners.

Such type of teaching materials – through animation video, booklet and facilitator guide – helped target groups to better understand the meaning of waste and its management. Most important outcome of the dissemination process was related with transformation of values of learners with regard of waste. People recognized that if waste is managed properly then it will become a resource, the environment will be clear and our lives will be safer.

The implemented activities as collecting plastic and metal bottles, gathering leaves and composting them made the surrounding tidy; it raised the community awareness towards waste management; and, certainly, the population of the pilot sites and school-children learned that it can be even income generating activity.

After collecting feed-backs from schools, CLCs and teachers it showed that there is a need and great demand for more materials in the field of Education for Sustainable Development and all participants expressed their interest for further continuation of activities.

II. OBJECTIVES AND EXPECTED OUTCOMES

The main objective of the project was to change the behavioral attitude of populations towards sustainable living in society.

In order to reach objective following actions were implemented within project:

- ② Publication and dissemination of user-friendly ACCU learning materials on waste management in local language.
- ② Training courses for the target learners with basic knowledge on waste management.
- ② Awareness raising activities among policy makers, educators, and community members about waste management for a better environment and healthy life style.
- ② Generation of idea for respect to nature and limited natural resources on the Earth.

The following were the expected outcomes:

- ② Translation and adaptation of learning materials on PLANET 3.
- ② Publication of the learning materials package on Waste Management.
- ② Preparation of trainers for teaching published materials.
- ② Public awareness on importance of waste management.
- ② Setting up effective waste reducing and recycling system in project sites.
- ② Integration of local version of the PLANET 3 into the learning programs in formal and non-formal educational programs (within Community Learning Centers).

III. BACKGROUND INFORMATION AND CONDITIONS

Uzbekistan consists of 14 administrative regions: 13 provinces (viloyats) and Tashkent city. There are 10 Community Learning Centers (CLC) in different regions. At the first stage following CLC's were selected as pilot sites for implementation of the project: urban areas in Bukhara and Samarkand, rural areas in Syrdaryo and Shakhrisabz. At the next stage, all other CLC's and several formal schools were involved into the process of utilization of the PLANET 3 learning materials.

CLCs were established in Uzbekistan in 1999 by the support of UNESCO within the framework of the Asia-Pacific Programme of Education for All (APPEAL). At present, there are ten CLC's and one CLC Resource Centre created under the initiative of the National Commission of Uzbekistan for UNESCO. Moreover, the

UNESCO Office in Tashkent initiated the creation of a number of skills development CLC to provide training and market economy approaches for income generating activities.

Due to the fact that all of the population of Uzbekistan lives in social environment with a strong sense of community, CLC's provide opportunities for individuals to acquire knowledge and skills through structured activities and non-formal learning. The CLC's environment also encourages all age groups living together in one community to make and follow their own education plans and programs.

Bukhara

Bukhara Region is situated in the southwest part of Uzbekistan. The Kyzylkum Desert occupies the most part of the territory of Bukhara Region. The population of the region is about one and half million people, from which about 68 % lives in rural area and 32 % in urban area. Bukhara, one of the oldest cities of the world, was founded 2500 years ago. Cities of Bukhara oasis played important role in trade on the Great Silk Road in the early mediaeval time. Bukhara became sacred Muslim culture center in the Central Asia in VIII-XII centuries and was famous by its great scholars and theologians, such as Aby Ali Ibn Sino (Avicenna) and Imam Bukhari. Historical Center of Bukhara was inscribed into the UNESCO World Heritage List in 1993. UNESCO also awarded "City for Peace" award to Bukhara in 2001.

Bukhara CLC was established in 2003 on the base of secondary school No.8 in Bukhara city (UNESCO ASPnet school). Residents of 3 local communities (residential areas) and teachers of the city are covered with training within the framework of activity of CLC. The fields of activity are the following: ecology and preservation of the environment, vocational education, law literacy education, public health, maternity protection and health of children, gender education, cultural heritage, art and public creative activity, tourism, business and entrepreneurship, social protection of disadvantage families, elderly, orphans and other marginal categories of population.

Existing resources: 7 computers, scanner, photocopy machine, one printer, two TV sets, video recorder, two LCD projectors, video camera, Internet connection, library, electronic learning materials.

Syrdaryo

Syrdaryo Region is located at the centre of Uzbekistan on the left bank of the Syrdaryo River. Steps occupies the essential part of the region. The population of the region is about 650 thousands inhabitants. The economy of the region is based on agriculture, particularly on production of cotton and wheat. Besides cotton and

wheat, forages, vegetables, melons, pumpkins, potatoes, corn, orchards and vineyard are also cultivated. Cattle-breeding is very successfully developed.

Syrdaryo CLC was established in April 1999 within secondary school No. 21 at the Dehqonabad Farm (UNESCO ASPnet school). The fields of activity of Syrdaryo CLC includes: vocational education, ecology, health education (HIV/AIDS, reproductive health, drug abuse etc.), public relations, national handicrafts, social protection of vulnerable groups, early childhood education. About 30% of trainees are women. The status of learners: 30% unemployment, 20% graduated from institutes, 50% students.

Existing resources: 6 computers, two TV sets, one printer, one photocopy machine, scanner, two sewing machine, medical center, library, electronic learning materials.

Samarkand

Samarkand Region is located at the centre of Uzbekistan in the basin of the Zarafshan River. The population is about two and half million people, from which three quarters live in rural areas. 2750 years old Samarkand is the second city after capital Tashkent with huge economic, scientific and cultural potential. Well-known architectural monuments of the city turn Samarkand into the country's largest center of the international tourism. Samarkand as cross roads of culture was inscribed into the UNESCO World Heritage List in 2001.

Samarkand CLC was established in September 2001 in Syob District of the city within secondary school No. 5 (UNESCO ASPnet school). The fields of activity of the center include: cultural heritage, ecology and preservation of the environment, vocational education, public health, maternity protection and health of children, problems to feminine emancipation, public, culture, art and public creative activity, tourism, business and entrepreneurship, social protection of disadvantage people, ICT education, English language courses. 60 % of trainees are women.

Existing resources: 13 computers, one scanner, one printer, one photocopy machine, one TV set, one video recorder, one video camera, one sewing machine, Internet connection, library, electronic learning materials.

Shakhrisabz

City of Shakhrisabz is located in Qashqadaryo Region. Shakhrisabz is situated 160 km south from Samarkand. The city is located in a valley surrounded by foothills of Pamir Mountains. Historical Center of Shakhrisabz was inscribed into the UNESCO World Heritage List in 2000. The 2700th anniversary of the foundation of Shakhrisabz was celebrated in 2002, demonstrating to the world the ancient culture of the city, its greatness and beauty.

Shakhrisabz CLC was created in August 2003 at the secondary school No. 32, situated in Chavkan village, 20 km from Shakhrisabz. The fields of activity of the

CLC include: professional-oriented education, public health, maternity protection and health of children, cultural heritage, art and public creative activity, tourism, business and entrepreneurship, social support and protection of handicapped people, ICT education, English language courses; handicrafts, machine embroidery, tailoring and agricultural courses. 79,8 % of trainees are women.

Existing resources: 5 computers, one printer, 7 embroidery machines, library, learning materials.

Information on waste management in selected regions of Uzbekistan:

Region	Normative accumulation of waste as on population size (tons, m ₂)	Actually collected and taken out in 2003 (tons, m ₂)	Ratio of actual size to normative accumulation	Needs of special cars in normative accumulation (units)	Actual availability of special waste collecting cars (units)	Necessary number of special cars to bring into normative level (units)
Bukhara	539	145,6	27,01	140	67	73
Syrdaryo	285	60,9	21,37	67	9	58
Samarkand	1040	134,4	12,92	211	32	179
Qashqadaryo	604	33,4	5,53	153	21	132

IV. INPUTS OF RESOURCES

Human Resources:

The schoolteachers, CLCs facilitators, group leaders were the major human resources of the implementation of the project.

Physical Resources:

During the implementation of the project different conferences, seminars and training were conducted at the CLCs, ASPnet schools classrooms, Universities, hotel conference rooms and Camp. TV set, LCD projectors and computers were utilized.

Technical Resources:

The PLANET 3 materials were used during in the training programs, seminars and conferences. The materials were distributed to the secondary schools, CLCs, 14 regional educational branches of the Ministry of Public Education of Uzbekistan and respective NGOs.

Distribution List of the PLANET 3

–	Name of organization	PLANET 3 learning package				
		<i>FG</i>	<i>Booklet</i>	<i>Poster</i>	<i>VHS</i>	<i>CD</i>
1	CLCs	30	30	30	30	30
2	ASPnet schools	62	62	62	62	32
3	14 regional educational branches of the Ministry of Public Education of Uzbekistan	28	28	28	28	28
4	Experts from various governmental and non-governmental organization in the filed of education (during national seminar on waste management, official launching of the DESD and National Forum on EFA)	200	200	200	200	200
5	State Committee for Nature Protection of Uzbekistan (Resource Center)	2	2	2	2	2
5	NGOs (Tashkent)	8	8	8	8	8
6	EU/UNDP Pilot schools (Namangan, Karakalpakstan)	100	100	-	-	-
7	Participants of the Youth Educational Camp	200	200	100	100	-
8	ACCU	10	10	10	10	10
Total:		640	640	440	440	310

V. IMPLEMENTATION

A. *Implementation structure of the project*

Adaptation	Evaluation and Monitoring	Dissemination
<ul style="list-style-type: none"> ➤ Review of the materials with representatives from the Ministry of Public Education ➤ Inviting translators from the universities ➤ Selection of pilot sites ➤ Conducting field tests at CLCs ➤ Identification of facilitators/trainers ➤ Publication of materials 	<ul style="list-style-type: none"> ➤ Interviews with partners ➤ Observation and monitoring of pilot sites ➤ Discussion with community members ➤ Feedback from CLCs ➤ Discussion of future plans and sustainability of the project with stakeholders 	<ul style="list-style-type: none"> ➤ Discussion with potential stakeholders, government officials on promotion of the project (January 2006) ➤ Presentation for NFE teachers and trainers of CLCs (January 2006) ➤ Seminar at national level in co-operation with partner agencies (March, May 2006) ➤ National Forum on EFA (August 2006). Distribution among experts from GOs and NGOs ➤ Practical session at Youth Camp (August 2006) ➤ Conducting trainings at ASPnet schools (September 2006) ➤ National teacher training seminar (October-November 2006)

Utilization
<ul style="list-style-type: none"> ➤ Community based activities at CLCs ➤ Learning making compost ➤ Making biogas and using it as a fuel ➤ Cleaning neighborhood ➤ Segregating dry and wet waste ➤ Organizing poster contests among school classes ➤ Re-using of waste (plastic bottles/clothes) ➤ Collection of paper and metal and income generating activities

B. Brief description of the stages of project development over time

Sustainable development is about harmonic interactions between society, environment and economy. It also means a more holistic and comprehensive approach to human development, addressing such important areas as poverty reduction, improvement of health, balanced nutrition and increased employment opportunities.

It is very important to strengthen and develop the activities in sphere of education for sustainable development by initiating innovative projects to promote literacy and quality of education. Both formal and non-formal educational programs should provide knowledge and information on various subjects such as environment protection, water resources management, waste management, healthy lifestyle and others.

The project PLANET 3 was implemented and coordinated by the National Commission of Uzbekistan for UNESCO. Before adaptation representatives from the Ministry of Public Education of the Republic of Uzbekistan were invited to discuss the project issues such as integration learning package into formal and non-formal education systems of the country, modalities of local implementation in selected pilot sites, establishing networking with existing projects in waste management.

The second activity was to carry out translation and adaptation work in order to produce user-friendly materials. In order to be very close to the original English text and to be associated with local context, translators selected phonetically close peoples' names in Uzbek; for example Mina - Minavvar, Nora - Anora, Jai - Jasur, etc. Clothes and environment were also changed in accordance with local context. After the adaptation and preparation of the draft version of the materials were field-tested.

Field testing in the 4 selected CLC was implemented by the National Commission of Uzbekistan for UNESCO and Ministry of Public Education of Uzbekistan (computer equipment for CLC's was also provided by the National Commission of Uzbekistan for UNESCO):

- i) School 21, Dehqonabad Farm, Syrdarya Region;
- ii) School 32, Shakhrisabz District, Qashqadaryo Region;
- iii) School 5, Samarkand, Samarkand Region;
- iv) School 8, Bukhoro, Bukhoro Region.

On the basis of the outcomes of the filed testing the preliminary draft local version of the PLANET 3 was revised by the experts of the National Commission of Uzbekistan for UNESCO and Ministry of Public Education of Uzbekistan. The images have been revised by the experts of the Media Resources Center in Tashkent. Audio/video montage of the video animation has been implemented by the experts of the “Uzbekfilm” Studio.

Corrected materials were finalized then printed and published. Ten copies of adapted version of PLANET 3 were submitted to the ACCU.

The second phase of the Project was to disseminate and utilize of PLANET 3 materials in Uzbekistan through various modalities (national conferences and seminars, trainings in schools, Community Learning Centers and Youth Educational Camp as well as on-line Internet Forums).

The first presentation of the project was organized for non-formal educators in January 2006 in Shakhrisabz. The heads of 10 Community Learning Centers of Uzbekistan, representatives of the Ministry of Public Education, community members were invited to the seminar. During three-day seminar, the project was introduced, animation cartoon was showed and heads of the CLCs reviewed the Facilitators’ Guide. It was decided to teach waste management to community and CLC members in order to raise their awareness towards this issue and explain them that it could be an income generating activity.

Seminar on “Raising Public Awareness on Waste Management” has been held on 3 March 2006 in Tashkent. The seminar was organized in cooperation with UNDP Office in Tashkent and the State Committee of Uzbekistan for Nature Protection and participants were from all regions of the country. During the seminar the presentation of the package on “Waste Management” was held and the materials were disseminated to the participants. Taking into account the needs of more copies it was decided by partner organizations to publish additional copies (200 copies) of the package (EU/UNDP Project “Enhancement of living Standards in Karakalpakstan and Namangan Region”, “National Waste Management Strategy Project”, UNDP Office in Tashkent, New Zealand’s International Aid and Development Agency, State Committee of Uzbekistan for Nature Protection).

Next stage of dissemination of the PLANET 3 was organized during official launching of the United Nations Decade on Education for Sustainable Development (Tashkent, 11 May 2006).

In order to setup nation-wide links of collaboration with policy makers in education, the PLANET 3 learning package was distributed among 14 regional educational branches of the Ministry of Public Education of Uzbekistan (Tashkent, July 2006).

During National Forum on Education for All, which was held in Tashkent in 18 August 2006, special session was devoted to the presentation and dissemination of the PLANET 3 learning material. About 50 experts from various governmental and non-governmental organization participated in the Forum.

Moreover, special training on utilization of PLANET 3 was organized for 200 participants of the Youth Educational Camp (17-27 August 2006). This training was also a practical one. Participants played a game “Let’s clean our community from waste”. The different types of waste were thrown everywhere and the duty of participants was to collect the waste by segregating it into boxes. Participants enjoyed the training and it was decided to carry out similar courses in schools.

A number of trainings for formal schools were held at UNESCO ASPnet schools during March-September 2006. Administrations and school-children were highly interested in this project. Trainings combined video presentation of cartoon and after-class sessions. As follow up, learners were involved in school and community activities on waste management. They cleaned their schools; each class put a box for paper wastes near the doors. Organized poster contests and the best poster performers were awarded by school administration. The staff of National Commission monitored the schools’ and CLCs’ activities on regular bases.

For purpose of sustainability of the project and to plan further actions on development of waste management technologies, National Commission as well as CLC established partnership links with respective local and international stakeholders.

C. Partner agencies, major stakeholders and their functions

The National Commission was the main coordinator and implementer of the PLANET 3 project.

Role of the National Commission of the Republic of Uzbekistan for UNESCO:

- ② Coordination of the project;
- ② Adaptation and dissemination of PLANET3 materials;
- ② Cooperation with partners;

- ② Organization seminars, trainings for facilitators, community people, and pupils of the school;
- ② Evaluation and monitoring.

Functions of CLCs in implementation of the PLANET 3:

- ② Collection of materials for adaptation of PLANET 3;
- ② Selection of facilitators for training;
- ② Utilize the PLANET 3 in non-formal education;
- ② Organization of trainings, seminars.

Role of ASPnet Schools:

- ② Encourage schools to conduct pilot and flagship projects reinforcing the four main pillars of learning for 21st century:
 - learning to do;
 - learning to know;
 - learning to be;
 - learning to live together.
- ② New opportunities to improve the relevance of education content, develop participatory teaching methods and innovative educational resource material.
- ② Professional development and high motivation for teachers.
- ② Acquisition of problem-solving skills as well as a sense of responsibility and improvement by working on concrete flagship projects.
- ② Contributing to national reforms and renewal of educational systems.
- ② Organization of regular trainings for teachers and pupils.
- ② Organization of TOT (trainers of trainers) of young leaders.
- ② Organizing contests for pupils on “Waste management”.
- ② Cleaning up of the territory of the school.
- ② Organization of the “Week on Environment”.

Governmental organizations:

- ② Ministry of Public Education of Uzbekistan
- ② Ministry of Higher and Secondary Specialized Education of Uzbekistan
- ② State Committee of Uzbekistan for Nature Protection

Governmental organizations’ functions were to assist in administrative support for both formal and non-formal institutions to be involved in the project, ensuring the participation of teachers and future trainers.

International Organizations

- ② Environment and Energy Unit, UNDP Office in Tashkent
- ② EU/UNDP Project “Enhancement of living Standards in Karakalpakstan and Namangan Region”
- ② “ECOSAN” International Foundation

International organizations were invited to cooperate in promotion of the project and requested to provide support to reproducing PLANET 3 materials.

Non-governmental organizations

- ② NGO “Atrof-muhit va sog’lom hayot” (Environment for healthy life)
- ② NGO “Media Resources Center”
- ② Community Learning Centers (CLC) in Uzbekistan

Non-governmental organizations provided additional learning materials, brochures on environment protection to facilitators and trainers to distribute among learners. The NGO “Media Resources Center” actively participated in adaptation and publication process: in drawing and changing the characters’ appearance.

D. Time-scale, phases, locations, methods

The project implementation was divided into two phases: first, translation and adaptation, the second, dissemination and utilization. Trainings at CLCs were held during from March to September 2006 (three times a week); as for the schools, trainings was organized during the same period as extra-curricular activity in accordance with time-schedule adopted by each school administration.

VI. EVALUATION

The evaluation of the project was done from the following different viewpoints: project management, delivery mechanism and impact to the learners.

② *Project Management:*

- Discussion and Sharing Experiences
- Observation of implementation
- CLC reports
- School reports
- Questionnaire Survey

② *Delivery Mechanism:*

The delivery Mechanism followed by the National Commission of Uzbekistan, Ministry of Public Education, State Committee for Nature Protection through organization of presentations, seminars, trainings on PLANET 3 “Waste management” materials for target groups: CLCs personnel, school teachers, facilitators, young leaders. Others members of local communities as well as stakeholders were participated in different events on “Waste management”. On-line Internet Forum on “Waste Management” was jointly organized by UNDP and National Commission.

The implementation process was designed by National Commission of Uzbekistan for UNESCO on national level and by CLCs and schools on local level.

② *Impact of the project:*

To observe the impact of the of the project to the target groups, experts team from the National Commission of Uzbekistan for UNESCO visited 4 CLCs and 10 selected schools.

VII. LESSONS LEARNT AND FUTURE WORK PLAN

Lessons learnt:

- ② PLANET 3 linked with ESD projects in Uzbekistan as integral part;
- ② Increased dissemination (Internet Forum);
- ② Learners behavioral attitude in respect waste was changed;
- ② Reduce, Reuse and Recycle approaches were introduced;
- ② Participants of the project gained experience, knowledge and skills in the innovative utilization of PLANET 3;
- ② Cooperation link with similar projects of the UN Agencies and NGOs was established.

Future plan:

- ② To continue raising awareness of the community people on waste management;
- ② To continue the using of PLANET 3 materials in both formal and non-formal education;
- ② To continue cooperation with international and local partners organizations;
- ② Organization of national conference on waste management;
- ② To broadcast of the cartoon of PLANET 3 in national TV;

- ② Continuation of Internet Forums (on-line) on waste management;
- ② Additional reproduction of the Facilitator Guide and booklet.

Suggestions and recommendations:

The following suggestions and recommendations are made after the implementation of the project:

- ② Expand the dissemination of PLANET 3 materials among other schools and communities;
- ② Cooperation with ACCU on adaptation and dissemination of the PLANET 1, PLANET 2 and PLANET 4 in Uzbekistan as integral part of ESD;
- ② Elaboration of the guidelines on waste management for community members (adult learning programme).

VIII. CONCLUSION

Major findings:

- ② Conducting of waste management lessons in both formal and non-formal education;
- ② Broad visibility of PLANET 3 and raising of public awareness on waste management;
- ② Utilization of waste through biomass utilization in rural areas as a fuel, making compost in agriculture, reusing of waste for production of new materials, segregating waste materials.
- ② 35 trainers and facilitators were trained;
- ② 200 young leaders for TOT trained during Youth Camp;
- ② Several Internet Forums were organized.

Concluding remarks:

Four CLCs and 10 schools were focused on the realization of the project. During the seminars the CLC facilitators had chances to exchange experiences on waste management. The outcomes of the seminars were: preparation of training programs, follow up practical activities on the grass root. CLC's facilitators and school teachers initiated numerous activities on waste management and developed ideas on reduce, recycle and reuse.

PLANET 3 learning package became an interactive material for target groups. Beneficiaries developed their own ideas on waste management through different contests and activities.

Young leaders from ASPnet schools and eco-schools, who participated at the Youth Camp, is conducting different activities as follow-up actions at their schools, which brings sustainability of the project.

The overall outcome of the project can be evaluated as successful and timely. It met the needs and requirements of communities and raised public awareness on waste management. Learners understood the value of waste and it can be precious resource if it used and managed in a proper way.