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Prepared by the
Institute for Sustainable Communities
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I. Executive Summary

With seven demonstration communities of various sizes and demographics, the project resulted in national models on environmental management and public involvement for other Ukrainian communities.

Through the four-year Ukraine Local Environmental Action Program (Ukraine LEAP), the Institute for Sustainable Communities (ISC) and its Ukrainian partner ISAR "Ednannia" demonstrated citizen participation approaches to solving environmental problems at the local level. At the same time, the project strengthened local government, nongovernmental organization, and business long-term capacity to conduct LEAPs and other community-based programs throughout Ukraine in the years to come. Through this effort, the ISC team raised environmental awareness, promoted public participation in environmental decisionmaking, and stimulated citizen involvement in directly solving local environmental issues, utilizing Ukrainian expertise to the greatest degree possible and engaging experts from CEE/NIS to provide technical assistance to Ukrainians and their communities.

Ukraine LEAP created opportunities for citizens to engage in priority-setting alongside municipal officials and business leaders and take constructive action using creative, low-cost, and cost-effective approaches to solve priority community environmental problems. With seven demonstration communities of various sizes and demographics, the project resulted in national models on environmental management and public involvement for other Ukrainian communities. In partnership with local governments, pilot communities formed project stakeholder groups (PSGs) composed of a broad cross-section of community members who worked collaboratively to establish environmental priorities, develop local environmental action plans, raise public awareness, engage

community members in the process, and implement concrete actions to improve environmental quality. To support these community efforts, the ISC team prepared a wide range of methodological and information materials, developed a cadre of trainers, and established a network of interested communities.

The ISC team met or exceeded all program goals and expectations, identifying three long-term outcomes consistent with USAID intermediate results. Achievements include:

- Communities significantly **improved their environmental situation**. Pilot communities developed and implemented local environmental policies and action plans focused on a broad range of activities that resulted in improved solid waste collection and management, higher quality drinking water, improved water treatment, creation and expansion of green spaces, removal of abandoned pesticides, and the development of recycling collection systems. Citizens were able to leverage their ISC grants (totaling \$91,000) to secure an additional 2,376,000 hryvnia, or \$450,000 in funding from local authorities, oblasts, and other sources to support priorities identified in their local environmental action plans.
- Pilot communities **strengthened environmental governance** by fostering collaboration among different stakeholders, improving citizen access to information, improving transparency and accountability of local government, and strengthening citizen involvement in local decisions. Public awareness of environmental issues doubled in most pilot communities, and the number of people who believed that NGOs

and citizens had an important role to play in initiating community improvements doubled as well. Pilot communities showed a two- to seven-fold increase in the level of public involvement in community actions, demonstrating the extent to which the project served to increase public trust in the value of collective action. PSGs held 22 public presentations—including seven public hearings—to share draft findings of environmental priorities and proposed actions with over 1,100 citizens participating. With assistance from the project partner Child and Environment, youth implemented eleven projects to build new parks, improve the landscape around their schools, organize environmental summer camps, establish an ecotourism school, and conduct seminars on environmental topics, among other projects.

- Collectively, local authorities in the seven pilot communities adopted and incorporated into their official community planning processes one-third of the recommendations made by the PSGs. Five communities changed their development programs according to recommendations in their community's environmental action plan. With assistance from project partner EcoPravo-Kyiv, five pilot communities adopted new regulations into their existing community charters establishing new legal mechanisms for public involvement in local government decisions consistent with the Aarhus Convention. More than twenty new NGOs were established as a result of the Ukraine LEAP that played a leading role in mobilizing citizens in local environmental actions throughout the project.

- Ukraine LEAP **increased long-term institutional capacity to develop and implement community-based programs** throughout Ukraine in the years to come. Ukraine now has a cadre of 14 lead and five back-up trainers available to train communities across the country to implement LEAPs and other community problem-solving approaches. These trainers conducted 74 trainings for PSG members, and provided direct technical assistance and coaching to assist the PSGs work through each step of the LEAP process. These trainers are now providing training and coaching assistance to 15 new LEAP communities.
- ISC and Ednannia established a network of 106 Ukrainian communities interested in implementing LEAPs, including 64 NGOs and 42 local self-governments and governments. In addition, the ISC team supported the existing Volyn Resource Center, and the newly formed Institute for Community Development to continue working with communities to implement LEAPs and other community mobilization activities throughout Ukraine. The ISC team developed proven models and methodologies in community-based participatory approaches to environmental, social, and economic issues which have been shared with 6,000 Ukrainian communities, NGOs, and institutions through a website, conferences, and the publication of a regular newsletter.

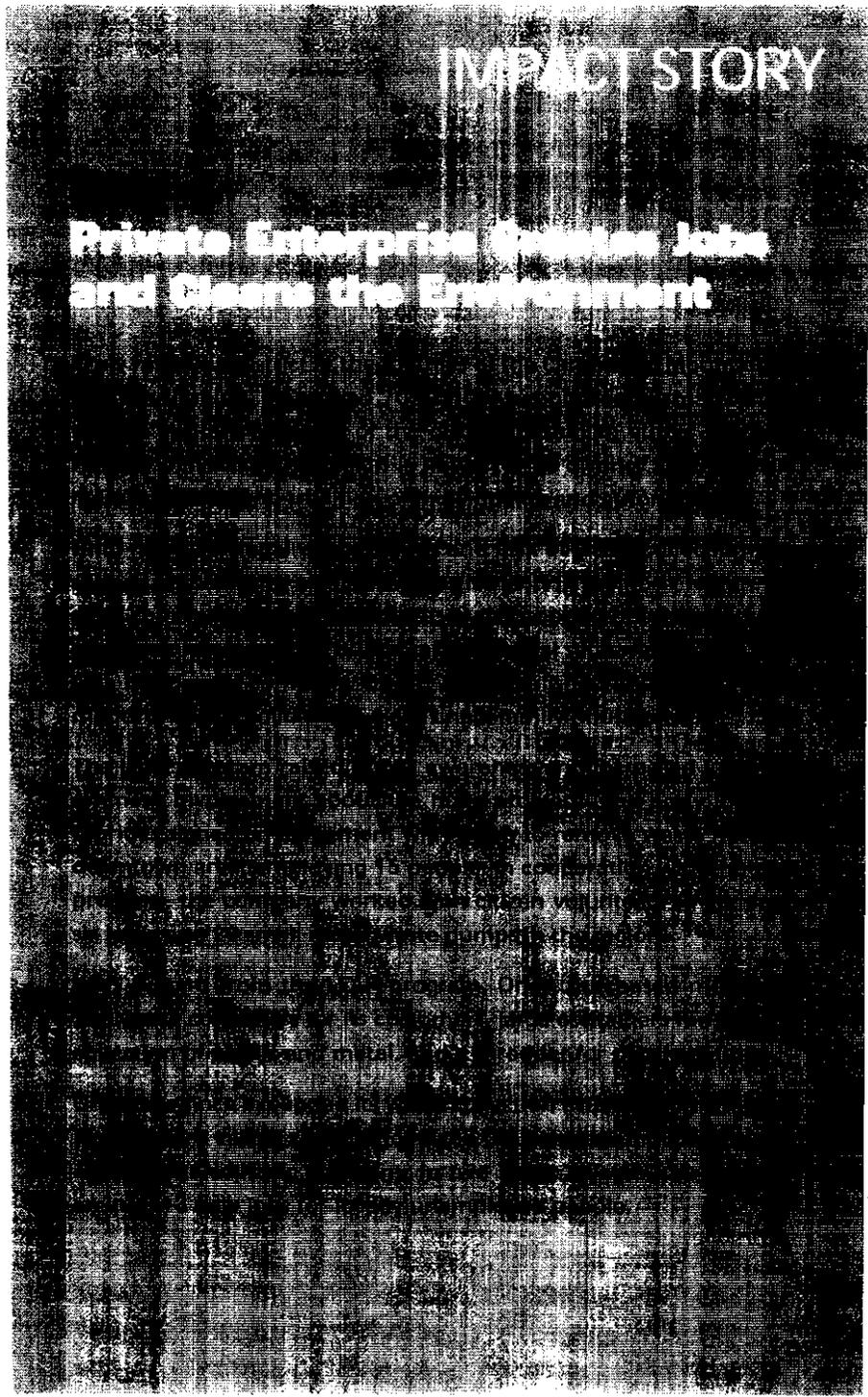
"Public participation has helped us to defend the interests of the city. Now our actions are based not just on the opinions of city officials—but are drawn from the people of the city."

Andrei Danilenko, Mayor
City of Evpatoria

The success of this project in laying the foundation for future successful community action projects can be measured in two ways: 1) how many Ukrainian communities implement LEAPs and other similar community-based projects; and 2) the degree to which pilot communities continue in their efforts to address environmental and other community issues. As a follow-up activity, ISC recommends that the Institute for Community Development (ICD) conduct a survey of pilot communities in the fall of 2005 to evaluate the full extent of environmental improvements that have been realized, the degree to which environmental governance has been deeply rooted in the communities, and whether pilot communities have applied a collaborative process to other community issues. ISC also recommends that ICD conduct a survey of other communities to determine how many have implemented similar community action projects, what impacts have been achieved as result of

these programs, and what assistance they need to continue their efforts.

Through the Ukraine LEAP USAID has laid the foundation in Ukraine for successful LEAPs and other community action projects in the future. Results show that Ukrainian communities are ready to commit their own resources to tackle environmental and other community issues, and the ISC team found that Ukrainian communities are particularly well suited to the type of community-based, participatory problem solving approach inherent in this project. Because this approach on the whole is so new to Ukrainians, communities will need continued technical support and direct assistance from trainers and NGOs to implement participatory community-based approaches. Due to limited budgets of local authorities, continued external funding can play a large role in leveraging local contributions for technical assistance and project implementation.



II. Context

Opportunities to involve Ukrainian residents in local government environmental decisions help ensure that these decisions are sustainable and have the full support of the public.

PROGRAM HISTORY

Environmental problems in Ukraine are widespread and severe. Air and water pollution, toxic and hazardous waste contamination, and soil degradation threaten public health and damage natural ecosystems. Until recently, local governments and the general public lacked experience with a democratic process for assessing the relative significance of environmental risks and implementing cost-effective strategies.

It is against this backdrop that ISC and Ednannia teamed up to implement the Ukraine LEAP. This four-year project was designed to demonstrate participatory approaches to solving environmental problems at the local level while creating the training and support infrastructure to conduct LEAPs throughout Ukraine in the years to come. Increased public participation in environmental decisionmaking is key to Ukraine's successful transition to a democratic society. Opportunities to involve Ukrainian residents in local government environmental decisions help ensure that these decisions are sustainable and have the full support of the public. The Ukraine LEAP project was based on the principle that limited U.S. government assistance is best targeted on activities that help decision makers in local and regional governments, industries, and NGOs rank environmental protection needs, develop plans of action to address priority problems, and implement cost-effective actions that reduce pollution and save consumers and industries money.

In 1999, USAID awarded a grant to ISAR Ednannia to raise public awareness about LEAPs and stimulate locally based environmental actions. Ednannia provided grants to NGOs in over a dozen communities that clearly demonstrated that local governments and citizens could work cooperatively to address local environmental concerns. Subsequently, in 2000, USAID solicited applications for Ukraine LEAP that was awarded to ISC and Ednannia.

Ukraine LEAP represents a culmination of ISC and Ednannia's history of promoting citizen involvement and local environmental protection in Ukraine and throughout Central and Eastern Europe. Since 1991, ISC has implemented LEAPs in partnership with host-country organizations in Poland, Hungary, Bulgaria, Macedonia, Albania, and Russia. ISC's prior Ukraine work included managing an ecological television and public awareness project and a community-based environmental and civic education program in western Ukraine. Ednannia has provided training and information, technical assistance, and financial support to Ukrainian NGOs and other community members in Ukraine since 1997. Ednannia is recognized for its work in grantmaking, information networking, and consultations to NGOs.

The timing for Ukraine LEAP was opportune. As this report will show, Ukrainian communities have eagerly embraced the principles of collaboration and participation, and are committed to targeting limited resources to improve environmental quality.

PROGRAM GOALS AND OBJECTIVES

The Ukraine LEAP was designed to achieve the following four goals and objectives:

Goal 1. **Environmental Management**

Build local environmental management capacity, enabling communities to achieve environmental improvements while considering social and economic impacts.

- Complete and approve (by each local government) environmental action plans in at least six pilot communities and implement at least one priority action in each community.
- Prepare project financing plans in at least six pilot communities and obtain financial support for environmental projects in at least three pilot communities.
- Complete environmental audits and prepare environmental management plans in at least one large industry per pilot community.

Goal 2. **Networking and Information-Sharing**

Raise awareness about the benefits of LEAPs and stimulate new interest in implementing them.

- Establish twinning programs between the seven Ukrainian pilot communities and Polish or other neighboring CEE/NIS communities.
- Develop a network of at least 100 Ukrainian municipalities focused on best practices in local environmental management.

- Support replication by broadly sharing the results of LEAP implementation in pilot communities, and provide LEAP training for at least fifteen additional communities interested in conducting LEAPs.

Goal 3. **Capacity Building**

Strengthen the capacity of Ukrainian NGOs, technical and training institutions, and individual experts to provide ongoing LEAP assistance to local governments and NGOs.

- Create a team of at least 12 Ukrainian LEAP trainers and establish peer matches with CEE/NIS technical experts.
- Establish three to four LEAP Centers to deliver LEAP-related trainings and become financially sustainable over the long term.

Goal 4. **Public Awareness and Participation**

Improve involvement of citizens, NGOs, businesses, and industries in environmental decisionmaking.

- Integrate citizen participation into local government decision making in at least four of the seven pilot communities.
- Increase citizen, industry, and NGO participation through involvement in activities associated with the LEAP process and through environmental actions supported by an NGO small grant program.
- Increase public awareness of local environmental issues in seven demonstration communities.

"In the beginning, we did not believe we were capable to solving this difficult-to-solve issue for our city. The project stakeholder group made a decision, took the first steps, and now the program is a success. We are thinking how to make this activity profitable for us and the district."

Natalia Buriak, Business Owner and Head Solid Waste Working Group of Balaklava Project Stakeholder

Emphasis was placed on integrating environmental issues with local economic development, social wellbeing, and democratic governance.

PROGRAM APPROACH AND COMPONENTS

Building on USAID's efforts to support environmental management capacity and a transition to a democratic society in Ukraine, the ISC team helped strengthen local governments, NGOs, and businesses to effectively manage local environmental problems in Ukraine. Through this capacity-building effort, ISC and Ednannia raised environmental awareness, promoted public participation in environmental decision making, and encouraged low-cost, cost-effective solutions to environmental problems at the local level.

Emphasis was placed on integrating environmental issues with local economic development, social wellbeing, and democratic governance. ISC and Ednannia tapped into Ukrainian expertise to the greatest degree possible and engaged experts from the CEE/NIS to provide technical assistance to Ukrainian experts and communities. The Ukraine LEAP had five interrelated components designed to build the capacity of Ukrainian organizations and individuals:

COMPONENT 1

LEAP PILOT PROJECT IMPLEMENTATION

ISC and Ednannia selected seven demonstration communities to serve as national models on environmental management and public involvement for other Ukrainian communities. Selected communities were chosen through an extensive competitive process among 115 applicants

Each pilot community formed a project stakeholder group (PSG) composed of a broad cross-section of community members including representatives from local governments, environmental groups, business and industry, municipal environmental facilities, and the public.

In partnership with local government, each PSG worked collaboratively to establish environmental priorities, develop a local environmental action plan, raise public awareness, and engage community members in the process. Ukrainian trainers, trained through an extensive training program organized by ISC and Ednannia, provided trainings to PSGs on the methodological approach and effective collaboration. Upon adoption of the environmental action plans by the city/district councils, ISC provided implementation grants to each community to help implement priority actions.

ISC and Ednannia strengthened pilot communities through a diverse range of complementary programs. With funding from the *Polish American Ukrainian Cooperative Initiative*, the ISC team fostered cooperative relationships among Ukrainian and Polish communities by matching each Ukrainian LEAP pilot community with a Polish counterpart for study tours. With additional USAID funding provided through the *Academy for Educational Development*, pilot communities strengthened their capacity to conduct environmental audits and identify pollution reduction opportunities for municipal and private enterprises on solid waste, wastewater, and drinking water systems.

ISC and Ednannia worked cooperatively with *EcoPravo-Kyiv* to promote public participation in environmental decision making. ISC also worked in partnership with the Ukrainian NGO, *Child and Environment*, to implement the privately-funded Strengthening Community School Partnerships project in two LEAP pilot communities, Balaklava and Kosiv, to cultivate youth participation in local environmental problem solving and encourage democratic activism within these communities.

COMPONENT 2

ADAPTING METHODOLOGIES AND TOOLS TO UKRAINIAN CONDITIONS

Using the experience of pilot communities to inform the adaptation, the ISC team prepared methodological and information materials for community participants and trainers, published information materials on topics ranging from public participation to municipal financing, and compiled best practices for environmental management activities implemented by local governments, NGOs, and industries in Ukraine, and for other CEE/NIS countries. This information was disseminated to over 6,000 sources through the project website, conferences, and a newsletter.

COMPONENT 3

BUILDING LEAP CENTERS OF EXCELLENCE

A primary goal of the Ukraine LEAP was to strengthen the capacity of Ukrainian trainers and organizations to provide ongoing LEAP assistance to Ukrainian local and raion

governments and NGOs after the completion of the pilot projects.

The ISC team conducted extensive trainings for Ukrainian trainers to help ensure that trainers had a solid understanding of each LEAP component and were well-versed in group process and inter-personal skills. ISC and Ednannia relied on experts with prior LEAP experience in Macedonia, Bulgaria, Poland, and Russia to lead training-of-trainers.

ISC and Ednannia selected four Ukrainian organizations geographically dispersed throughout Ukraine to serve as LEAP Centers of Excellence. These LEAP Centers were created to help support and facilitate LEAP activities within pilot and non-pilot communities throughout Ukraine. The Centers distributed LEAP-related services and information, encouraged the development of LEAP networks, and promoted program replication in new communities.

COMPONENT 4

CREATING A LEAP NETWORK OF MUNICIPALITIES AND NGOS

ISC and Ednannia used a three-step approach to encourage new Ukrainian communities to implement LEAPs: disseminating information, establishing a LEAP network, and setting the stage for successful replication efforts. These three steps were designed to be mutually supportive with the primary goals of stimulating new Ukrainian communities to implement LEAPs and sharing information on best approaches to local environmental management. ISC and Ednannia shared pilot community project results through a

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combination of video promotional materials, quarterly information bulletins, websites, and regional and national seminars.

ISC and Ednannia worked with the Ukrainian NGO, *Ecological Media Group*, to document pilot community activities in a series of video segments and public service announcements. Further, ISC and Ednannia worked closely with the *Association of Ukrainian Cities*, the *U.S. Ukraine Foundation's Community Partnerships Project (CPP)*, and other organizations working with municipalities to help disseminate information and LEAP results among Ukrainian municipalities.

Building upon the information dissemination efforts, Ukrainian municipalities and NGOs were invited to become part of the LEAP network. By joining the LEAP network, Ukrainian communities received regular information updates, access to information databases, invitations to participate in regional seminars and trainings, national conferences, and methodological materials on how to implement LEAPs. In partnership with the LEAP Centers, ISC and Ednannia supported activities that encourage the adaptation and replication of the LEAP process in new

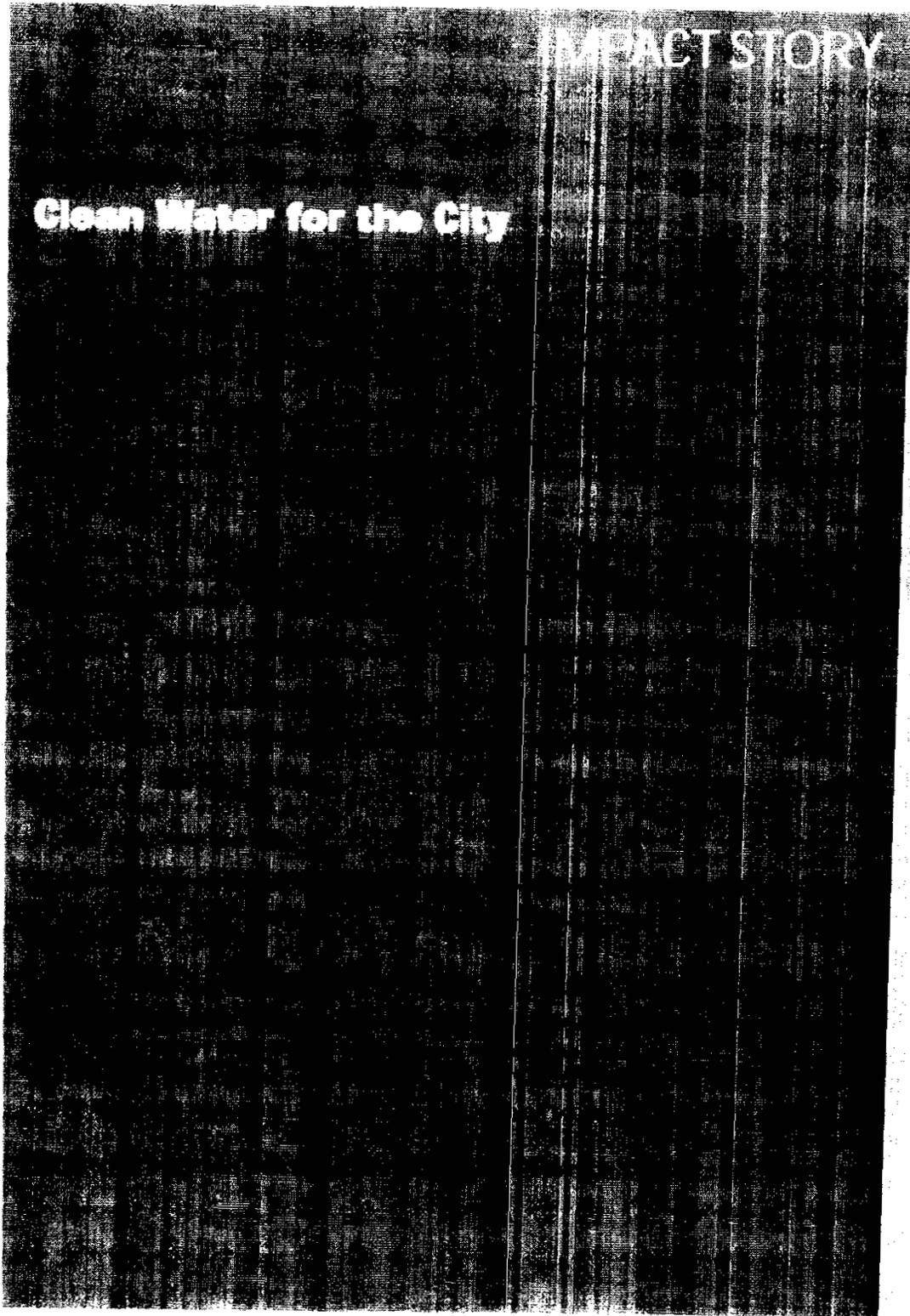
Ukrainian communities, including conducting targeted trainings for communities interested in implementing LEAPs.

COMPONENT 5

COMMUNICATION AND COORDINATION OF ACTIVITIES

The ISC team closely coordinated all activities with USG and other implementers, organizations, and institutions working in Ukraine on environmental issues. ISC and Ednannia established a 35-person Project Advisory Committee composed of diverse governmental and non-governmental institutions and organizations that provided strategic advice and guidance, coordinated assistance efforts, and identified opportunities to support replication of project results. Project staff coordinated directly with numerous organizations and institutions, many included on the Project Advisory Committee, on issues related to the environment, municipal development, and public participation. The primary goal of these efforts was to inform these institutions about the process and benefits of implementing LEAPs, share progress of the LEAP pilot communities, leverage assistance of these institutions and organizations for the pilot and replication communities, and encourage them to adopt and implement similar programs.

These components are described in more detail under Section IV.



IMPACT STORY

Clean Water for the City

III. Summary of Results

"The LEAP helped us overcome a lack of trust by the citizens of locally elected officials. Now, people believe we can achieve results. Trust building is the single largest result of this project."

City council member,
City of Evpatoria

ISC and Ednannia incorporated four USAID Intermediate Results (IR) into its Monitoring and Evaluation Framework for the Ukraine LEAP. This Framework was included as a component of the Life-of-Activity Work Plan, and approved by USAID in March 2001.

These IRs include:

- IR 1.6.1 Implementation of internationally consistent, locally effective policies;
- IR 1.6.2 Increased environmental investment;
- IR 1.6.3 Improved environmental management at private and public facilities; and
- IR 1.6.4 Increased empowerment of citizens to affect environmental decisionmaking.

As the results below indicate, ISC and Ednannia met or exceeded all USAID Intermediate Results in addition to other results identified in the Monitoring and Evaluation Framework (see Attachment A) ISC and Ednannia have identified three long-term outcomes of the Ukraine LEAP project that incorporate the intermediate results. These outcomes are:

- A. An improved environmental situation;
- B. Strengthened environmental governance; and
- C. Increased long-term capacity to develop and implement community-based programs.

These long-term outcomes provide the basic framework for reporting on project results as follows.

A) IMPROVED ENVIRONMENTAL SITUATION

From the project outset, ISC and Ednannia emphasized the importance of achieving real improvements in the quality of people's lives as critical to building community credibility and a sense of accomplishment among PSG members. Improved environmental situation can be measured by:

- A.1 Improved ability to develop local environmental policy
- A.2 Improved environmental conditions.
- A.3 Increased environmental investments and,
- A.4 Improved environmental management in businesses and municipal enterprises.

A.1. IMPROVED ABILITY TO DEVELOP ENVIRONMENTAL POLICY

Under the Ukraine LEAP, communities significantly improved their ability to develop local environmental policies. Each PSG worked together for two years to assess environmental issues, establish environmental priorities, identify and implement a set of actions to address top priority issues, and undertake a broad range of public outreach activities to foster community-wide discussion of the plan. In the process, PSGs learned to work collaboratively to resolve their differences and develop a consensus document in the form of an environmental action plan.

Each action plan provides a long-term roadmap for environmental priorities and investments in these communities. Following the completion of the action plan, city council

councils adopted and approved these plans unanimously. This unanimous approval is indicative of the broad political support for the action plans and a testimony to the power of the collaborative process used by the PSGs. Following the approval of the action plan, each PSG prepared implementation plans for those environmental priorities that they were ready to take immediate action.

A.2. IMPROVED ENVIRONMENTAL CONDITIONS

LEAP pilot communities undertook and continue to undertake a broad range of actions to improve environmental conditions. ISC provided \$91,000 in grants to pilot communities to implement priorities identified in the Implementation Plans. (Each community provided significant matching funds as described in greater detail below under 'increased environmental investments.') Pilot communities implemented a broad range of activities improving solid waste management, improving drinking water quality and quantity, expanding and improving green areas, and eliminating unused pesticides. These implementation projects include:

- Eliminated and cleaned-up over 80 illegal waste dumps totaling 943 tons in four communities (Kosiv, Chechelnyk, Korostyshiv, and Svatove);
- Established separate waste collection systems for waste and recyclable materials in two communities that resulted in 25 tons diverted from waste disposal (Kosiv, Balaklava);

- Renovated of wastewater treatment facilities in four communities (Pavlohrad, Chechelnyk, Korostyshiv, and Kosiv);
- Expanded waste collection and management systems in four communities increasing service to 35,200 residents and businesses (Kosiv, Chechelnyk, Balaklava, and Korostyshiv);
- Expanded clean drinking water opportunities by renovating and/or drilling 32 wells in four communities (Korostyshiv, Pavlohrad, Kosiv, Balaklava) and increased access to clean drinking water for 90,300 people;
- Expanded and improved green space totaling 16.8 hectares in six communities (Evporiia, Balaklava, Korostyshiv, Svatove, Kosiv, and Chechelnyk);
- Removed and safely disposed of 28.6 tons of unidentified pesticides and herbicides from 11 former collective farms in one community (Svatove);
- Renovated town drinking water supply system to provide high quality drinking water 24 hours per day in one community (Korostyshiv); and
- Installed high quality drinking water supply systems in 22 public schools in one community (Pavlohrad) for 9,000 students.

A.3. INCREASED ENVIRONMENTAL INVESTMENTS

The Ukraine LEAP exceeded expectations and generated a significant amount of environmental investments. Local authorities,

Our LEAP was approved unanimously by our city council. This is a very big achievement because we have many political parties on our city council.

Janna Chmut,
Local Coordinator,
Town of Korostyshiv

"Due to our program, people have learned how to discuss issues and to come to agreement. The City Council is much more active now and trust has been built up between the PSG and City Council. The PSG has direct contacts with all the heads of the communal services. People now realize that it is possible to make changes for themselves."

—Inna Mazanova, Local Coordinator

oblasts, and other sources provided implementation funding totaling approximately 2,376,000 hrvna (approximately \$450,000).

ISC and Ednannia provided training to pilot communities on how to prepare project financing plans, and this training proved to be highly successful as communities received significant funding from external sources. For example, the Town of Korostyshiv received \$38,000 (200,000 Hrv) from Zhytomyr Oblast Environmental Fund to replace outdated wastewater treatment equipment and received \$74,670 (398,000 Hrv) from the national budget to renovate a historical sculpture park in the town center. Kosiv Raion received \$19,000 (100,000 Hrv) from the Ivano-Frankivsk Oblast Environmental Fund to replace wastewater treatment equipment, while Svatove Raion received \$28,000 (150,000 Hrv) from the Lugansk Oblast Environmental Fund to remove and neutralize obsolete pesticides and herbicides. The City of Pavlohrad received \$50,700 (270,000 Hrv) from the Dnipropetrovsk Oblast Environmental Fund to reconstruct its wastewater treatment plant. The Town of Chechelnyk received \$59,100 (315,000 Hrv) from the Vinnitska Oblast Environmental Fund

to build a new wastewater treatment facility. See Table 1 below for more detailed information.

A.4. IMPROVED ENVIRONMENTAL MANAGEMENT IN BUSINESSES AND MUNICIPAL ENTERPRISES:

ISC and Ednannia worked directly with the business community and municipal enterprises to help introduce environmental improvements into their management practices. As a result, several municipal enterprises and businesses made changes in their management systems. For example, following trainings on conducting environmental audits sponsored through the Academy for Educational Development, the Svatove Department of the Lugansk Vodocanal Company (municipal water/wastewater company) incorporated recommendations on improving the efficiency of the water treatment system. In Korostyshiv, the Mayor's office established a new reporting system for all existing municipal companies and set up new private company for providing municipal waste collection. The new company increased the number of household and business waste

Community	Amount of Funds and Sources of Financing for Project Implementation in Ukrainian hrvna (\$1= 5 hrv ñ approx.)				
	ISC Grants	Community	Implementers	Other Sources	Total
City of Yevpatoria	80,000	70,000	-	-	150,000
City of Pavlohrad	80,000	100,000	-	270,000	450,000
Balaklava raion	70,000	35,000	34,242	-	139,242
Kosiv raion	70,000	35,000	-	511,800	616,800
Svatove raion	70,000	27,000	-	150,000	247,000
Town of Korostyshiv	60,000	58,076	101,352	598,000	817,428
Settlement of Chechelnyk	50,000	71,000	-	315,000	436,000
TOTAL	480,000	396,076	135,594	1,844,800	2,856,470

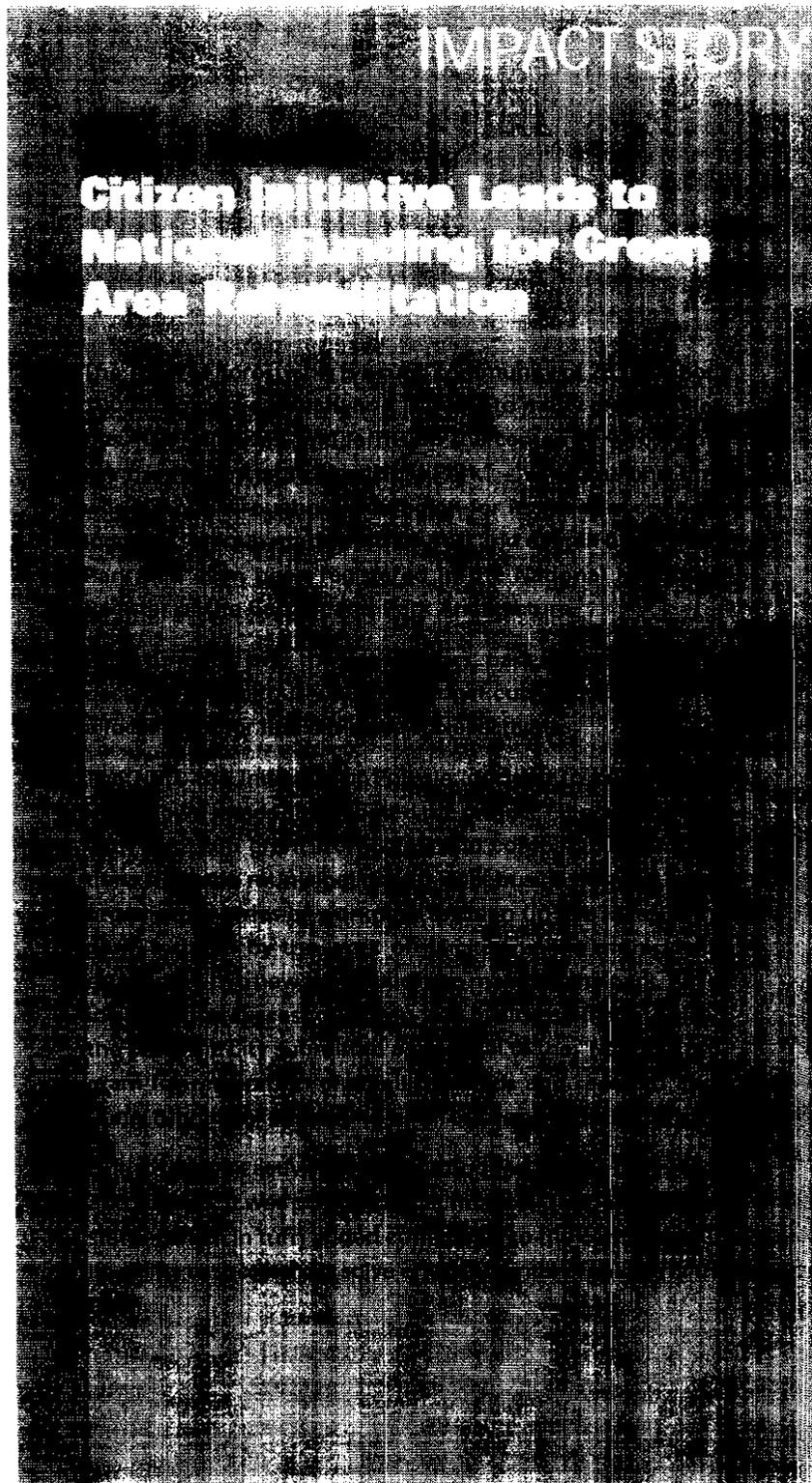
collection contracts from 200 to 4000 – resulting in a significant decrease in illegal disposal of waste.

In Kosiv, the private company, Orion, signed agreements with 26 villages in the raion to collect solid waste, and with the help of citizen volunteers, eliminated more than 18 illegal waste dumps. In Pavlohrad, two private companies were established to collect solid waste. In Chechelnyk, a local agricultural processing enterprise replaced its outdated coal-fired heating system with an environmentally-sound biomass fuel burner – thus significantly reducing air pollution in the town center. In Balaklava, ISC and Ednannia sponsored a training for the Balaklava Mining Company that resulted in the mining company conducting waste management audit.

B) STRENGTHENED ENVIRONMENTAL GOVERNANCE

All seven LEAP pilot communities strengthened collaboration among different stakeholders, improved citizen access to information, improved the transparency and accountability of local government, and strengthened citizen involvement in local decisions. These improvements fall under the recently emerging concept known as “environmental governance.”

Simply put, environmental governance focuses on how environmental decisions are made and who makes these decisions. Environmental governance deals with who is empowered to make decisions that affect ecosystems and the communities that depend



"Before this project, people didn't believe in the abilities of local authorities. Now, we have started step-by-step to solve environmental problems. People are starting to believe that we can do something."

Deputy Chair, Korostyshiv
City Council

on them, and how these decision-makers are held accountable. It includes the rights of citizens to obtain access to information and participate in decisions that affect their lives. Central to the success of environmental governance is the level of transparency and accountability of institutions that make these decisions.¹

Ukraine has ratified the Aarhus Convention, which establishes a uniform set of standards for involving citizens in environmental decision making and emphasizes the importance of fully integrating environmental considerations in governmental decisions. It recognizes that citizens must have access to information, be entitled to participate in decisionmaking, and have access to justice in environmental matters.

The Ukraine LEAP has served as a model for local environmental governance in Ukraine. Strengthened environmental governance for the Ukraine LEAP is measured by:

- B.1. Increased public awareness of and access to information on environmental issues.
 - B.2. Improved accountability and transparency of local government.
 - B.3. Improved stakeholder involvement in community decisions, and,
 - B.4. Increased incidents of citizen environmental activism.
- B.1. Increased public awareness of and access to information on environmental issues

Project stakeholder groups achieved impressive results in raising public awareness and citizen access to information. ISC and Ednannia, in cooperation with PSGs conducted two independent before and after

surveys over a period of one year. In the seven communities, a total of 5 300 individuals were surveyed in the first round and another were 900 surveyed in the second round. The survey results revealed that public awareness of environmental issues increased two-fold in most pilot communities, including an increase of 21% to 39% in Svatove, 12% to 25% in Pavlohrad, 11% to 22% in Korostyshiv, and from 12% to 38% in Yevpatoria.

Further, the number of people who believed that NGOs and citizens had an important role to play in initiating community improvements doubled in almost every pilot community, including: Svatove - 27% to 54%, Kosiv - 19% to 27%, Korostyshiv - 32% to 57%, Evpatoria - 24% to 54%, Chechelnyk - 27% to 54% and Balaklava - 24% to 48%. This increased confidence in the power of citizen activism, born out by the concrete achievements made by citizen groups in demonstration communities, will continue long after the LEAP project has been completed.

Increased access to information can be measured principally by the success of the PSGs in preparing their environmental action plans. As noted earlier, PSGs successfully prepared environmental issue assessments that described the environmental situation in their communities and the associated public health and environmental risks. PSG members spent an endless amount of hours working with information providers, such as health and environmental inspectorates and local hospitals to collect and compile this information. Many of these information providers were represented on the PSG. Thus, the PSGs served as an effective

mechanism from building trust among different stakeholders and thus facilitating the collection of essential environmental and public health information.

B.2. IMPROVED ACCOUNTABILITY AND TRANSPARENCY OF LOCAL GOVERNMENT

Project stakeholder groups – and the collaboratively decision making process they utilized — proved to be a highly effective mechanism for public involvement in local government decisions. The effectiveness of the collaborative process can be measured by the PSGs' success in making changes in local government decisions. Collectively, local authorities adopted and incorporated into their official community planning processes one-third of the recommendations made by the PSGs. Five communities changed their development programs according to recommendations in their community's environmental action plan. As a measure of the strengthened collaboration between citizens and elected officials, city council members and municipal staff participated as members of the PSGs, including 42 city/town council members, 13 local administration staff, and 19 municipal staff.

Furthermore, LEAP communities moved to formally institutionalize transparency and public accountability into their community decision making processes. In partnership with Ukrainian NGO EcoPravo-Kyiv, ISC and Ednannia worked in five pilot communities to promote public participation in environmental decision making (Evpatoria, Pavlohrad, Kosiv raion, Svatove raion, and Korostyshiv). All five are reviewing their community charters. Evpatoria adopted new regulations into its

existing community charter establishing new legal mechanisms for public involvement in local government decision making consistent with the Aarhus Convention. PSGs held 22 public presentations – including seven public hearings — to share draft findings of environmental priorities and proposed actions with over 1100 citizens participating in these presentations. Further, Evpatoria and Kosiv created Environmental Public Councils to serve as mechanisms for public participation in community decision making process.

B.3. IMPROVED STAKEHOLDER INVOLVEMENT IN COMMUNITY DECISIONS

The Ukraine LEAP has been successful in increasing public participation in local government decision-making. Each pilot community established project stakeholder groups composed of representatives from a broad-cross section of institutions and organizations. PSG members worked collaboratively over a two-year period to establish environmental priorities, develop a local action plan, and involve citizens in the decision making process. All together, PSGs held 197 meetings with a total of 4,300 participant days in PSG meetings (57% of these participants were women).

In every LEAP community, existing NGOs have been revived and new NGOs have been established. More than 20 new NGOs were established as a result of the Ukraine LEAP. These NGOs played a leading role in mobilizing citizens in local environmental actions throughout the project. ISC and

"I believe our greatest achievement is that we have created an Environmental Council (PSG) which is a permanent group of people willing to work together on environmental issues."

Oleksander Ovchar,
Mayor of Chechelnyk

"Environmental improvements can only be achieved by joining together forces in the community. We never expected the great support for solving environmental problems like we are seeing now in our community. In Svatove, we believe no one will solve our problems except ourselves."

Valeriy Chesnykh, Head,
Svatove Raion Council

"Now I understand that I can play a role in my community."

10th grade student
in Balaklava

Ednannia trained representatives for NGO representatives from pilot communities on strategic planning to strategize on how to continue LEAP activities after the USAID-funded project is completed.

The PSGs have taken a leading role in establishing and strengthening collaboration with the business community. More than 60 business people were directly involved in action planning and implementation in the pilot communities, with five new private enterprises created to address priority environmental actions.

B.4. INCREASED INCIDENTS OF CITIZEN ENVIRONMENTAL ACTIVISM

Direct citizen involvement in improving local environmental conditions rose dramatically in all pilot communities. Based upon the surveys on citizens in pilot communities cited above, pilot communities showed a two-to-seven fold increase in the level of public involvement in community actions, including: Svatove — 22% to 58%, Korostyshiv — 7% to 51%, Evpatoria — 11% to 45%, Chechelnyk — 13% to 62%, and Balaklava — 12% to 32%.

ISC and Ednannia funded three rounds of small grants for citizen groups and NGOs to stimulate local environmental initiatives in pilot communities. In all, ISC and Ednannia gave out 40 small grants resulting in 5,000 citizens participated in a wide variety of environmental improvement projects.

Community groups restored and expanded public parks and green spaces, renovated public drinking wells, cleaned riverbanks, renovated summer camp areas, and developed environmental education and public awareness campaigns.

For example, in Pavlohrad, an NGO developed a system for recycling in one apartment block that was so successful that it inspired groups from other apartment blocks to organize efforts to replicate the experience. In Korostyshiv, the youth NGO Melody, cleaned-up and restored four different public drinking wells with the help of local enterprises, local authorities, and church parishioners. These environmental improvements were made possible through a significant amount of community investment in cash and in-kind contributions. In the first grant round alone, the communities provided a cost share of \$14,700 or twice the amount of the ISC and Ednannia grant funds and a cost share of \$17,500 in cost share in the second grant round.

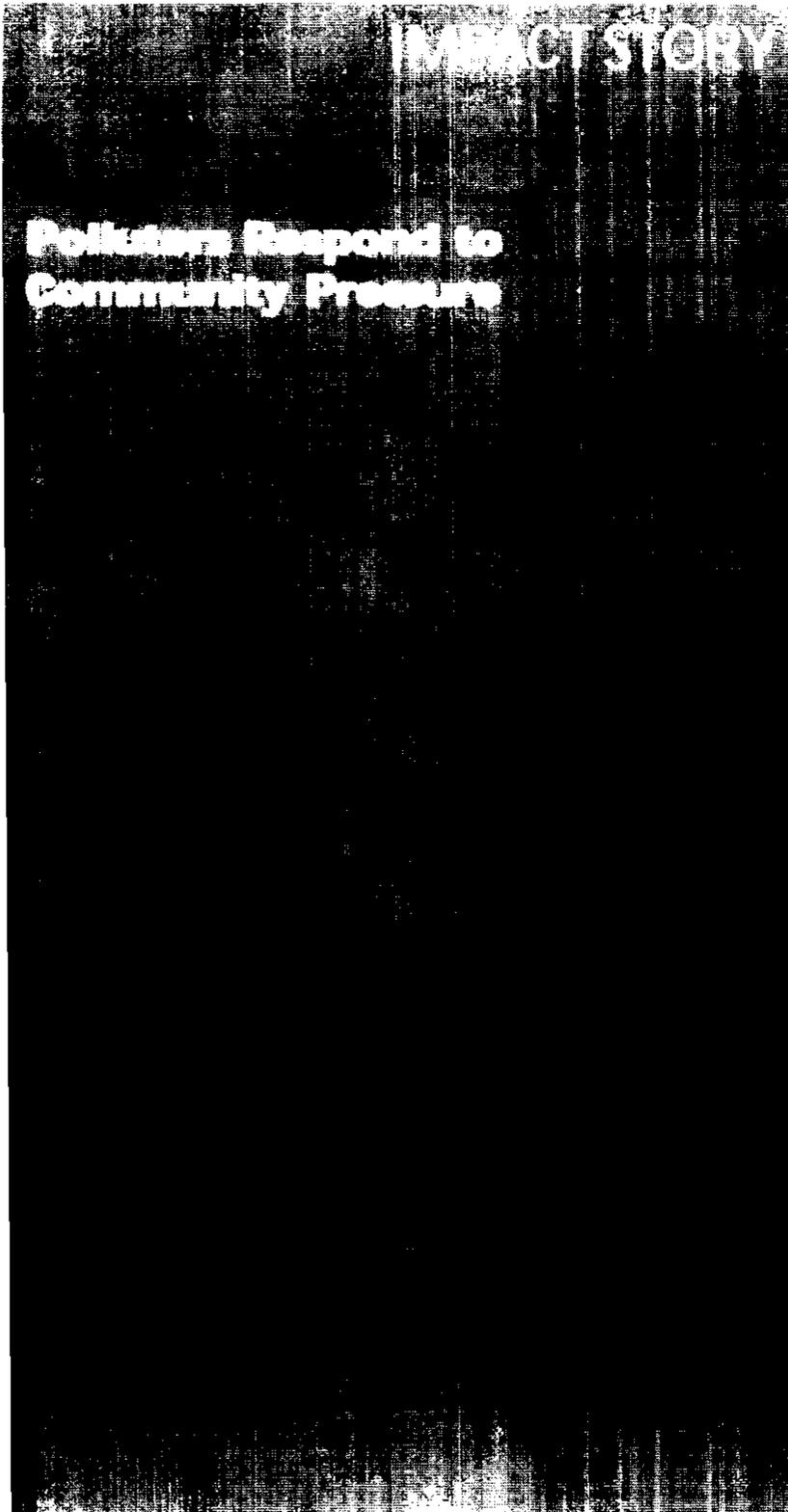
Under the "Strengthening Community School Partnerships" project (SCSP), ISC was able to focus specifically on cultivating youth participation in local environmental problem solving and encouraging democratic activism in two pilot communities of Kosiv and Balaklava. Funded by the Charles Stewart Mott Foundation and GE Fund, the SCSP supported youth involvement in community visioning, encouraged community citizen participation, and resulted in the development integrated lesson plans tied to community issues. With small grants from the SCSP project, youth implemented eleven projects to build new parks, improve the landscape around their schools, organized environmental summer camps, established an eco-tourism school, and conducted seminars on environmental topics.

IMPACT STORY

Institutionalizing Transparency and Public Accountability in Local Government Decisionmaking

"The methodology and tools used in the LEAP project enabled the community to make great progress in the development of Evpatoria and figure out modern innovative approaches to solution of the essential task – creating of a new democratic society."

Sergei Sukhoboichenko, Inna Miroshnichenko, LEAP local coordinators, Evpatoria



C) INCREASED LONG-TERM CAPACITY TO DEVELOP AND IMPLEMENT COMMUNITY-BASED PROGRAMS

The Ukraine LEAP was designed to demonstrate participatory approaches to solving environmental problems at the local level while building the long-term institutional capacity to conduct LEAPs and other community-based programs throughout Ukraine in the years to come. This long-term capacity can be measured by:

- C.1. Ukrainian professionals trained in LEAP methodology and with hands-on experience working at the community level.
- C.2. New communities implementing LEAPs and network of Ukrainian LEAP communities established.
- C.3. LEAP support organizations established and trained to implement LEAPs and community development activities in Ukraine.
- C.4. Guidance materials prepared, Ukrainian models documented, and information widely disseminated and.
- C.5. Cross-border ties established.

C.1. UKRAINIAN PROFESSIONALS TRAINED IN LEAP METHODOLOGY AND WITH HANDS-ON EXPERIENCE WORKING AT COMMUNITY LEVEL

One of the principle goals of the Ukraine LEAP was to strengthen the capacity of Ukrainian NGOs, technical and training institutions, and individual experts to provide ongoing LEAP assistance to local governments and NGOs. Ukraine now has a cadre of trainers available to train communities across the country to implement LEAPs and other participatory community problem-solving approaches. ISC and Ednannia established a group of 14 lead trainers and five back-up trainers who received extensive training over a two and one-half year period on how to implement the LEAP methodology and how to work effectively with community groups and local officials. Teams of two-three trainers worked with the same community throughout the duration of the project. These trainers conducted 74 trainings for the PSG members, and provided direct technical assistance and coaching to assist the PSGs work through each step of the LEAP process. These trainers are now providing training and coaching assistance to 15 new LEAP communities. To establish this training team, ISC and Ednannia conducted eight training-of-trainers (TOTs) over the life of the project. ISC and Ednannia utilized experts from Central and Eastern Europe and Newly Independent States – drawing upon its broad network of LEAP practitioners in neighboring countries to provide technical assistance and training to Ukrainian counterparts.

C.2. NEW COMMUNITIES IMPLEMENTING LEAPS AND NETWORK OF UKRAINIAN LEAP COMMUNITIES ESTABLISHED

The Ukraine LEAP was designed to stimulate the replication of the LEAP process in new Ukrainian communities. In cooperation with the LEAP Centers of Excellence, the following 15 communities are moving forward with replicating LEAPs in their communities:

- Towns of Torez, Shakhtarsk, Khartsisk, Nikopol, Krasnoarmeisk, Gorlovna, and Debaltsevo; (Donetsk oblast)
- Towns of Korosten (Zhytomyr oblast)
- Town of Berezhany (Ternopil oblast)
- Settlement of Berezhnytsia and Town of Gorodok (Lviv oblast)
- Settlement of Toporiv (Ivano-Frankivsk oblast)
- Settlement of Lazeschyna (Zakarpattia oblast)
- Town of Kremenchug (Poltava oblast)
- City of Melitopol (Zaporizhzhia oblast)
- District of Simferopol (Crimea)
- Town of Chortkiv (Ternopil oblast)

All of the above communities have participated in trainings conducted by the LEAP Centers of Excellence. Of the above communities, seven have established PSGs and held a kick-off conference in their communities. Each replication community sent teams of four-to-five people to participate in the regional trainings, composed of representatives from the

"The main outcome of the LEAP is that people realized that their opinions mattered. There are no strategic decisions made by the local authorities now without public discussion."

Journalist and member of Evaporatoria Project Stakeholder Group

municipality, local NGOs, the business community, and other key stakeholders

During the trainings, team members worked together to help design each phase of the LEAP process in their community. These teams were then responsible for leading the LEAP process in their own communities. Representatives from the pilot communities participated in the trainings to share their experiences.

As part of replication activities, ISC and Ednannia established a network of 106 Ukrainian communities interested in implementing LEAPs, including 64 NGOs and 42 local self-governments and governments. Each LEAP Network member provided an official letter of interest in joining the network. Members of the network were given access to the LEAP database, received regular newsletters and guidance materials, and were invited to attend seminars, conferences, and trainings. ISC and Ednannia shared methodological materials with other organizations, such as the United Nations Development and the Association of Ukrainian Cities, who are using portions of the methodology for community sustainable development efforts.

Further, LEAP implementation activities are being promoted by oblast and national governments institutions. For example, the Lugansk Oblast Environmental Department is working with four raions in the oblast to collect obsolete and abandoned pesticides and herbicides. The Ukrainian Parliamentary Committee on the Environment has requested assistance from Ukraine LEAP office in developing new legislation that will strengthen the ability of Ukrainian

communities to develop local environmental policy

C.3. LEAP SUPPORT ORGANIZATIONS ESTABLISHED AND TRAINED TO IMPLEMENT LEAPs AND OTHER COMMUNITY ENGAGEMENT ACTIVITIES IN UKRAINE

In addition to the cadre of Ukrainian trainers versed in the participatory, community-based approaches, ISC and Ednannia established a network of collaborating Ukrainian organizations which are poised to provide ongoing support for LEAPs. Four LEAP Centers were established to support and facilitate LEAP activities both within pilot and non-pilot communities throughout Ukraine. These organizations include: the Volyn Resource Center (western Ukraine), the Donetsk Debate Center (eastern Ukraine), Southern Ukrainian Regional Training Center in Kherson (southern Ukraine), and the Crimean-Tatar Initiative Foundation (Crimea). The LEAP Centers provided and distributed LEAP-related services and information, established regional LEAP networks, and promoted program replication in new communities. LEAP Centers of Excellence held nine regional seminars involving 150 individuals from a range of organizations and communities and conducted more than 80 personal consultations designed to share pilot community results with new communities interested in implementing LEAPs.

In addition, staff from the Kyiv-based LEAP project office registered a new international charity organization, the Institute for Community Development, to continue LEAPs and other community mobilization activities throughout Ukraine. ICD will take a leading role in coordinating future LEAP activities nationwide.

IMPACT STORY

From Closed City to Tourist Destination

*"They say Balaklava is not a City,
rather it is a state of the soul."*

Popular saying in Balaklava

C.4. GUIDANCE MATERIALS PREPARED, UKRAINIAN MODELS DOCUMENTED, AND INFORMATION DISSEMINATED

The Ukraine LEAP project has resulted in the development of proven models and methodologies in community-based participatory approaches to environmental, social, and economic issues. ISC and Ednannia undertook extensive efforts to document results, develop methodological materials adapted to the Ukrainian context, and shared information on LEAP results through a broad dissemination effort. These efforts included:

- Published "Ukrainian Guide to Implementing Local Environmental Action Programs" that modifies existing methodology and includes case studies of Ukrainian LEAP communities.
- Published 10 Ukrainian editions, 5 Russian editions, and one English abstract of the bulletin, *Chysta Khata*, and distributed the bulletin to 6,000 interested practitioners.
- Compiled an electronic database on community best practices available to pilot communities and LEAP Network members.
- Established a multi-language website.
- Established four 'LEAP Informational Repositories' where citizens can access LEAP methodological materials, pilot community environmental action plans, and other LEAP materials. These information repositories include: the NGO "Ecology and Mir" (Simferopol), the NGO "EcoPravo-Lviv" (Lviv), the NGO EcoPravo-Kharkiv (Kharkiv) and the southern branch of the Institute of Ecology (Mykolaiv), and
- Stimulated more than 1,800 media activities on the local and national levels.

The table to the left summarizes LEAP activities coverage by media

C.5. CROSS-BORDER TIES ESTABLISHED

ISC worked in partnership with the Umbrella Association of Consultants (Poland) to foster cooperative relationships and share best practices among Ukrainian and Polish communities on how local governments, businesses, non-governmental organizations, and ordinary citizens can work together to improve a community's environment and foster sustainable development. With funding from the Polish-American-Ukrainian Cooperative Initiative (PAUCI), ISC matched Polish and Ukrainian communities and sponsored two sets of exchanges between these communities. As a result, five pairs of Ukrainian-Polish communities signed memoranda of cooperation for long-term partnerships. These partnerships include Yevpatoria - Ostrowiec Swietokrzyski, Kosiv - Elk, Korostyshiv - Lapy, Chechelnyk - Elblong, Balaklava — Zgierz.

Types of Media	From beginning till October 2002	From October 2002 till April 2003	From April 2003 till December 2003	From December 2003 till July 2004	Total
TV except broadcasting LEAP video	11 (3)*	18	50 (40)	61 (5)	140 (12)
TV broadcasting LEAP video (23,945,000 audience)			981	49	1,030
Newspapers	67 (5)	33	114 (7)	97 (4)	311 (16)
Radio	49 (32)	30	118 (26)	101 (24)	298 (82)
Internet	14	-	6	11	31
TOTAL	141 (40)	81	1,269 (37)	319 (33)	1,810 (110)

* in brackets national level media.

IV. Description of Activities

The following is a description of all activities undertaken within the scope of the Ukraine LEAP. The project consisted of five primary components, plus project start up:

1. Implement LEAP Pilot Projects
2. Develop Methodologies and Tools
3. Build Capacity of Ukrainian Trainers and LEAP Centers
4. Disseminate Information, Create LEAP Network, and Replicate LEAPs
5. Communicate and Coordinate Activities

PROJECT START UP

ISC and Ednannia received its project registration in September 2001 and opened the Ukraine LEAP Project Office in Kyiv with six full-time staff one month later.

ISC and Ednannia officially launched the Ukraine LEAP on October 31, 2001 with a well-attended kick-off conference at the Hotel Kyiv. The primary purpose of the conference was to share information with a wide range of individuals, publicize the project through the media, and inform people about the competition for demonstration communities and LEAP Centers of Excellence. Over 100 people attended the conference, including 15 representatives of local authorities from different regions of Ukraine, 11 representatives of the Ministry of Environment and Natural Resources and their oblast departments, 14 Advisory Committee members, 9 journalists, and other representatives from donor agencies, Ukrainian NGOs, and other organizations and institutions.

As part of project start-up activities, ISC and Ednannia met individually with representatives from 26 key environmental institutions and organizations working in Ukraine to inform them about the project, explore opportunities for collaboration, and to leverage their assistance to demonstration communities. These institutions and organizations included: Association of Ukrainian Cities, Counterpart International, Eco-Pravo, MAMA-86, Ministry of Environmental and Natural Resources, Regional Environmental Center-Kyiv, UNDP, US Peace Corps, World Bank, and U.S. Ukraine Foundation, among others.

COMPONENT 1. IMPLEMENT LEAP PILOT PROJECTS

PILOT COMMUNITY SELECTION

In May 2002, ISC and Ednannia selected seven Ukrainian demonstration communities geographically disperse throughout the country — one more community than originally anticipated. Selected communities were chosen through an extensive competitive process by a committee composed of representatives from the Institute for Sustainable Communities, ISAR "Ednannia," and three independent experts. The selection committee reviewed 115 applications and visited sixteen communities in April 2002. Communities were evaluated based upon their experience in addressing environmental issues, commitment of local government officials, and prior cooperation between local officials and non-governmental organizations, among other criteria.

"People realize what they can do with a small amount of money but a great desire to do something."

Janna Chmut, Local Coordinator, Korostyshiv

The following communities were selected:

More than 100,000 citizens:

- City of Pavlohrad (Dnipropetrovsk region)
- City of Evpatoria (Crimea)

Between 50,000 and 100,000 citizens:

- Balaklava district (Crimea)
- Kosiv district (Ivano-Frankivsk region)

Less than 50,000 citizens:

- Svatove district (Luhansk region)
- Settlement of Chechelnyk (Vinnitsya region)
- Town of Korostishiv (Zhytomyr region)

ISC signed memoranda of cooperation with the local authorities in each pilot community that delineated roles, responsibilities and the project timeframe. Each pilot community formed an Initiator Group to organize and implement initial LEAP activities and to inform the wider community about the project. From June-September 2002, the Initiator Groups, with assistance from the LEAP project staff, organized kick-off conferences in each pilot community to further educate community members about LEAPs and solicit participation from a broad cross-section of community members to serve on the project stakeholder groups. An average of 200 people attended the kick-off conferences. Conferences were held in the following months: June 2002, Kosiv district; July 2002, Chechelnyk and Korostyshiv; September 2002, Evpatoria, Svatove district, and Balaklava district; and October-Pavlohrad.

FORMATION OF PROJECT STAKEHOLDER GROUPS AND HIRING LOCAL COORDINATORS

At the conclusion of the kick-off conference, participants were asked to join the Project Stakeholder Group (PSG) and participate in an introductory workshop to receive a detailed overview of the LEAP process and the role of the PSG, guidance on taking the first steps in implementing a LEAP, and an opportunity to practice group process skills. An average of 25-30 individuals decided to join the PSGs – with 50-60 individuals from some communities like Pavlohrad and Evpatoria. Throughout the LEAP program, PSGs met regularly to oversee and direct LEAP activities.

Each community hired a local coordinator(s) with two coordinators hired in the four largest communities. In July 2002, ISC and Ednannia organized a five-day training for local coordinators and representatives from PSGs to provide them with a basic understanding of the LEAP process, guidance on their roles and responsibilities, and to address project management issues. Subsequently, each local coordinator established a local office – with local and raion governments providing in-kind contributions in the form of office rent, electricity, and heat.

COMMUNITY WORKSHOPS AND TRAININGS

Over a two year period, Ukrainian LEAP trainers conducted a series of workshops in each pilot community to provide PSG members with the skills and knowledge they needed to successfully undertake the LEAP (see topics and schedules for community workshops on next page)

The LEAP office also organized trainings on more specialized topics for participants from all communities. In November 2002, ISC and Ednannia cooperated with the Ukraine Land Resource and Management Center (ULRMC) to provide assistance on using geographic information systems (GIS) to map environmental problems at the local level. ULRMC led a one-day training for local coordinators, stakeholder group members, and trainers on GIS as a tool for preparing the community issue assessments. Subsequently, ULRMC worked with 3 communities to map environmental problems using GIS.

In Evpatoria, GIS activities have proven invaluable in mapping significant landscape changes over time in coastal erosion and narrowing of beaches, increased development along coastal areas, and increased flooding

In Kosiv, analysis revealed a significant decrease in forested areas, along with increased number of industrial buildings in mountainous areas. In Balaklava, GIS activities were used to map numerous adverse environmental changes, including open mining, development, and deforestation.

In December 2003, PSG members, local coordinators, businesses, and municipal staff participated in a training on community financing mechanisms for environmental action implementation. The training prepared teams from each community to develop grant applications to national or oblast environmental funds or other external sources. In June 2004, 50 representatives from pilot community attended a training on strategic planning to develop plans for continuation of LEAP activities.

Finally, ISC and Ednannia organized two roundtable discussions (November 2003, June 2004) over the life of the project for local coordinators, project stakeholder group members, and trainers to share experiences, discuss next steps, and discuss support and assistance needs.

ENVIRONMENTAL ACTION PLANS

Each PSG conducted environmental issue assessments that described the main environmental problems facing the community and the risks these posed to both human and ecological health. These assessments were completed between February-June 2003. PSGs also conducted public surveys to determine which environmental issues residents felt were priorities. The number of respondents varied from 300-1200 people, depending on the community. Based upon issue assessments and survey findings, PSGs in each community established environmental priorities (see detail on next page).

Topic	Schedule
Introduction to LEAPs, group process skills	June-September 2002
Conducting environmental issue assessments; conducting public outreach campaigns	October-November 2002
Establishing environmental priorities	February-March 2003
Preparing an environmental action plan	May-October 2003
Implementing actions	November-December 2003
Implementing actions; monitoring and evaluating project results	March-May 2004
Preparing targeted information campaigns based on community LEAP results	May-June 2004

After completing the environmental issue assessments and establishing environmental priorities, each PSG prepared an Environmental Action Plan (EAPs) focused on the top priority environmental issues. In the fall 2003, PSGs completed their draft EAPs and submitted them for public comment. With the assistance of EcoPravo-Kyiv, four pilot communities held public hearings on their EAPs (Kosiv, Pavlohrad, Evpatoria, and Korostyshiv). In January and February 2004, the municipal councils in all seven communities adopted the EAPs and allocated funds for implementing priority activities.

"Improvement of the environmental can only be achieved by joining together of forces in the community. We never expected the great support for solving environmental problems like we are seeing now in our community. In Svatove, we believe no one will solve our problems except ourselves."

Valeriy Chesnykh, Head,
Svatove Raion Council

Evpatoria. Emergency condition of water supply and sewage collection system and poor condition of green vegetation zones in various neighborhoods of the city. *Approved by the City of Evpatoria, February 2004.*

Pavlohrad. Poor quality of drinking water, flooding in some parts of the city, poor collection and utilization of household solid waste, and atmospheric air pollution. *Approved by the City of Pavlohrad, November 19, 2003.*

Kosiv. Poor solid waste management, uncontrolled logging, and poor quality of surface water. *Approved by the Kosiv Raion, November 6, 2003.*

Balaklava. Pollution of Balaklava Bay, lack of sewage and storm water collection systems, illegal landfills and inadequate solid waste disposal and processing system, and waste on the banks of the Chorna and Baydarka Rivers. *Approved by the Balaklava Raion, November 28, 2003.*

Svatove. Improperly stored and outdated pesticides and herbicides, surface water pollution, illegal dumps. *Approved by the Svatove Raion, November 11, 2003.*

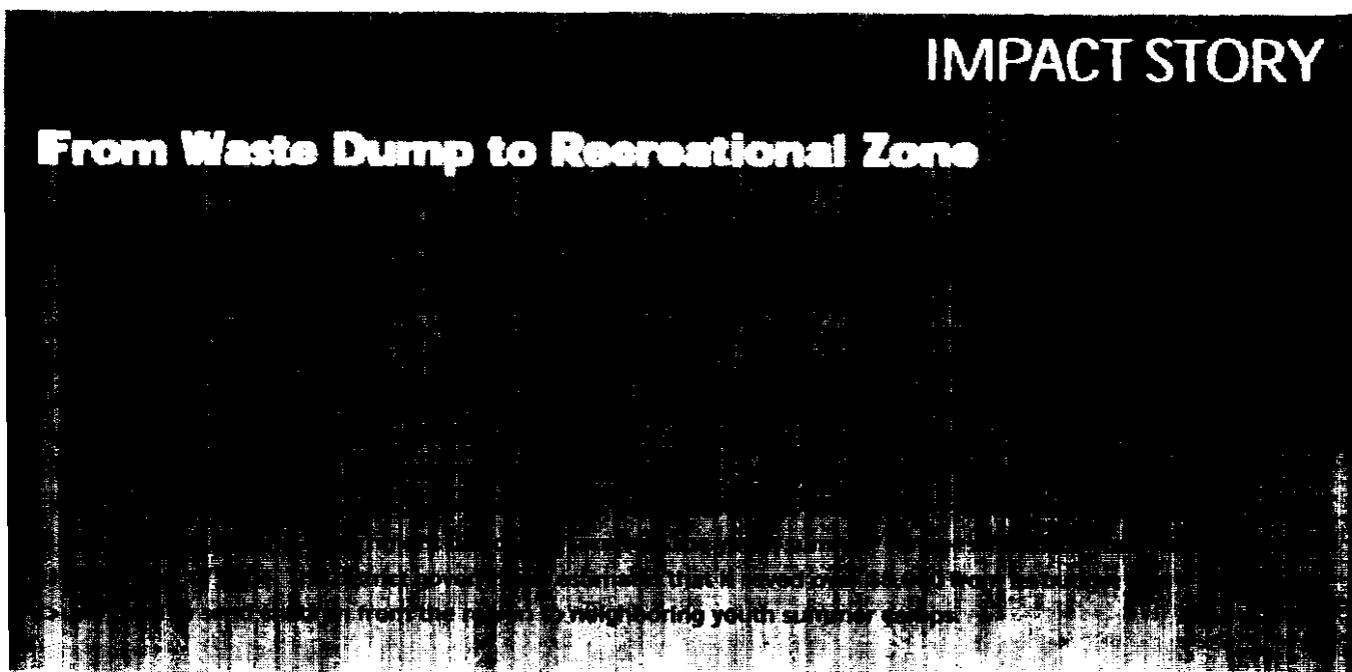
Korostyshiv. Low quality of drinking water, illegal landfills, and waste/pollution from local granite industry. *Approved by the Town of Korostyshiv, October 23, 2003.*

Chechelnyk. Lack of adequate sewage collection/treatment, poor quality of drinking water, and lack of adequate solid waste management. *Approved by the Settlement of Chechelnyk, December 25, 2003.*

Subsequently, each PSG developed an implementation plan focused on selected environmental issues in the environmental action plan. ISC provided \$90,000 in grants to pilot communities to implement priorities identified in their Implementation Plans. These projects are summarized in the diagram on the next page.

IMPACT STORY

From Waste Dump to Recreational Zone



Balaklava	<ul style="list-style-type: none"> Establish efficient system for waste collection and recycling of plastic bottles, and increase the number of green areas in the district. 	<ul style="list-style-type: none"> Established a collection system for plastic bottles within town of Balaklava. Created new green areas in the center of the town.
Chechelmyk	<ul style="list-style-type: none"> Establish a comprehensive system for managing solid waste. 	<ul style="list-style-type: none"> Purchased of new waste collection truck.
Evpatoria	<ul style="list-style-type: none"> Renovate and clean-up existing green areas and establish new green areas. 	<ul style="list-style-type: none"> Established new green areas in the urban centers of the City.
Korostyshiv	<ul style="list-style-type: none"> Establish a proper system for managing solid waste and waste from granite processing. Improve water quality in central water system of city. 	<ul style="list-style-type: none"> Constructed new pumping station for water treatment plant, and renovation of public wells.
Kosiv	<ul style="list-style-type: none"> Implement proper collection and utilization of household solid waste and raise public awareness on solid waste. Proper management of forest resources. Implement proper system of portable water. 	<ul style="list-style-type: none"> Expanded solid waste collection system in Town of Kosiv and six villages. Eliminated unauthorized waste dumps. Established waste collection system.
Pavlohrad	<ul style="list-style-type: none"> Improve availability of high quality drinking water by renovating old wells and constructing new ones. Establish a proper system for managing solid waste. 	<ul style="list-style-type: none"> Installed tanks in public schools for high quality drinking water. Improved and expanded number of high-quality public drinking water wells.
Svatove	<ul style="list-style-type: none"> Safely dispose of abandoned pesticides and raise public responsibility for safely disposing of pesticides 	<ul style="list-style-type: none"> Removed abandoned pesticides and transport to safe disposal site.

PUBLIC OUTREACH AND SMALL GRANTS PROGRAM

Each PSG organized a wide range of public awareness raising and involvement activities designed to increase public understanding of environmental issues and to get residents and businesses more actively involved in addressing environmental issues.

PSGs undertook wide ranging public awareness actions, e.g., working with school children to distribute public opinion surveys and local media to get free articles and media coverage, conducting public hearings, and holding dispersed public meetings.

With the active participation of PSG members, NGOs were particularly active in involving community members in public involvement activities, including tree plantings, clean up of illegal waste dumps, and green public spaces. These activities raised a considerable amount of community cost share in monetary, in-kind, and volunteer contributions.

Ednannia managed three small grant rounds for NGOs in the pilot communities to stimulate local environmental initiatives. With assistance from Ednannia, each community formed a grant selection committee.

ISC and Ednannia worked in cooperation with the Academy of Education Development to organize environmental management trainings for enterprises, including solid waste management (December 2003) and waste water treatment (June 2004).

These committees were designed to give communities practical experience in managing open and competitive processes for awarding financial grants or contracts. For the first grant round, Ednannia awarded \$7,000 in grants to 10 grantees in seven communities. The second round of grants was completed in the spring 2003, with a total of approximately \$13,000 to 12 grantees. The third grant focused on youth-initiated activities with 16 grants awarded for a total of \$9,000. In total, 38 grants were awarded to 38 different citizens groups, NGOs, and youth groups. See Attachment B: Description of Small Grants.

ENVIRONMENTAL MANAGEMENT ASSISTANCE TO LOCAL ENTERPRISES AND BUSINESSES

ISC and Ednannia worked in cooperation with the Academy of Education Development to organize environmental management trainings for enterprises, including solid waste management (December 2003) and waste water treatment (June 2004). Representatives from the PSGs, local authorities, and municipal enterprises participated in trainings to learn how to conduct audits and develop recommendations on improving municipal enterprise management. These participants then returned to their communities to conduct these audits and share their findings with the community. Recommendations from the audits were ultimately incorporated into many enterprises management practices

POLISH-UKRAINIAN COMMUNITY EXCHANGES

ISC and Ednannia, in partnership with the Umbrella Association of Consultants, organized a study exchange to communities in Poland for representatives from each community with funding from a grant under the Polish American Ukrainian Cooperative Initiative. In September 2003, representatives from nine Ukrainian communities, including all 7 LEAP pilot communities, traveled to Poland to visit partner communities in Poland. Each delegation participated in a wide variety of meetings and conducted site visits directly related to their priority issues. At the conclusion of the tour, representatives from Ukrainian and Polish communities shared their experiences at a one-day conference in Warsaw. In April 2004, delegations from eight Polish communities traveled to Ukraine for 3-4 study tour and exchange with their Ukrainian partner communities. At the conclusion of the study tour, 100 participants traveled to Kyiv for a one-day conference to share experiences on how citizens and local governments are collaborating to improve community life. On the next page is a list of partner Polish and Ukrainian communities, with communities that signed memoranda of cooperation in **bold**.

PAUCI Study Tour Partner Communities		
	POLISH COMMUNITY	UKRAINIAN COMMUNITY
1.	Elbl g	Settlement of Chechelnyk
2.	Elk	Kosiv raion
3.	Góra Kalwaria	Town of Horodok
4.	Kamienna Góra	Svatove raion
5.	Łapy	Town of Korostyshiv
6.	Ostrowiec wi tokrzyski	City of Evpatoriya
7.	Płock	City of Pavlohrad
8.	Trzebinia	Town of Sokal
9.	Zgierz	Balaklava raion

"Even adults ask me how I managed to persuade children to work in summer time in the park, at the springs, and take pictures of waste dumps? The answer is easy – they are excellent children and have a high potential. One just needs to assist them. I am grateful to the LEAP that it helped our kids to realize themselves and together with grown-ups to participate in solution of the city's issues!"

Tamara Shugailo,
Biology Teacher,
Korostyshiv school # 5

COMMUNITY-SCHOOL PARTNERSHIPS

ISC worked in partnership with the Ukrainian NGO, Child and Environment (C&E), to strengthen community-school partnerships in Balaklava and Kosiv. Funded by the Charles Stewart Mott Foundation and the GE Fund, it engaged community members and youth in identifying educational needs, leveraging local resources to support these needs, and organizing positive civic actions to address community and environmental priorities.

ISC/C&E organized a kick-off workshop in December 2002 in Kyiv followed by trainings in the two demonstration communities designed to create a common vision of success and common terms of reference among key stakeholder. In June 2003, ISC/C&E brought together approximately 20-25 representatives from the two pilot communities, including 7-9 students for a two day working session to celebrate results, evaluate lessons learned, and plan for the next year's activities. ISC/C&E, with assistance from Polish, Ukrainian, and American trainers held five workshops in the pilot communities from November 2003 – March 2004 on the following topics: Education for Sustainability, democratic leadership, project proposal preparation, interactive education methods with a focus on environmental education, developing integrated curricula based upon sustainable community principles (organized in cooperation with Step-by-Step Foundation). Youth groups in each community identified priorities and implemented activities related to these priorities with financial assistance under Ednannia small grant program and community financial support. These projects included: organizing clean-up activities and events such as youth environmental camps, a district environmental congress, and an environmental education congress.

INSTITUTIONALIZING CITIZEN PARTICIPATION

ISC and Ednannia worked in cooperation with EcoPravo-Kyiv to help institutionalize citizen participation in environmental decision making in five of the seven pilot communities (Evpatoria, Pavlohrad, Kosiv, Korostyshiv, and Svatove.)

Funded by the Ukraine Citizen Action Network, EcoPravo provided a wide range of assistance to communities to help strengthen legal mechanisms within the community for public involvement.

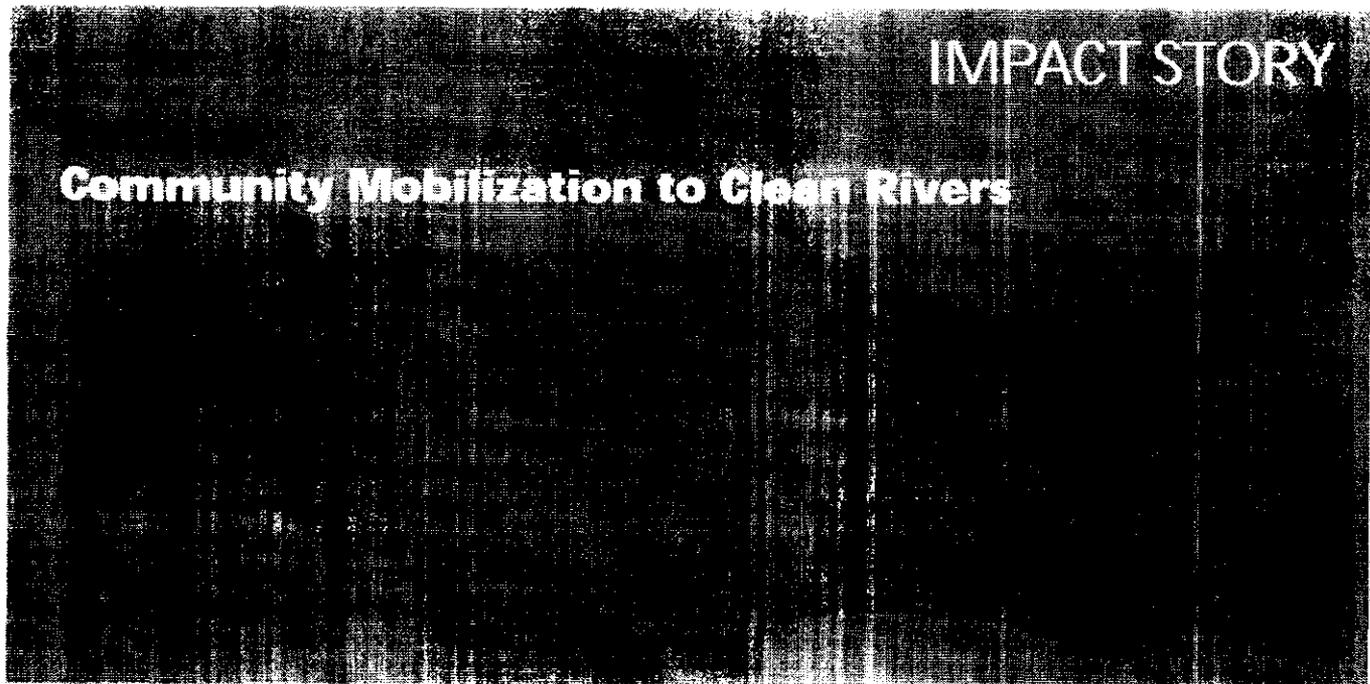
In July-September 2003, it organized kick-off workshops and presentations in the five communities for approximately 230 participants. In November-December 2003, EcoPravo helped communities organize public hearings in Kosiv, Pavlohrad, Evpatoria, and Korostyshiv on their local environmental action plans. It also provided extensive legal consultations for all LEAP pilot communities and prepared an extensive citizen guide on public participation in environmental decision making.

COMPONENT 2. DEVELOP METHODOLOGIES AND TOOLS

Under the Ukraine LEAP ISC and Ednannia produced a wide range of methodological and information materials designed to help citizens, local authorities, and NGOs to implement community-based environmental actions. These included:

LEAP GUIDEBOOK AND METHODOLOGY

In July 2002, ISC and Ednannia published the Ukrainian translation of the *Guide to Implementing Local Environmental Action Programs in Central and Eastern Europe*



This Ukrainian version was published under contract with the Regional Environmental Center (REC) (Szentendre, Hungary). The Ukraine LEAP office subsequently printed the Russian translation of the LEAP Guide in October 2003. The LEAP Guide served as the basic methodological materials for the project. In October 2004, ISC and Ednannia adapted the LEAP Guide and published the *Ukrainian Guide to Implementing LEAPs* that incorporates pilot communities' experiences and case studies.

ISC prepared a *Trainers' Handbook* to accompany the LEAP Guide that was published in by the Regional Environmental Center in 2002. The Trainer's Handbook includes a draft workshop agenda, key learning points, descriptions of small group work sessions, and a set of overhead transparencies for each training module. Moreover, ISC and Ednannia developed in-depth supplemental training materials and Ukrainian-specific information for project

stakeholder group members. ISC and Ednannia disseminated the LEAP Guide and other methodological materials to all project stakeholder group members, LEAP Centers of Excellence, LEAP Information Repositories, Advisory Committee, and LEAP Network.

INFORMATIONAL MATERIALS

Over the course of the project, ISC and Ednannia published a number of booklets and brochures. These included:

- *Introduction to the Ukraine LEAP*: an informational pamphlet describing LEAP, its benefits, and phases. The booklet was widely distributed to LEAP Network members and through Ednannia's environmental network;
- *Environmental management for businesses*: ISC and Ednannia prepared a brochure for businesses on pollution prevention, environmental audits, and environmental management; and,

Centers were selected based upon their experience in providing training and technical assistance to communities, environmental expertise, and ability to sustain LEAP assistance after the close of the project, among other criteria.

- *Stimulating public participation:* In cooperation with EcoPravo-Kyiv, Ukraine LEAP office published a 70-page guide to public participation in environmental decision making.

DOCUMENTING BEST PRACTICES

The LEAP Project Office established an information database on information technologies and community best practices for solid waste management, water supply, waste water management, and other environmental issues. Each pilot community and a number of LEAP network members received a copy of the database on CD.

COMPONENT 3. BUILD CAPACITY OF UKRAINIAN TRAINERS & LEAP CENTERS

One of the primary goals of the Ukraine LEAP was to build the long-term capacity in Ukraine to assist Ukrainian communities to implement participatory, community-based programs. ISC and Ednannia provided extensive training to Ukrainian trainers and worked with four existing Ukrainian organizations to become LEAP Centers

UKRAINIAN TRAINERS TEAM ESTABLISHED

ISC and Ednannia held eight training-of-trainers (TOT) over the life of the project – twice as many as originally planned. TOT activities began in October 2001 with a two-day training of *candidate* trainers to observe individuals' facilitation and interpersonal skills, and gain some insights of their understanding of the materials. Project staff observed these candidate trainers in action and selected 12 individuals from throughout Ukraine to serve as project trainers and five individuals to serve as back-up trainers.

After trainers were selected, ISC and Ednannia held a series of TOTs within a relatively short-time frame to ensure that LEAP trainers had sufficient knowledge to lead the first set of community workshops. In February, March, and May 2002, ISC and Ednannia organized three TOTs on starting a LEAP forming a project stakeholder group, conducting an effective public outreach campaign, fostering positive community-local government relations, developing a community vision, practicing group process skills, conducting an environmental issue assessment, and establishing environmental priorities.

ISC and Ednannia relied upon experts from CEE/NIS to lead the trainers, helping ensure that LEAP experiences within the region were utilized to the greatest degree. At the conclusion of each TOT, trainers worked for a day to prepare the agenda for the upcoming community workshops. Trainers conducted their first set of community workshops from June-September 2002.

In response from trainers on need for more extensive training, ISC and Ednannia conducted an additional training on preparing an environmental issue assessment in October 2002. ISC and Ednannia conducted two additional TOTs to expand its pool of individuals trained in the LEAP methodology (December 2002, January 2003) because of a turnover in trainers.

In February and April 2003, ISC and Ednannia held TOTs on establishing environmental priorities and preparing environmental action plans, respectively. Subsequently, ISC and Ednannia organized TOTs on developing public outreach and information campaigns (July 2003), implementing environmental action programs (Sept. 2003), monitoring and evaluating project results (Feb. 2004), and strategic planning (June 2004).

LEAP CENTERS OF EXCELLENCE

ISC and Ednannia conducted a competitive process to select four LEAP Centers of Excellence. The selection committee reviewed 85 applications and visited 10 potential centers. Centers were selected based upon their experience in providing training and technical assistance to communities, environmental expertise, and ability to sustain LEAP assistance after the close of the project, among other criteria.

These Centers included: Volyn Resource Center (Rivne), Southern Ukrainian Regional Training Center (Kherson), Donetsk Debate Center, and Crimean-Tatar Initiative Foundation.

Each LEAP Center prepared and submitted action plans that specified their proposed activities over the life of the project, including documenting and disseminating information, encouraging the replication of LEAPs, building a LEAP network, and developing long-term sustainability plans.

After approval of the workplans, ISC signed grant agreements with each Center. Centers conducted seminars on a wide range of topics, including solid waste management, environmental education, LEAP methodology, and community environmental financing mechanisms.

More than 350 individuals representing 150 different organizations, institutions, and communities participated in the seminars. For example, the Volyn Resource Center organized four regional seminars for communities in the surrounding region to share the results of LEAP pilot communities, the role of the public in the LEAP, and how to start a LEAP in their own community.

Representatives from LEAP pilot communities participated in the seminars to share their experiences. Over 175 individuals representing 74 different organizations and institutions — including 11 state institutions, 43 NGOs, and 13 local authorities — participated in the seminars.

LEAP Centers also conducted roundtable discussions with interested communities in their region. For example, the Donetsk Debate Center conducted roundtable discussions in Gorlovska, Torez, Shakhtarsk, Mykolaiv, Sumy, Debaltseve, and Mariupol to present LEAP pilot community results and stimulate the initiation of LEAP activities in these communities. LEAP Centers also conducted more than 100 personal consultations with NGOs and local authorities designed to share pilot community results with new communities interested in implementing LEAPs.

COMPONENT 4. DISSEMINATE INFORMATION, CREATE LEAP NETWORK, AND REPLICATE LEAPS

ISC and Ednannia undertake a diverse range of activities to share information about pilot community results and encourage additional Ukrainian communities to implement LEAPs. These included conducting publishing a regular information bulletin, conducting a national media campaign, conducting national conferences, forming a LEAP network, and

PUBLICATION OF INFORMATIONAL BULLETIN — CHYSTA KHATA

ISC and Ednannia published the Chysta Khata bulletin to share results of the pilot communities and best practices on environmental management and sustainable development. Over the course of the project, ISC and Ednannia published 10 Ukrainian issues, five Russian issues, and one English digest. The bulletin was originally mailed to a network of 5,280 individuals, NGOs, local governments, national institutions, and was eventually expanded to a list of 6,000 contacts.

MEDIA CAMPAIGN

ISC and Ednannia contracted with the Ecological Media Group to prepare video promotional materials and documentaries of the LEAP program. EMG then negotiated for free air time with several national and regional television stations. Promotional and documentary videos produced as a result of the project include:

- Promotional piece to promote the project among the general public (60 seconds),
- Promotional piece targeting local government officials (80 seconds),
- Promotional piece targeting local government officials (30 seconds), and
- Three 15-20 minute videos documenting activities within the pilot communities

ISC and Ednannia worked in partnership with the 1* National Channel to promote LEAP on national radio, along with other national radio stations. In addition, pilot communities were able to stimulate a large number of free media broadcasts and local coverage. Altogether, it is estimated that the program

stimulated over 1,800 separate media activities on the local and national levels.

NATIONAL LEAP AND SUSTAINABLE DEVELOPMENT CONFERENCES

ISC and Ednannia organized two national conferences for representatives from demonstration communities, potential donors, and LEAP communities network. In June 2003, over 150 individuals – including representatives from 40 new Ukrainian communities — came to hear about project results in pilot communities. In September 2004, ISC and Ednannia sponsored a closing national conference that was attended by over 100 people representing 25 new communities.

In May 2003, ISC and Ednannia prepared materials and participated in the fourth Ministerial Conference for the "Environment for Europe." ISC and Ednannia prepared an information packet, "Local Environmental Action Program in Ukraine." The packet included a bi-language (English and Ukrainian) mid-term report in hard copy and CD, a calendar of activities, an overview of the LEAP process, and the latest issue of Chysta Khata. In partnership with the Ukrainian Foundation for Education Reform, ISC/Ednannia organized a site visit to Korostyshiv to share LEAP experience there. LEAP Project Staff also participated in a panel presentation on LEAP implementation throughout CEE organized by the Regional Environmental Center.

LEAP staff also participated in a wide range of conferences to promote LEAPs. These included the International Forum of Sustainable Development in Ukraine (October 2003, Balaklava), national conference for

municipalities (September 2003, Kyiv), and the All Ukrainian Selianske Viche (Dec. 2003).

WEBSITE

ISC and Ednannia established a project website (www.leap.kiev.ua) in three languages that includes a broad range of information about the project, including program description, activities in pilot communities, and community resources.

LEAP NETWORK

ISC and Ednannia established a network of 106 communities interested in implementing LEAPs. By joining the LEAP network, Ukrainian communities received regular information updates, access to information databases, invitations to participate in regional seminars and trainings, and methodological materials on how to implement LEAPs.

COMPONENT 5. COMMUNICATE AND COORDINATE ACTIVITIES

ISC and Ednannia worked extensively to coordinate project activities with other national and international organizations and institutions to maximize synergies among various programs. As noted earlier, ISC and Ednannia cooperated extensively with a number of organizations, including EcoPravo-Kyiv, Child and Environment, PAUCI, and the ULRMC, and Academy for Educational Development. ISC and Ednannia formed a project advisory committee that met throughout the life of the project and established working groups focused on specific topics pertinent to local environmental issues. ISC and Ednannia also coordinated with a wide range of USG implementers and other donors and assistance

programs working in Ukraine, including the *United Nations Development Program*, *World Bank*, and *British Council*.

PROJECT ADVISORY COMMITTEE

ISC and Ednannia held six Project Advisory Committee meetings throughout the project to provide strategic guidance on the project and help coordinate assistance efforts among a diverse institutions and organizations. The Advisory Committee was composed of representatives from over 35 institutions and organizations (see Attachment C: List of Advisory Committee Members). In July 2001, ISC and Ednannia organized the first Advisory Committee to provide committee members with background information about the project, review the role of the Advisory Committee, and provide a preview of upcoming activities. Advisory Committee members provided ISC and Ednannia with feedback on project kick-off activities and the community selection process. Subsequent Advisory Committee meetings included:

- February 2002: Advisory Committee members provide advice on how to effectively build collaboration with local authorities and strengthen relations between the PSGs and local authorities;
- November 2002: focused on how to increase financing opportunities for municipal environmental investments;
- April 2003: addressed issues related to environmental priority setting;
- October 2003: focused on project implementation activities in pilot communities; and,
- April 2004: Representatives from Parliament Environmental Committee and the Administration of the President

"I want to be different. I don't want to be part of the group of students who are doing drugs and alcohol. This is my community and I plan to live here in the future. I want to do something to make Balaklava a better place to live. This project was real. It gave students a real opportunity to work on problems that we care about and to make a difference."

Artiem Kravtsov, 16 year old student, Balaklava School District, Ukraine

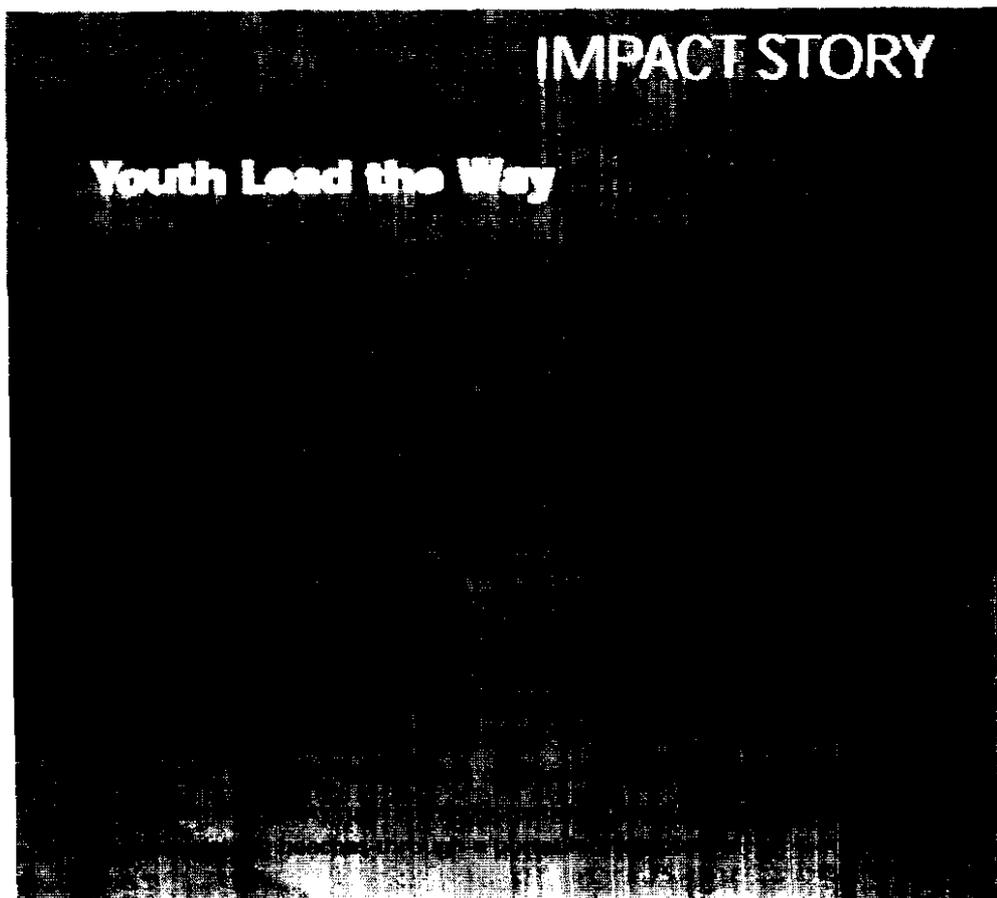
expressed their interest to support new regulations/legislation for community development program framework based upon the LEAP communities' experience

WORKING GROUPS

ISC and Ednannia identified several issues related to adequately addressing local environmental issues that required more in-depth discussion than afforded by the structure of the Project Advisory Committee. Consequently, ISC and Ednannia formed several issue-specific working groups to facilitate in-depth discussions on complex issues facing Ukrainian communities. For example, ISC and Ednannia held several

working group meetings (January, February 2002) to obtain advice about challenges to successful collaboration between citizens and local authorities.

In November 2002, LEAP organized a working group meeting among representatives from different national and international institutions on how to successfully build mechanisms to address barriers to municipal environmental financing. As a result of the meeting, a policy paper was created outlining the basic issues and challenges on this issue and was presented to the Advisory committee. ISC and Ednannia incorporated this information into the municipal financing training conducted under the project.



V. Ingredients for Success, Lessons Learned & Recommendations

The following ingredients were built into the project design and contributed to successful outcomes.

WORKING IN COMMUNITIES

SECURE STRONG SUPPORT OF LOCAL AUTHORITIES

In all pilot communities, ISC and Ednannia had strong support from local authorities which led to adoption of the environmental action plans by local councils, financial commitment for implementation, and access to local media. ISC and Ednannia signed agreements with each local government to help delineate respective responsibilities and help ensure their effective participation.

USE COMPETITIVE SELECTION PROCESS TO SELECT PILOT COMMUNITIES

ISC and Ednannia used a competitive process to select pilot communities. Selection criteria included prior cooperation and support among different sectors, commitment of local government, and prior efforts to initiate public participation activities. This competitive process helped ensure that the communities with the greatest chance to succeed were selected.

ACKNOWLEDGE UNIQUE NATURE OF EACH COMMUNITY

Of the seven pilot communities, there was great diversity in population size, urban versus rural nature, types of environmental problems, and political status (raions, cities, and towns). Project staff approached each community with an understanding that each community is unique, and thus, to be effective, it is critical to have a solid understanding of community conditions and aware of potential obstacles.

ENSURE DIVERSE AND REPRESENTATIVE PROJECT STAKEHOLDER GROUPS

ISC and Ednannia undertook an extensive effort to ensure that each PSG had diverse representation, including representatives from city council, municipality/raion, businesses, NGOs, citizens, academia, among others. This helped minimize the possibility that the concerns of key stakeholders were omitted, and led to decisions that reflected broad-based consensus among stakeholders. ISC and Ednannia helped ensure this diverse representation through several mechanisms. First, each community kick-off conference was open to the public and participants were invited to join the PSG. Second, ISC and Ednannia provided PSG members with a list of the type of representation that was desirable on the PSG. After the PSG had initially formed, ISC and Ednannia asked each PSG to identify gaps in their representation and actively seek new members to fill these gaps.

UNDERTAKE "ENVIRONMENTAL INITIATIVES" SMALL GRANT PROGRAM

ISC and Ednannia initiated three small grant rounds to local NGOs for local environmental initiatives that were highly successful. These grant rounds provided a number of benefits. First, they helped achieve concrete environmental improvements in the communities and helped build community support for the project. Second, it helped strengthen the role of local NGOs and their skills in preparing grant proposals and managing small projects. Third, it gave communities experience with transparent and objective decision making process since each community was required to establish an independent panel to review and select proposals.

"The real value of LEAP Program is that it helps bring together isolated community members.

LEAP enables to solve the problems that we as community members think are important."

Nadiya Yemets,
Kosiv Raion Center for
Children's Creative Work

LOCAL COORDINATORS ARE KEY ELEMENTS FOR SUCCESS

ISC and Ednannia hired paid local coordinators to coordinate project activities and work with the PSGs and local authorities to help ensure that all project activities were completed. Coordinators played a pivotal role in organizing meetings, collecting data, preparing reports, undertaking logistical functions, and coordinating project activities. These coordinators were essential to the success of the project in each community. Over the course of the project, these coordinators became strong community leaders and heads of NGOs.

MAINTAIN CLOSE CONTACT WITH PILOT COMMUNITIES

Project staff worked closely with local coordinators, local authorities, and PSG members to address concerns and difficulties as they arose. Project staff were in contact with local coordinators on a weekly basis, participated in community workshops, and conducted regular site visits throughout the project to assess progress and be proactive in addressing issues.

WORK WITH YOUTH

Youth played a critical role in almost all pilot communities in gathering data, initiating local environmental projects, conducting public surveys, and engaging the public. ISC worked closely with youth in several pilot communities to strengthen their ability to take initiative in designing and implementing local environmental actions by providing training and financial support.

ESTABLISH STRONG TIES WITH LOCAL MEDIA

Pilot communities received substantial media coverage for local LEAP activities under the project. In Ukraine, many local authorities have strong ties with local media and can leverage their assistance to assure coverage of important activities. ISC and Ednannia incorporated language in the memoranda of cooperation with each pilot community that specifically identified securing local media support as one of their responsibilities.

BUILDING INSTITUTIONAL CAPACITY

BUILD IN-COUNTRY TRAINING CAPACITY

ISC and Ednannia conducted extensive training-of-trainers (over 24 days) for Ukrainian trainers and representatives from LEAP Centers of Excellence over a period of two and one-half years on all aspects of the LEAP process to help ensure that they had the necessary technical expertise to train PSG members and were able to continue providing this assistance to new Ukrainian communities. Trainers worked in teams of 2-3 people with individuals with complementary skills. ISC and Ednannia utilized the skills and expertise of CEE/NIS organizations with LEAP-related experience to the maximum extent possible.

ESTABLISH PARTNER RELATIONSHIPS WITH COMMUNITIES IN OTHER COUNTRIES

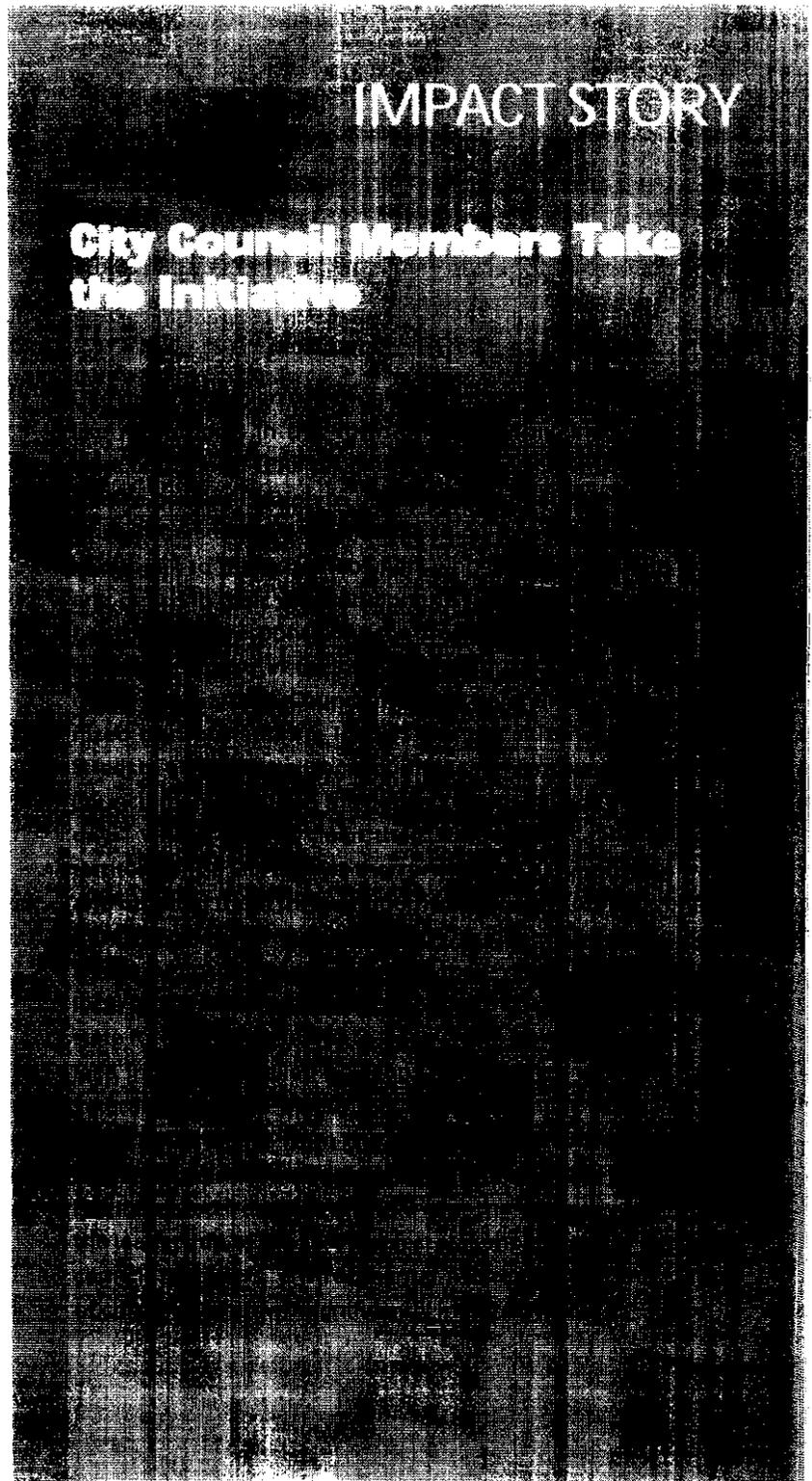
One of the most effective ways to build the capacity of municipal authorities and citizen leaders to manage environmental problems is to match them with counterparts in communities of similar size and nature and have implemented relevant approaches and programs. Under a grant from PAJCI, ISC and Ednannia matched up Polish and Ukrainian pilot communities to share experiences through two separate study tours.

CREATE NATIONAL NETWORK OF INTERESTED COMMUNITIES

ISC and Ednannia worked with seven pilot communities who served as national models on how to successfully undertake local, participatory environmental decision making. To help ensure that other Ukrainian communities benefited from the experiences of the pilot communities, ISC and Ednannia established a network of over 100 communities interested in implementing LEAPs. These communities were invited to national and regional seminars, and received informational newsletters and methodological materials. Of these 100 communities, 15 communities have received additional training and begun to initiate LEAPs in their own communities.

ESTABLISH NATIONAL ADVISORY COMMITTEE OF APPROPRIATE INSTITUTIONS AND ORGANIZATIONS

ISC and Ednannia established a national advisory committee to provide strategic guidance on the project, coordinate assistance efforts among various institutions and organizations, and to identify opportunities to support replication of project results. Advisory committee meetings were very successful in helping to build partnerships among several key institutions that contributed to project success. Further, ISC and Ednannia encouraged an open door approach of inviting additional organizations and institutions to participate in advisory committee members to share their experiences.



B. Lessons Learned & Recommendations

The following lessons were learned as a result of implementing the project and recommendations are offered for implementing similar community-based programs.

WORKING IN COMMUNITIES

PSG MEMBERS AND TRAINERS REQUIRED MORE TRAINING THAN PLANNED

ISC and Ednannia underestimated the amount of training that both PSG members and trainers would need to effectively implement LEAPs. Under the project design, ISC and Ednannia had originally planned on conducting four community-based workshops in each pilot community (or a total of 28 community trainings), but ultimately conducted 74. 1

ISC and Ednannia responded to community needs and provided additional community trainings on group process skills – such as conflict resolution and facilitation, and technical aspects of the project, such as preparing an environmental issue assessment. Similarly, ISC and Ednannia doubled the number of training-of-trainers (from four to eight) to ensure that trainers received sufficient training.

Recommendation. Future programs should fully consider the relative lack of experience, skills, and knowledge of Ukrainian communities in undertaking collaborative approaches to addressing community issues by planning on conducting extensive training and allowing time for program participants to practice and incorporate information.

PREPARATION OF ENVIRONMENTAL ISSUE ASSESSMENTS A COMPLEX BUT WORTHWHILE ACTIVITY

Based upon interviews, PSG members said that the environmental issue assessments were an excellent tool for educating community members about the significance of specific environmental issues. These issue assessments were designed to quantify the health and ecological impacts from environmental degradation. PSG members remarked that these assessments marked the first time this type of information had been compiled for their communities. Yet, PSG members noted that they experienced several challenges in preparing the issue assessments, including lack of experience on how and where to data, lack of availability of data, concerns about the validity of data, and time constraints in compiling the data. Further, PSG members expressed concern about their technical ability to adequately prepare issue assessments. ISC and Ednannia provided additional technical training to PSG members to address these issues.

Recommendation: Future programs should take into full consideration the constraints that Ukrainian communities face in preparing environmental issues assessments by allowing sufficient time for data gathering and providing sufficient training.

COMMUNITIES DO NOT UNDERSTAND THE CONCEPT OF A COMMUNITY VISION

PSGs were asked to prepare a community vision that described where the community saw itself 15-20 years into the future. Community vision is a relatively new concept for Ukrainian communities, and many PSG members expressed questions about the

value and purpose of developing a long-term vision when they have many pressing problems facing the community today. Thus, in several communities, the community vision was never fully developed and utilized to the degree anticipated.

Recommendation. The community vision concept has value in helping communities think beyond their immediate problems, however, additional work is needed in explaining the relevance and value of a community vision to their efforts.

COMMUNITIES HAVE LITTLE EXPERTISE AND EXPERIENCE IN CONDUCTING PUBLIC OUTREACH CAMPAIGNS

Several PSGs experienced significant delays in implementing activities to raise public awareness and involve the public in their activities — despite specific training on this topic. ISC and Ednannia found that communities have little experience in this area, and thus, it took some time before local coordinators, PSG member, and local authorities fully grasped how to successfully proceed. ISC and Ednannia found that communities became more comfortable in conducting outreach campaigns when they could build on specific community achievements.

Recommendation. Provide more extensive training to communities at the project outset on how to reach out to the public and emphasizing the importance of focusing on concrete, specific activities around particular issues of concern to the public.

ANTICIPATE CONFLICTS BETWEEN THE PSG AND MUNICIPAL STAFF

Three communities experienced some implementation challenges related to conflicts between the PSG and some municipal staff. Some middle-level managers with the local governments raised obstacles to LEAP implementation. These conflicts became particularly acute as project implementation became imminent. In some communities, the LEAP program exposed some of the inefficiencies and poor performance of certain municipal departments and this created some resentment among some municipality staff. Second, in at least one community, there was perceived competition between elected officials and public leaders from the PSG wherein elected leaders felt potentially threatened by the power of the publicly-led LEAP activity. To address these challenges, the Ukraine LEAP staff met with key leaders and municipal staff to agree on appropriate approaches for effective LEAP implementation.

Recommendation. Actively involve staff from local government and municipal enterprises in all phases of preparing the action plans and implementation plans to ensure that staff fully understands the implications for changes in their responsibilities and practices.

Most of the communities were successful in their efforts to form effective and functioning project stakeholder groups and involve the community in LEAP implementation

PSG MEMBERS AND IMPLEMENTERS DO NOT RECOGNIZE FULL PROJECT IMPACTS

Despite receiving trainings on project monitoring and evaluation, PSG members and implementers often had a difficult time capturing the full impacts of their efforts. To address this problem, the LEAP Project Offices hired independent experts to conduct an assessment of project outcomes and impacts at community level and to collect performance stories on the most significant changes that have been realized in the pilot community. Based upon this information, each community developed a targeted information campaign based upon the impact stories collected by the independent experts.

Recommendation. Project participants need extensive training at the project outset on the importance of project monitoring and guidance on how to monitor project impacts.

CREATING EFFECTIVE COMMUNITY SOCIAL MOVEMENTS TAKES TIME

Most of the communities were successful in their efforts to form effective and functioning project stakeholder groups and involve the community in LEAP implementation. These PSG groups played a leading role in reaching out to the public and implementing action plans. However, a few of the pilot communities experienced some challenges to forming social cohesion among different elements of the community – whether it was due to prior conflicts or political differences. The length of time before this “cohesion” takes effect varies from community-to-community.

Recommendation. Project stakeholder groups, composed of a diverse mix of community members, have wide range of needs and perspectives, and therefore need ample time before they coalesce as a group. This social cohesion is essential if the group will be successful as community problem-solving group. Future projects should ample time and provide sufficient guidance on effective group process to help ensure that this social cohesion materializes.

LOCAL AUTHORITIES LACK MECHANISMS FOR FINANCING ENVIRONMENTAL INVESTMENTS

Ukrainian communities face some legal challenges to accepting financing from international sources. In six of the seven pilot communities, new NGOs were formed to serve as mechanisms for accepting funding from ISC for project planning and implementation – and this contributed to some project delays.

Recommendation. Future project should build in sufficient time in the project planning period and provide guidance to communities on how to establish adequate mechanisms for accepting international funding.

BUILDING INSTITUTIONAL CAPACITY

RELATIVELY FEW NGOS ARE PREPARED TO BE LEAP CENTERS OF EXCELLENCE

ISC and Ednannia found that relatively few Ukrainian organizations were prepared to provide assistance to Ukrainian communities on how to implement LEAPs and other community-based programs. ISC and Ednannia worked with several organizations to become LEAP Centers of Excellence. ISC and Ednannia received 85 applications, interviewed 10 organizations, and ultimately selected four organizations to be LEAP Centers. ISC and Ednannia provided extensive training and technical assistance to LEAP Center staff. While all four Centers conducted seminars and consultations, ISC and Ednannia believes only one of these organizations (Volyn Resource Center) has the capability to assist Ukrainian communities in the future. The Volyn Resource Center already had previous experience assisting communities and was able to build upon this experience.

Recommendation. NGOs need direct technical assistance and guidance on how to work effectively with Ukrainian communities.

TRAINERS NEED GUIDANCE ON EFFECTIVE COMMUNITY COACHING

Our experience has been that communities need both training and coaching to help them implement the community development process. Under the LEAP, each pilot community had a training team of two-to-three trainers. While the trainers' were informed that their responsibilities involved both conducting workshops and undertaking consultations in the pilot communities, ISC and Ednannia found that only a few of trainers engaged in the community consultation aspect of their work. Trainers, who worked as contractors under the project, viewed themselves principally as "trainers" not as "coaches." Further, trainers were often occupied with other paid work, had limited time to devote to coaching, and were seemingly uncomfortable in this role. To address this issue, the LEAP Project Office undertook the coaching and direct technical assistance component. ISC and Ednannia also initiated a discussion among trainers on the importance of the trainer-coach role for future LEAP and community mobilization activities.

Recommendation. Provide training to trainers on how to effectively serve as coaches and support their coaching activities during project implementation.

VI. Next Steps and Conclusion

"I was born and raised in Chechelnyk. As mayor, I will do everything in my power to make the town a better place to live. Due to LEAP, I realize that I am not alone, there is a whole group of citizens who are equally concerned, and this makes it much easier for me to share ideas with citizens. We can accomplish good things for our community and will continue to do so."

Olexandr Ovchar,
Mayor of Chechelnyk

A. PROGRAM CONTINUATION

USAID funding for the Ukraine LEAP has established all the successful conditions for future implementation of LEAPs in Ukraine.

First, Ukraine now has successful models of locally-based, participatory decision making processes that lead to tangible community improvements. The seven pilot communities of the Ukraine LEAP represent a diversity of community sizes and types, including small rural villages, small towns, raions, and medium-sized cities.

Further, these communities tackled a broad range of environmental issues that are relevant to other Ukrainian communities, including wastewater, solid waste, drinking water, abandoned pesticides, and green areas.

Pilot communities have shown how local authorities can work collaboratively to achieve community improvements and have institutionalized participatory processes in decision making. Perhaps more fundamentally, the LEAP process serves as a model not just for addressing environmental issues, but a whole host of community issues.

The Ukraine LEAP resulted in the preparation of methodological and informational materials that have been adopted to Ukrainian conditions with Ukrainian case studies. Ukrainian trainers were trained and given practical experience in community-based problem solving. Several Ukrainian LEAP Centers have hands-on experience working with Ukrainian communities on environmental issues, and a new organization, the Institute for Community Development, has been

created to continue assisting Ukrainian communities to implement LEAPs and similar community-based approaches. Over 100 communities have joined a LEAP network and expressed an interest in implementing LEAPs with 15 communities moving forward to various degrees.

As the results indicate, pilot communities demonstrated that Ukrainian communities – including local authorities, businesses, and citizens – are ready to commit their own resources to tackle environmental and other community issues. ISC and Ednannya found that Ukrainian communities are fertile ground for the type of community-based, participatory problem solving approach inherent in the Ukraine LEAP.

What is needed to stimulate more Ukrainian communities to implement LEAPs and other community-based problem solving approaches? In the future, Ukrainian communities will need continued technical support in the form of training and direct assistance on how to implement participatory, community-based approaches. Further, external funding will continue to be needed to cover technical support costs for Ukrainian communities and to complement local cost share for LEAP planning and implementation costs. Donor funding for these community-based activities should be considered to be extremely cost-effective given the willingness of Ukrainian communities to commit their own resources to improve community conditions.

B. MEASURES OF FUTURE SUCCESS

The real legacy of the Ukraine LEAP will be measured in several ways. First, by how many Ukrainian communities implement LEAPs and other similar community-based projects. LEAP piloted a collaborative, community-based problem-solving approach that can be applied to social, economic, health, and other community issues. In evaluating future success, ISC and Ednannia believes it will be important to evaluate how many communities have undertaken LEAPs and applied its methodology to other community issues.

Several Ukrainian communities are already moving ahead on their own initiative with both internal and external financial support. As the results of the Ukraine LEAP become more widely known throughout Ukraine, ISC and Ednannia believe that more and more Ukrainian communities will implement LEAPs. Ednannia recently announced small grants for LEAPs in three new communities.

Second, the future success of the Ukraine LEAP can be evaluated by the degree to which the pilot communities continue to address environmental and other community issues in this way. PSGs can continue to fulfill a number of meaningful roles in their communities, including on advisory bodies to their local authorities, initiating community environmental initiatives, monitoring environmental programs and conditions, and working on sustainable development strategies.

PSGs in six of the seven pilot communities formed NGOs to continue implementation activities, and will serve as effective vehicles for future implementation efforts. The Ukrainian NGO, Institute for Community

Development, is working with pilot communities to develop a long-term program for project continuation.

As a follow-up project, ISC and Ednannia proposes to conduct a range of follow-up activities to evaluate the longer-term impact of the Ukraine LEAP. ISC and Ednannia propose to conduct a survey of pilot communities in one year to evaluate additional environmental improvements that were achieved and the degree to which environmental governance has become rooted in the community. ISC and Ednannia are interested in assessing whether pilot communities have applied collaborative processes to addressing other community issues, e.g., in Evpatoria, the PSG has moved forward with a collaborative process to tackle public health issues in the community.

ISC and Ednannia propose to conduct a survey of Ukrainian communities to determine how many communities have implemented LEAP-type approaches, what impacts have been achieved as result of these programs, and what assistance communities need to continue their efforts.

C. CONCLUSION

The Ukraine LEAP has demonstrated that Ukrainian communities are clearly ready to implement participatory approaches to community problem solving. The collaborative decision making approach used in the LEAP project found fertile ground in Ukraine.

Ukrainian communities demonstrated that they can successfully leverage both local and national resources, tackle difficult environmental issues, mobilize large numbers of citizens, and model the type of participatory approaches that democratic societies embody.

Attachments

- A. Comparison of Expected Outcomes and Results
- B. Summary of NGO Small Grants
- C. Project Advisory Committee Members
- D. Project Photographs
- E. Chystra Khata Newsletters
- F. Summary of Pilot Projects

ATTACHMENT A

Comparison of Expected Outcomes to Results

<i>USAID & ISC Project Outcomes</i>	<i>Indicator</i>	<i>Targets</i>	<i>Results</i>
Implementation of internationally consistent, locally effective policies [USAID IR1.6.1]	1.1 Compliance with international treaties and agreements. [USAID Indicator]	Six policy changes — one per pilot community	Five pilot communities adopted new municipal ordinances institutionalizing public involvement in local government decision-making consistent with Aarhus Convention.
2.0 Increased environmental investment USAID IR 1.6.2]	2.1 Projects prepared for investment [USAID Indicator]	Six project financing plans — one per pilot community	Seven project financing plans completed — one per pilot community.
	2.2 New funding for environmental protection [ISC Indicator]	Six new investments — one per pilot community	Seven pilot communities committed new investments for environmental protection. Five pilot communities secure funding from national and oblast sources. Environmental investments totaled \$450,000.
3.0 Improved environmental management at private and public facilities [USAID IR1.6.3]	3.1 Public or private facilities developing and implementing environmental management plans. [USAID Indicator]	Six environmental management plans for facilities — one facility per pilot community	Seven pilot communities developed recommendations for improvements in solid waste, wastewater, and drinking water facilities. Management changes made in municipal enterprise management in all seven pilot communities.
4.0 Increased empowerment of citizens to affect environmental decision making (USAID IR1.6.4))	4.1 Formation of environmental networks and/or associations. [USAID Indicator]	6 new networks or associations — one per community	20 new NGOs established with at least one new NGO in six of the pilot communities
	4.2 Incidents of citizen environmental activism [USAID Indicator]	12 incidents of environmental activism — two per pilot community	38 local environmental initiatives undertaken — with a minimum of three per community

	4.3 New mechanisms of public participation established for local governance & decision making on environmental issues [ISC indicator]	6 new mechanisms — one per pilot community	Five pilot communities adopted new municipal ordinances institutionalizing public involvement in local government decision-making; consistent with Aarhus Convention.
	4.4 Citizen participation in public forums sponsored under LEAP [ISC indicator]	Steady growth of public participation at LEAP events and participation by a broad cross-section of the community.	Over 15,000 citizens participated in LEAP-related events in all seven pilot communities
5.0 Increased regional and national capacity to implement LEAPs [ISC IR]	5.1 Establish sustainable LEAP Centers of Excellence [ISC indicator]	Three-four LEAP Centers established	Four Ukrainian organizations undertake activities related to serving as a LEAP Centers; one of these NGOs with experience and qualifications to be a LEAP Center
	5.2 Establish group of Ukrainians trained in LEAP approach [ISC indicator]	12 trainers trained	14 lead trainers and five back-up trainers who have received extensive training and community-based training experience
6.0 Increased regional (CEE) cooperation to solve environmental problems. (ISC IR)	6.1 Professional relationships established between Ukrainian and CEE/NIS communities [ISC indicator]	Six community-to-community partnership established - one per pilot community	Seven community-to-community exchanges conducted; five long-term partnerships established
7.0 Improved environmental conditions in pilot communities [ISC IR]	7.1 Measurable environmental improvements [ISC indicator]	Six measurable improvements - one per pilot community	Over two dozen environmental improvements achieved in green areas, drinking water quality, solid waste management, wastewater treatment, and pesticide management
8.0 Increased number of new Ukrainian municipalities addressing local environmental problems [ISC IR]	8.1 New (non-pilot) communities implementing LEAP [ISC indicator]	15 new communities implementing LEAPs	15 new communities in the process of implementing LEAPs

Based upon the "Ukraine LEAP Monitoring Framework" submitted as component of the Ukraine LEAP Life-of-Activity Plan that was approved by USAID in March 2001

ATTACHMENT B

Summary of NGO Small Grants

ISAR Ednannia conducted three rounds of small grants for NGOs to promote public awareness, outreach, and involvement. These grants are described below.

FIRST ROUND

ISAR Ednannia conducted the first round of small grants for NGOs in the Winter 2003. In all, ISC and Ednannia provided grants of \$7,000 that resulted in community cost share totally \$13,900. The following small grant activities were implemented in the LEAP pilot communities:

EVPATORIA

Green World restored a previously neglected small community park and planted 1000 trees.

PAVLOHRAD

The Union of Soldiers-Internationalists implemented the "Green Zones for Veterans" project to improve and repair monuments, memorials and historical areas.

KOSIV

The Kosiv Society Gutsul'shchyna implemented a project to remove two illegal waste dumps along the shores of the Rybnysya River and improve the riverbanks in the town center.

BALAKLAVA

UNEKO, a youth NGO, implemented a project to clean a portion of the Balaklavka River and strengthen its banks with the help of local residents, school students, navy personnel and businessmen.

SVATOVE

Rural Union of the Svatove Raion implemented a project to improve a local park and public swimming area by removing waste and cleaning the shores.

KOROSTYSHIV

Melody, a youth NGO, cleaned-up and restored four different public drinking water wells. Several enterprises, businesses, students, church parishioners, and city council staff participated in the clean-up of the wells. Further, the NGO published an environmental bulletin and organized a public awareness campaign to keep the springs clean.

CHECHELNYK

community members joined together to implement two projects. Vidkasnyk implemented a project to improve the Shkil'na River including removing old branches and tree stumps trees, plant trees and bushes, and installing benches and information stands. Enlightenment led an effort to improve an area near the Chechelnyk Sports School including the removal of an illegal dump and planting trees on the site.

SECOND ROUND

ISAR Ednannia conducted the second round of small grants in the Spring 200 with a total of \$13,000 in grant funds with communities providing a total of xxxx in matching funds. The following small grant activities were implemented in the LEAP pilot communities (amounts in parentheses indicate amount of the grant)

EVPATORIA

The youth NGO, Scouts' Union of Evpatoria cleaned up and restored a previously neglected area surrounding a unique architectural monument, "Tekie of Dervish" (\$540). The Moinaki Initiative Group cleaned up the Moinaki Park area (\$1,000), and the Assistance Board of Trustees of the Middle School #8 restored a neglected small park located near the school (\$750).

PAVLOHRAD

The NGO, Our City, set up a system of separate solid waste collection in several apartment blocks in Pavlohrad (\$2,000). With the profits from the sale of materials, residents from the buildings made repairs and painted their buildings. The public was consulted throughout the entire project and video footage of the project was aired by local TV studio. As a result, residents from other apartment blocks are working to replicate this experience.

KOSIV

Shafran Amulet Youth Environmental Association restored a well and cleaned up the surrounding area located near Moskativka village (\$765). Union of Ukrainian Women, Kosiv Branch restored a small park by removing debris and planting a tree and flowers in a downtown area of the Town of Kosiv (\$760). The NGO, Hutcul'schyna, restored wells located near the Rybnytsia river (\$760).

BALAKLAVA

EcoBUD implemented a project to clean the banks and beds of rivers and streams flowing through the Baidarska Valley, and developed recommendations for improving septic and sewage systems in these areas (\$2,285).

SVATOVE

Red Cross Society, Svatove Raion Branch is implementing a project to restore a well and set up a delivery infrastructure for schools' and other public institutions' drinking water supply. The project implementation has been delayed and will be finished in the Spring 2004 (\$2,285).

KOROSTYSHIV

The NGO, Polis'ka Initsiatyva, cleaned up and restored portions of a previously neglected municipal park with small lakes. Several

renovation. The PSG initiated and conducted a series of weekend clean-up activities (\$2,285). Obiast authorities provided additional funding of \$53,000 to improve the remaining areas of the park.

CHECHELNYK

The NGO, Environment, replaced the heating system located at the Chechel'nyk Agromash enterprise and installed an environmentally-sound biomass fuel burner. The old heating system used costly fuel and produced high levels of air pollution that caused health problems for part of the community (\$1,785). The enterprise "Chechel'nyk Agromash" contributed approximately \$4,906 for the burner replacement. The NGO, Vidkasnyk, restored a recreation area in the formerly neglected Central Park and set up anew monument (\$500), with contributions of \$1,500 from community-based enterprises and businesses.

THIRD ROUND

Ednannia conducted the third round of small grants in Spring 2004 with a special focus on youth NGOs and informal groups to promote youth awareness and involvement in community initiatives. This grant round was conducted in cooperation with Child and Environment under the Strengthening Community Schools Partnership Project. Ednannia provided a total of \$9,000 in grants with communities providing matching funds in the amount of XXXX. The following small grant activities were implemented in the LEAP pilot communities:

EVPATORIA

The youth group from High School #16 held out-of-class events and competitions for school children of grades 6 - 8 in the Evpatoriia Dolphin Center (\$400). The "Center of youth naturalists" organized and held trainings by students-to-students related to the threat of AIDS infection (\$300).

PAVLOHRAD

The youth group from School #22 restored green recreation area (0,5 ha) in the territory of the elementary school (\$330). The youth group from School #7 refurbished a park located near the school, including cleaning up the area and planting trees (\$140).

KOSIV

Shafran Amulet Youth Environmental Association created a playground for schoolchildren and preschool children play; installed benches, swings, and a sandbox; and planted trees and bushes (\$500). The youth group from High School #2 created a rest zone to restore the health of students, established a small nature zone near the school, planted trees and shrubs, and created a natural area within the school (\$400). The youth group from Kobakiv High School created a green area on the school ground that had formerly been boggy and unusable (\$500). The youth group of High School #1 will hold a summer camp for youth education related to environmental issues and conduct clean-up activities within the nature reserves of "Ternoshory" and "Kaminets", and the headwaters of the Rybnitsa River (\$500). The youth club "Palette" of the Kosiv State Institute of Applied and Decorative Art established an employment center for young people of Kosiv raion (\$400). The Sary Kosiv youth group, together with environmental-tourist club "Lileia," renovated a building provided by the Verbovetska Village Council and established an ecotourism school (\$500).

BALAKLAVA

Youth group from High School #33 cleaned up dump near the school, brought in new soil, and established a park (0.5 ha) (\$500). Youth group of School #25 organized summer camp for three groups of children from the families with low income (\$500). Youth NGO "Terra" and group

from School #59 designed, reconstructed and equipped playground in village of Ternovka (\$648). Youth group from School #30 together with daycare #13 improved the area near the daycare for classes for ecology, natural study and tourism (\$205). Youth group of school #30 held a series of workshops on: "Your life is your choice", "Prevention of illegal drug addiction", "Environmental problems of community and possible approaches to solving", and "The environment and us." (\$147).

SVATOVE

Youth group of School #2 planted 1 500 trees, held a competition for a better design of the park, and sponsored environmental classes (\$500).

KOROSTYSHIV

Youth group of School #1 cleaned-up the area surrounding the school, including removing dead trees, arranging flower beds, cleaning trails, and equipping the park with 17 wood benches (\$350). Korostyshiv Children's Creativity Center together with youth group "Friends of Nature" establish three trails for visitors along the Polesia landscape, developed and printed a guidebook on the environmental trail and a leaflet on "do not cut the fir trees" (\$150). Environmental youth group "Era" together with humanitarian grammar school #5 conducted a summer camp and cleaned-up surrounding wells, river banks, and a nearby lake (\$500).

CHECHELNYK

Youth NGO Korsar cleaned up 2 ha of forest and planted bushes on 1.5 ha, improved the quality of local drinking water wells, and cleaned-up local beaches and a recreation area on bank of the river (\$500). Youth group of School #2 held an environmental tour to learn more on flora and fauna of the Chechelnyk area, including cleaning-up local wells (\$500).

ATTACHMENT C

LEAP Advisory Committee Members

1. USAID	Oleksander Cherkas	LEAP CTO, Environmental Program Management Specialist
2. Verkhovna Rada of Ukraine	Yurly Samoilenko	M.P., Chairman of the Committee on Environmental Policy, Nature Resource Management and Liquidation of the Consequences of the Chernobyl Catastrophe
3. Ministry of Economy of Ukraine	Vasyl Rohovyi	Minister of Economy of Ukraine
4. Ministry of Ecology and Natural Resources of Ukraine	Serhiy Kurykin	Minister of Ecology and Natural Resources of Ukraine
5. Ministry of Health of Ukraine	Olha Bobyltlova	First Deputy Minister, Chief Sanitary Doctor of Ukraine
6. Secretariat of the Cabinet of Ministers of Ukraine	Oleksandr Bohachov	Section Head, Environmental protection
7. Fund for Support of Local Governing Institutions, under the Office of the President	Mykola Pukhtynskiy	Chairman
8. UNDP	Douglas Gardner	United Nations Resident Coordinator, UNDP Resident Representative
9. World Bank	Oleksiy Slenzak	Operations Officer, Environmental Sector
10. Organization for Economic Cooperation and Development (OECD)	Olga Savran	Programs Manager, Environmental Directorate
11. Peace Corps/Ukraine	Viktor Karamushka	Regional Manager, Lead Environment Specialist
12. British Council, SEPS	Victor Kyrylenko	Executive Secretary
13. Danish Environmental Protection Agency (DANCEE)	Vasyl Vasychenko	DANCEE Programs Manager
14. REC-Kyiv	Viacheslav Oleschenko	Chairman, Board of Directors
15. National Academy of Science of Ukraine	Bohdan Danylyshyn	Deputy Chairman, Council on Study the Productive Forces
16. Association of Ukrainian Cities	Myroslav Pittsyk	Vice President on Executive Work
17. Union of Local and Regional Authorities Leaders	Viacheslav Nehoda	Head of the Secretariat
18. Association of Rural and City Councils	Victor Stysh	Chairman
19. Ukrainian League of Industrialists and Entrepreneurs	Valentyn Pldvysotskyi	Vice President, Investments and Regional Development
20. MENR Public Council	Serhiy Taraschuk	Member of the Council
21. MAMA-86	Anna Golubovska-Onisimova	Director
22. Eco-Pravo	Dmytro Skrylnikov	Executive Director, Eco-Pravo-Lviv
23. OGI International, The Civil Initiative Organization	Mykhailo Magal	Chairman
24. EcoLinks	Megan Falvey	NIS Regional Program Manager
25. U.S.-Ukraine Foundation, Community Partnerships Program	Valerie Wright	Project Director
26. PAUCI (Freedom House)	John Kubiniec	PAUCI Secretariat Director
27. Counterpart International/Mariupol Municipal Water Rollout Project	Olena Levytska	Environmental Programs Manager
	Igor Slobodeniuk	Manager
28. Tariff Reform and Communal Services Enterprise Restructuring (PADCO)	Oleksandr Kucherenko	Program Manager

ATTACHMENT D

Project Photographs

Balaklava Region

Balaklava Bay



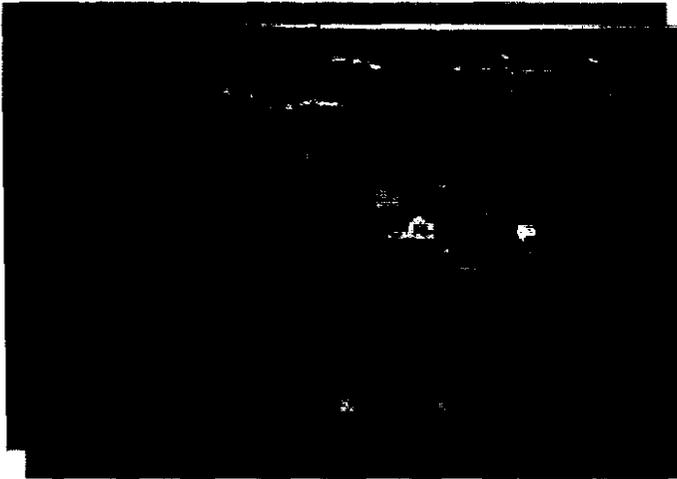
**Recycling processing facility
for plastic bottles**



**Youth planting trees
in old Balaklava**

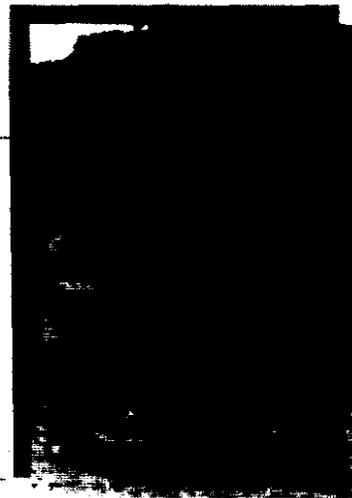


Chechelynk Region



Settlement of Chechelynk

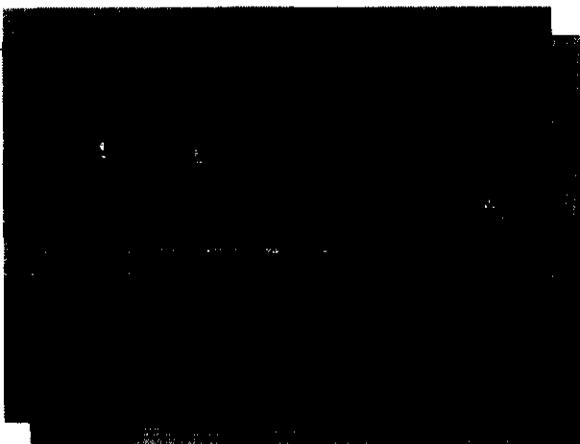
Creation of a Afghanistan war memorial and park



Cleaning a river of debris

Evpatoria Region

Beaches of Evpatoria



Improving and greening a territory adjacent to the unique architectural monument 'Tekiye of Dervishes' by local youth groups



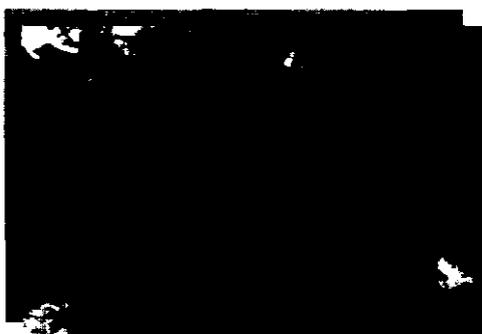
Korostyshiv Region



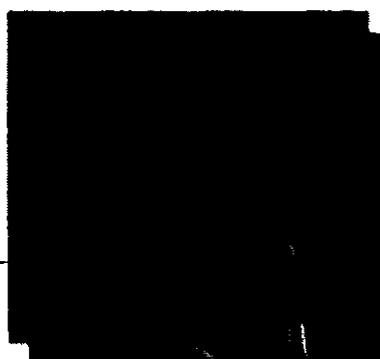
Green Scout Patrol



*Renovation of municipal
water treatment facility*



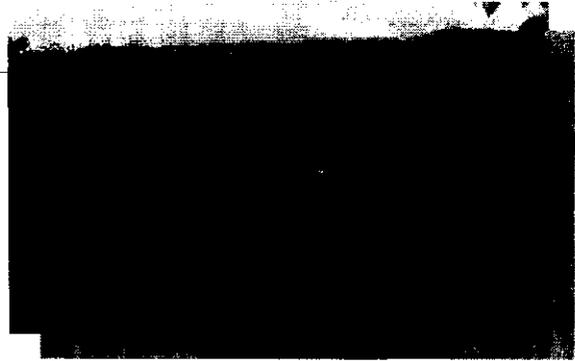
Dedication of renovated municipal park



*Renovated drinking
water well*

Kosiv Region

***Approach to Kosiv with
Carpathian mountains behind***



Public containers for glass and plastic recycling

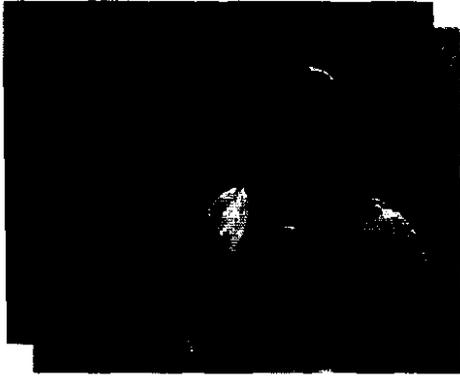


Greening of the Downtown in Kosiv



***Cleaning of the Rybnitsia River
from an illegal waste dump***

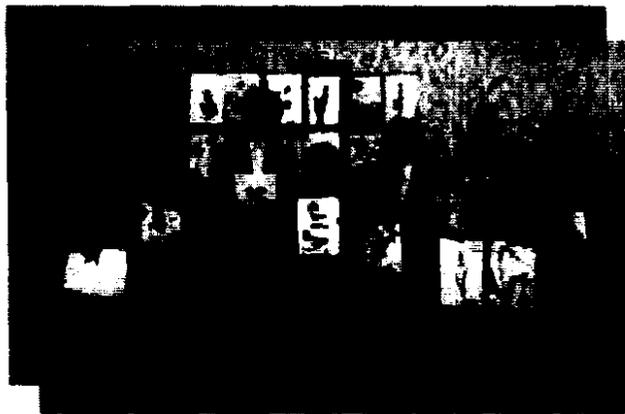
Pavlograd Region



Organizer of a local recycling project with LEAP logo



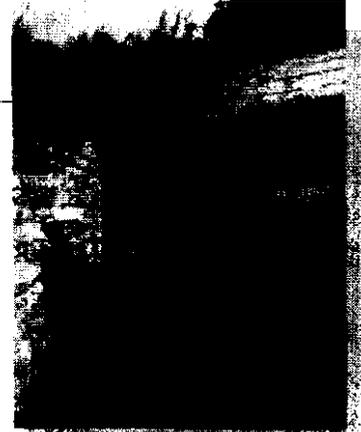
Tree planting led by local youth group



Ecological education in local elementary school

Savatore Region

Restored well with curative powers



Abandoned pesticides that were removed and disposed safely



Svatove - main boulevard

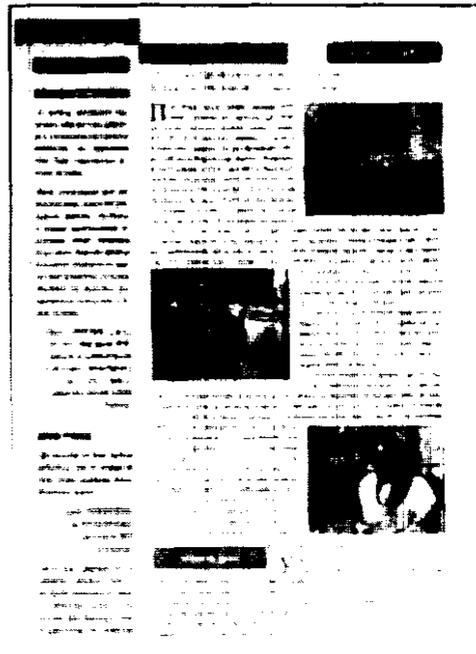
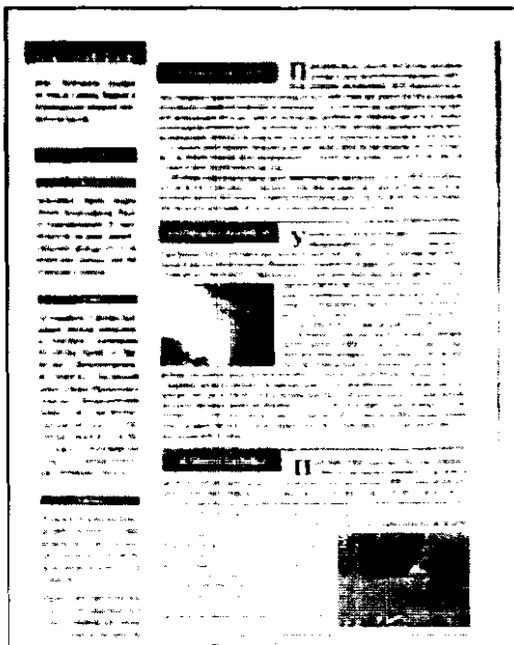
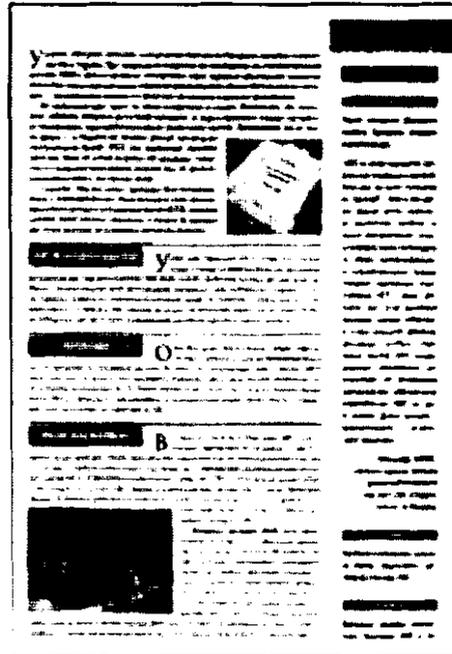


Restoring a recreational area at a local lake; organized by Rural Union of Svatove Rayo



ATTACHMENT E

Chystra Khata Newsletters



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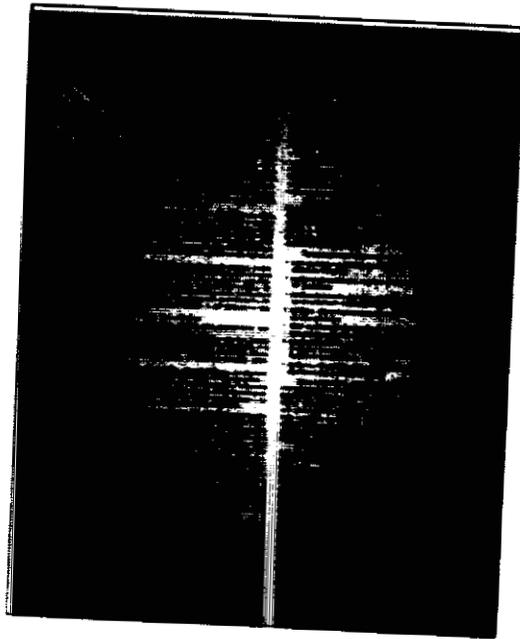
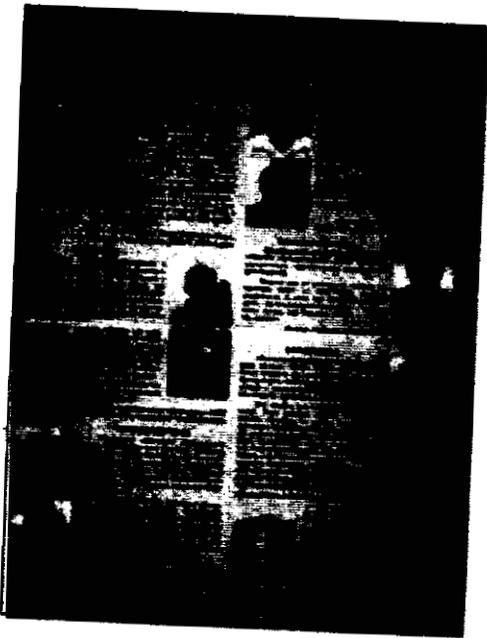
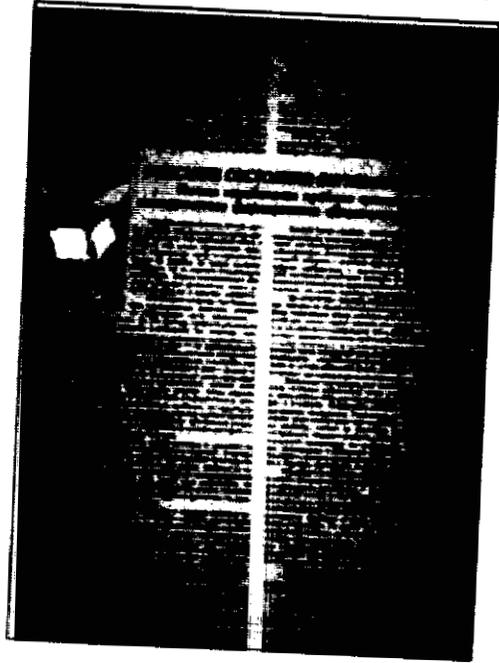
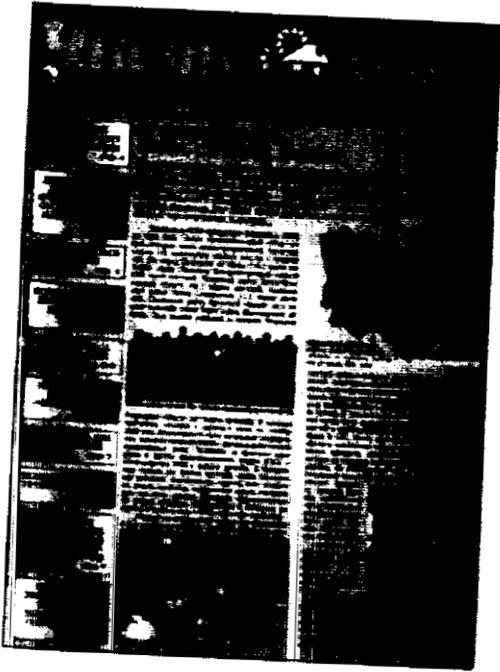
9.1. Технические рисунки

9.2. Таблицы

9.3. Фотографии

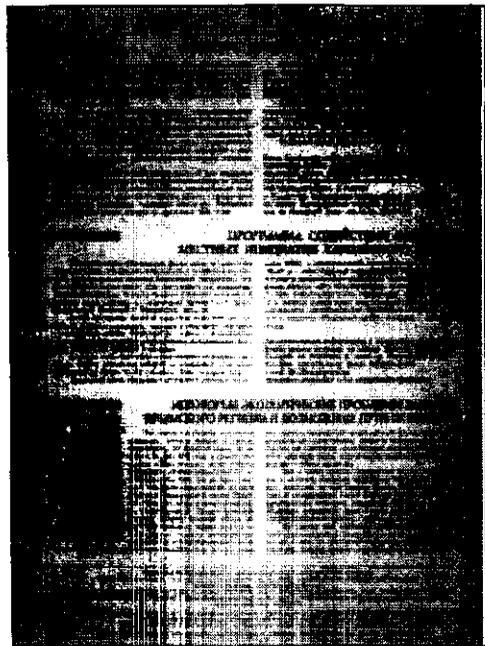
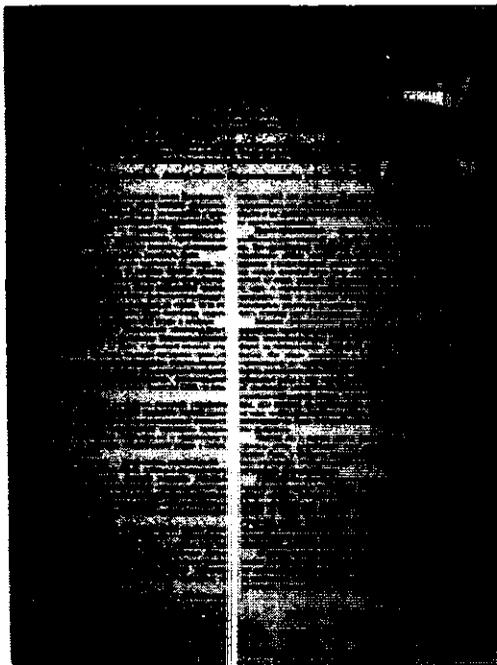
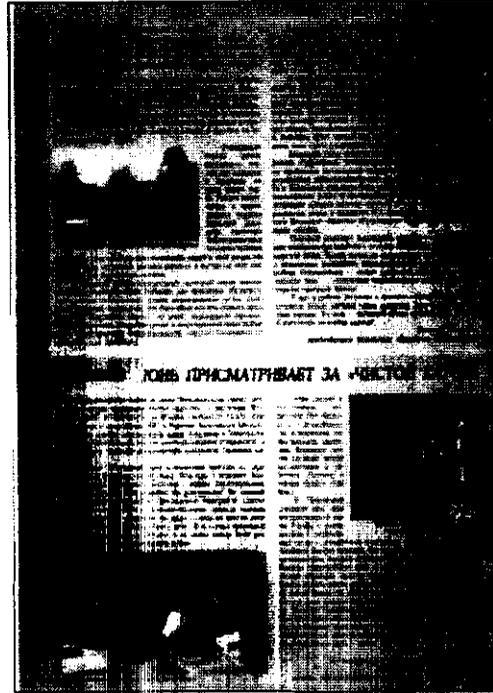
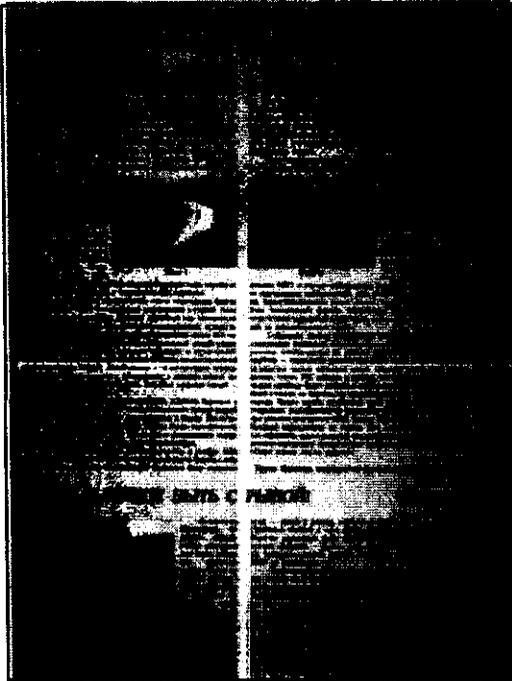
9.4. Расчетные листы

9.5. Иные материалы



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ATTACHMENT F

Summary of Pilot Projects

See PDF file titled LEAP Final Report Attachment F

Attachment F: Summary of Pilot Communities' Environmental Action Plans

Excerpt from the Environmental Action Plan of the Balaklava District

Approved by the session of the Balaklava district council in Sevastopol on 28.11.2003

Action Area								
Prevention of pollution and cleaning of the Balaklava bay								
Issue								
Pollution and reduction of recreational value of the Balaklava bay								
Objectives								
To keep clean the shore area of the Balaklava bay along the Nazukin quay during the project's duration. To draw attention of the district council and district administration, citizens, users of the bay and adjacent territory to the issue of pollution of the bay.								
Task 2								
Cleaning the bottom (down to 1,5 m) and the surface from garbage near the Nazukin quay								
Indicators								
Volume of collected and removed garbage								
1. Information campaign on issues of the Balaklava bay pollution	15.05.2004 ñ 31.07.2004	Balaklava LEAP NGO, Old Balaklava Council	Magdych N.M., Kosmyna N.V., Gordienko A.L.	450	110	-	340	-
2. Cleaning shallow area near the Nazukin quay	15.03.2004 ñ 31.07.2004	Balaklava LEAP NGO, Old Balaklava Council	Kosmyna N.V., Gordienko A.L.	2390	1190	700	300	200
TOTAL				2840	1300	700	640	200

Action Area		Planting and beautification of Balaklava parks						
Issue	Insufficient vegetation in Balaklava							
Objectives	Increase the number of green zones up to the level meeting the community's demand							
Task 1	Increase planting by 20% within two years							
Stage 1	Planting trees on the Nazukin quay							
Indicators	Number of planted and preserved trees							
1. Planting of trees								
	15.03.2004 ñ 15.06.2004	Balaklava LEAP NGO, PE (private enterprise) Velsam	Velikoselsky D.N., Heorhieva E.Y.	13150	-	12700	300	150
2. Maintenance of vegetation								
	15.03.2004 ñ 15.06.2004 (and so on)	Balaklava LEAP NGO, PE Velsam	Velikoselsky D.N., Kosmyna N.V.	1100	-	600	300	200
3. Educational work with citizens and information campaign								
	20.02.2004 ñ 31.07.2004	Balaklava LEAP NGO, PE Velsam	Kosmyna N.V., Magdych N.M.	200	-	-	100	100
Task 1								
Stage 2								
Indicators								
Increasing number of planted vegetation by 20% within 2 years								
Planting trees in a lower park next to the БКЦД								
Number of planted and preserved plants								
1. Planting of trees								
	15.03.2004 ñ 15.06.2004	Balaklava LEAP NGO, PE Velsam	Velikoselsky D.N., Heorhieva E.Y.	19000	18252	-	648	100
2. Maintenance of the greenery								
	15.03.2004 ñ 15.06.2004 (and on)	Balaklava LEAP NGO, PE Velsam	Velikoselsky D.N., Kosmyna N.V.	3604	2352	-	1052	200
TOTAL							1700	300

Action Area Sanitary cleaning of the district and elimination of unauthorized dumps (including beaches)								
Issue	Moving large volume of not sorted garbage to the Pervomaysk landfill							
Objectives	To establish an efficient system of separate collection and recycling of plastic bottles in the district							
Task 1	Establishment of an efficient system of separate collection and recycling of plastic bottles in the district							
Stage 1	Establishment of two permanent stations for separate collection and plastic bottles recycling							
Indicators	Number and volume of separately collected types of wastes; smaller volume of garbage moved to landfill							
1. Establishment of a station for collection of plastic bottles (30 containers)	02.01.2004 ñ 25.03.2004	PE Buriak N.A., TIS-YUG	Buriak N.A., Ivanov V.L.	7000	-	-	-	7000
2. Establishment of a station for collection of plastic bottles in neighborhoods (10 containers)	20.03.2004 ñ 25.04.2004	RAP-12	Kieva V.P., Romanova V.I.	3000	-	3000	-	-
3. Storage and processing of plastic bottles	02.01.2004 ñ 25.07.2004 and on	PE Buriak N.A.	Buriak N.A.,	4000	3300	-	700	-
4. Storage and processing of plastic bottles	27.04.2004 ñ 25.07.2004 and on	RAP-12	Kieva V.P., Romanova V.I.	6206	-	-	6206	-
5. Transportation and sorting of plastic bottles	12.01.2004 ñ 31.07.2004 and on	PE Buriak N.A.	Buriak N.A.,	15370	13870	-	1500	-
6. Transportation and sorting of plastic bottles	27.04.2004 ñ 31.07.2004 and on	RAP-12	Kieva V.P., Romanova V.I.	8646	8646	-	-	-
7. Processing of plastic bottles	10.03.2004 ñ 31.07.2004 and on	PE Buriak N.A.	Buriak N.A.,	19900	10800	-	9100	-
8. Processing of plastic bottles	27.04.2004 ñ 31.07.2004 and on	RAP-12	Kieva V.P., Romanova V.I.	1500	1500	-	-	-

9. Educational work with citizens	02.01.2004 ñ 31.07.2004 and on	Balakiava LEAP NGO PE Buriak N.A. PЭП ñ 12, Old Balakiava Council	Magdych N.M., Buriak N.A., Kieva V.P., Romanova V.I., Kosmyna N.V.	600	600	-	-	-
10. Economic incentives for citizens (collection of plastic bottles from citizens, competitions)	02.01.2004 ñ 31.07.2004 and on	Balakiava LEAP NGO PE Buriak N.A. PЭП ñ 12, Old Balakiava Council	Buriak N.A., Kieva V.P., Romanova V.I., Kosmyna N.V.	8746	5380	-	3266	100
TOTAL							3072	7300
Objectives	Cleaning the territory							
Task 2	Elimination of unauthorized dumps							
Indicators	Number of existing unauthorized dumps and number of eliminated ones							
1. Elimination of unauthorized dumps near the Yalta highway	19.04.2004 ñ 25.04.2004	Balakiava LEAP NGO, Ecobad NGO, Skalles	Lobach T.H., Semeniuk A.P., Braga Y. K.	15200	-	15000	-	200
TOTAL								200
GRAND TOTAL				90168	44096	18000	20772	7300

Action Area		Cleaning rivers Chorna and Baidarka, as sources of potable water for the Sevastopol region (including restoration of natural sources n springs and wells).						
Issue	Intake pollution in the Baidarsk valley							
Objectives	Getting reliable information on pollution origins in the Baidarsk valley							
Task 1	Survey of water reservoirs in the Baidarsk valley, development of a plan of sanitary cleaning							
Stage 1	Development of a map of Balaklava district springs (materials for GIS ` Springs of Sevastopol. Balaklava district ^a							
Indicators	Information on the intake condition in the Balaklava valley							
1. Identification of springs location and condition	15.03.2004 ñ 15.06.2004	Ecobad NGO	Semeniuk A.P.	1900	1550	-	250	100
2. Drafting a database of locations and condition of springs	15.06.2004 ñ 15.07.2004	Tavria University, Terra NGO	Dunduk T.S.	330	200	-	80	50
3. Development of electronic map and its hard copy ` Springs of Balaklava ^a	15.06.2004 ñ 23.07.2004	SINECO Institute, Ecobad NGO, Uneco NGO	Susin E.O., Semeniuk A.P., Voronin V.N.	800	450	-	250	100
4. Development of a website ` Balaklava springs ^a	15.06.2004 ñ 23.07.2004	Uneco NGO, Free Internet Access Center (IREX)	Voronin V.N., Betina E.E.	450	250	-	150	50
				3480	2450	-	730	300
Task 2	Cleaning, repair, and reconstruction of wells and springs							
Stage 1	Rehabilitation of the Baidarsk spring							
Objectives	To improve water supply of the Sevastopol area and the Baidarsk valley							
Indicators	Water meeting sanitary norms							
1. Restoration of the Baidarsk spring	17.05.2004 ñ 31.05.2004	Ecobad NGO	Semeniuk A.P.	950	200	600	100	50
2. Cleaning the territory around the Baidarsk spring	24.04.2004 ñ 12.06.2004	Ecobad NGO	Semeniuk A.P.	250	100	100	50	-

3. Sanitary survey of the Baidarsk spring	C 12.06.2004	Ecobad NGO, Sanitary Agency	Semeniuk A.P.	450	100	300	-	50
4. Information support and educational work with citizens	19.04.2004 ñ 15.06.2004	Balaklava LEAP NGO	Magdych N.M.	100	50	-	-	50
Task 2	Cleaning, repair, and reconstruction of wells and springs							
Stage 2	Cleaning, rehabilitation of a well in the village of Orline							
Objectives	To improve water supply of the Sevastopol area and the Baidarsk valley							
Indicators	water meeting sanitary norms							
1. Cleaning the territory, and bottom of the well	24.04.2004 ñ 30.04.2004	Ecobad NGO	Semeniuk A.P.	550	100	200	100	150
2. Rehabilitation of the well	17.05.2004 ñ 31.05.2004	Ecobad NGO	Semeniuk A.P.	1800	300	1200	200	100
3. Cleaning of the adjacent territory	24.04.2004 ñ 12.06.2004	Ecobad NGO	Semeniuk A.P.	1300	500	600	100	100
4. Information support and educational work with citizens	19.04.2004 ñ 15.06.2004	Balaklava LEAP NGO	Magdych N.M.	300	200	-	50	50
TOTAL								

Excerpt from the Environmental Action Plan for Settlement of Chechelnik

III. Ranking of environmental issues

According to the description of the environment, made on the basis of the data collected by the SGM, all factors have been described that negatively influence human beings, animals, and flora. All priority environmental issues are identified.

Taking into account the opinion of the community, results of polling, materials of the description of the environment, and the expert analysis, the following priorities have been identified:

1. Pollution of the town with solid wastes
2. Pollution of water
3. Water supply issue
4. Unemployment
5. Condition of roads

IV. Description of priority environmental issues of the town

1. Pollution of the town

In the town of Chechelnik, they have registered one legitimate landfill that is subordinated to the communal enterprise "Chechelnikomunservis". Condition of the landfill does not meet existing sanitary norms: the territory of the landfill is not fenced, there is no regular entrance, there is no watchman, and there is no sorting of garbage and wastes. The garbage is neither pre-processed, nor recycled. In the beginning of 2002, the town of Chechelnik had 35 unauthorized dumps. As the result of the work done there are only 16 dumps now. The source of garbage pollution is activity of citizens Chechelnik. Pollution is aggravated by chemical compounds that penetrate into soil, air, and water. Environmental contamination with garbage is one of the most acute issues of the community. The low sanitary awareness of the population and the local government's lack of money to eliminate unauthorized dumps predetermine urgency of this issue.

2. Pollution of water

One of the important issues for the town of Chechelnik and area is the condition of underground waters. Together with the Sanitation Agency, the city did a research of potable water 31 wells and took 56 tests from the water distribution system. According to the research, content of iron exceeds the norm (0.5 mg), as well as content of ammonia substances (nitrates, nitrites). The increased level of acidity and content of ammonia substances testify to a high level of organic pollution of surface water. About 70 % of wells need cleaning and regular chlorination and are under the threat of further pollution by factors of different origins. The major part of citizens use potable water from wells. The ground water table is 4-10 meters and deeper. The territory of the town has several water tables: in crystal soils, of Sarmatian period, of Baltic period, and also quaternary table. The main water producing table is the Sarmatian one that is used with wells. Capacity of wells makes 2.5 - 4 cubic meters an hour, and the water is drinking according to the standards. Ground water used to be of high quality and could be used without additional treatment. Cases of

pollution of ground water with poisonous substances happen more often. The main source of pollution of ground water is improper location of dumps, and storages of poisonous substances. On the territory of the town, there are 2 gas stations.

3. An issue of water supply

The problem of water supply is caused by the relief of the town (hilly terrain); artesian wells are located at long distances from water pressure head tanks which reduces the life of deep pumps. The deep pumps that are used are of the maximum height of water delivery (150 m). Water supply systems are outdated that results in often leakages and large financial cost of repair. In order to improve the water supply of the town, it is necessary to replace 200-250 m of pipes each year. The existing tariff (50 kopecks for a cubic meter of water) does not cover the cost of such replacement. There are no additional sources of financing. Most consumers (90 %) do not have water meters, which results in the lack control over consumption.

4. Unemployment.

The most sensitive issues and risks of unemployment include:

- Difficult economic and financial condition of enterprises, bankruptcy the sugar mill that employed 500 people.
- In many cases lack of motivation to work (low level of wages, untimeliness of payment of wages) that has a negative impact on stabilization of employment.
- Production scope is insignificant, and the rate of development of services is insufficient.
- There is still a difficult problem of employment of graduates of educational institutions.

Lately, there is a trend of increase in jobs creation mainly by individuals. In order to support development of enterprises, organizations, enterprise activity, it would be feasible to open credit lines for individuals with minimum interest, and such credits could be used to create new jobs.

5. Roads.

Roads in the town of Chechelnyk are in an unsatisfactory condition; they need current and capital repairs. The city has its "Regional program of development, repair, and maintenance of roads and streets in the town", approved by the Chechelnyk City Council on 08.28.2003. The total cost of capital repair of streets makes UAH 1,952,424, including in the following years:

2004: UAH 603,648
2005: UAH 286,104
2006: UAH 26,9336

2007: UAH 380,424
2008: UAH 195,979
2009: UAH 103,752

2010: UAH 113,184

The budget of 2003 appropriates for the repair of roads only UAH 58,000. The main problem is lack of sufficient financing.

V. Objectives and tasks of the environmental action plan

1. Problem: Contamination of the town with wastes

Objective: Cleaning of the town

Tasks: Involvement of all citizens of the town to the system of wastes collection

Liquidation of unauthorized dumps

Establishment of containers

Putting into order of the existing landfill

2. Problem: Pollution of water

Objective: Improvement of the water quality to meet the state standard 2874082 "Potable Water"

Tasks: Allocation of sanitary - protection zones

Repair of equipment of aquifers (pavilions, equipment).

Construction of the centralized sewage in the town.

Construction of treatment facilities.

To make production wastes meet norms of standards.

3. Problem: Water supply

Objective: To provide to the citizens quality potable water

Tasks: To make sources of water supply (artesian wells, wells) meet requirements.

To make sanitary - protection zones and water-pressure tanks meet standards.

Repair pavilions and installation of system of automatic control and protection.

Repair of the distribution network and valves.

Installing water meters.

Improvement of the laboratory control over quality of water that is provided to the distribution network.

Strengthening of control of water metering by consumers.

Repair of mains and the distribution network

4. Problem: Unemployment

Objective: Creation of new jobs

Tasks: To stabilize an employment level of the citizens.

To increase rates of development of industrial production and development of services.

In order to support development of enterprises, organizations, enterprise activity, to submit a petition to higher bodies of authority about provision of minimum interest loans which would enable to create new jobs.

5. Problem: Unsatisfactory condition of roads

Objective: Repair and maintenance of roads of the town to meet requirements of traffic safety

Tasks: Maintenance roadsides with drainage system

To carry out current and capital repair of roads with solid pavement (rubble)

To carry out capital repair of the Kirov street (4 kms) with sidewalks

To carry out capital repair of the Marx and Kalinin streets (1 km) with drainage system

VI. Ways of implementing tasks and evaluation criteria

For implementation of tasks the following categories of actions have been developed:

1. Information and training for the community

These actions are targeted at formation of environmental awareness of citizens and their active participation in improvement of the environment of the town of Chechelnik.

2. Economic incentives

They need to influence behavior of those who pollute the environment, to create material and moral incentives for termination of pollution.

3. Public programs

They entail direct participation of citizens in solution of the environmental issues or holding information-educational actions on environmental issues.

4. Technological actions

They entail designing, construction, and operation of environmental facilities.

5. Legislative actions.

They entail development and approval of some local instruments within the framework of existing powers.

6. Others

These are actions that do not belong to any of the specified categories.

Due to the lack of time, money, and human resources, they have chosen out of the majority of the suggested actions the ones that have relative advantages in achievement of the environmental objectives and tasks. For this purpose, the following criteria of evaluation have been used: cost, efficiency, time of implementation, safety, recognition of the community, and legislative powers. The criteria provide for development of an objective and transparent basis for decision making. The criteria are not always equally in their value and that is why UNESCO has ranked them and later it was taken into account for the analysis of the developed actions and determination of sequence of their realization.

VII. Actions

Objectives: Cleaning the town of garbage.

Actions	Time of implementation	Cost of implementation (UAH)
Placement of materials in permanent environmental columns of the media on removing garbage from the town	Permanently 2004-2009	3000
Optional classes (daycares, schools): Clean home to clean town	2004-2005	Up to 1500 a year
Informing citizens on establishment and powers of the town's work group	I quarter 2004	Up to 85
Informing citizens on legislative decisions of the town council on this issue	permanently	Up to 85
Polling school children and parents on cleaning the town	I quarter 2004	Up to 90
Approval of decisions of the town council: - On appointment of the work group on cleaning the town - On banning of unauthorized construction, and maintenance of individual household farms On responsibility for violation of sanitary rules	IV quarter 2003	Up to 125
Approval of annual benefits for business entities (individuals and legal persons) and citizens for the best maintenance of their territories	I quarter 2004p	Up to 200
Development of the town's map with indication of places of garbage collection	01.01.2004	Up to 500
Work of public inspectors and street committees controlling sanitary condition of their territories	permanently	
Informing citizens on location and hours of work of the existing landfill	II quarter 2004	Up to 600
Development of a plan of the landfill	First 6 months 2004	Up to 600
Approval of the schedule of the landfill	First 6 months 2004	N/a
Stage by stage improvement of the landfill's territory	2004-2005	Up to 30386
Introduction of utilization and sorting of garbage	10 years	
Introducing new jobs on landfill maintenance	I quarter 2004	5700
Approval of penalties for violation of rules of use of the landfill	I quarter 2004	N/a

Actions	Time of implementation	Cost of implementation (UAH)
Informing citizens by the town councilors on efficiency of sanitation days	permanently	N/a
Informing citizens by media and leaflets on existing sanitation rules of territory maintenance	1 quarter 2004	Up to 150
Development of an information-educational stand "Clean and live better"	First 6 months 2004	Up to 450
Personal notifications to citizens on responsibility for violation of streets/ borders and dumping construction garbage and litter.	permanently	200
Recognizing heads of enterprises, who properly maintain sanitation order on their territories.	permanently	100
Category of actions: Environmental		
Competition for best street, yard, territory of enterprises and organizations.	6 months	Up to 2500
Category of actions: Public		
Planting and beautification events on streets, territories of organizations and enterprises	2 years	5000
Liquidation of unauthorized dumps in the town	6 months	Up to 3000
Category of actions: Environmental		
Approval of penalties for violation of existing rules of private and public territory maintenance	First 6 months 2004	N/a
Task of installing containers		
Informing citizens on advantages of use of polyethylene garbage bags and containers	2004	150
Informing citizens on the ban to misuse garbage containers	permanently	80
A series of lectures on the necessity to collect garbage and threats that occur when it is destroyed	2004	1100
Performance of environmental groups on the action plan	Permanently according to the schedule	Up to 1200
Informing citizens on schedules on locations and collection of garbage	First 6 months 2004	240
Category of actions: Environmental		
Local benefits to small businesses that buy recycled resources at reasonable prices	2004-2005	
Imposing penalties on those who do not pay for garbage collection	permanently	
Development and approval of the system of incentives at the level of street committees for timely collection of garbage	2004	
Category of actions: Public		
Continue cooperation with the employment center on engaging unemployed to beautification work	Permanently	
Establishment of public control over observance of the schedule of garbage collection and proper location of garbage collection places	Permanently	
Hotline on the town's beautification issues	permanently	100
Establishment of children's environmental teams	permanently	
Category of actions: Environmental		
Purchase of a special truck for garbage collection		50000

Actions	Time of implementation	Cost of implementation (UAH)
Purchase of containers, arrangement of garbage collection places	2004	105000
Development of a map of garbage collection places, and containers	First 6 months 2004	250
Setting kiosks for accepting recycled glass, paper, and other resources	2004-2005	Up to 500
Approval of decisions to allocate land plots for places of garbage collection and containers	First 6 months 2004	
Decision of the town's council on material compensation for intentional damage to containers	Second half, 2004	
Review of garbage collection tariffs	First 6 months 2004	
Beautification of the town	2004	25000
Repair of roads	2004	47000

Excerpt from Environmental Action Plan for City of Evpatoria

1.5. Setting of priorities.

Setting priorities means revealing the most promising ways of improvement of the environmental situation, which will help to concentrate efforts on issues where it is possible to achieve real results in the easiest way. This process enables local government and the community to concentrate the limited financial and human resources on solution of priority issues and to achieve optimal results in improvement of environment.

During the special training on defining issues, priorities for actions, the environmental issues have been ranged. That is, for each of issues they identified human activities (sources of problems) that result in penetration of chemical pollutants or influence of physical factors with negative impact on environment. Besides, they identified threats for public health, for environment, and quality of life, occurrence of which are caused by the environmental issues. This work has been carried out with assistance of Ukrainian experts and trainers.

Thus, members of the Environmental Board took into account conclusions by experts, opinion of the community (results of the sociological poll held in March, 2003 with the purpose to find out citizens' attitude to environmental issues), and possibility of local government, and used the following criteria:

- Public importance of environmental issues;
- Availability of legal circumstances that enable to solve such issues;
- Interest of local government concerning solution of the issues;
- Time span necessary for implementation of planned actions; and
- Availability of resources, including financial, technical, and human.

It resulted in definition of three strategic objectives and tasks that are priorities for the community of Evpatoria:

Objective	To increase the number of green zones up to the level meeting needs of the community and to turn the city into a green island in the steppe area of the Crimea.
Task 1	To increase number of plants in the community by 20% during 2 years
Task 2	To ensure permanent protection of the existing green zones.
Task 3	To educate people of the understanding of the necessity to preserve greenery
Objective	To improve quality of the water supply, to provide water 24/7
Task 1	Reduction of water losses by 20%
Task 2	To provide water to citizens up to 12 hrs a day
Objective	To establish an efficient system of collection and utilization of wastes/garbage, including from the beaches
Task 1	To reduce volume of wastes delivered to the landfill by 20%
Task 2	To improve the system of sanitary cleaning of the city

2. Environmental action plan

June 2003, City Environmental Board began the process of setting actions that ensure achievement of objectives. The actions constitute the Environmental action plan of the city - the Plan of investments into solution of environmental issues. It has been decided that tasks and actions for each of three objectives would include actions targeted at:

1. **Informing and training citizens** (such actions are targeted at formation of environmental awareness of the community and citizens' active participation in improvement of the environment of Evpatoria);
2. **Economic incentives for the community.** (influence on behavior of those who pollute the environment, establishment of material and moral incentives for prevention of negative influence).

Besides, the action plan stipulates:

3. **Public actions** (direct participation of citizens in solution of certain environmental issues or educational actions on environmental issues);
4. **Technological actions** (designing, construction, and operation of environmental facilities);
5. **Legislative actions** (development and approval of some instruments at a local level within the framework of existing powers).

Due to the lack of time, money, and human resources, there is a necessity to choose among a number of the developed actions and to start with those with relative advantages in achievement of the environmental objectives. For this purpose, the following **evaluation criteria** have been chosen:

- Size of the targeted audience in implementation of actions;
- 'Profitability' (balance of invested resources and the targeted audience);

- Possibility of additional financing;
- Efficiency of remembering the information;
- Duration of the project's implementation;
- Possibility of adjustment and updating when necessary;
- Availability of legislative powers as to implementation of actions;
- Innovative nature of actions;
- Time span necessary for positive results after implementation of action;
- Emotional appeal of actions.

2.1. Improper condition of green parts of the city districts in view of their functions

2.1.1. Description of an environmental issue

The total area of green plantings within the city per one citizen makes 218 m². However, the data on greenery are very approximate. Since the beginning of 90ies of the previous century and till our days, non-authorized cutting continues, trees perish because of illnesses and old age. There was no inventory of green plantings for long time. Plantings are mainly old and it means they need regular care, permanent work on their structure, renovation, and special protection.

The common characteristic feature of vegetation of the city is significant degree of deterioration as green plantings are located near numerous public places, including cafeteria, restaurants, canteens, bars, kiosks, etc. with large quantity of household and construction garbage around. Because of this, trees deteriorate, have chopped off branches, bent trunks, and bushes dry out or are cut down, lawns are trodden). During last 10 years, there occurs significant reduction of protective strips of wood. There is no precise accounting on this issue; however, according to opinion of employees of state forestry, losses can reach 30 % as a result of non-authorized cutting and ageing trees. There is not enough information as to what plants can survive in our climate, where to plant them, and to do it in a correct way, etc.

3. Potential actions

Objective: To increase the number of green zones up to the level meeting needs of the community and to turn the city into a green island in the steppe area of the Crimea				
#	Action	Doers	Time of implementation	Estimate cost, UAH ths
1.	Information campaign on planting greenery	media	Starting 2004 annually	5,0
2.	Competition on planting and beautification	DHCS (Department of Housing and Communal Services)	annually	15,0

Objective: To increase the number of green zones up to the level meeting needs of the community and to turn the city into a green island in the steppe area of the Crimea.

#	Action	Doers	Time of implementation	Estimate cost, UAH ths
3.	Seminars for people of all ages	Youth Naturalists Club	2004-2005	8,0
Category of actions: Economic incentives				
1.	Provision of benefits	City Council	2004-2005	---
Category of actions: Public programs				
1.	Environmental-ethnic facilities	DHCS, ethnic communities	2005-2008	500,0
Category of actions: Technological actions				
1.	Renovation of squares, parks, boulevards, being public places open for citizens and visitors of the city	DHCS	2004-2008	800,0
2.	Restoration of playgrounds in neighborhoods	Zhilishniki ^a	2004-2008	600,0
3.	Re-use of storm water	DHCS	2005-2008	over 1500,0
4.	Restoration of washing of streets	DHCS	2005-2008	over 1000,0
5.	Restoration of woods around the city	forestry	since 2004 annually	500,0
6.	Development of a decorative plants nursery	DHCS	2005-2007 r.	50,0
Category of actions: Legislative action				
1.	Introduction of changes to the master plan (planting)	DAUD (Department of Architecture and Urban Development)	2004-2005	
Task 2. To ensure permanent protection of the existing green zones.				
Category of actions: Information				
1.	Hot line	DHCS	2004-2005	1,0
2.	Advertising	DHCS	2004-2008	50,0
Category of actions: Economic incentives				
1.	Strengthening control over purchases of plants and seeds	DHCS	since 2004	0
Category of actions: Public programs				
Category of actions: Technological actions				
1.	Protection and surveillance of existing woods	DHCS, forestry	2004-2005	100,0
2.	Adjustment of borders of sanitary zones	DAUD	2004-2005	35,0

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Objective: To increase the number of green zones up to the level meeting needs of the community and to turn the city into a green island in the steppe area of the Crimea				
Task 1. To inform				
Category of actions: Informing and training the public.				
#	Action	Doers	Time of implementation	Estimate cost, UAH ths
3.	Inventory of plants in the city and development of computer database	DHCS	2004-2005	25,0
Category of actions: Legislative actions.				
1.	Development and approval of decisions of the City Council governing maintenance of vegetation	City Council	2004-2005	---
Task 2. To educate				
Category of actions: Information and training.				
1.	Quizzes	Youth Naturalists Club	regularly since 2004	5,0
2.	Internet site	DHCS	2004	1,0
Category of actions: Economic incentives.				
1.	Environmental stand of recognized people	DAUD	2005	30,0
2.	Introduction of the "green quality mark"	DHCS	2005-2006	35,0
Category of actions: Public programs.				
1.	"Green Stock Exchange"	Youth Naturalists Club	2004-2006	6,0
Category of actions: Technological actions.				
Category of actions: Legislative actions.				

2.2. Emergency condition of the water supply systems; irregular supply

2.2.1. Description of the environmental issue

City uses potable aquiferous water that is supplied under pressure by two mains from intakes "Ivanovka" and "Chebotarka", and also separate wells in rural areas. The sanitary - chemical analysis shows that water does not meet the 2874-82 national standard "Potable water" in hardness. There are no deviations in chemical and bacteriological parameters. The water works has 382.1 km of water pipes. 226.2 km are of 100% wear and tear. Annually, the losses of water due deterioration of the distribution network make 7,775.6 thousand m³. Deficiency of potable water makes 38

thousand m3 a day, and during the summer season it considerably grows due to visitors of the city. Water is supplied according to the following schedule:

6.00 am till 9.00 am and between 6.00 pm and 9.00 pm with pressure 3.2 atm

9.00 am till 6.00 pm - 1.5 atm

9.00 pm till 10.00 pm - 1.0 atm

10.00 pm till 6.00 am - 0.5 atm.

I.e. most citizens have water 2 times a day for 3 hours.

80 % of sewage networks are 90 % worn.

2.2.2. Potential actions

Objective: To improve quality of the water supply, to provide water 24/7				
#	Action	Doers	Time of implementation	Estimated cost, UAH ths
1.	Tours to facilities		Regularly since 2004	2,0
2.	Seminars for all age groups	Youth technicians Club	2004-2005	8,0
3.	Advertising	DHCS	since 2004 annually	50,0
4.	Information campaigns to save potable water	media	since 2004 r. annually	5,0
Category of actions: Economic incentives				
1.	Support and benefits to the enterprises that save water	City Council	2004-2005	---
Category of actions: Public programs				
1.	Work with neighborhoods	DHCS	Regularly since 2004	10,0
2.	Promotion of water saving	City Environmental Council	2004-2008	20,0
3.	To ensure access to reliable information	Waterworks	2004	1,0
4.	Public control over activities of the waterworks	DHCS	2004-2005	3,0
Category of actions: Technological actions				
1.	Replacement of pipes	DHCS, waterworks	2004-2010	5 000,0
Category of actions: Legislative actions				
1.	Development and approval of decisions of the City Council regulating water supply issues	City Council	2004-2005	
Task2. To provide water to citizens up to 12 hrs a day				
Category of actions: Economic Incentives				

Category of actions: Public programs.			
Category of actions: Technological actions.			
1.	Construction of storage tanks for water	waterworks	15000,0
2.	To install filters reducing hardness	waterworks	1500,0
Category of actions: Legislative actions.			

2.3. Lack of efficient system of collection and utilization of wastes/garbage, including from the beaches

2.3.1. Description of an environmental issue

Soil of the city suffers significant anthropogenous pressure. The system of cleaning soil from commercial and household garbage is far from being perfect; because of the lack of money, there are not enough containers; many platforms are not equipped and not fenced; there are not enough street cleaners (between 210 in summer to 150 in other seasons, instead of 1,000 as it was in 80ies). Cleaning beaches is an especially acute issue. During summer period, anthropogenous pressure on beaches grows immensely. Communal services fail to manage the sharp differences of pollution. Because of the lack of financing, some enterprises and individual household farms are not removed from zones 1 and 2 of resort protection; the old part of the city does not have sewage. There is difficult situation with recycling of industrial wastes, luminescent lamps, tires, accumulators, and galvanic production wastes ("Vympel" plant, mechanical Plant, trucks repairs facility). Soil of parks, squares, streets suffer pollution from household pets.

The volume of wastes annually delivered to the landfill makes 192.7 thousand m³, 16.0 thousand a month, and 535 m³ a day. A limit for 2002 for SHW on the city landfill - 210.0 thousand m³. According to the beautification department of the DHCS, the largest part of wastes makes SHW and industrial wastes (55.2 %), and commercial wastes (paper, metal packing) - 20 %. Of negative impact are so-called non-authorized dumps. In transportation of wastes, about 20 % of the volume make plastic bottles, which when on fire at the landfill produce dioxides.

2.3.2. Potential actions

Objective: To establish an efficient system of collection and utilization of wastes/garbage, including from the beaches				
Category of actions: Information and training.				
#	Action	Doers	Time of implementation	Estimate cost, UAH ths
1.	Release of calendars, brochures	DHCS	2004-2008	50,0
2.	Competition "And can you?" on SHW utilization; competition on items made of SHW	DFYA (Department of Youth and Family Affairs)	2004-2005	10,0
Category of actions: Economic incentives.				

1.	Benefits	City Council	2004-2005	----
Category of actions: Public programs				
1.	Pre-processing of garbage	DHCS	2004-2008	500,0
Category of actions: Technological actions				
1.	Introducing new technologies of garbage processing	DHCS	2004-2008	1600,0
2.	Introduction of composting in the city	DHCS	2005-2006	3,0
Category of actions: Legislative actions				

Task 2. To improve the system of sanitary cleaning of the city				
C				
1.	Hot-line on unauthorized dumps	DHCS	2004-2005	1,0
2.	Information campaigns against garbage	media	since 2004 annually	5,0
3.	Release of calendars, brochures	DHCS	2004-2008	50,0
Category of actions: Economic incentives				
1.	Environmental stand of recognized people	DAUD	2005	30,0
2.	Introduction of the 'green quality mark'	DHCS	2005-2006	35,0
Category of actions: Public programs				
1.	To plant greenery and build constructions in locations of potential unauthorized dumps.	DHCS	2005-2008	500,0
2.	Work with neighborhood committees	Zhilishniki*	2004-2008	10,0
Category of actions: Technological actions				

Category of actions: Legislative actions				
1.	Development and approval of decisions regulating wastes management	City Council	2004-2005	----

Excerpt from the Environmental Action Plan for Town of Korostyshiv

III. Sections on Specific Issues

ISSUE: Pollution of water in the central water system of the city

General description of the issue:

Water supply in the city of Korostyshiv is carried out both from centralized and decentralized sources of water supply. 57% of the city population receives water from the city municipal and industries' water systems; other citizens receive water from public and individual wells. Capacity of the city intake is 4.4 ths cubic meters a day, with daily provision of 3.3 ths cubic meters. Currently, there are 9 aquifer wells in operation; than iron is removed from water and aeration; mechanical filtration (2 sand filters) and PMB (3). The iron content of the aquiferous water makes up to 2 mg / l, and after removing iron it is reduced down to 0.3 mg /l. According to requirements of clause 8.6.4. of the norms of radiation safety, the management of the Korostyshiv water works tests water for natural radio nuclides. It is necessary to admit, that the city waterworks has a system of water treatment and identifications of polluting substances in the water. Capacity of the water intake is insufficient. Since 2002, there often interruptions of water supply due to blackouts between several hours up to several days. Between July and October water is provided according to a schedule. When water supply resumes, powerful pumps cause water hammer and the water flow washes off dried parts of corrosion; and the water with that pollution enters the distribution system. Distribution system is outdated and worn out, which cause numerous leaks. The scope of the problem hurts 57 % citizens. This problem influences health of people: excess content of iron causes heart illnesses, hardness of potable water weakens protective functions of cardiovascular system.

The waterworks assigned a team to eliminate emergencies. Thus, in terms physical and chemical parameters there is an excess of iron contents in the water in the range of 0.66-1 mg /l (the norm is 0.3 mg /l), and accordingly, transparency of water makes 25-28 sm (the norm is 30 sm), color makes 25-40 * (the norm is 20 *), hardness makes 7.2-8.9 mg /cubic dm (the norm is no more than 7 mg /cubic dm), and sediments have corrosion particles. There were 8 deviations from the standard in terms of bacteriological parameters during 9 months of 2002.

In 2002, no work has been done on cleaning and disinfection at the water treatment facilities and in the distribution system. The sanitary - protection zone near the aquifers is allocated but not fenced, there was no current repairs of the wells structures. Water pumps of the old Cherkunov design need to be replaced with a new Moscow type design ones. In order to improve the sanitary and technical condition of the water intake, improvement of the quality of water, and prevention of epidemiological complications concerning intestinal diseases and virus hepatitis A, in September 2002, they cleaned and disinfected the intake and the distribution networks of the city.

Objective: Clean potable water safe for health

Task:

1. To promote culture of efficient water consumption.

2. To ensure uninterrupted provision of clean potable water.

Indicators:

1. Number of days a year when iron exceeds norm
2. Number of days a year when turbidity deviates from its norm
3. Number of days a year when color exceeds its norm
4. Number of days a year when hardness of water exceeds its norm
5. No corrosion particles in potable water
6. Number of days a year when nitrites exceed the norm
7. No nitrates in the water
8. Number of days a year with excess of a bacteria index
9. Interrupted water provision
10. Replacement of the water supply system of the city

Actions:

Objective 1: Clean potable water safe for health		
1. Competition of pictures and posters on water saving topics.	UAH 200 (prizes for winners)	3 months
2. "From door to door".	UAH180 (production of leaflets)	4 months
3. Informing on an establishment of meters	UAH140	5 months
4. Educational classes	UAH22	6 months
5. Performances of performing teams under the motto "Water is life!	UAH125	1 month
Category of actions: Economic incentives.		
Objective 2: Ensuring uninterrupted provision of clean potable water		
1. Permanent coverage by media of the local government's actions concerning the objective.	Up to UAH 300	Permanently

Category of evaluation: legislative powers		
2. Public hearings to discuss the issue of higher tariffs for water consumption.	-----	As soon as the issue of higher tariffs is on the agenda
Evaluation criteria: efficiency of expenses, technological influences, efficiency		
3. Construction of the water disinfection station	UAH 1,950,000	8 years
4. Reconstruction of the existing water treatment facilities.	2,500,000	2 years
5. Finishing construction of new facilities of the water intake.	UAH850,000	3 years
6. Replacement of pumps at the water intake with less power-intensive ones.	UAH226,000	1 year
7. Replacement of water supply mains	UAH2,700,000	5 years
8. Elimination of causes of water losses in the distribution network.	UAH48,000	1 to 5 years
Criteria of actions: Legislative actions		
9. Penalties for misuse and non-reasonable use of water.		Permanently

Schedule of Implementation

Actions	Responsible institutions	Water in the system										
		Since December 2003						2004				
		1	2	3	4	5	6	7	8	9	10	11
Task 1. Culture of water consumption	LEAP, SHG (stakeholders' groups)		■									
Competition of pictures and posters	LEAP, school groups, SHG		■	■	■							
"From door to door"	LEAP	■	■	■				■	■	■		
Information on installation of meters	Schools, SHG		■	■	■							
Educational classes	LEAP, SHG, ecological groups					■	■					
Performances by amateur groups	LEAP	■										
Competition of pictures and posters on water saving issues	City Council, SHG			■								
Public hearings												
Task 2. Uninterrupted supply of water	Media, SHG			■			■			■		
Permanent coverage by media of the local government's actions concerning the task	City Council, SHG			■								

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Actions	Responsible institutions	Water in the system											
		Since December 2003						2004					
Public hearings about a raising of tariffs	Waterworks												
Construction of the iron removing station	Waterworks												
Reconstruction of the existing water treatment facilities.	Waterworks												
Finishing construction of new facilities of the water intake.	Waterworks												
Elimination of causes of water losses in the distribution network.													

ISSUE: Unauthorized dumps after granite processing

General description of the issue:

The city of Korostyshiv has registered about 400 enterprises that process granite. But there is no mechanism of pulp recycling (a dense liquid that consist of granite dust, water, remaining polishing mastic). The production cycle is not complete. The enterprises dump the pulp everywhere - in forests, into springs. The pulp contains chromium. Therefore, there is a possibility that chromium migrates to underground water, which is dangerous for people that live in the area.

As great volumes of granite are processed, a number of granite tailings dumps are scattered around the city. There is no place to utilize the tailings, though they are not dangerous for human health.

As for today, it is not possible to identify more specific actions without testing valency of chromium substances (chromium compounds are used in abrasive pastes for granite processing).

Objective: ecologically safe, authorized recycling of waste products of granite processing.

Tasks: Promotion of the culture of proper behavior with granite wastes

Construction of a landfill for the pulp utilization

Research of the market and new technologies of pulp processing

Indicators:

1. Landfill for tailings
2. Availability of a special entity responsible for removal of tailings.
3. Procedure of registration of removed volumes.
4. Number of tons of removed tailings by enterprises of granite processing (ledger of registration and control)
5. No complaints from citizens about non authorized dumping of tailings.

Actions:

Objective: ecologically safe, authorized recycling of waste products of granite processing.		
Categories of actions: informing citizens, economic incentives, public programs, technologies		
1. To test valency of chromium compounds in the pulp (category of actions - technological norms)	UAH 2,500	6 months
2. To identify locations of unauthorized dumps of the granite pulp	—	4 months
3. To get recommendations concerning arrangement of landfills for the pulp	—	6 months
4. To learn the existing experience in this area (recycling of granite waste products)	—	6 months
5. To inform businessmen on the responsibility for pollution of the territories by tailings and about actions of the government concerning solution of this problem	—	1 year
Task 2: To construct the landfill for the pulp processing.		
1. To find out monthly volumes of the granite pulp in the territory of the area	—	6 months
2. Certification of the granite processing enterprises with the purpose to identify volumes of waste products.	—	6 months
Task 3: Search for the market and technologies of pulp processing.		
1. Informing citizens, the region, and the country on availability of this construction material.	UAH100	1 year

Problem: Pollution of the city with solid household waste

Description of the issue: the city landfill is located within borders of the city; in view of the fact that the landfill operates for more than 40 years (started in 1957), its capacity exhausted (the design documentation stipulates the total amount of the wastes should not exceed 200 thousand tons, that is only 4.6 thousand tons a year). As of now, there is no vacant territory to continue dumping the wastes. The sanitation zone of the Teteriv river and nearby housing does not meet requirements. In 9 months of 2002, the volume of utilization made 568.600 tons. The landfill operates with infringement of sanitary norms, which results in environmental contamination. The area that is stipulated by documentation of the landfill is 4.5 h. Though, the decision of the executive committee of the Korostyshiv City Council #220 of 06.17.1998 allowed the administration the municipal beautification enterprise, by way of exception, to continue operation of the landfill near the Lisova street until a new landfill is constructed. Sanitary condition of the landfill and its adjacent territory of wood are unsatisfactory. Garbage is dumped randomly over all territory of the landfill. A bulldozer works occasionally. Actual sanitary protection zone is not available and the distance to the nearest housing area is 75 m, and to the Teteriv - 50-90 m. The distance from the city water intake makes 1.5 km. Absolute height of the surface is 157.5 m. The water table is 2.5-3.0 m deep. Quality evaluation of security of the underground water (conditional categories of safety): relatively protected. Capacity of the aeration zone is 2.5-3.0 m. The structure of the aeration zone - 0.0-0.1 m - soil and vegetation layer, 0.1-3.0 - sand, 3-3.5 m - clay sand with granite

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fragments. The underground water is low pressure water. Other features of natural safety: a sand quarry. The type of the landfill: open and shallow. Filtration: no drainage system. Means of protection of environment from pollution: soil screen - clay. Side insulation screens: walls in soil. No drainage gutters. Technology of disposal: condensation of wastes with clay soil on top. No disinfection of wastes ever occurred. Sorting of wastes never occurs. Below, the tables show the general characteristic of wastes; information of monitoring of the water quality, soil and air in the area of the landfill. Information on pollution of the environment in the area of the landfill; violations of requirements concerning landfills; and a category of ecological safety of the landfill.

There is a permanent worker at the landfill, but control over dumping is insufficient. In the southern part of the landfill there is an unauthorized dump of granite tailings brought by trucks - about 40-50 tons. Similar dump was found out in the northern part of the landfill (about 6-8 tons). The city uses containers for solid household waste. Location of containers near houses was not approved by the sanitation agency. There are no solid platforms under containers. All containers have no covers, some of them have rusted. There is no washing and disinfection of containers during summer season. While unloading containers, some garbage remains in containers and this causes reproduction of flies. The enterprises (Korostyshiv Housing Maintenance Unit - director Serlozhkin M.M., the city municipal enterprise "Beautification" - director Prishchepa V.F.) failed to develop and accordingly to apply the rules of container maintenance. Garbage from containers is removed without a schedule.

Also, the Beautification enterprise failed to properly organize collection of garbage in neighborhoods of single family houses, therefore some irresponsible citizens dump solid and liquid household wastes in ravines and woods. Each unauthorized dump has an impact on 300 persons (from an adjacent housing area). Rotting garbage promotes duplication of pathogenic bacteria, brought by flies around, which results in increase of intestinal diseases. One of components of the SHW issue is burning of household garbage by citizens. In this way, cadmium, vinyl chloride, heavy metals, hydrogen sulphide go to the air with smoke. The scope of impact - 5,000 persons of an adjacent neighborhood. This has an impact on human health: cadmium in air causes neurotoxication, headaches, irritability, decrease of cerebral activities, damage to kidneys, liver, bones; vinyl chloride causes depression, illnesses of nervous system, lung cancer, liver cancer; heavy metals cause damage to skin, illness of stomach, annoyance, polyneuritis; and hydrogen sulphide influences respiratory system, and nervous system.

Objectives: To reduce pollution of the city with solid household wastes,
To eliminate unauthorized dumps, and their influence on people.
Reduction of waste volume.

Task:

1. To develop a culture of behavior with solid household wastes.
2. To develop a system of collection and utilization of solid household wastes.

Indicators:

1. Tons of utilized solid wastes products
2. The area of the territory cleared of unauthorized dumps
3. Number of newly emerged unauthorized dumps

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4. No garbage on streets of the city and in all public places.

Category of actions: informing and training of the public; economic incentives; public programs; technological actions; legislative actions

Evaluation criteria: efficiency of expenses; time of implementation; financial influence; influence on employment; influence on environment; technical feasibility; efficiency of action; number of people engaged; and involvement of financially interested parties.

ACTIONS

Task 1: Development of a culture of behavior with SHW		
1. Information and promotional actions (informing and training of citizens)	UAH700 for 6 months	Permanently
2. Penalties for misbehavior with SHW (economic incentives)	ó	Permanently
3. Annual competition for the best house, street, yard, educational institution, multi-storey house, doorway, organization (economic incentives)	UAH500	Once a year
4. Weekly neighborhood cleaning events "Clean Thursday" (public program)	ó	Constantly
5. Installing garbage boxes (technology)	UAH700	1 year
Task 2: Development of a collection and utilization system		
1. Decision of local government to allocate a land plot for a landfill (legislative actions)	ó	1 year
2. Equipment of the landfill to sort and recycle of wastes (technological actions)	UAH30,000	1 year
Task 3: Search for the market and technologies of pulp processing		
1. Informing citizens, the region, and the country on availability of this construction material.	UAH100	1 year

SCHEDULE OF ACTIONS IMPLEMENTATION

		1	2	3	4	5	6	7	8	9	10	11	12
Information promotional actions	LEAP, public committees												
Penalties for misbehavior with SHW	City Council, office MEP												
Annual competition for the best house	City Council, LEAP												
Weekly cleaning events	City Council												
Installing garbage cardboard boxes	Beautification ^a												
Installing garbage boxes	Beautification ^a												
Burying wastes in the ground	Beautification ^a , City Council												
Equipment of the landfill to sort and recycle wastes	City Council												

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Problem: potable water in some wells does not meet standards

Description of the issue:

The city of Korostyshiv has 102 wells. All of them are maintained by the municipal enterprise "Beautification." When the sanitation agency inspected the wells, it found out the following:

- Public wells (Bilshovytska Street, Peremoha Street, Lisova Street) do not have a clay lock and a cement foundation.
- The distance to a source of pollution is less than 50 m near the well on the Tolstoho and Bilshovitska streets.
- Awning of the wells on the Suvorova and Lisova Streets needs repair.
- Insufficient tightness of the cement shell of the wells on Suvorova and Lisova Streets.
- There is no prop for a bucket near the wells on the Suvorov Street.
- There are no buckets near the wells on the Bilshovitska, Peremohy, Luksemburg, Khmelnitsky, Lisova, Suvorova Streets.
- There are deviations on bacteria indicators in the wells on the Suvorova, and Shevchenko Streets (higher content of intestinal bacillus - K1 with the norm of 9).
- There are deviations from the norm of physical and chemical parameters - higher content of nitrites (the norm of 45 mg /l) in the wells on the following streets:
 - Khmelnitsky, 21 - 144.5 mg / l
 - Luksemburg, 24 - 135.6 mg / l
 - Luksemburg, 32 - 54.5 mg / l
 - Suvorova, 69 - 136.2 mg / l
 - Suvorova, 54 - 132.8 mg / l
 - Suvorova, 43 - 138.2 mg / l
 - Suvorova, 33 - 128.5 mg / l
 - Shevchenko, 59 - 128 mg / l.
- There are also nitrites (norm: there should not be any available):
 - Khmelnitsky, 21 - 0.088 mg/l.
- There are also other drawbacks (the well on the Shelushkova Street): the above surface part of the well is destroyed, there is no cement lining, the cover and awning need repair; there are registered deviations from bacteriological parameters - bacteria index - 23 (the norm 9), there are registered contents of ammonia - 0.24 mg / l, contents of nitrates - 0.06 mg/l (the norm - these substance should be not present in water at all), there are registered contents of nitrates of 48 mg / l (the norm - 45 mg/l).
- The laboratory tests of water from the well on the Shehors lane showed contents of nitrates that exceeds hygienic requirement almost by two times; bacteriological parameters show a deviation from the norm almost by 3 times. The excess content of nitrates in water testifies to pollution, and at the distance of 4-5 meters from the well there is an unauthorized dump. The well does not have bucket and a prop for a bucket. The awning and lining of the well are not tight.
- The scope of influence of each problem well is about 300 persons who reside in the neighborhood and use water from such wells.

- This issue influences public health: the nitrate content complicates breath, raises a level of infant death rate, generates carcinogenic substances, violates work of cardiovascular system, causes colitis, toxic hepatitis, and toxic shock.

Objective: Water in public wells within accepted sanitary norms

Task: To eliminate sources of pollution.

Indicators:

- Number of days a year when contents of iron exceed the norm
- Number of days a year when turbidity does not meet the norm
- Number of days a year when color exceeds the norm
- Number of days a year when hardness exceeds the norm
- No corrosion particles in potable water
- Number of days a year when contents of nitrites exceed the norm
- No nitrates in water

Actions:

Category of actions: informing and training of citizens		
Distribution of precautionary leaflets near the wells, the water of which does not meet sanitary requirements	UAH350 quarterly	2 times a year
2. Permanent support to implementation in media	ó	Permanently
Category of actions: ecological incentives		
A competition on the best maintained well (with water meeting sanitary norms)	UAH500	once a year
Category of actions: public programs		
Small public hearings on the streets where the well water does not meet sanitary norms.	ó	Once a year
Planting of phytocide trees	UAH500	1 year (spring and autumn)
Category of actions: technical norms		
To provide buckets to each well	UAH2,500	1 year
Purchase of pumps to pump water from wells	UAH2,100	6 months
Liquidation of unauthorized dumps next to wells	UAH 3,000	3 months
Category of actions: legislative actions		
Report of the "Beautifications" management on condition of public wells in the city		Quarterly

Excerpt from Environmental Action Plan of Kosiv Raion

Issue: Pollution of environment with solid household wastes

					LEAP	
1.1. Purchase of small facility for recycling of solid wastes. <i>(technological norms)</i>	30.07.2004	Private enterprise Orion (Popazov A.)	-	-	-	UAH 60 000
1.2. Wood utilization. <i>(technological norms)</i>	30.07.2004	Private enterprise Halecotek (Boichuk H.)	UAH 5 000	-	-	UAH 7 000
1.3. Decisions of local government on landfills location. <i>(legislative actions)</i>	30.03.2004	Kosiv District Council, city, town councils	-	-	-	-
1.4. Arranging the landfill according to technical norms. <i>(technological norms)</i>	30.07.2004	Private enterprise Orion (Popazov A.)	UAH 8 500	-	-	UAH 330 000
1.5. Establishment of a charitable environmental fund. <i>(Economic incentives)</i>	30.07.2004	Kosiv District Council, city, town councils	UAH 200	-	-	-
					LEAP	
2.1. Burying wastes. <i>(technological norms)</i>	30.05.2004	Private enterprise Orion (Popazov A.)	UAH 4 000	-	-	UAH 1 500
2.2. Sorting of the wastes and moving to properly arranged landfills. <i>(technological norms)</i>	30.06.2004	Private enterprise Orion (Popazov A.)	UAH 9 000	-	-	UAH 1 800
2.3. Decision of local government on allocation of land plots for landfills. <i>(legislative actions)</i>	30.03.2004	Kosiv District Council, city, town councils	-	-	-	-

2.4. Arranging permanent stations for wastes collection (5 neighborhood locations)	30.05.2004	Private enterprise Orion (Popazov A.), city, town councils	-	-	UAH 15 000	-
2.5. Mobile stations of collection and sorting SHW	30.07.2004	Private enterprise Orion (Popazov A.)	-	-	UAH 3 324	-
2.6. Partial processing of SHW n making charcoal of wood wastes: - purchase of equipment (6 pieces) 1. bringing the equipment from Bila Tserkva (2 trips by a truck) 2. Assembling the equipment	30.07.2004	Private enterprise Orion (Popazov A.)	-	-	UAH 24 000 UAH 2 120 UAH 1 016 UAH 530	-
- a company's representative holds training to run the equipment						
2.7. Partial processing of the SHW n plastic bottles: 3. purchase of equipment 4. transportation of the equipment	30.07.2004	Private enterprise Orion (Popazov A.)	-	-	UAH 3 710 UAH 300	-
2.8. Making containers for pre-sorting of SHW (80)	30.05.2004	Private enterprise Orion (Popazov A.)	-	-	UAH 20 000	-
2.9. Cleaning the territory of settlements	Till 30.07.2004	Village, town councils	UAH 6800	-	-	-
3.1. Information and training for the public. (information and training)	30.07.2004	Regional charitable organization Public Initiatives (Blyzniuk M.)	-	-	-	UAH 500
3.2. Info bulletin i Environment of Kosiv area (Economic incentives)	30.07.2004	Regional charitable organization Public Initiatives, Hutsulski Krail magazine Vovchak I., Havuka P.	-	-	-	UAH 600

Issue: Unfeasible use of forest resources

	Implementation				LEP	Amount
1.1. Closing sawmills that do not meet norms. (legislative actions)	30.06.2004	Inspector on environment and nature resources (Plikhtiak A.)	-	-	-	-
1.2. Monthly inspections concerning observation of cutting norms. (legislative actions)	30.06.2004	The National Natural Reserve ĘhutsulshchinaĚ, Inspector on environment and nature resources (Plikhtiak A.)	-	-	-	UAH 1 000
1.3. Establishment of a group of friends of forest. (information and training)	30.06.2004	Kosiv District Council, city, town councils	-	-	-	-
1.4. Consideration of the issue of forest protection by local government upon request of NGOs (each three months). (legislative actions)	30.06.2004	Kosiv District Council, city, town councils	-	-	-	-
1.5. Check-points in each village to control traffic from forests. (Economic incentives)	30.06.2004	The National Natural Reserve ĘhutsulshchinaĚ, city, town councils	-	-	-	UAH 1 000
1.6. Monthly TV programs Ě Do not destroy Carpathian regionĚ. (information and training)	30.07.2004	Public Environmental Council of the Kosiv area (Barchuk V.)	-	-	-	UAH 300
1.7. Publishing information in local media on violations of the rules forest maintenance. (information and training)	30.06.2004	Regional charitable organization ĘPublic InitiativesĚ, Ęhutsulski KraĚi magazine Vovchak I., Havuka	-	-	-	UAH 200

1.8. Publishing a picture album Kosiv Forests condition, protection, restoration/. <i>(information and training)</i>	30.06.2004	P.) Public environmental organization Edelweiss (Yemets N.)	-	-	-	UAH 100
1.9. Implementation of a rule Cut a tree plant three . <i>(legislative actions)</i>	30.06.2004	Kosiv District Council, schools of the district	-	-	-	-
Preservation of Precious Resources						
Preservation of Precious Resources						
Preservation of Precious Resources						
2.1. Closing sawmills that do not meet norms. <i>(legislative actions)</i>	30.07.2004	Inspector on environment and nature resources (Plikhtiak A.)	-	-	-	-
2.2. Annual planting of trees engaging educational institutions and organizations of the district. <i>(public programs)</i>	30.05.2004	The National Natural Reserve Hutsulshchinal, NGOs, schools of the district (Prorochuk V.)	UAH 1 500	-	-	-
2.3. Consideration of the issue of forest protection by local government upon request of NGOs (each three months). <i>(legislative actions)</i>	30.06.2004	Kosiv District Council, city, town councils	-	-	-	-
2.4. Establishment of a tree nursery. <i>(information and training)</i>	30.06.2004	The National Natural Reserve Hutsulshchinal, forestries	-	-	-	UAH 2 000
2.5. Check-points in each village to control traffic from forests. <i>(Economic incentives)</i>	30.06.2004	The National Natural Reserve Hutsulshchinal, city, town councils	-	-	-	UAH 1 000
2.6. Engaging citizens to preservation and protection of precious types of	30.06.2004	NGOs, schools, the National Natural	-	-	-	UAH 1 000

trees / establishment of nature protection objects / (public programs)		Reserve Hutsulshchina				
3.1. Establishment of a group of friends of forest. (information and training)	30.06.2004	Kosiv District Council, city, town councils	-	-	-	-
3.2. Monthly TV programs i Do not destroy Carpathian region. (information and training)	30.07.2004	Public Environmental Council of the Kosiv area (Barchuk V.)	-	-	-	UAH 300
3.3. Publishing information in local media on violations of the rules forest maintenance. (information and training)	30.06.2004	Regional charitable organization Public Initiatives, Hutsulski Krai magazine (Vovchak I., Havuka P.)	-	-	-	UAH 200
3.4. Publishing a picture album i Kosiv Forests i condition, protection, restoration. (information and training)	30.06.2004	Public Environmental Organization i Edelweis (Yemets N.)	-	-	-	UAH 100
3.5. Exchange of information on issues of reasonable use of forests with organizations of neighboring oblasts of Ukraine. (information and training)	30.06.2004	District Council, Regional charitable organization Public Initiatives	-	-	-	UAH 500
3.6. Implementation of a rule i Cut a tree i plant three. (legislative actions)	30.06.2004	District Council, NGOs and schools	-	-	-	-

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Issue: Unsatisfactory quality of potable water

1.1. Decision of local government on improving bacteriological parameters to meet existing norms. (legislative actions)	30.03.2004	Kosiv District Council, city, town councils	-	-	-	-
1.2. Closing low quality wells. (Economic incentives, technological norms)	30.06.2004	District Sanitary Agency	-	-	-	UAH 500
1.3. Sanitary cleaning of wells. (technological norms)	30.06.2004	District Sanitary Agency	-	-	-	UAH 600
1.4. Permanent inspections of wells and springs. (legislative actions)	30.06.2004	District Sanitary Agency	-	-	-	UAH 500
1.5. Inspection of maintenance of wells in neighborhoods with single family houses. (legislative actions)	30.06.2004	District Sanitary Agency	-	-	-	-
1.6. Monthly publications on reasonable water use in local media. (information and training)	30.06.2004	Regional charitable organization "Public Initiatives", "Hutsulski Krail magazine (Vovchak I., Havuka P.)	-	-	-	UAH 100
2.1. Improvement of financial and technical condition of the waterworks. Reconstruction of water distribution system. (Economic incentives, technological norms)	30.07.2004	District State Administration (Prorochuk L.)	-	UAH 100 000	-	-

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2.2. Standing commission controlling functions of the waterworks and sewage. (legislative actions)	30.07.2004	Kosiv District Council, city, town councils	-	-	-	-
2.3. A seminar for interested parties on issues of water supply. (information and training)	30.06.2004	Regional charitable organization «Public Initiatives»	-	-	-	UAH 1 000
2.4. Decision of local government on improving bacteriological parameters to meet existing norms. (legislative actions)	30.03.2004	Kosiv District Council, city, town councils	-	-	-	-
			UAH35000.	UAH100,000	UAH70,000	

Excerpt from Environmental Action Plan for City of Pavlograd

4. Description of priority environmental issues of the city.

1. Distortion of water balance in the territory of city.

The city of Pavlograd is located in a valley between the rivers Wolcha and Samara. Such location of the city has caused high natural table of underground water, and consequently, flooding of the lowest parts of its territory, especially during spring. However, the issue of flooding further aggravated and can cause catastrophic outcomes due to deterioration of the natural drainage systems, leaks of water mains, termination of operation of the Pavlograd water intake, periodic flooding, violation agricultural technologies of cultivation of protected strips of river banks. As a result, there locations in the vast territory of the city with stagnant water (basements), where activators of infectious diseases develop (mosquitoes, microbes, fungi), that negatively influence the quality of life and deteriorate housing. The polluted ground water from basements penetrates into the water supply systems and thus constitutes the secondary source of pollution of potable water. The issue of flooding affects economy; it causes significant material damage: housing and infrastructure deteriorate, household plots are destroyed.

2. Unsatisfactory quality of potable water.

About 80 % of citizens of the city of Pavlograd consume the potable water from the Dnipro - West Donbass canal. In spite of the fact that the water parameters meet the state standard for drinking water, it is not desirable to drink the water. Water treatment of water are outdated, the distribution system is worn and is the secondary source of pollution of potable water as it is distributed to consumers: water contains chloride organic substances that have negative impact on health. The city has resources underground potable water of high quality.

3. Pollution of the city with solid household wastes (SHW).

SHW from Pavlograd are taken to the Pavlograd landfill, which during many decades is actually an unauthorized dump in an old quarry. This object is of high sanitary - ecological danger as it does not meet requirements of landfill maintenance and operation: there is no insulating underlay, drainage, surveillance wells, impound, etc. The landfill is located in a flooded area near the Samara river with the terrain descending towards the river. Due to the factors above, there is pollution of soil and underground waters. Besides, there are lots of unauthorized dumps in the territory of the city. Wastes can be found along river banks, green zones, wastelands, cultivated forests. According to estimates, in 20 streets of the city there is 1,260 tons of wastes.

5. The purposes and tasks of the environmental action plan.

1. Purpose: To lower the groundwater table to its natural level of 1950-60ies. Termination of distortion of water balance in the territory of the city.

Tasks: 1. Restoration of old drainage systems and development of new ones.

2. Reduction of losses of water in the infrastructure by 20 %.

3. Restoration of wells of the Pavlograd Intake.

2. Purpose: Provision of quality drinking water to citizens.

Tasks: 1. To improve quality of potable water provided by the water works.
2. To provide to citizens quality water from aquifers, to develop backup sources of potable water.
3. To provide quality potable water to preschool and school institutions of the city.

3. Purpose: Introduction of a system of wastes management.

Tasks: 1. To re-arrange collection and storage of SHW.
2. To organize processing of SHW.

6. Ways of fulfilling the tasks and evaluation criteria.

In order to fulfill the tasks, the following categories of measures have been developed:

1. **Information and education for the public.** These measures are targeted at formation of ecological awareness of citizens of the community and their active participation in improvement of environment of the city of Pavlograd.
2. **Economic incentives.** They are expected to influence behavior of those who pollute environment, to establish material and moral incentives in order to prevent pollution.
3. **Public programs.** They imply direct participation of citizens in solution of certain environmental issues or holding educational events on environmental issues.
4. **Technological measures.** Design, construction, and operation of environmental objects.
5. **Legislative actions.** Development and approval of certain local legislative instruments within the existing powers.
6. **Other.** Measures that do not belong to the specified categories above.

Due to lack of time, resources means, and human resources, there was a need to choose from a number of suggested measures the ones that would have a relative advantages in achieving environmental purposes and objectives.

For this purpose, the following evaluation criteria have been chosen:

- Cost of implementation;
- Efficiency;
- Time of implementation;
- Safety;
- Recognition of the community;
- Legislative powers.

The criteria ensure establishment of an objective and transparent basis for decision-making. The criteria are not always of equal value, therefore the IBC has ranked them and later the ranking has been taken into account for the purposes of analysis of developed actions and determination of succession of their implementation.

7. Measures

Purpose: To lower the groundwater table to its natural level of 1950-60ies. Termination of distortion of water balance in the territory of the city				
#	Action	priority	term of implementation	implementation cost
1.	Personal notification of citizens whose land plots are adjacent to the drainage systems on their responsibility for preservation of such systems.	4	2 months	Up to UAH 1 ths.
Category of actions: Economic incentives				
1.	Competition for the best suggestion on development of the drainage system on a specific street with participation of citizens and enterprises.	5	6 months	UAH 1-10 ths.
Category of actions: public programs				
1.	Holding an action of planting trees on the banks of the river Hnezdki.	3	2 years	UAH 1-10 ths.
2.	Holding an action on cleaning drainages	3	1 month (annually)	UAH 1-10 ths.
Category of actions: Technological actions				
1.	Implementation of the project (Protection from flooding of the city of Pavlograd in the area of the river Hnezdka) (1 st part of construction).	7	5 years	over UAH 1 mn
2.	Development of a drainage system in districts adjacent to the river of Hnezdka with runoffs to the river.	6	5 years	over UAH 1 mn
3.	Development of the plan of planting and planting of trees along the restored stream of the Hnezdka river	5	2 years	UAH 1-10 ths.
4.	To introduce to the master plan of the city the system of existing drainage and storm drainage infrastructure and the ones that need to be constructed or restored in the city.	1	6 months	UAH 1-10 ths.
Category of actions: Legislative actions				
1.	To approve a plan of a stage by stage construction and restoration of drainage and storm drainage systems by the city council.	1	6 months	Up to UAH 1 ths.
2.	To develop and approve a decision on including representatives of the public to the land alienation commission at a city council session	2	3 months	Up to UAH 1 ths.
Category of actions: Informational actions				
1.	Establishment of the "hot line" at the City Hall on communal issues. Informing citizens through media on the need to be thrifty with water.	2	1 year	Up to 1 ths.
2.	To publish leaflets with explanation of the need to be thrifty with water.	1	1 year	Up to 1 ths.

3.	Holding lectures at educational institutions: ' Save water n save environment'.	4	1 year	Up to 1 ths.
4.	Information in media on proprietors of infrastructures, who fail to timely eliminate emergencies related to infrastructure.	4	1 year	Up to 1 ths.
5.	Expression of gratitude to managers who in timely manner eliminate leakages.	1	1 year	Up to 1 ths.
6.	Development and implementation of an informational campaign targeted at ???	1	1 year	Up to 1 ths.
Category of actions: Economic incentives.				
1.	To promote citizens' interest to independently replace basement pipes.	4	1 year	
2.	Installing water meters for citizens at the cost of the water supplier under condition of timely payment or pre-payment for consumed water.	2	1 year	
3.	To establish a loan opportunity for people installing meters	2	6 months	
Category of actions: Public programs.				
1.	To establish a network of public inspectors to survey communal infrastructures in neighborhoods.	3	6 months	Up to 1 ths.
Category of actions: Technological actions.				
1.	Replacement and repair of water infrastructure.		Long term - 20 years. Short term - 5years.	
Category of actions: Legislative actions.				
1.	Development and approval of the long term strategy of changing the structure of water consumption in the city (reduction of the share of the Dniper river through saving and increasing share of aquiferous water.	1	6 months	Up to 1 ths.
Category of actions: Other				
1.	To start a mechanism of administrative responsibility for untimely elimination of leakages.	1		Up to 1 ths.
2.	To develop a mechanism of public control on quality of provided water and sewage services.	3	6 months	Up to 1 ths.
3.	To establish a fund for reconstruction of water supply infrastructure	3	6 months	Up to 1 ths.
Category of actions: Information and education of citizens.				
-	-	-	-	-
Category of actions: Economic incentives.				
1.	Introduction of tax incentives at the local level for the proprietor of the intake provided it is renovated by the proprietor and provides water to citizens.	1	6 months	Up to UAH 1 ths.
Category of actions: Public programs.				
1.	Elimination of unauthorized dumps in the 2 nd area of sanitation protection of the Pavlograd intake by citizens and enterprises.	2	3 months	Btw. 10 and 100 ths.
Category of actions: Technological actions.				
1.	Development and implementation of projects of restoration of wells of the Pavlograd intake.	3	5 years	over UAH 1 mn
Category of actions: Legislative actions.				
1	Development and approval of long term strategies of changing a	1	6 months	Up to UAH 1

structure of water consumption in the city (reduction of the share of the Dniper river through saving and increasing share of aquiferous water).				ths.
Category of actions: other				
Purpose: Provision of quality potable water to citizens.				
No	Action	priority	Terms of implementation	Implementation cost
1.	Education of citizens of rules how to use chlorinated water (before implementation of different disinfection technologies).	1	1 year	Up to 1 ths.
2.	Informing citizens on quality of the water provided by the waterworks.	2	1 year	Up to 1 ths.
3.	Informing citizens of the dispatch-emergency service of the city.	2	1 year	Up to 1 ths.
4.	Informing citizens who reside in sanitation zones of the Pavlograd and Hnezdovsk sanitation zones of intakes on possible influence of their activities on the quality of underground water.	9	1 year	Up to 1 ths.
5.	To develop and implement an information campaign targeted at promotion of water meters.	5	1 year	Up to 1 ths.
Category of actions: Economic incentives				
1.	To conduct an internal audit of the waterworks in order to reduce energy consumption and water losses.	2	6 months	Up to 1 ths.
Category of actions: Public programs				
1.	Establishment of "hot line" on issues of potable water quality and condition of water infrastructure.	4	1 year	Up to 1 ths.
2.	Establishment of public control over potable water quality.	6	1 year	Up to 1 ths.
3.	Conduct polls of population on sources of potable water they use.	9	3 months	UAH1-10 ths.
4.	Holding events on cleaning of the 2 nd sanitary zone of the Pavlograd intake.	8	5 years	UAH10-100 ths.
5.	Establishment of a green zone in the territory of the 2 nd sanitary zone of the Pavlograd intake.	8	1 year	Up to 1 ths.
6.	Establish environmental teams of children.	6	1 year	Up to 1 ths.
Category of actions: Technological actions				
1.	To stage-by-stage replace water distribution and sewage infrastructure.	10	20 years	over UAH1 mn
2.	To plan and conduct replacement of piping in basements of housing with participation dwellers.	10	20 years	over UAH1 mn
3.	Introduce modern technologies of water disinfection.	10	20 years	over UAH1 mn

4.	To restore wells of the Pavlograd intake in the capacity that existed before.	10	10 years	over UAH1 mn
Category of actions: Legislative actions.				
1.	To transfer water works to the municipal property.	7	1 year	UAH100 ths -1 mn
2.	To transfer the Pavlograd intake to the municipal property.	6	1 year	over UAH1 mn
Category of actions: Other.				
1.	To check meters without disassembling.	4	1 year	
Category of actions: Information and education of citizens.				
1.	To inform citizens on advantages of aquiferous water (of checked quality)	2	1 year	Up to 1 ths.
2.	To inform on prevention of pollution of sanitary zones near wells.	3	1 year	Up to 1 ths
3.	To provide information of the sanitation agency to citizens on water quality in regular wells.	3	1 year	Up to 1 ths.
Category of actions: Economic incentives.				
1.	Provision of water from aquifers without payment.	2	done	Up to UAH 1 ths.
2.	Material incentives to people, who would monitor condition of regular wells.	5	1 year.	1-10 ths.
Category of actions: Public programs.				
1.	Organization of actions to clean and repair wells according to sanitary requirements.	6	1 year	1-10 ths.
2.	To appoint responsible people (among citizens upon their consent) who would monitor maintenance of wells.	4	1 year	Up to 10 ths.
Category of actions: Technological actions.				
1.	To develop a framework of placement of wells in the territory of the city (in view of citizens' needs and hydrology conditions.)	2	1 year	up to 1 ths.
2.	To stage-by-stage place wells in the territory of the city with participation of citizens and enterprises.	4	6 years	10-100 ths.
Category of actions: Legislative actions.				
1.	To approve the status of people responsible for maintenance of wells and annual incentives for them.	1	3 months	Up to 1 ths.
Category of actions: Other.				
1.	To hold a competition of the best design of wells.	6	1 year.	Up to 1 ths.
Category of actions: Information and education of citizens.				
1.	To educate teachers and parents on the necessity that children need consume quality potable water.	4	1 year	Up to 1 ths.
2.	Publication of a poster of water quality impact on human health.	4	1 year	up to 1 ths.
3.	To develop and hold a lesson on 'Thrifty water consumption by families'.	6 mos.	3 years	up to 1 ths.

4.	To develop and distribute a brochure: (Main rules of thrifty water consumption)	6 mos.	1 year	up to 1 ths.
Category of actions: Economic incentives				
1.	To ensure that a company or an organization that are willing to fully or partially provide quality water to schools and preschools would have advantages over other applicants in solution of their issues (allocation of a land plot, trade permit, etc.)	3	6 months	up to UAH1 ths.
Category of actions: Public programs				
1.	To discuss the issue of water quality for children in school and preschool institutions.	4	1 year	up to 1 ths.
2.	To poll children, parents, and educators on issues related to water quality.	7	1 year	up to 1 ths.
3.	To involve parents, students, and general public to organization of regime of water consumption in school and preschool institutions.	3	1 year	up to 1 ths.
4.	To engage students to solution of problems of organization of water consumption regime in schools.	4	1 year	up to 1 ths.
5.	Distribution of leaflets on potable water.	5	1 year	1- 10 ths.
6.	To conduct internal audit of water consumption in schools.	2	3 months	up to 1 ths.
7.	To develop recommendations on reduction of water consumption.			
Category of actions: Technological actions				
1.	Provision of pure potable water to pre-school and school institutions in special tanks.	2	1 year	10-100 ths
2.	Additional treatment on site: in pre-school and school institutions.	6	5 years	100 ths. - 1 mn
Category of actions: Legislative actions				
1.	To develop and approve a regulation on internal audit of the water works.	2	6 months	up to 1 ths.
2.	To develop and approve a regulation on internal audit of an enterprise, schools, hospitals, and other institutions	3	6 months	up to UAH1 ths.
Purpose: Introduction of a wastes management system				
#	Action	priority	Term of implementation	Implementation cost
1.	Regular media publications on wastes management. Extra-curricular classes Wastes n origin and ways to rid of them *	1	1 year	up to UAH1 ths.
2.	To inform citizens on sites they accept pre-processed wastes and the time they are open.	1	1 year	up to UAH1 ths.
3.	To inform citizens on sites they accept pre-processed wastes, assortment and prices.	4	1 year	1-10 ths.
4.	To borrow experience of other cities, streets, and apartment blocks with emphasis on economic gains.	4	1 year	
Category of actions: Economic incentives				
1.	Incentives for streets and neighborhoods for pre-processing of SHW.	8	1 year	1-10 ths.
2.	Lottery for vouchers for pre-processed wastes.	5	1 year	1-10 ths.

3.	To pay for pre-processed wastes according to a flexible scale.	3	1 year	up to 1 ths.
4.	To announce a bidding process for acceptance of O	2	1 year	up to 1 ths.
5.	To provide bonuses to street cleaners for pre-processed wastes.	2	1 year	1-10 ths.
6.	To promote establishment of small businesses on collection and processing of wastes.	2	1 year	1-10 ths.
Category of actions: Public programs.				
1.	Establishment of a hotline with an NGO on collection and utilization of SHW.	3	1 year	up to 1 ths.
2.	Establishment of coordination committees on SHW related issues in neighborhoods.	5	1 year	up to 1 ths.
3.	Establishment of school environmental teams.	3	1 year	up to 1 ths.
4.	Establishment of the public surveillance system on quality of services related to collection and utilization of SHW.	4	1 year	up to 1 ths.
Category of actions: Technological actions.				
1.	Introduction of a system of garbage collection: single family areas n a plan for a neighborhood; apartment blocks n based on the use of containers.	4	2 years	up to UAH1 ths.
2.	Use of color containers with covers to separate wastes.	7	1 year	10-100 ths
3.	Establishment of a network of SHW collection kiosks (including the npre-processed) covering all neighborhoods, including single family areas.	5	2 years	10-100 ths
4.	To introduce pre-processing technologies at the SHW kiosk.	5	1 year	10-100 ths
Category of actions: Legislative actions.				
1.	To review the job description of beautification foremen with HMUs.	2	2 months	up to 1 ths.
2.	To develop and approve a regulation on public control on the quality of municipal services.	2	6 months	up to 1 ths.
Category of actions: Other.				
1.	Development of a database on objects of SHW origin.	1	1 year	up to 1 ths.
Category of actions: Information and education of citizens.				
1.	Publication of printed materials on advantages of pre-processing of SHW with its further utilization.	7	1 year	1-10 ths
2.	To introduce a column 'Ecological bulletin' in the 'Zapadny Donbass' newspaper	5	1 year	up to 1 ths
3.	To establish 'Center for Environmental Education' on issues of SHW.	5	3 years	up to 1 ths
Category of actions: Economic incentives.				
1.	Local benefits to utilizing companies that accept pre-processed wastes at reasonable prices	3	1 year	up to 1 ths
2.	Development and approval a system of incentives for neighborhood committees for timely conclusion of contracts for collection of SHW	3	1 year	up to 1 ths
3.	Internal audit of a communal enterprise dealing with collection and utilization of SHW.	3	1 year	up to 1 ths
Category of actions: Public programs.				
1.	Polling citizens on wastes management.	7	1 year	up to 1 ths.
2.	Elimination of unauthorized dumps with participation of citizens.	3	1 year	1-10 ths.
Category of actions: Technological actions.				
1.	Construction of a sorting facility (processing facility).	7	3 years	over 1 mn

2.	Establishment of the special fleet for garbage collection and processed wastes	6	3 years	up to 1 mn.
Category of actions: Legislative actions				
1.	Appropriation of money for a new municipal enterprise.	2	6 months	1-10 ths.
2.	Organization and approval of a new municipal enterprise	1	3 months	up to 1 ths
3.	Development and approval of a regulation on internal audit of an enterprise on SHW collection and utilization	2	6 months	up to 1 ths

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Excerpts from the Environmental Action Plan for Raion of Svatove

4. Description of priority environmental issues of the Svativ area.

4.1. A problem of warehouses with unidentified poisonous chemicals.

The warehouses that were used for storing agricultural chemicals accumulated 23.81 tons of unidentified chemical substances (they are believed to be pesticides and herbicides). The warehouses are abandoned, their condition is unsatisfactory, containers are not tight anymore. Access to the warehouses is free. All this results in environmental contamination (soil, underground water, air). These warehouses are potentially dangerous for human health since the chemical substances cause malignant tumors and other diseases.

4.2. A problem of unauthorized dumps.

Dumping of solid wastes by enterprises and citizens in random places produced unauthorized dumps that accumulated about 1,200 tons of garbage. This type of pollution influences human health, and the sanitation condition in the area. Wastes are a potential source of epidemics. The volume of solid wastes (including in unauthorized dumps) constantly increases.

4.3. A problem of pollution of surface water.

Dumping household waste on the banks of ponds and rivers, no observance of water protection zones result in pollution of surface water, death of fish, crawfish, amphibia, dissemination of infectious diseases, and loss of picturesque natural areas.

5. The objective and tasks of the environmental action plan.

1. The objective: Elimination of threat of negative influence of chemicals on environment and human health

- Task: 1. To raise awareness and responsibility of the public
2. Neutralization of chemicals
3. Elimination of negative influence of warehouses where chemicals are kept on environment and human health

2. The objective: Clean area

- Task: 1. Organization of a system of collection and utilization of garbage
2. Reduction of volume of garbage in households and in production

3. The objective: Clean surface water of the Svativ area.

- Tasks: 1. To eliminate dumps on riverbanks.
2. Protection of water zones.
3. To restore natural self-regulation of rivers and ponds in the territory of the Svativ area.

6. Ways of implementation and evaluation criteria.

In order to implement the tasks, the following categories of actions have been developed:

1. Informing and training of the public.

These actions are aimed at formation of environmental awareness of citizens and active participation in improvement of the condition of environment of the Svativ area.

2. Economic incentives.

They should influence those, who pollute environment, to create material and moral incentives to prevent pollution of the environment.

3. Public programs.

They imply direct participation of citizens in solution of the identified environmental issues, information and educational actions on environmental issues.

4. Technological actions.

They imply designing, construction, and operation of environmental facilities.

5. Legislative actions.

They imply development and approval of the some instruments on the local level within the existing powers.

6. Other

These are actions that do not belong to any of the above categories.

The following evaluation criteria have been developed to select the most feasible actions:

Efficiency

Economic efficiency

Time

Safety

Public recognition

Recognition of the government

7. ACTIONS

Objective: Elimination of threat of negative influence of chemicals on environment and human health				
Category of actions: Informing and training of the public				
#	Actions	Priority	Time of implementation	Implementation cost
1.	Massive informing on negative impact on environment of poisonous chemicals that are stored in warehouses and necessity of their elimination	2	2 months	UAH1,000
2.	Holding seminars by members of the work group and specialists with managers and specialists of agricultural enterprises, local government employees, activists of NGOs, teachers from schools that are located in neighborhoods close to warehouses.	3	2 months	UAH500
3.	Educational work with citizens, participants of seminars, at public meetings in neighborhoods that are located close to the warehouses.	1	1 month	free
4.	Development and distribution of information calendars	4	2 months	UAH1600
5.	Holding lectures, classes in educational institutions	2	6 months	UAH1000
Category of actions: Economic incentives				
1.	Free medical examination of people from villages where the warehouses are located.	1	6 months	UAH 25000
2.	Imposing penalties for plundering the warehouses	1	1 month	free.
Category of actions: Public programs				
1.	To promote activities of the environmental patrols of the schools in the area	1	1 month	free
Category of actions: Legislative actions				
1.	Decisions by village councils on planned actions	1	2 months	free
Category of actions: Informing and training for the public				
1.	Informing citizens through media on activities targeted at neutralization of chemicals	1	1 month	UAH500
Category of actions: Economic incentives				
1.	A festivity for activists and participants of the activities on neutralization of chemicals	1	1 month	UAH2000
Category of actions: Technological actions				
1.	Neutralization of the poisonous chemicals by the way of pyrolysis in the city of Shostka.	1	3 months	UAH90000
Category of actions: Legislative actions				
1.	Decision of the Rayon Council on approval of the scheduled neutralization measures	1	2 months	free.
Category of actions: Informing and training for the public				
1.	Informing citizens through media on activities to eliminate the negative influence of warehouses where chemicals are kept on environment and human health	1	1 month	UAH500
Category of actions: Economic incentives				

1.	Awarding specialists and active participants of elimination of negative influence of the warehouses with health center vouchers	1	1 month	UAH4000
2.	Organization of special meals for specialists involved to works aimed at elimination of negative influence of the warehouses	1	1 month	UAH1000
Category of actions: Public programs n N/A				
1.	Putting banks around the warehouses	3	3 months	UAH30000
2.	Decontamination of the warehouses	2	2 months	UAH40000
3.	Putting warning and prohibition signs	1	2 months	UAH2000
Category of actions: Legislative actions				
1.	Decisions by village councils on approval of scheduled actions	1	2 months	Free
Objective: Clean area of unauthorized dumps				
#	Actions	Priority	Time of implementation	Implementation cost
1.	LEAP news on TV	1	Every month	UAH2500
2.	Media announcements on competition for projects to start a recycling enterprise	2	2 months	UAH50
3.	Media project on the Svativ radio	3	12 times a year	Free
4.	Regular coverage by the Svativ TV.	4	4 times a year	UAH1000
5.	Regular placement of articles in local newspapers	4	12 times a year	Free
6.	Informing citizens of the time and location of garbage collection, on hot lines at the radio station, and a permanent hot line of the Public Initiative	5	6 months	UAH2700
Category of actions: Economic incentives				
1.	Recognition of people in newspapers and on TV	1	6 months	UAH1000
2.	Organization of summer camps for young people who promote elimination of unauthorized dumps	2	1 month	UAH10000.
3.	Gifts for the hotline volunteers and those, who provide information for project development	4	4 months	UAH800
4.	Reduction of payment for land by 50% for the enterprises that utilize garbage	5	Permanently	-
5.	To arrange leisure events for citizens (government sponsored)	7	3 months	UAH8000
Category of actions: Technological actions				
1.	Installing containers for sorting of garbage	2	3 years	UAH500 000
2.	Organization of garbage collection in single family houses neighborhood based on needs.	1	3 months	Free
Category of actions: Public programs				
1.	Establishment of coordination committees on garbage issues in communities	1	1 month	Free
2.	To provide a forum for everybody to express opinion on collection and utilization of garbage in the area	2	3 times a year	UAH1500

3	Setting youth groups	3	Month	Free
4	Development of a database on modern recycling technologies, relevant experience of other communities	4	Month	Free
5	Development of a hotline by the Slobozhanska Initiative NGO on collection and utilization of garbage	5	480 hours a year	Free

Category of actions: Legislative actions

1.	Development and approval of a system of incentives for citizens, neighborhood heads, councilors	1	4 months	Free
2	Legislative approval of the communal services	2	4 months	Free
3	Search for finance to re-organize the area's communal services enterprise	3	6 months	Free
4	Local finances for reorganization of housing and communal services	3	6 months	Free

Category of actions: Informing and training for the public

1	Regular placement of articles in local newspapers	1	4 times a year	free.
2	Commercial on the Svativ TV channel	2	Permanently	UAH1000
3	Informing citizens through leaflets how to achieve the objective	3	4 times a year	UAH8000

Category of actions: Public programs

1.	Polling citizens on the garbage related topics	1	1 month	UAH400
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Category of actions: Economic incentives

1.	Organization of summer health centers for active participants who distribute leaflets	2	1 month	UAH8000
2	To provide finance to recognize active participants	1	1 month	UAH1200

Objective: Clean surface water of the Svativ area.

Category of actions: Informing and training for the public

#	Action	Priority	Time of Implementation	Implementation cost
1.	A series of 5 articles in the newspaper (Novyny Svativshynyi) in 2003 on the issue of unauthorized dumps along the Krasna river and water reservoirs of the Svativ area.	3	3 months	up to UAH1 ths
2.	Promotional and information radio programs on unauthorized dumps on banks of water reservoirs and rivers of the Svativ area (15 minutes, Svativ radio).	1	1 month	up to UAH1 ths
3.	Lectures in Svativ schools and other educational institutions in the area.	5	1 month	UAH1-10 ths
4.	Meetings and personal information for citizens of Svativ on the rules of garbage collection.	1	1 year	UAH1-10ths
5.	Putting prohibiting and information signs along the Krasna river and water reservoirs of the Svativ area.	4	2 months	UAH1-10 ths
6.	TV programs on pollution of surface water in the area.	2	4 months	UAH1-10 ths

Category of actions: Economic incentives

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Category of actions: Public awareness				
1	A tour of students of the Svativ area along the Krasna river to pick garbage.	1	10 days	UAH1-10 ths
2	To organize cleaning events to clean river banks.	1	1 year	UAH10-100 ths
Category of actions: Technological actions				
1	Organization of garbage transportation to proper landfills through establishment of a municipal enterprise to serve the area; equal co-founders of the enterprise will be stakeholders of the Svativ area communities.	1	3 months	UAH100-500 ths.
Category of actions: Legislative actions				
1	Consideration of the action plan on beautification and garbage collection near water reservoirs by rayon council, city council, and village councils.	1	1 month	up to UAH1 ths
2	To assign enterprises and agricultural companies to monitor the territories near reservoirs in order to ensure order.	1	1 month	up to UAH1 ths
Category of actions: Other				
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Table 2				
1	A series of three articles in the newspaper "Novyny Svativshynyl" on the issue of protection zones near the Krasna river and water reservoirs of the Svativ area.	2	3 months	up to UAH1 ths
2	Promotional and information radio programs on the issue of water protection zones on banks of water reservoirs and rivers of the Svativ area.	1	1 month	up to UAH1 ths
3	Holding seminars by employees of the agriculture and land resources departments of the Svativ area for chief agronomists of agricultural companies on issues of nature protection zones.	3	1 year	UAH1-10 ths
4	TV programs on water protection zones near the Krasna river and reservoirs of the Svativ area.	2	1 year	UAH1-10 ths
5	Meetings and personal information for citizens of Svativ on the rules of water protection zones and anti-erosion measures.	5	1 year	up to UAH1 ths
6	Meetings of village citizens with representatives of village councils.	4	1 year	up to UAH1 ths
Category of actions: Economic incentives				
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Category of actions: Public awareness				
1	To establish a network of public inspectors to monitor the condition of water protection zones	2	3 months	up to UAH1 ths
Category of actions: Technological actions				
1	Planting trees on the area of 10 hectares along river banks	2	1 year	UAH10-100 ths
2	Bucking of areas around water reservoirs and rivers - 350 hectares.	2	1 year	UAH100-500 ths
3	Plowing fields across slopes	1	1 year	up to UAH1 ths
4	Planting forest shelter-belts in eroded areas.	4	2 months	over UAH1 mn
5	Sanitary cutting in shelter-belts - 80 hectares.	3	2 years	UAH10-100 ths

1	Approval of the action plan on water protection zones by rayon, city, and village councils.	1	1 months	up to UAH1 ths
1	Twice a year, with assistance of the stakeholders' group, to analyze the condition and threats of the water protection.	1	5 years	UAH1-10 ths
1	A series of 3 articles in the newspaper 'Novyny Svativshyni' on the issue of disappearing reservoirs in the Svativ area and lack of natural self-regulation	2	1 week	up to UAH1 ths
2	Promotional and information radio programs on the issue of disappearing reservoirs in the Svativ area and lack of natural self-regulation.	1	1 year	up to UAH1 ths
3	Meetings of village citizens with representatives of village councils.	3	1 year	up to UAH1 ths
1	Organization of a retreat for active participants of cleaning springs and reservoirs, festivities near cleaned springs	1	1 week	up to UAH1 ths
1	A tour of 9-11 grade students of the Svativ area along the Krasna river to clean the banks and restore self-regulation.	2	10 days	UAH1-10 ths
2	To organize cleaning events to clean springs to restore their natural self-regulation.	1	1 year	UAH1-10 ths
1	To put fences around springs and information signs.	1	1 year	UAH10-100 ths
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