

POLAND: A CASE STUDY ON COMMITMENTS-RELATED BEST PRACTICE OR LESSONS LEARNED IN WATER

1. Which specific WSSD or Agenda 21 commitment does your case study address?

The study address the 18.50 (b) of Agenda 21 and the 26c) commitment of Johannesburg Plan of Implementation (JPOI) related to improvement of efficient use of water resources.

2. Please briefly describe the essential characteristics of the case study you wish to share including the nature of activities undertaken.

The name of the study is as follows: “Water Saving Experimental Program in the Region of Radom Municipality in Years 1994-2000”.

The pilot project commencement: On 9 April 1994, and agreement on implementing the pilot project within the National Action Program on Environmental Protection was signed in Radom.

The Parties to the agreement:

- Institute for Sustainable Communities in Vermont, USA;
- Institute for Eco-development in Warsaw;
- Radom Municipality;
- Vivode of Radom.

The agreement was signed in the presence of a representative of the Ministry of the Environment in Warsaw.

As a result of the signed agreement and on the initiative of local community and Radom Corporation Social Committee for Eco-development of Radom (*Spoleczny Komitet Ekorozwoju Radom* – SKER) was established. It was a public body with a primary goal to identify environmental problems in the region, to work out and action plan for them and to achieve gradual improvement of the natural environment in the area. The SKER, taking into account the main priorities of the city, decide that the first of the problem is ‘louvered level of subterranean water and waning of surface runoffs’. According to this decision the actions limiting consumption of drinking water was made.

The main goal of the project:

- decrease of the drinking water consumption.

The other goals of the project:

- strengthen awareness of local community as to the need of water saving and the possibilities to technical and organizational facilities (educational program);
- increase the local government interests in the importance of rational water management in business planing and running;
- saving of energy use by water consumption and sewage reduction, and in turn decrease refuse and emission into the air;
- promotion of Agenda 21 and City of Radom.

The course of the project: To begin with, a questionnaire was sent out to citizens through the local media and offices of housing cooperatives in which they could volunteer their participation in the program. Several thousand respondents wished to take part.

In the meantime, action pursuant to law on public orders was taken to choose compatibility with commonly used plumbing fixtures, and the price. In the tendering procedure an offer was chosen in which the contractor would supply a three-part kit of two aerators and a shower-head. The set was relatively cheap and according to technical data had capacity to decrease water consumption by 20-40%.

In the educational program Radom inhabitants received information on advantages of using water saving devices and other possibilities of saving water.

Then, 1806 kits of water saving devices were distributed among the willing participants. They agreed to use the device in their houses for one year. After that time they would keep them as their own and could continue using them in available through housing cooperatives to evaluate the program. Collected information was compared with consumption data in the year preceding device installation thus providing information for the present report.

Program results

- 1) water consumption drop was at the level of 2% - 28.8%

Conclusions:

- 1) In one year of the program total 23 023 (twenty thousand and twenty three) cubic meters of drinking water was saved. The quality of energy saving devices, their operational reliability with user awareness allow us to suppose that in the years to come economical results would be much greatens.
- 2) The value of saved amounts to PLZ 51 732 (about 14 000 USD) as per obligatory in August 2000 price of water and sewage disposal from individual recipients.
- 3) Average drop of water consumption per households participating in the program was 12, 75 cubic meters.
- 4) Considering the cost of device and the value of the average household water drop, the cost of the device will be depreciated after 3,5 years.
- 5) Compiled data suggest significant differences in water consumption depending on housing cooperative. Summed up results of four entities indicate increase in average water consumption following water – saving assembly. However, the results come from fewer apartments, which could mean that the outcome could have been caused by some other circumstances, independent of water saving assembly. In big entities where analyzed outcome referred to hundreds of apartments drop in average water consumption was regularity.

3. Please explain the nature and characteristics of particular challenges and constraints faced, if any.

No particular challenges and constraints were faced.

4. What are the lessons learned in the process, positive and/or negative?

Obtained water decrease was lower than capacity rates given by the manufacturer. Still the device performance is highly dependent on the way water is used by consumers. From that it is possible to conclude that further educational programs for the device users will strengthen their awareness and in the end may change their habits.

5. What has been the impact of such a case in the area(s) concerned?

As regards anticipated goals of the experimental program it should be stated that both the recorded decrease in drinking water consumption and in industrial water consumption from subterranean water stopped the process of “depression funnel” expansion in the area of Radom. It

is confirmed by systematic research conducted by specialized units monitoring the level of subterranean waters.

In addition, environmental knowledge and awareness of local community has increased. It can be seen in proposals and complaints sent to the City Office, in which environmental problems and pro-ecological suggestions are precisely named and described, and wide interest of inhabitants in the issue of water saving is also noteworthy. The City Office effects investments and plans new steps in water management in order to improve it.
