

## 2.4. Environmental Questionnaire

### 1. General Status of the Environment

What is the general status of the environment in your Town or Village? Please choose **one** from the following.

- a) The environment is well-preserved.
- b) The environment is adequately preserved.
- c) There are some environmental problems.
- d) Environmental problems exist widely.
- e) Difficult to answer
- f) Other (please describe below)

### 2. Kinds of Environmental Problems

From the following list please circle all relevant kinds of environmental problems that occur in your town or village.

- 1. Air pollution due to stationary sources such as factories
- 2. Air pollution due to mobile sources such as automobiles and agricultural machines
- 3. Smog
- 4. Smoke problem from outdoor burning (eg of waste, straw)
- 5. Water pollution due to industrial wastewater
- 6. Water pollution due to domestic wastewater
- 7. Water pollution due to agriculture
- 8. Water pollution due to intensive livestock rearing
- 9. Eutrophication (over abundance of algae) of ponds and lakes
- 10. Groundwater contamination
- 11. Reduction or drying up of spring waters
- 12. Soil contamination caused by industrial activities
- 13. Soil erosion
- 14. Land subsidence caused by mining, by groundwater extraction or other artificial causes
- 15. Noise and vibration caused by industrial activities (such as factories, construction and quarrying)
- 16. Noise and vibration caused by motor vehicles or trains
- 17. Noise and vibration caused by commercial activities (such as shops and restaurants)
- 18. Noise caused by neighbours
- 19. Offensive odour (bad smell) caused by industries
- 20. Offensive odour caused by agriculture or intensive livestock breeding

21. Offensive odour caused by commercial activities or neighbors
22. Adverse effects caused by spraying of agricultural chemicals (eg pesticides)
23. Increase of domestic solid waste
24. Increase of non-hazardous industrial waste
25. Increase of hazardous industrial waste
26. Illegal dumping of waste or random disposal of rubbish by people ("fly-tipping")
27. Loss of vegetation/greenery in the neighbourhood(such as meadows and forests)
28. Decline in wild birds and animals
29. Change (worsening) of natural landscape or other environmental attributes due to urban expansion (house-building)
30. Change (worsening) of natural landscape or other environmental attributes due to industrial expansion
31. Change (worsening) of natural landscape or other environmental attributes due to mining or quarrying
32. Change (worsening) of natural landscape or other environmental attributes due to other development activities
33. Blocking of sunlight or free-movement of air by new buildings, etc.
34. Difficulty in preserving historical buildings and streets
35. Shortage of parks and public squares
36. Danger of walking in narrow streets due to automobile traffic
37. No significant environmental problem
38. Others (please specify below)

### 3. Desired Environment

How would you like to see the environmental status of your Town or village in the future? Please put in order of priority 5 items from the following. (The item assigned the number 1 is regarded as being of the highest priority). **RANK** (1,2,3...)

- a) Beautiful natural environment with forests, rivers, etc.
- b) Refreshing environment without blocking of sunlight and airflow
- c) Able to enjoy traditional culture
- d) Able to enjoy new culture
- e) Healthy environment without pollution
- f) Characterized by humane atmosphere
- g) Children can play safely
- h) Old people can live without anxiety
- i) Characterized by lively young people
- j) Good network of well-maintained roads and streets
- k) Good system of public transport
- l) Convenience in shopping with availability of wide variety of goods
- m) Safety from natural disaster
- n) Sufficient, well-managed parks and public squares
- o) Prosperous with tourists
- p) Secure employment
- q) Others (please specify)

### 4. Environmental Awareness of the Public

Please choose the most appropriate **one** from the following concerning the general awareness of the public in your town or village toward environmental issues.

- a) Highly aware
- b) Fairly aware
- c) Difficult to judge
- d) Rather unaware
- e) Unaware

### 5. Attitude of the Public Towards Participating in Environmental Protection Activities

Please choose the most appropriate **one** from the following concerning the attitude of the public in your town or village towards participation in activities aimed at the protection and improvement of the environment. Eg Prepared to spend some time on environmental activities; use public transport instead of private car when available; separate different types of waste for recycling.

- a) Willing to participate even with some degree of sacrifice of an ordinary lifestyle.
- b) Willing to participate as long as it does not affect ordinary life.
- c) Convenience in life is the first priority.
- d) Other (please describe below):-

### 6. Obstacles to the Promotion of Environmental Protection

What are the obstacles for promoting environmental protection and improvement in your town or village? Please select **all** applicable items from the following and rank in order of importance. (The item assigned the number 1 is regarded as being the most serious obstacle).

**RANK (1,2,3...)**

- a) Insufficient number of suitable staff
- b) Insufficient budget (or other sources of funding)
- c) Insufficient technology and equipment
- d) Poor public awareness
- e) Lack of information
- f) Inadequate legal provisions
- g) Others (please describe below)

#### 7. Priority Between Environmental Protection and Economic Development

Which **one** of the following is closest to your views concerning the priority between environmental protection and economic development?

- a) Environmental protection is clearly the first priority.
- b) Greater emphasis should be placed on environmental protection than on economic development.
- c) Difficult to choose
- d) Greater emphasis should be placed on economic development than on environmental protection.
- e) Economic development is clearly the first priority.
- f) Other (please describe below).

#### 8. Implementing Bodies for Environmental Protection

Who or which bodies do you think should play the central role in the protection and improvement of the environment in your Town or village? Please select one or more from the following and rank in order of importance. (The item assigned the number 1 is regarded as being the most important). **RANK (1,2,3...)**

- a) State Administration (Kraj and Okres; Ministry of Environment).
- b) Municipalities
- c) Commercial Enterprises
- d) General public
- e) All four of the above in cooperation
- f) Other (please specify)

#### 9. Concern About Global Environmental Problems

Which of various global environmental problems are you concerned about most? Please rank **five (5)** from the following. (The item assigned the number 1 is regarded as being of the highest priority). **RANK (1,2,3...)**

- a) Global warming
- b) Acid rain (acid precipitation)
- c) Depletion of the ozone layer
- d) Destruction of tropical forests
- e) Decrease of wild animals
- f) Desertification
- g) Pollution of the seas

- h) Transboundary transport of toxic and hazardous wastes
- i) Environmental pollution in developing countries
- j) Other (please specify)

10. Environmental Protection Measures Implemented in the Past

In your Town or village, what kinds of environmental protection/improvement measures were implemented in the last 5 years. Please select **all** applicable measures from the following. If available, please attach brief details of projects, expenditure on each and source of funding (eg state budget, local taxes, local business or community groups).

- a) Air pollution control measures
- b) Water pollution control measures
- c) Noise and vibration control measures
- d) Offensive odor control measures
- e) Land subsidence control measures
- f) Soil pollution control measures
- g) Soil erosion control measures
- h) Measures to reduce the quantity of solid wastes
- i) Measures to promote waste recycling
- j) Tree-planting or measures for its promotion
- k) Nature conservation measures (to protect plants, animals and their habitats)
- l) Cultural conservation measures (to protect cultural monuments etc)
- m) Environmental education programmes
- n) Others (please describe below)

11. Desired Measures

For the environmental protection and improvement of your town or village, what kinds of measures do you want to promote? Please choose **five (5)** items from the following.

- a) Introduction of pollution control technologies (air quality, water quality, soil quality, etc.)
- b) Promotion of energy/resource saving
- c) Recycling of waste
- d) Effective utilization of water, such as utilization of rain water
- e) Utilization of renewable energy such as solar energy and wind energy
- f) Control or prohibition of use of CFCs (freon) and of other chemicals which destroy the ozone layer
- g) Control of emission of carbon dioxide (CO<sub>2</sub>) and other gases causing global warming
- h) Control of emission of sulphur dioxide (SO<sub>2</sub>) and other gases causing acid rain
- i) Preservation of the existing natural environment
- j) Restoration (revitalisation) of damaged environments
- k) Promotion of learning and education on the environment
- l) Encouraging/sponsoring/supporting persons capable of promoting environmental protection/improvement
- m) Promotion of environmentally-friendly life style.
- n) Promotion of eco-tourism
- o) Strengthening the system of environmental impact assessment and promotion of its implementation
- p) None
- q) Other (please specify)

## 12. Expectations of Higher Administrative Bodies

What do you expect from the State (eg Slovak Environment Agency), Kraj or Okres administrations for promotion of environmental protection/improvement activities in your Town or village? Please select and rank **five** from the following. (The item assigned the number 1 is regarded as being of the highest priority). **RANK (1,2,3...)**

- a) Development of a legal system and policies that clarify the direction of environmental protection/improvement
- b) Development of regional environmental management plans (eg Environmental Action Plans)
- c) Implementation of concrete projects for protection and improvement of the environment
- d) Providing information concerning the environment
- e) Providing learning courses and seminars concerning the environment
- f) Financing of, and favourable taxation for, activities concerned with environmental protection/improvement
- g) No expectation
- h) Other (please specify)

## 13. Role of Municipalities

What do you regard as the main roles of Municipalities in Environmental Management? Please select and rank as many as you like from the following. (The item assigned the number 1 is regarded as being of the highest priority). **RANK (1,2,3...)**

- a) Development of and enforcement of bye-laws that support environmental protection/improvement
- b) Development of local environmental management plans (or Agenda 21)
- c) Implementation of concrete projects for protection and improvement of the environment
- d) Providing information concerning the environment
- e) Financing of, and favourable taxation for, activities concerned with environmental protection/improvement
- f) No expectation
- g) Other (please specify)

## 14. Environmental Education

What do you think is the most effective means of promoting environmental awareness and learning in your town or village? Please choose and rank **three (3)** from the following. (The item assigned the number 1 is regarded as being of the highest priority). **RANK (1,2,3...)**

- a) Providing information materials concerning the environment
- b) Enlightenment and popularization by providing learning courses and seminars
- c) Enlightenment and popularization by providing pamphlets
- d) Improvement of environmental education in schools
- e) Establishment of a center for environmental education
- f) Encouraging/sponsoring/supporting trainers for environmental education
- f) Support for activities of non-governmental bodies
- h) Other (please describe)

15. Please add below any other comments you would like to make regarding environmental management in your town or village in particular, or to Slovakia as a whole or on a global scale.

## 2.5 Results of the Questionnaire

Face page analysis:

### Reply Status:

No. of Distribution		No. of Replied	Ratio
Mesto	16	11	68.8%
Obec	252	87	34.5%
Total	268	98	36.6%

### Number of Staff Employed by Municipalities

No. of Employee	No. of Obec / Mesto	Ratio
1	9	9.2%
2	23	23.5%
3	15	15.3%
4	12	12.2%
5	3	3.1%
6 to 10	16	16.3%
11 to 15	3	3.1%
16 to 20	1	1.0%
21 to 25	3	3.1%
26 to 30	1	1.0%
more than 31	4	4.1%
No answer	8	8.2%
Total	98	100.0%

**Number of Staff in Environmental and Public Health Section**

No. in EPH Sector	No. of Obec / Mesto	Ratio
0	69	70.4%
1	11	11.2%
2	3	3.1%
3	4	4.1%
4	2	2.0%
6	1	1.0%
7	1	1.0%
N/A	7	7.1%
Total	98	100.0%

**Q1. General Status of the Environment**

RANK	ANSWERS	COUNT	%
1	c) There are some environmental problems.	47	48%
2	b) The environment is adequately preserved.	30	31%
3	d) Environmental problems exist widely.	11	11%
4	a) The environment is well-preserved.	9	9%
5	e) Difficult to answer	1	1%
	<b>TOTAL</b>	<b>98</b>	<b>100%</b>



**Q2. Kinds of Environmental Problems**

Issue No.	Category	Issue	Count	Rank	Each %	Sub-total	%		
1	Air poll.	factories	18	12	3.1	90	15.3		
2		cars	35	5	6.0				
3		smog	7	24	1.2				
4	Air poll. (smoke)	outdoor burning	30	8	5.1	150	25.6		
5	Water poll.	industrial w.w.	8	21	1.4				
6		domestic w.w.	56	2	9.5				
7		agriculture	30	7	5.1				
8		livestock	23	9	3.9				
9		eutrophication	10	19	1.7				
10	Grounwater poll.		19	11	3.2				
11	Water drying up	spring	4	31	0.7				
12	Soil poll.	industrial	2	35	0.3			26	4.4
13	Soil erosion		17	13	2.9				
14	Land subsidence		7	23	1.2				
15	Noise	industrial	6	26	1.0	44	7.5		
16		vehicles	30	6	5.1				
17		commercial	3	34	0.5				
18		neighbours	5	27	0.9				
19	Odour	industrial	4	30	0.7	53	9.0		
20		agriculture	41	4	7.0				
21		commercial	8	20	1.4				
22	Spraying chemicals	agriculture	10	18	1.7	10	1.7		
23	Solid waste	domestic	47	3	8.0	114	19.4		
24		industrial	4	29	0.7				
25		hazardous	1	38	0.2				
26		fly-tipping	62	1	10.6				
27	Loss of greenery		16	15	2.7	16	2.7		

28	Decline in wildlife		16	14	2.7	16	2.7
29	Landscape change	urban expansion	4	28	0.7	14	2.4
30		industrial	1	37	0.2		
31		mining/quarrying	6	25	1.0		
32		others	3	33	0.5		
33	Sunlight blocking by new building		1	36	0.2	1	0.2
34	Preservation of historical building		11	17	1.9	11	1.9
35	Shortage of parks and public squares		7	22	1.2	7	1.2
36	Danger in streets by automobile traffic		20	10	3.4	20	3.4
37	No significant environmental problems		3	32	0.5	3	0.5
38	Others		12	16	2.0	12	2.0
Total			587		100.0	587	100.0

### Q3. Desired Environment

RANK	ITEMS	1st	2nd	3rd	4th	5th	Point*	%
1	e) No pollution	53	23	5	3	2	380	26.5%
2	a) Good natural env.	19	10	6	3	5	164	11.4%
3	f) Humane atmosphere	3	23	11	7	7	161	11.2%
4	p) Secure employment	12	8	12	5	16	154	10.7%
5	n) Parks and public squares	1	6	11	16	5	99	6.9%
6	j) Good roads/streets	2	3	13	12	4	89	6.2%
7	m) Safe from natural disaster	1	6	4	8	6	63	4.4%
8	k) Good public transport	1	2	7	6	5	51	3.6%
9	h) No anxiety for olds	0	1	10	6	4	50	3.5%
10	g) Safe for children	0	6	3	4	8	49	3.4%
11	l) Lively youngs	0	3	5	7	8	49	3.4%
12	c) Traditional culture	2	1	5	3	7	42	2.9%
13	d) New culture	1	3	2	2	2	29	2.0%
14	o) Prosperous with tourists	0	0	0	9	11	29	2.0%
15	l) Variety of goods	0	0	1	4	2	13	0.9%
16	b) No sunlight blocking	0	1	1	0	1	8	0.6%
17	q) Others	1	0	0	0	0	5	0.3%
	TOTAL	96	96	96	95	93	1435	100.0%

\* Point = (1st x 5) + (2nd x 4) + (3rd x 3) + (4th x 2) + (5th x 1)

### Q4. Environmental Awareness of the Public

RANK	ANSWERS	COUNT	%
1	d) Rather unaware	56	57.1%
2	c) Difficult to judge	28	28.6%
3	b) Fairly aware	13	13.3%
4	a) Highly aware	1	1.0%
5	e) Unaware	0	0%
	Total	98	100.0%

**Q5. Attitude of the Public towards Participating in Environmental Protection Activities**

RANK	ITEMS	COUNT	%
1	b) Willing to participate as long as it does not affect ordinary life.	68	69.4%
2	c) Convenience in life is the first priority.	15	15.3%
3	d) Others	8	8.2%
4	a) Willing to participate even with some degree of sacrifice of an ordinary lifestyle.	7	7.1%
	TOTAL	98	100.0%

**Q6. Obstacles to the Promotion of Environmental Protection**

RANK	ITEMS	1st	2nd	3rd	4th	5th	Point*	%
1	b) Insufficient budget	75	12	8	1	2	451	35.2%
2	d) Poor public awareness	12	21	16	17	5	231	18.0%
3	a) Insufficient number of staff	2	20	25	12	6	195	15.2%
4	c) Insufficient technology/equip.	4	21	18	15	4	192	15.0%
5	f) Inadequate legal provision	4	11	13	5	9	122	9.5%
6	e) Lack of information	1	6	3	7	24	76	5.9%
7	g) Other	0	2	0	2	2	14	1.1%
	TOTAL	98	93	83	59	52	1281	100.0%

\* Point = (1st x 5) + (2nd x 4) + (3rd x 3) + (4th x 2) + (5th x 1)

**Q7. Priority between Environmental Protection and Economic Development**

RANK	ANSWERS	COUNT	%
1	a) Environmental protection is clearly the first priority.	34	34.7%
2	b) Greater emphasis should be placed on environmental protection than on economic development.	30	30.6%
3	f) Others	11	11.2%
4	d) Greater emphasis should be placed on economic development than on environmental protection.	9	9.2%
5	c) Difficult to choose	8	8.2%
6	e) Economic development is clearly the first priority.	6	6.1%
	TOTAL	98	100.0%

**Q8. Implementing Bodies for Environmental Protection**

RANK	ITEMS	1st	2nd	3rd	4th	5th	Point*	%
1	e) All of above in cooperation	44	5	1	4	9	260	27.0%
2	b) Municipalities	32	19	7	1	0	259	26.9%
3	a) State administration	17	24	5	4	3	207	21.5%
4	d) General public	5	6	22	13	3	144	15.0%
5	c) Commercial enterprises	0	3	13	14	6	85	8.8%
6	f) Others	0	0	2	0	1	7	0.7%
	TOTAL	98	57	50	36	22	962	100.0%

\* Point = (1st x 5) + (2nd x 4) + (3rd x 3) + (4th x 2) + (5th x 1)

**Q9. Concern About Global Environmental Problems**

RANK	ITEMS	1st	2nd	3rd	4th	5th	Point*	%
1	c) Depletion of the ozone layer	42	25	18	9	2	384	26.4%
2	a) Global warming	25	20	24	7	5	296	20.4%
3	b) Acid precipitation	19	18	18	18	8	265	18.2%
4	d) Destruction of tropical forests	6	20	14	19	5	195	13.4%
5	g) Pollution of the seas	1	7	8	14	22	107	7.4%
6	e) Decrease of wild animals	1	2	9	10	16	76	5.2%
7	h) Transboundary toxic wastes	1	4	4	10	14	67	4.6%
8	l) Poll. in developing countries	3	2	3	1	10	44	3.0%
9	f) Desertification	0	0	0	6	7	19	1.3%
	TOTAL	98	98	98	94	89	1453	100.0%

\* Point = (1st x 5) + (2nd x 4) + (3rd x 3) + (4th x 2) + (5th x 1)

**Q10. Environmental Protection Measures Implemented in the Past**

RANK	ITEMS	COUNT	%
1	h) Measures to reduce the quantity of solid wastes	67	19.9%
2	j) Tree-planting or measures for its promotion	47	13.9%
3	i) Measures to promote waste recycling	46	13.6%
4	b) Water pollution control measures	38	11.3%
5	l) Cultural conservation measures (to protect cultural monuments etc)	34	10.1%
6	a) Air pollution control measures	29	8.6%
7	k) Nature conservation measures (to protect plants, animals and their habitats)	23	6.8%
8	n) Others (please describe below)	12	3.6%
9	d) Offensive odor control measures	10	3.0%
10	m) Environmental education programmes	10	3.0%
11	c) Noise and vibration control measures	7	2.1%
12	f) Soil pollution control measures	7	2.1%
13	g) Soil erosion control measures	5	1.5%
14	e) Land subsidence control measures	2	0.6%
	Total	337	100.0%

**Q11. Desired Measures**

RANK	ITEMS	COUNT	%
1	c) Recycling of wastes	74	16.1%
2	l) Preserve natural environment	46	10.0%
3	j) Revitalise damaged environ.	46	10.0%
4	m) Environment friendly life style	42	9.1%
5	n) Promotion of eco-tourism	40	8.7%
6	b) Energy / resources saving	37	8.0%
7	k) Env. Learning and education	37	8.0%
8	g) Control of CO2 emissions	28	6.1%
9	l) Fostering capable persons	27	5.9%
10	a) Pollution control tech.: air, water, soil	23	5.0%
11	h) Control of SO2, etc. (acid rain)	16	3.5%
12	d) Effective water utilization	15	3.3%
13	e) Renewable energy utilization	14	3.0%
14	f) Control of CFCs (ozone layer)	13	2.8%
15	o) Environmental impact assess.	1	0.2%
16	p) None	1	0.2%
	TOTAL	460	100.0%

**Q12. Expectations of higher Administrative Bodies**

RANK	ITEMS	1st	2nd	3rd	4th	5th	Point*	%
1	f) Economic measures for env.	40	22	12	13	4	354	25.3%
2	c) Implement concrete projects	18	29	22	13	4	302	21.6%
3	a) Legal system and policies	21	11	19	11	17	245	17.5%
4	b) Development of REMP	9	11	21	19	15	205	14.6%
5	d) Provide environ. information	6	17	11	15	20	181	12.9%
6	e) Provide environ. education	2	6	7	16	21	108	7.7%
7	g) No expectation	1	0	0	0	0	5	0.4%
	<b>TOTAL</b>	<b>97</b>	<b>96</b>	<b>92</b>	<b>87</b>	<b>81</b>	<b>1400</b>	<b>100.0%</b>

\* Point = (1st x 5) + (2nd x 4) + (3rd x 3) + (4th x 2) + (5th x 1)

**Q13 Role of Municipalities**

RANK	ITEMS	1st	2nd	3rd	4th	5th	6th	Point*	%
1	c) Implement concrete projects	28	30	22	8	2	0	434	24.2%
2	e) Provide economic measures	28	15	19	13	15	0	388	21.6%
3	a) Develop / enforce bye-laws	22	16	11	26	12	0	358	20.0%
4	b) Develop LEMP	15	22	23	14	11	0	356	19.9%
5	d) Provide env. Information	2	8	16	18	30	2	232	12.9%
6	f) No expectation	2	0	0	0	0	6	18	1.0%
7	g) Others	0	1	0	0	1	0	7	0.4%
	<b>TOTAL</b>	<b>97</b>	<b>92</b>	<b>91</b>	<b>79</b>	<b>71</b>	<b>8</b>	<b>1793</b>	<b>100.0%</b>

\* Point = (1st x 6) + (2nd x 5) + (3rd x 4) + (4th x 3) + (5th x 2) + (6th x 1)

**Q14. Environmental Education**

RANK	ITEMS	1st	2nd	3rd	Point*	%
1	d) Env. education in school	57	16	9	212	36.7%
2	a) Provide information materials	19	26	21	130	22.5%
3	c) Provide pamphlets	4	23	20	78	13.5%
4	b) Provide learning courses	5	12	15	54	9.4%
5	g) Supporting NGO	5	8	20	51	8.8%
6	e) Env. education centre	5	5	6	31	5.4%
7	f) Fostering trainers for env. ed.	1	5	3	16	2.8%
8	h) others	1	1	0	5	0.9%
	<b>TOTAL</b>	<b>96</b>	<b>95</b>	<b>94</b>	<b>577</b>	<b>100.0%</b>

\* Point = (1st x 3) + (2nd x 2) + (3rd x 1)

### 3 RESPONSE TO THE SECOND QUESTIONNAIRE, TO INDIVIDUALS

The second questionnaire was circulated and 60 responses obtained. The analysis is presented below.

#### 3.1. Sample Characteristics

##### Age distribution

<25.....	17.2%
25-34.....	10.3%
35-44.....	20.7%
45-54.....	25.7%
55-64.....	3.4%
>65.....	6.9%
Not Stated.....	15.5%

##### Living Place

DETVA.....	58.6%
B.BYSTRICA.....	19.0%
BREZNO.....	1.7%
VALKOVO OBR. ROLTAR.....	1.7%
MASTO POLTAR.....	1.7%
CINORANA.....	1.7%
NOT STATED.....	15.5%

##### Employment

Empl. of state of admin. at env. dept.....	8.6%
shop assistant.....	3.4%
empl. of self admin.....	3.4%
state employee.....	5.2%
retired.....	8.6%
student.....	6.9%
secretary.....	5.2%
programme manager of foundation.....	1.7%
architect.....	1.7%
economist.....	10.3%
electrician.....	1.7%
chief of operation in museum.....	1.7%
clerk.....	3.4%
assistant.....	6.9%
medical doctor.....	1.7%
waitress.....	1.7%
technician.....	1.7%
teacher.....	3.4%
business man.....	1.7%
employee of culture dept.....	1.7%
special pedagogue.....	1.7%
worker.....	1.7%
not stated.....	15.5%

#### 3.2 Questionnaire and Response

##### (1) General Status of the Environment

What is the general status of the environment in your Town or Village? Please choose one from the following.

- (a) Environment is well preserved ..... 5.2%
- (b) Environment is adequately preserved ..... 27.6%
- (c) There are some environmental problems ..... 37.9%
- (d) Environmental problems exist widely..... 19.0%
- (e) Difficult to answer..... 8.6%
- (f) Other ( Please describe)..... 1.7%

(2) Kinds of Environmental Problems

- (i) Bad legislation/ lack of finance .....2.8%
- (ii) Little public interest/lack of info. and education .....7.8%
- (iii) Industrial and domestic pollution of local brooks ..... 15.6%
- (iv) Inadequate sewerage treatment technology ..... 8.4%
- (v) Air pollution due to industry..... 10.6%
- (vi) Lack of public facilities ..... 4.6%
- (vii) Burning of grass/ deforestation/ lack of greenery .....22.0%
- (viii) Pollution from cars- exhaust gases/ noise/ congestion ..... 14.5%
- (ix) Poor general maintenance of buildings and streets..... 6.2%
- (x) Inadequate waste disposal sites/ lack of recycling..... 13.4%
- (xi) Do not know ..... 3.9%

(3) Environmental Awareness

Please choose the most appropriate one from the following concerning the general awareness of the public in your town or village toward environmental issues.

- (a) Highly aware..... 0.0%
- (b) Fairly aware ..... 1.7%
- (c) Difficult to judge..... 55.0%
- (d) Rather unaware ..... 41.7%
- (e) Unaware..... 1.7%

(4) Environmental Protection

Please choose the most appropriate one from the following concerning the attitude of the public in your town or village towards participation in activities aimed at the protection and improvement of the environment.

- (a) Willing to participate even with some degree of sacrifice of an ordinary lifestyle .....44.8%
- (b) Willing to participate as long as it does not affect ordinary life..... 53.4%
- (c) Convenience in life is the first priority ..... 0.0%
- (d) Other (Please describe)..... 1.7%

\* " Municipality must be a good example- should be able to negotiate improvement with individuals and then I'll be willing to do something for the environment."

(5) Your Participation in Environmental Activities

Have you participated in any environmental protection activity in your area in the last year?

- YES ..... 30%
- NO ..... 70%

(6) Obstacles Toward the Promotion of Environmental Protection



What are the obstacles for promoting environmental protection and improvement in your town or village?

- (a) Insufficient number of suitable staff.....9.1%
- (b) Insufficient budget.....23.3%
- (c) Insufficient technology and equipment.....15.3%
- (d) Poor public awareness.....26.1%
- (e) Lack of information.....15.3%
- (f) Inadequate legal provisions.....10.8%
- (g) Other.....0.0%

(7) Participation in Making Environmental Decisions

Please choose the most appropriate one from the following list concerning your participation in environmental decision making.

- (a) The public are usually consulted-and I usually take part.....7.0%
- (b) The public are usually consulted- and I do not often take part.....12.3%
- (c) The public are not often consulted.....80.7%

(8) What are the Barriers to Taking Part in Environmental Decisions

Please select the most important three from the list below and put them in order of priority.

- (a) Those making decisions do not want us to take part- it would make things too complicated
- (b) Decision makers do not trust us and so do not consult us
- (c) It costs too much to consult the public
- (d) It takes too long and slows decisions down
- (e) People usually don't want to take part in consultations -nobody would listen and take any notice of their views anyway
- (f) People don't want to take part in consultations as they do not have strong views
- (g) The decision makers are advised by technical specialists and therefore make decisions on our behalf
- (h) Other

	First	Second	Third
(a)	0.0%	4.5%	0.0%
(b)	0.7%	0.0%	4.5%
(c)	4.5%	0.0%	4.5%
(d)	2.2%	6.0%	2.2%
(e)	14.9%	6.7%	3.7%
(f)	6.0%	12.7%	7.5%
(g)	6.0%	0.0%	13.4%
(h)	0.0%	0.0%	0.0%

(9) Do you think the general public should be more involved in making decisions and giving ideas

- YES.....98.3%
- NO.....1.7%

(10) Implementing environmental protection and decision making

Who or which bodies do you think should play the central role in the protection and improvement of the environment in your Town or Village?

- (a) State administration (Kraj and Okres; Min. of Env.).....16.1%
- (b) Municipalities.....1.6%
- (c) Commercial Enterprise.....6.5%
- (d) General Public.....74.2%
- (e) All four of the above in cooperation.....1.6%

(11) How much information /education about the environment do you receive at the moment?

Please tick one answer

- (a) A lot.....6.6%
- (b) Quite a bit .....31.1%
- (c) Not much .....57.4%
- (d) None.....4.9%

(12) Is the information / Education USEFUL for you?

- (a) Yes a lot of it.....28.3%
- (b) Yes most of it .....48.3%
- (c) Only some of it .....16.7%
- (d) Only a little .....1.7%
- (e) Hardly any of it.....3.3%

(13) Is the information / education INTERESTING for you?

- (a) Yes a lot of it.....27.1%
- (b) Yes most of it .....49.2%
- (c) Only some of it .....18.6%
- (d) Only a little .....1.7%
- (e) Hardly any of it.....3.4%

(14) Where do you MAINLY get this information/education from?

List up to three

- (a) Media (TV, Radio, Newspapers).....44.1%
- (b) Slovak Environmental Agency .....5.9%
- (c) NGOs .....5.9%
- (d) Friends .....12.7%
- (e) Professional groups.....4.2%
- (f) Schools/Universities .....8.5%
- (g) Local Government such as Kraj / Okre .....13.6%
- (h) Others.....5.1%

(15) If you wanted some MORE environmental information/education - how easy do you think it would be to get it?

- (a) Very easy.....3.4%
- (b) Quite easy .....22.0%
- (c) Not easy or difficult .....35.6%
- (d) Quite difficult.....37.3%
- (e) Very difficult.....1.7%

(16) What environmental information / education do you need that you are not getting at the moment?

- More info on nuclear power plants.....3.4%
- info on local radio and newspapers .....3.4%
- more env. educ./ leaflets .....8.6%
- info. about state of village .....6.9%
- info on proposed protection and monitoring.....5.2%
- are there penalties for pollution /degradation? .....3.4%
- info about state administrative.....8.6%
- meetings with professionals.....1.7%
- more about air/water pollution relating to health issues5.2%
- Don't know/difficult to tell/not stated .....55.2%

(17) What is the best way of getting this environmental information / education to you?

Please list the best three

- (a) Media (TV, Radio, Newspapers)..... 41.0%
- (b) Slovak Environmental Agency ..... 10.0%
- (c) NGOs..... 6.0%
- (d) Friends ..... 10.0%
- (e) Professional groups..... 5.0%
- (f) Schools / Universities ..... 13.0%
- (g) Local Government such as Kraj / Okre / Municipality..... 13.0%
- (h) Others (Internet)

(18) What do you think are the BEST METHODS of getting this environmental information / education to you?

	<b>First</b>	<b>Second</b>	<b>Third</b>
(a)	8.7%	6.9%	9.2%
(b)	0.6%	1.7%	0.6%
(c)	3.5%	6.4%	5.8%
(d)	16.8%	9.2%	5.8%
(e)	1.7%	2.3%	4.6%
(f)	1.2%	2.3%	2.3%
(g)	1.2%	2.9%	6.4%
(h)	0%	0%	0%

(19) What are the obstacles to getting more environmental training information / education?

- (a) not enough money to provide it .....16%
- (b) not enough information sources..... 18.8%
- (c) not enough people to teach it and provide it..... 18.8%
- (d) not enough demand for it from the public and different groups.....28.5%
- (e) not enough desire to provide it ..... 18.1%

(20) The Future

For the environmental protection and improvement of your town or village, what kinds of measures do you want to promote?

(a)	Intro. of pollution control technologies .....	11.2%
(b)	Promotion of energy / resource saving .....	8.0%
(c)	Recycling of waste.....	15.0%
(d)	Effective utilisation of water such as utilisation of rain water.....	2.8%
(e)	Utilisation of renewable energy such as solar and wind energy .....	4.5%
(f)	Control / prohibition of use of CFCs and other chemicals which destroy the ozone layer.....	7.3%
(g)	Control of emissions of carbon dioxide and other gases causing global warming.....	5.6%
(h)	Control of emissions of sulphur dioxide and other gases causing acid rain .....	4.5%
(i)	Preservation of the existing natural environment .....	7.3%
(j)	Restoration of damaged environments .....	4.9%
(k)	Promotion of learning and education on the environment.....	7.9%
(l)	encouraging / sponsoring / supporting persons capable of promoting environmental protection/improvement.....	5.6%
(m)	Promotion of environmentally-friendly lifestyle .....	11.9%
(n)	Promotion of ecotourism. ....	2.4%
(o)	Strengthening the system of environmental impact assessment and promotion of its implementation .....	1.0%
(p)	Other .....	0.0%

(21) Would you be willing to take part in future consultations about the management plan?

YES .....	38.2%
NO .....	61.8%

### 3.3 Review of the Second Questionnaire's Results

The second questionnaire has provided much interesting information which can be used to identify priorities for environmental education and public participation.

Two thirds of people consider that there are problems in the environment - and the major problems identified are the quality of local water sources; burning of grass, deforestation and the declining greenery in the area; inadequate waste disposal; the need for recycling facilities and air pollution both from cars and industry. People are obviously concerned about the situation and about two fifths stated that they would accept environmental protection measures even if it meant some sacrifice on their part although 70% had not taken part in any environmental activity.

The obstacles to promoting environmental activity on a local scale were considered to be poor awareness and a lack of information (around 40%) and a lack of finances and poor technology (also around 40%).

Just over 80% of people said that they were not consulted about environmental decisions made locally. To explain this respondents suggested that in some instances the decision makers did not want to hear the views of local people and would not listen, and in other, individuals themselves did not have strong enough views to comment. 98% of people felt that they should be more involved.

It was encouraging to note that nearly three quarters of people considered that environmental protection was their responsibility.

Two thirds of people feel that they don't receive enough information about the environment, but that the information that is provided is generally useful and interesting (over three quarters).

Environmental information is gained from the media (over 40%) but also local government and friends. Although most people want more information over three quarters think that it is difficult or very difficult to get hold of although over half the people did not really know what information was available. Individuals also felt that more emphasis should be given to environmental education in schools.

The main obstacle to getting environmental education, training and information is the lack of demand (nearly 30%) followed by the lack of people and information as well as a desire to provide it.

In summary therefore local people are concerned about environmental issues with water and air pollution being the most serious issues. Individuals want more information, and want to take part more in decision making, but to do this they need more information. The best way of getting this is through the media and the formal education system. They appear to be willing to make some sacrifices for a cleaner environment in the future.

#### **4 FIRST AND SECOND QUESTIONNAIRES - JOINT REVIEW**

The second environmental questionnaire (referred to as S) provided results similar in some ways to those from the first questionnaire (referred to as F).

The F questionnaire was answered by the representatives of 98 local municipalities - the S was answered by 60 people from a range of ages and occupations. The S cannot claim to be representative. Some questions were similar on both questionnaires.

##### **4.1 Q1 S (Q1 F)**

In terms of the general status of the environment.

The results are similar though slightly more people on the S consider that there are wide environmental problems.

#### 4.2 Q2 S (Q2 F)

This was common to both but asked in a slightly different way on the S - three of the four top issue mentioned matched.

On the F the four largest issues were (in order):

38. Burning of grass - deforestation
39. Pollution of local water sources
40. Pollution from cars
41. Waste disposal and sewage - lack of

On the F the four largest issues were:

42. Pollution due to domestic waste water
43. Illegal dumping of waste
44. Increase of domestic solid waste
45. Odour from agriculture

#### 4.3 Q3 S (Q4 F)

The Municipalities were more willing to make judgments about a lack of environmental awareness than individuals - 42% on the S said that the population were unaware compared with 59% of the Municipalities.

#### 4.4 Q4 S (Q5 F)

Many more individuals said that they would be willing to take part in environmental protection even if it affected their lifestyles - S 45%, F 7%

#### 4.5 Q5 S

70% of people had not taken part in any environmental activities in the past year

#### 4.6 Q6 S (Q6 F)

The differences here are expected - the individuals feel that poor awareness is the main reason for not taking part in activities (26%) whereas the Municipalities feel most strongly about the lack of a budget (77% first choice).

#### 4.7 Q7 S

80% of individuals feel that the public are not often consulted. Of the remaining 20%, 12% said that the public are sometimes consulted but that they don't take part.

#### 4.8 Q8 S

Individuals feel that people don't want to take part in consultations for three reasons - firstly that no one wants to because the decision makers wouldn't listen - secondly that people are not really interested - and thirdly because decision makers are advised by others.

#### 4.9 Q9 S

A resounding 98% want to be more involved in making decisions about the environment.

**4.10 (Q8 F)**

Most individuals think that environmental protection and improvement is their responsibility (74%) compared with the Municipalities who think that everyone should work in cooperation and that it is largely an municipality responsibility

**4.11 Q9 S**

The majority of people (57%) feel that they do not get much environmental information.

**4.12 Q10 S**

But - 77% feel that the information they do get is useful and.

**4.13 Q11 S**

about the same percentage feel it is interesting

**4.14 Q12 S**

The important sources of environmental information are the media (44%) and local government (14%) and friends (13%)

**4.15 Q15 S**

Most people felt that getting hold of environmental information would be not easy or difficult (75%) with only 25% feeling it would be easy (remember some of the sample worked for SAZP!)

**4.16 Q16 S**

The majority of people do not appear to know what environmental information they require (55%). Of those that expressed a view most of the requests were quite general.

**4.17 Q17 S**

Most people felt that the media was the best way of getting information to them (41%) followed by schools and local government (13% each)

**4.18 Q18 S (Q14 F)**

The results of the two questionnaires were similar here with environmental education in schools and provision of environmental leaflets being the two most favoured methods.

**4.19 Q 19 S**

The obstacles to environmental education were fairly evenly ranked! The largest opinion was that there was not enough desire for environmental education from the public and other groups (28%) followed closely by the lack of information, people and desire to provide it (around 18% each).

**4.20 Q20 S (Q10 F)**

The results are similar in many ways with the expected differences between the Municipalities and individuals. Recycling and Ecofriendly lifestyles were the two most important things for individuals.

#### 4.21 Q21 S

Only 40% of people would be happy to take part in future consultations!

#### 5. OVERALL CONCLUSION FOR THE FIRST AND SECOND QUESTIONNAIRES

On the whole the Individual questionnaire responses and those given by the Municipalities matched. This is encouraging as it suggests that the feedback has a level of reliability. The only differences were in areas that focused on finances and legislation. The Municipalities felt that the budget was the main obstacle to environmental protection, and also underestimated the willingness of people to make some sacrifices for a cleaner environment or the general public's sense of responsibility. Again, this is encouraging in terms of the future involvement of people in the protection of the environment.

It is important that the feedback from such questionnaires is integrated into plans such as the REMP, and used to guide the priority of activities in the plan both in terms of financial investment and also raising awareness and education. Decision-makers, including politicians, government officials and the private sector, should take note of the results of these questionnaires.



### **L.3 RESULTS OF THE QUESTIONNAIRE ON THE DRAFT FINAL REPORT**

#### **1. SUMMARY OF THE RESULTS**

The Draft Final Report for the present Study was prepared in November 1999. Its Summary report in English was translated into Slovak under the arrangement of SAZP. Some 100 copies of this Slovak Summary report were distributed to interested parties with a questionnaire form attached to each copy. The questionnaire form is shown in the following section.

There were responses from 28 individuals from central and local government administrations and institutions, universities, and other interested organizations.

The questionnaire included the following questions which are answerable marking boxes or entering numbers:

Question 1: Degree of support of the respondent on the recommendations presented in the Core Plan

Question 6: Priority areas of the environment requiring action and investment, and degree of importance of these areas

Question 7: Degree of support of the respondent on the recommendations presented in the Supporting Plans

The answers to the questions above were collated and shown in Table L.3 - 1.

It can be said generally that the respondents supported the majority of measures recommended in the Core Plan and Supporting Plans described in the Draft Final Report.

The responses contained also many constructive comments for improving the quality of the Draft Final Report, and these were incorporated into the Final Report at maximum, subject to the available time and the capacity of the Study Team.

Table L.3 - 1

Summary of Responses to Questionnaire on the Concept of the Draft final Report

Respondent No.	Support for the Recommendations in Draft Final Report													Area of Priority for Action						Degree of Importance of Proper Management						
	Core Plan							Supporting Plans						SW	SG	A	W	E	H	SW	SG	A	W	E	H	
	All	SW	SG	A	W	E	H	All	IM	CP	EE	EN	M													
1		2						3						1	1	2	3	2	3	1	1	1	1	1	1	
2					2				1					3	2	4	1	5	6	2	2	1	1	3	3	
3	1							1						1	5	6	3	4	2	1	3	3	3	3	1	
4		1						1						1	3	4	2	5	-	1	-	-	-	-	-	
5	1							1						2	1	3	5	4	6	2	1	2	3	3	4	
6		2								3				3	1	2	4	5	6	1	1	1	2	3	4	
7			1		1			-	-	-	-	-	-	3	1	5	2	4	6	1	1	2	1	3	3	
8				2	2								3	1	4	3	2	5	6	1	2	1	1	3	3	
9			1					2						2	1	4	3	5	6	1	1	2	1	2	3	
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11		2	2	2	2				2					2	1	4	3	2	5	6	1	2	2	1	1	3
12		2												2	2	1	5	3	4	6	1	1	2	1	3	3
13	1							1						3	2	1	5	4	6	1	1	1	1	2	3	
14						1								1	1	1	1	1	1	1	1	1	1	1	1	
15		2	2							1	1			3	2	4	1	5	6	2	1	2	1	3	3	
16	1							-	-	-	-	-	-	1	2	3	4	5	6	2	1	1	1	2	2	
17		1	1	4	2			-	-	-	-	-	-	1	3	5	4	2	6	1	1	2	1	1	3	
18				1							1			1	2	4	3	5	6	1	1	1	1	1	1	
19						1			1	1	1			2	3	4	1	5	6	1	1	2	1	2	2	
20							1			3				4	1	2	6	3	5	2	1	1	1	1	2	
21		2							2					1	1	1	1	1	1	1	1	1	1	1	1	
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
23		2	2											1	4	1	3	2	5	6	1	1	1	1	1	
24			3											2	2	1	2	3	3	2	1	2	3	3	3	
25		1	1					2						3	1	4	2	5	6	1	1	3	1	1	1	
26		1	1											1	1	2	3	4	5	6	1	1	2	1	2	2
27			2	2				2						-	-	-	-	-	-	-	-	-	-	-	-	
28		1				1								1	1	-	-	-	2	-	1	-	-	2	1	
Sum	4	19	16	11	9	3	1	13	6	8	3	3	9	48	46	78	67	99	117	31	28	37	32	47	53	
Number	4	12	10	5	5	3	1	8	4	4	3	1	6	25	24	24	24	25	23	25	23	23	24	24	23	
Average	1.0	1.6	1.6	2.2	1.8	1.0	1.0	1.6	1.5	2.0	1.0	3.0	1.5	1.9	1.9	3.3	2.8	4.0	5.1	1.2	1.2	1.6	1.3	2.0	2.3	
Legend	1: Practically all of the recommendations (more than 80 %) 2: Most of them (60 - 80 %) 3: About half of them (40 - 60 %) 4: Only a few of them (20 - 40 %) 5: Hardly any of them (Under 20 %)												1: Highest priority 6: Lowest priority						1: Highest importance 2: Important 3: Quite important 4: Minor importance 5: No importance							
	SW: Surface water quality			SG: Soil and groundwater quality			A: Air quality			W: Solid waste management			E: Ecology and biodiversity			H: Heritage and tourism resources										
	IM: Institutional measures			CP: Community participation and information dissemination			EE: Environmental education			EN: Environmental information network			M: Environmental monitoring													

**2. QUESTIONNAIRE FORM**

The following questionnaire form was used to invite comments on the content of the Draft Final Report.

\*\*\*\*\*

Please provide your name, institution and contact address (including e-mail); this will help those who will be following-up the REMP to contact you for further information or support. If you are able to complete the questionnaire in English as well as Slovak, this would very much help the Study Team.

<b>Name</b>	
<b>Position</b>	
<b>Address</b>	
<b>Telephone</b>	
<b>Fax</b>	
<b>E-mail</b>	

**QUESTIONS**

The recommendations of the "REMP – Core Plan" are summarised in Table S-2. Further description and discussion of the six main subjects of the Core Plan (Surface Water, Soil and Groundwater, Air Quality, Waste, Ecology and Biodiversity, Heritage and Tourism Resources) are presented in Chapter 2.

Please answer questions 1 to 5 with reference to the Section of the Summary (Chapter 2) that most concerns/interests you. Each recommendation has a unique identifier eg SW1.1; please use this in your answers to questions 2, 3 and 5.

Questions 7 to 11 relate to the Supporting Measures to the REMP's Core Plan; these are set out in Chapter 3.

\*\*\*\*\*

**QUESTIONS ON CORE PLAN – SUMMARY CHAPTER 2**

<b>I am commenting on the 'REMP – Core Plan' Section</b>		<b>Concerned with</b>	
----------------------------------------------------------	--	-----------------------	--

**Q1 Do you support the recommendations in this section?**

Please tick one of the answers

Practically all of them (more than 80%)	
Most of them (60-80%)	
About half of them (40-60%)	
Only a few of them (20-40%)	
Hardly any of them (Under 20%)	

**Q2 Which recommendation(s) do you support most strongly?**

---

**Q3 Which recommendation(s), if any, do you not support?**

---

**Q4 Do you have additional recommendations you would suggest were included in the Final Report? Your recommendations could be new projects, policies, targets, changes to legislation - or other ideas.**

---

---

---

**Q5 Do you have any amendments you would like to suggest to any of the recommendations?**

---

---

---

**Q6 The Core Plan covers six main subjects. According to the results presented in the Summary, please rank these in order of importance as a subject for action and investment by national and local government.**

You may feel that none of the subjects are very important to you or that they are all quite important – even the subject you have ranked last (No. 6). In the third column, please indicate against each subject how important it is to you that the ‘resource’ in question is properly managed, on a scale of one to five. 1: very important 2: important 3: quite important 4: minor importance 5: no importance.

Subject – Chapter 2 of the Summary	Your Suggested Priority (1 as the highest priority, 6 as the lowest priority)	Degree of Importance (1 to 5)
1 Surface Water		
2 Soil and Groundwater		
3 Air Quality		
4 Waste		
5 Ecology and Biodiversity		
6 Heritage and Tourism Resources		

**QUESTIONS ON SUPPORTING MEASURES – SUMMARY CHAPTER 3**

I am commenting on the 'REMP -- Supporting Measures' Section		Concerned with	
--------------------------------------------------------------	--	----------------	--

**Q7 Do you support the recommendations in this section?**

Please tick one of the answers

Practically all of them (more than 80%)	
Most of them (60-80%)	
About half of them (40-60%)	
Only a few of them (20-40%)	
Hardly any of them (Under 20%)	

**Q8 Which recommendation(s) do you support most strongly?**

---

**Q9 Which recommendation(s), if any, do you not support?**

---

**Q10 Do you have additional recommendations you would suggest were included in the Final Report? Your recommendations could be new projects, policies, targets, changes to legislation - or other ideas.**

---



---



---

**Q11 Do you have any amendments you would like to suggest to any of the recommendations?**

---



---



---



---

**Q12 Implementing Agencies**

We have suggested the Institutions and Organisations that might be given responsibility for implementing the REMP recommendations.

Please complete the table below to show whether in your opinion we have identified the most appropriate Institutions. Please answer this with respect to the subject which most concerns you in rows 1 to 5 and for any other subjects in rows 6 to 10.

Recommendation (Please give unique reference eg SW1.1, SG3.2 etc from Table S- 2)	Which Organisation do you suggest should be the Lead Agency responsible for implementation and/or which Additional Organisation(s) should be involved in supporting implementation?	
	Lead Agency	Supporting Agencies
<b>Main Subject</b>		
<b>Other Subjects</b>	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX

**Q13 Corrections and Additions to the REMP Summary Report**

Please note here any corrections and/or additions to the REMP Summary that you believe should be made.

Page in Summary	Paragraph number	Data/Information requiring Correction or Addition	Correction/Addition

**Q14 Corrections to the REMP Main Report**

Please note here any major corrections and/or additions to the REMP Main Report that you believe should be made.

Page in Main Report	Paragraph number	Data/Information requiring Correction or Addition	Correction/Addition

**Q15 Corrections to the REMP Supporting Report**

Please note here any major corrections or additions to the REMP Supporting Report that you believe should be made.

<b>Page in Supporting Report</b>	<b>Paragraph number</b>	<b>Data/Information requiring Correction or Addition</b>	<b>Correction/Addition</b>

**Q16 Further Comments**

If you have any further comments to make on any of the reports, please add them here.

Recommendation (Please give unique reference eg SW1.1, SG3.2 etc from Table S- 2)	Which Organisation do you suggest should be the Lead Agency responsible for implementation and/or which Additional Organisation(s) should be involved in supporting implementation?	
	Lead Agency	Supporting Agencies
Main Subject		
Other Subjects	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX

**Q13 Corrections and Additions to the REMP Summary Report**

Please note here any corrections and/or additions to the REMP Summary that you believe should be made.

Page in Summary	Paragraph number	Data/Information requiring Correction or Addition	Correction/Addition

**Q14 Corrections to the REMP Main Report**

Please note here any major corrections and/or additions to the REMP Main Report that you believe should be made.

Page in Main Report	Paragraph number	Data/Information requiring Correction or Addition	Correction/Addition



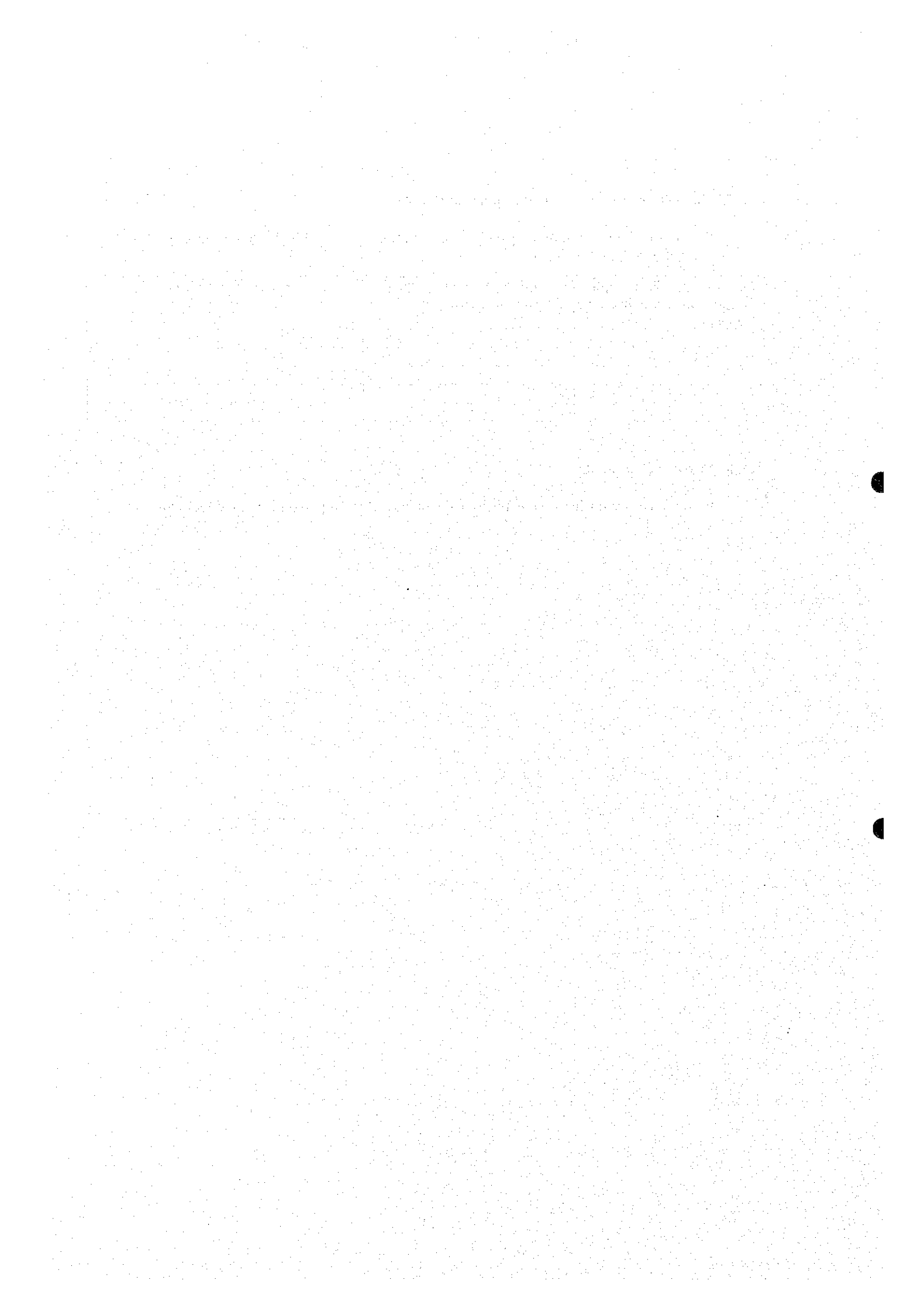
**Q15 Corrections to the REMP Supporting Report**

Please note here any major corrections or additions to the REMP Supporting Report that you believe should be made.

Page in Supporting Report	Paragraph number	Data/Information requiring Correction or Addition	Correction/Addition

**Q16 Further Comments**

If you have any further comments to make on any of the reports, please add them here.



**ANNEX M**  
**METHODOLOGIES FOR REGIONAL (RIVER BASIN)**  
**ENVIRONMENTAL MANAGEMENT PLANNING**

**CONTENTS**

<b>M.1</b>	<b>METHODOLOGY ACCORDING TO CORE COMPONENTS .....</b>	<b>M - 1</b>
1.	INDICATORS / EVALUATION .....	M - 1
2.	POLLUTION MECHANISM .....	M - 2
3.	ENVIRONMENTAL MANAGEMENT TARGET .....	M - 4
4.	STRATEGIC PLANS WITH ADDITIONAL PROPOSALS .....	M - 4
5.	GIS DATABASE WITH OPEN GIS .....	M - 5
6.	ENVIRONMENTAL MONITORING SYSTEM .....	M - 6
7.	PUBLIC PARTICIPATION .....	M - 7
8.	CASE STUDY FOR PRIORITIZATION OF EAP .....	M - 9
<b>M.2</b>	<b>METHODOLOGY WITH REFERENCE TO UK LOCAL ENVIRONMENT AGENCY</b>	
	<b>PLAN (LEAP) .....</b>	<b>M - 10</b>
1.	INTRODUCTION .....	M - 10
2.	OVERALL OUTPUT .....	M - 13
3.	METHODOLOGY .....	M - 15
4.	CONTENTS OF THE FINAL REPORT .....	M - 31



## M.1 METHODOLOGY ACCORDING TO CORE COMPONENTS

### 1. INDICATORS/EVALUATION

Indicators for evaluation of the state of pollution in the Hron Basin will be applied to two components: groundwater quality and soil quality. The evaluation will be made for the whole basin. The Hron basin is divided into uniform cells of the size 100 m x 100 m, and each cell is evaluated. An indicator for each component includes many parameters. Each parameter is evaluated with its environmental standard. These parameter evaluation maps are integrated to make a final evaluation map for each component classified into five ranks of quality according to the number of parameters exceeding environmental standards in one cell. An example for evaluation of groundwater is shown as Figure M.1-1.

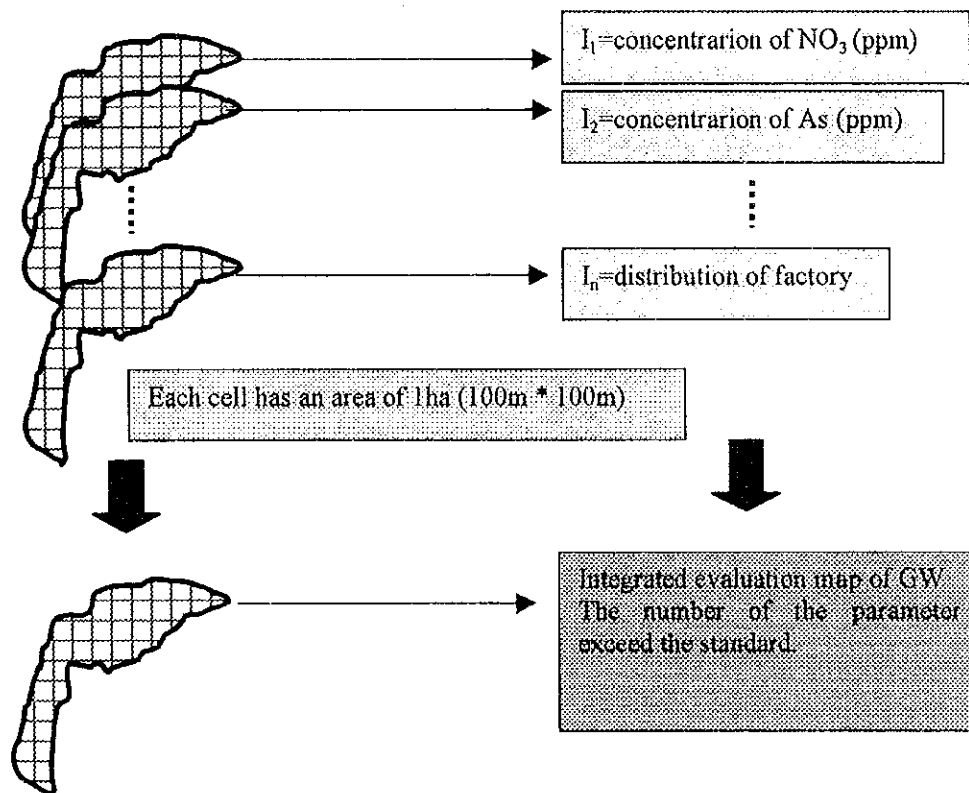


Figure M.1-1 Indicator/Evaluation in the Case of Groundwater

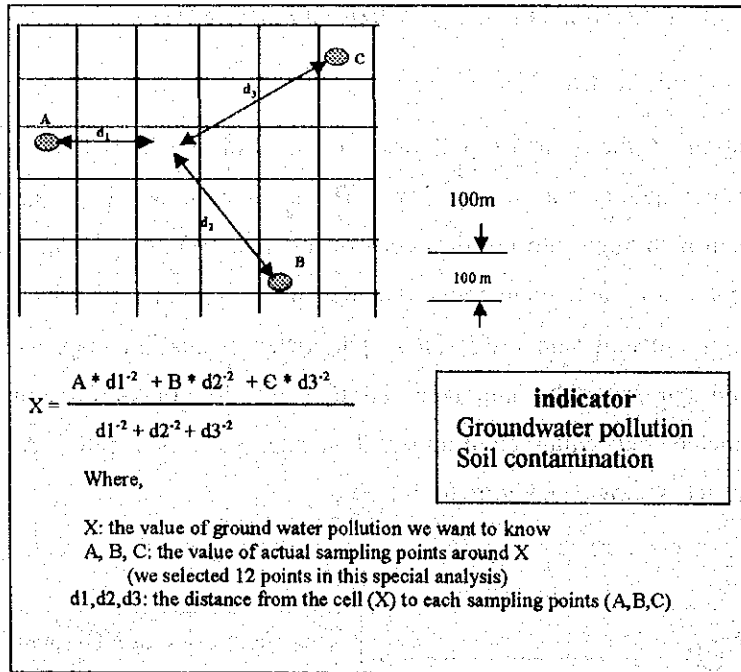


Figure M.1-2 Method of Interpolation

**2. POLLUTION MECHANISM**

Groundwater pollution, surface water pollution, soil contamination and air pollution may be major environmental issues in the Hron basin. Relation between their states and causes should be understood as clearly as possible so that the effective measures to rectify the situations can be elaborated. Figure M.1-3 depicts typical patterns of mechanism for soil and groundwater pollution. However, quantitative analysis to clarify such mechanism often requires much time and financial resources.

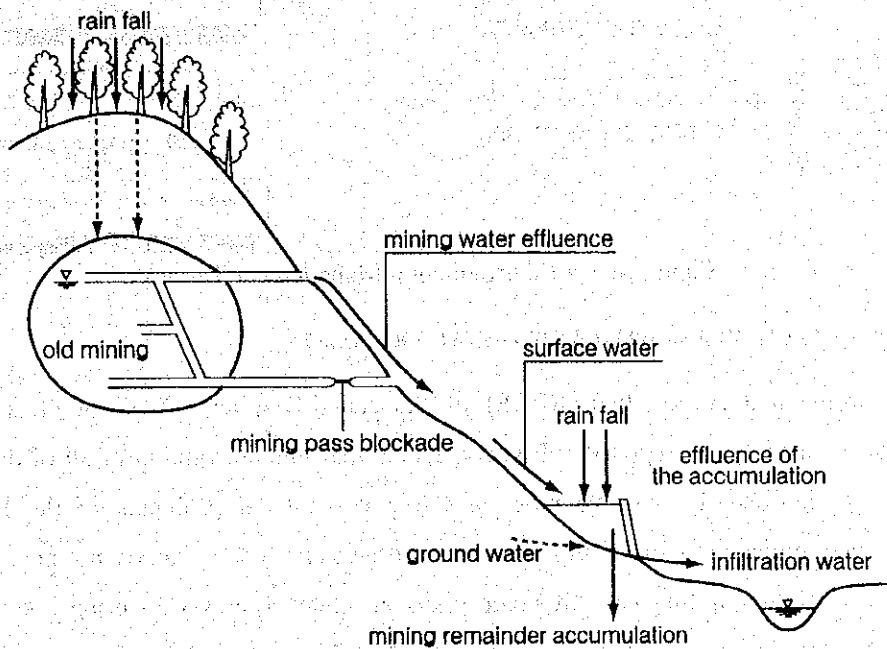
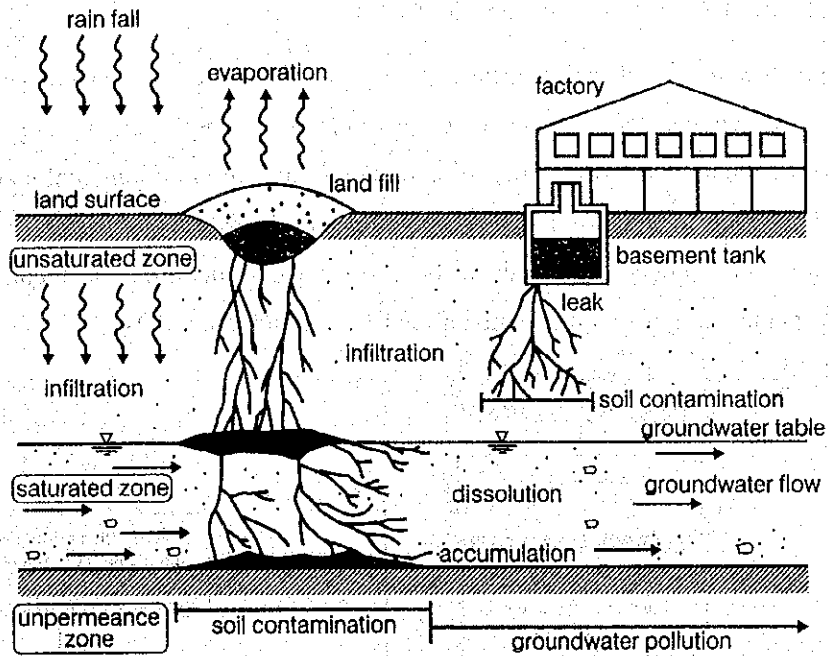


Figure M.1-3 Pollution Mechanism (Examples)

### 3. ENVIRONMENTAL MANAGEMENT TARGET

For the major environmental issues identified and presented properly on GIS maps, it will be necessary to set targets for abatement or rectification. These targets are most desirably quantitative ones such as specific values adopted from relevant environmental standards. In the case that such a target is not possible to be specified due to the nature of the problem, it will have to be set with an expert judgement based on the sufficient considerations on technical, social and political aspects including the requirements of the EU. (See Figure M.1-4)

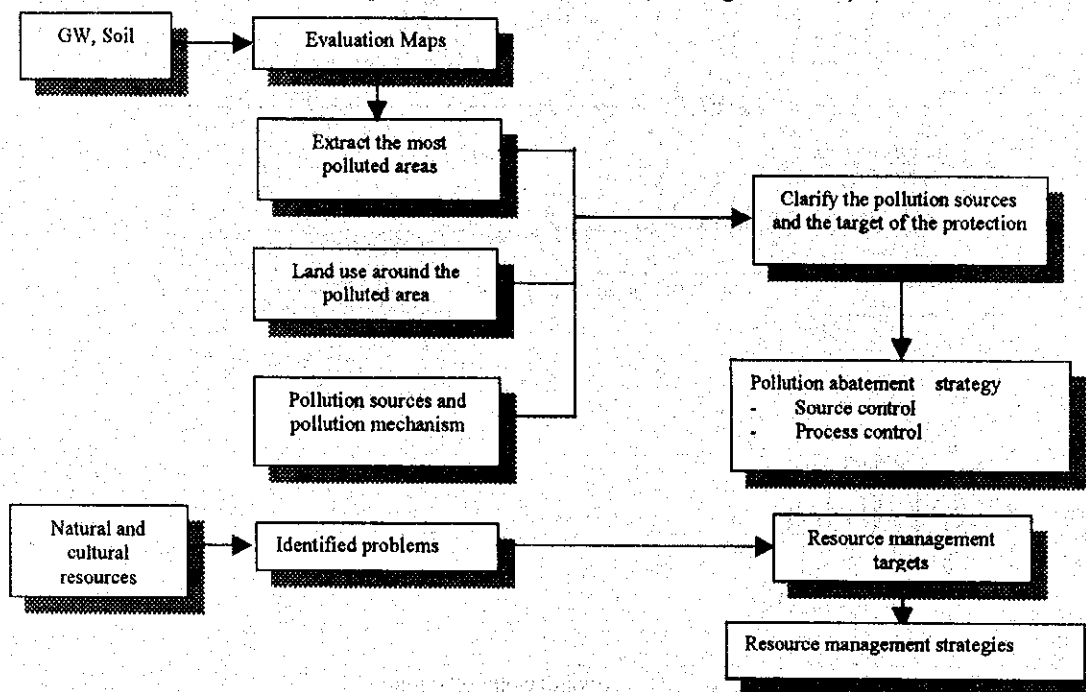


Figure M.1-4 Environmental Management Targets

### 4. STRATEGIC PLANS WITH ADDITIONAL PROPOSALS

In the Environmental Action Plans (EAP) of the state, Kraj and Okres, a great number of actions/projects have been proposed. It is considered that implementation of all of these projects will solve or significantly improve most of the environmental problems in the Hron Basin. However, since implementation of all the projects at the same time is clearly not possible because of limited availability of finance. Strategic plans are then necessary to bring about maximum effect with limited financial resources. (See Figure M.1-5)

There will be two strategic plans to deal with different nature of environmental issues. One is the plan for the abatement of environmental pollution such as of water and air. Another is the plan for



management of environmental resources such as water, forests, lands, and tourism resources including natural and cultural heritages.

These are to propose concrete strategies to achieve the management targets which have been set for major environmental issues identified. In the light of these strategies, existing projects in EAPs will be reviewed.

If EAP projects alone are found to be insufficient to meet the strategies, additional proposals will be elaborated. These should be as specific as possible.

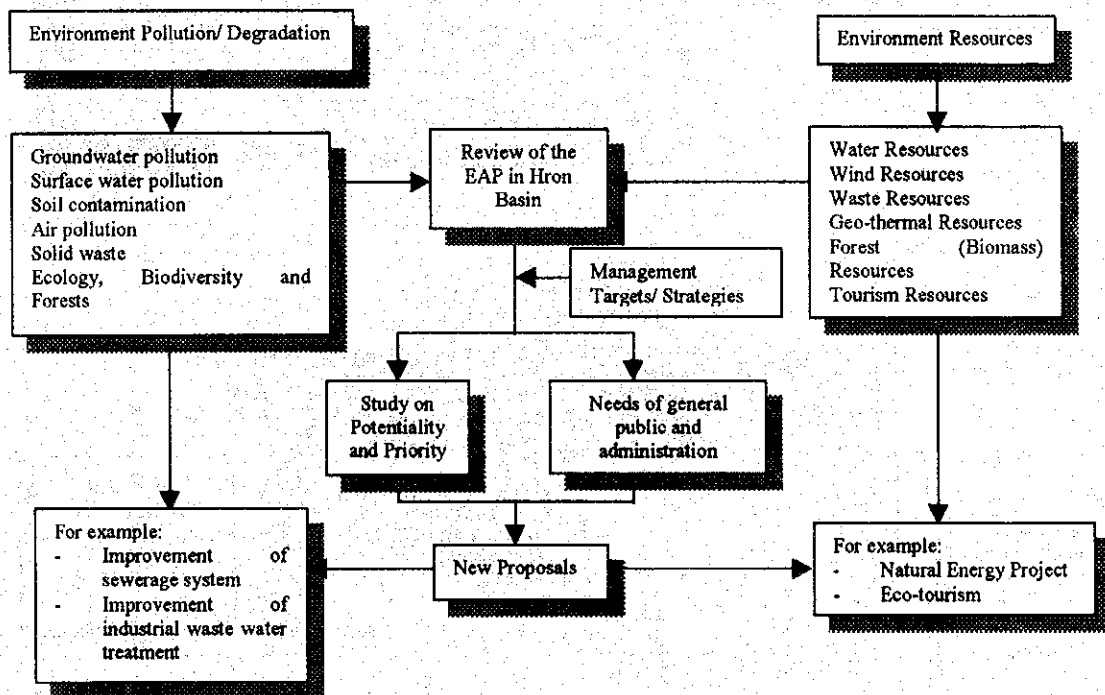


Figure M.1-5 Additional Proposals

## 5. GIS DATABASE WITH OPEN GIS

SAZP is now developing an EIS (Environmental Information System) and it is expected to play important roles in the management of the environment both in developing plans and in monitoring effects of plan implementation. SAZP intends to develop an integrated environmental database for each of several river basins in the Slovak territory. The database being developed in the present REMP for the Hron River basin will be one of them. With a Web server being established, SAZP can receive various sets of information from relevant institutions, integrate them into the database, and provide the information to various users in Slovakia. As means of

information dispatch, IMS will be used, which is an extension of ARCVIEW. The end users can read the environment information from the server of SAZP by using Netscape or Internet Explorer. (See Figure M.1-6)

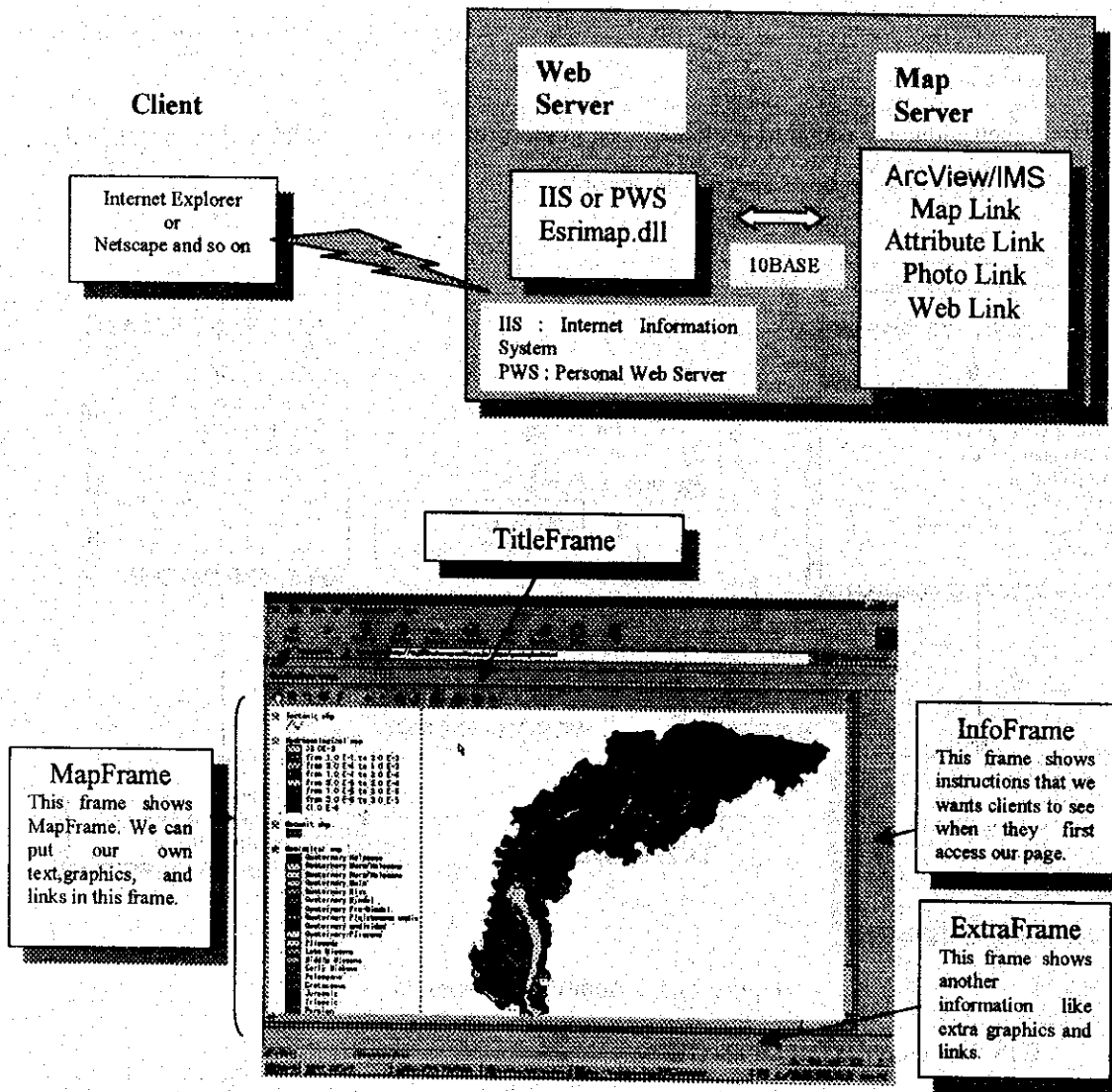


Figure M1-6 Outline of OPEN-GIS and Sample Image of OPEN-GIS

## 6. ENVIRONMENTAL MONITORING SYSTEM

There is a plan for Information System of Monitoring (ISM) in Slovakia. With due considerations given to this plan and the present situations of environment in the Hron Basin including polluted areas and pollution sources, the present monitoring items, spatial distribution of monitoring points,

and frequency of monitoring will be reviewed. When the present monitoring system is found to be not sufficient, necessary improvements will be clarified to compose an ideal system. This ideal system will be examined with practical considerations for realisation to propose an environmental monitoring plan for the Hron Basin. (See Figure M.1-7)

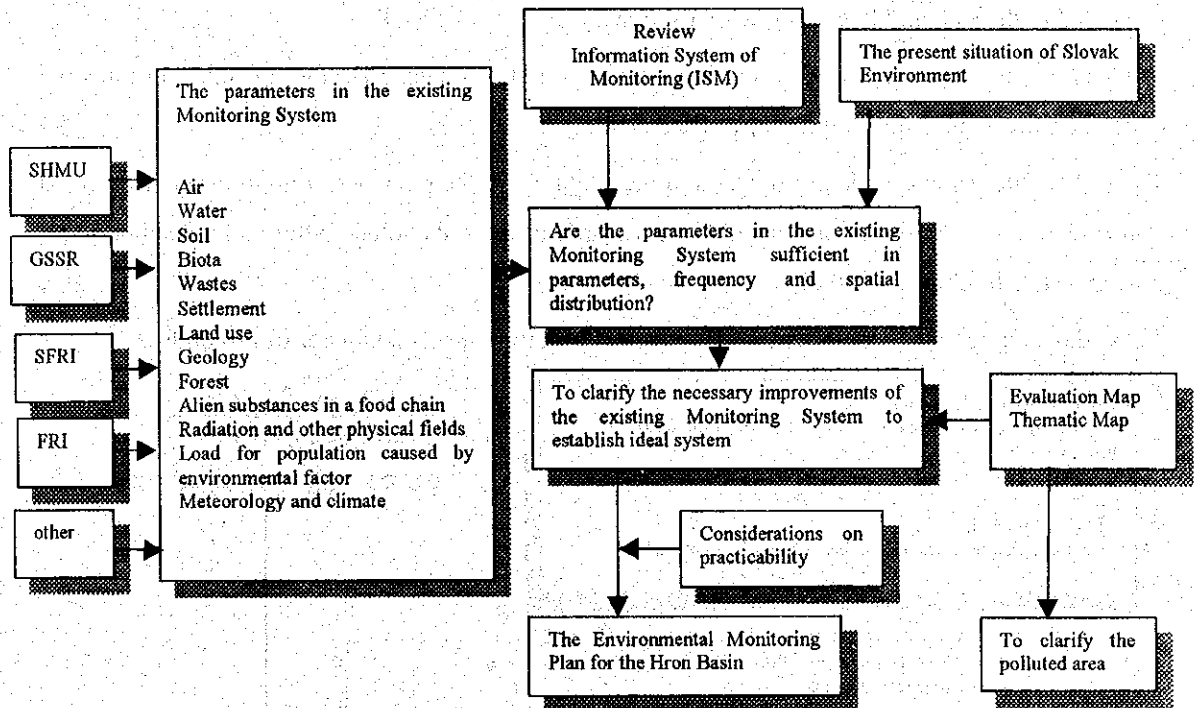


Figure M.1-7 Environmental Monitoring System

## 7. PUBLIC PARTICIPATION

The methodology shown on Figure M.1-8 is a summary of the public participation process.

Essentially those preparing management plans should identify key stakeholder groups. One of these groups will be the general public. Members of the general public will also belong to other stakeholder groups that are consulted.

At the same time as expert data is being collected, or even before this process starts, the key stakeholder groups should be consulted about their needs, and their concerns about the environment. This information should be used to both inform the collection of data, and assist in the prioritisation of management recommendations. There should also be a mechanism for allowing the general public to participate in the analysis of information.

A draft plan should be presented to the stakeholder groups, and their views and comments sought in a meaningful way, that allows them to really participate in the process, and know that views expressed will be actively considered.

The management plan should be revised in the light of these comments and the revised plan presented to the stakeholders along with a summary of their feedback.

It is possible to go through this cycle of presentation and feedback a number of times, but this will depend on the nature, status and scope of the plan.

The stakeholder should be kept informed of the progress of the plan, and if appropriate involved in implementation. Achievements should be presented to the stakeholders after an agreed period of time and stakeholders also involved in any review process.

Those devising the plan should ensure that the methodology meets a number of principles.

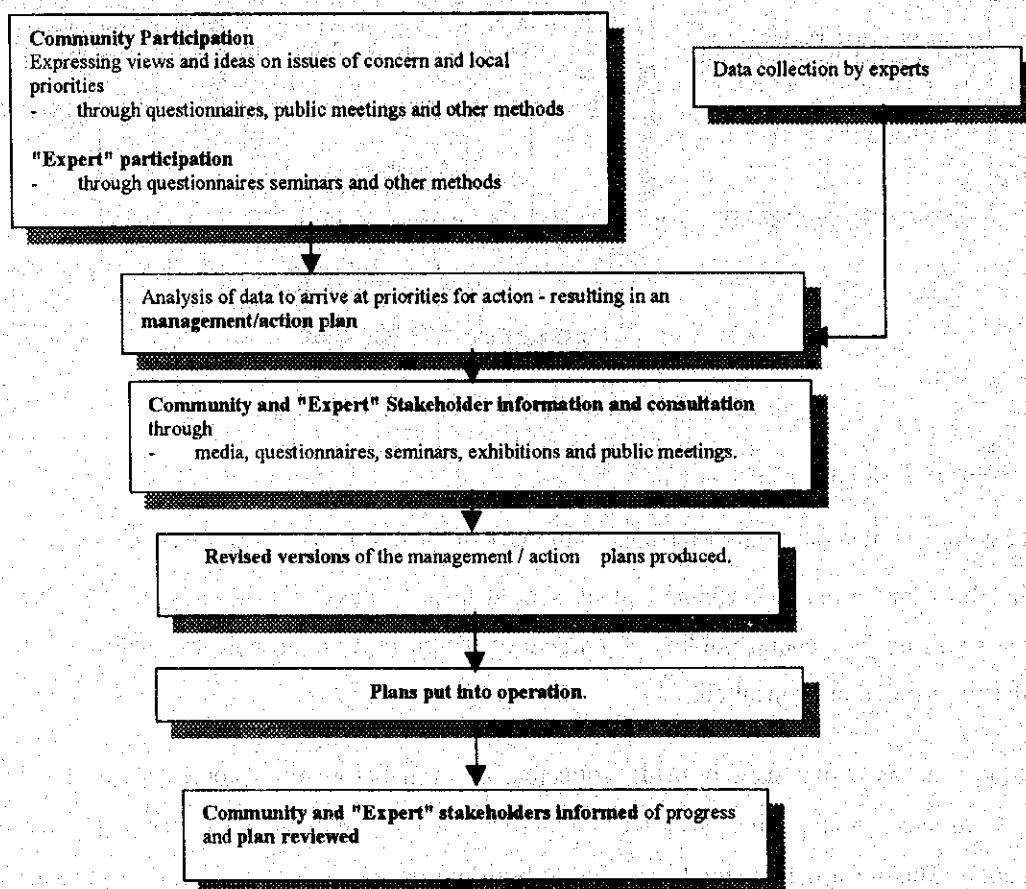


Figure M.1-8 Public Participation

## 8. CASE STUDY FOR PRIORITIZATION OF EAP

The followings are the general idea of the indicators, evaluation criteria and method of scoring for the prioritization of the projects. This method is proposed for the judgement of priorities of the huge number of Environmental Action Programmes, which will be useful tool for the evaluation of the priorities especially the physical development projects, such as gas supply, water supply, sewerage and WWTP, landfills etc. Figure M.1 - 9 shows the diagram of the general idea for the study.

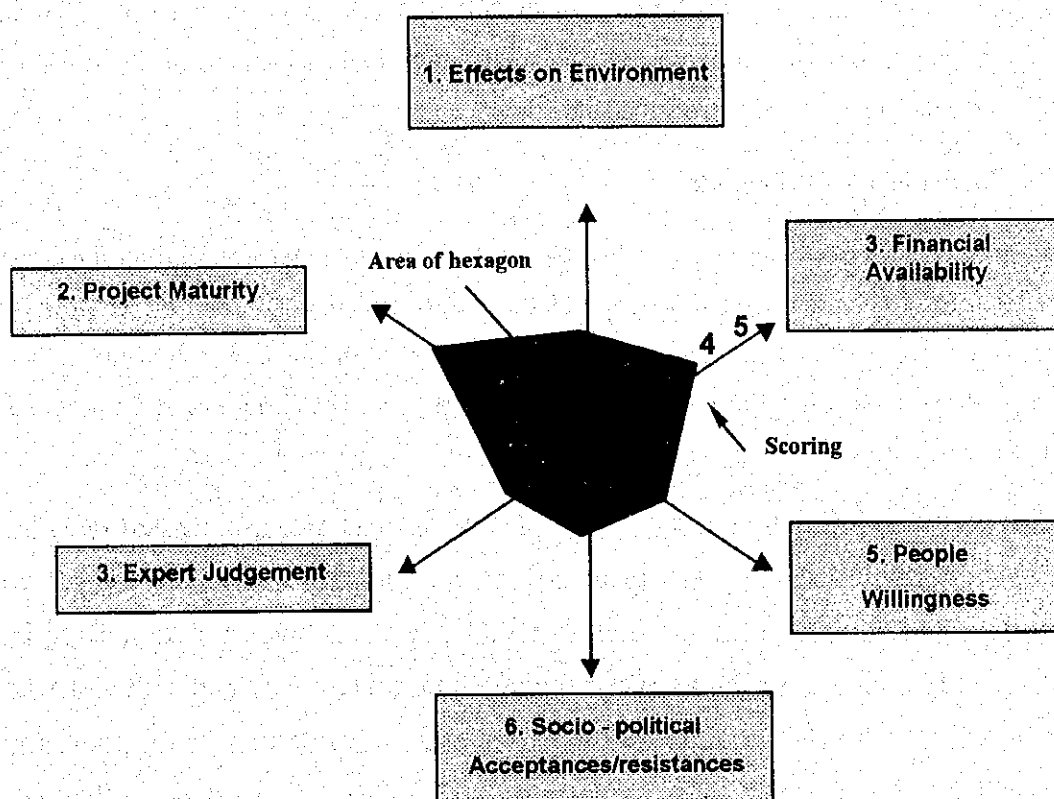


Figure M.1- 9 Diagram of the General Idea for the Project Prioritization Study

## 5. CASE STUDY FOR PRIORITIZATION OF EAP

The followings are the general idea of the indicators, evaluation criteria and method of scoring for the prioritization of the projects. This method is proposed for the judgement of priorities of the huge number of Environmental Action Programmes, which will be useful tool for the evaluation of the priorities especially the physical development projects, such as gas supply, water supply, sewerage and WWTP, landfills etc. Figure M.1 - 9 shows the diagram of the general idea for the study.

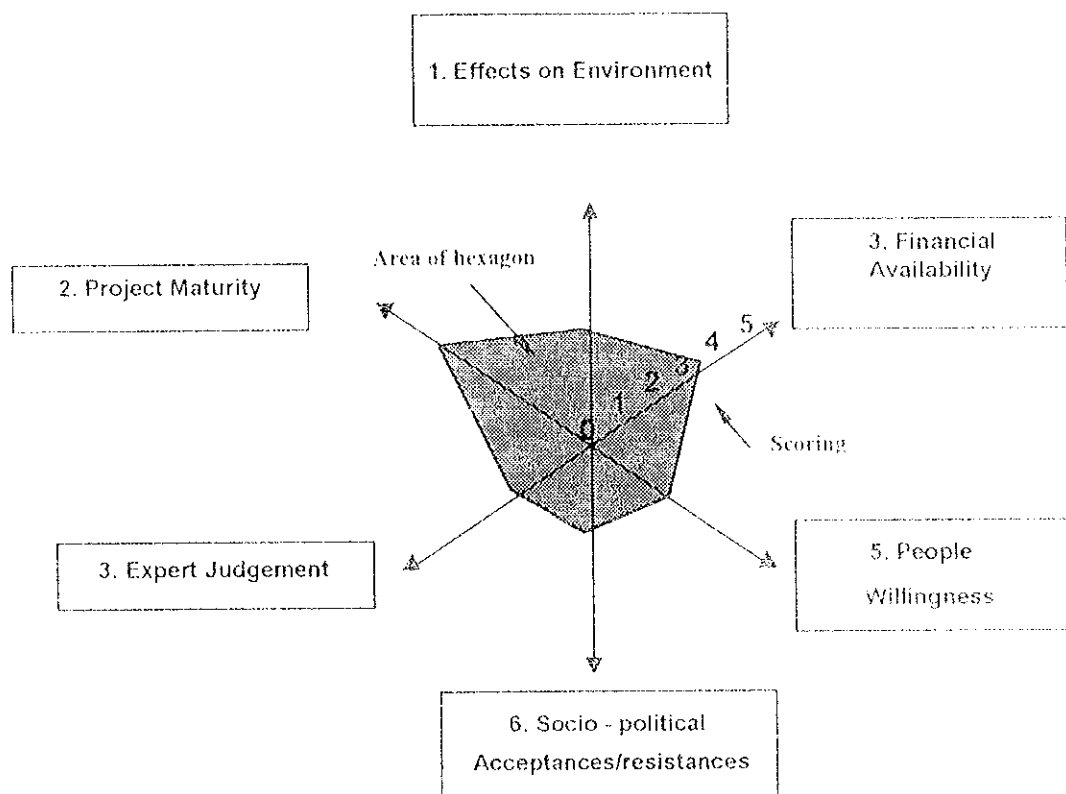


Figure M.1- 9 Diagram of the General Idea for the Project Prioritization Study