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# **VISTULA 2020 PROGRAMME**

#### Introduction

The 'Vistula and Its Basin 2020' Programme, later referred to as the 'Vistula 2020 Programme' or the PROGRAMME, was initiated by the Union of Vistula River Towns, an organisation that has managed to attract to the idea a number of local authorities, governmental and non-governmental organisations and other institutions. Their mutual interest in the programme resulted in the so-called Toruń Agreement signed on 2 June 2000.

The 'Vistula and Its Basin 2020' is an investment capital programme.

#### Historical Outline of the Programme

Among the many reasons underlying the need to launch such a programme there were the following:

- 1. to continue the work in progress undertaken by a number of governmental and local self-government institutions, research institutes, associations and others.
- to positively relieve the pressure felt by local self-government authorities to solve fundamental water economy problems; this pressure was instrumental in the selfgovernmental initiative to set up an Office to develop the PROGRAMME
- 3. To compensate for the lack of any direct united action related to water economy, including a total lack of water management policy or strategy
- 4. To finally create an unambiguous definition and classification of the problems present in the Vistula River basin and to arrive at the ways to solve them, mainly concentrating on finding funds to finance the work to be undertaken
- 5. To co-ordinate various activities and prevent possible conflicts from arising.

#### Legal foundations of the PROGRAMME

The PROGRAMME is based on the following legal foundations:

- > The constitutional sustainable development principle Acts related to water economy and environmental protection, such as:
- > EU directives-first and foremost-the EU Directive on the Quality and Protection of Water and Pollution Control
- > Polish ecological policy
- > Agreements and international conventions, including:
  - **Convention on Wetlands,** which have an international importance, especially as the natural environment for water birds (RAMSAR 1971),
  - Convention concerning the Protection of the World Cultural and Natural Heritage (PARIS 1972),
  - Convention on International Trade in Endangered Species of Wild Fauna and Flora (WASHINGTON 1973),

- Convention on the Conservation of Migratory Species of Wild Animals (BONN 1979),
- Convention on the Protection of Species of Wild European Fauna and Flora and their Natural Environments (BERN 1979),
- Convention on Biological Diversity (RIO de JANEIRO 1992),
- European Ecological Network of Specially Protected Areas known as NATURE 2000.
- > Strategies at the national and regional level
  - Environmental protection projects (of 2003) designed by the regional self-government authorities,
  - Integrated Operational Programmes of Regional Development designed by the local parliament offices for the years 2004 2006 taking into account the long-term needs of the Vistula 2020 Programme;
- > National Program of Municipal Sewage Treatment System
- > The Ordinance of the Chair of the Council of Ministers to establish the Ministry of Environmental Protection
- > The Polish Parliament resolution to embark on an investment undertaking called Nieszawa Ciechocinek water drop of 22 December 2000
- > Toruń Agreement of 2 June 2000

#### **PROGRAMME** Range

#### **DIVISION OF POLAND INTO TWO DRAINAGE BASINS**



The PROJECT embraces the whole area said to constitute the Vistula river basin.

Nearly the whole area of Poland (97,3%) falls within the drainage catchment of the Baltic Sea in the basins of the Vistula (53,9%), the Oder (34%), the Baltic Coastland rivers (11%) and the Nyoman (0,8%). According to the new division, in compliance to the Ordinance of the Council of Ministers of 10 December 2002 (Dziennik Ustaw, No 232 entry 1953 – an entry in the official gazette announcing current legislation), the Baltic Coastland rivers belong to the Oder basin (taking up 40% of Poland's area) and to the Vistula (59% of the total area), respectively. Thus, the area of Poland has been divided into two river basins.

Trunk Rivers in the Vistula Basin			
Rivers	Length (km)	Basin Area (km²)	
Wisła/ Vistula	1 047	194 424, including 168 699 in Poland	
Bug	772	39 420, including 19 284 in Poland	
Narew	484	75 175, including 53 873 in Poland	
San	443	16 861, including 14 390 in Poland	
Pilica	319	9 273	
Wieprz	303	10 415	

#### <u>Territorial Division of the Programme Area:</u>

- ▶ the Vistula basin within the boundaries of the Polish Republic;
- > basins of other rivers including the Baltic Coastland rivers ascribed to the area of the Vistula basin recently marked out.

According to the Ordinance of the Council of Ministers of 10 December 2002, **the Vistula basin has been divided into four water regions,** falling within the jurisdiction and supervision of regional water management boards (RZGWs):

- a) the water region of the Small Vistula/Mała Wisła (RZGW Gliwice) embracing the area of the Vistula basin from its source up to the Przemsza river mouth;
- b) the water region of the Upper Vistula/Górna Wisła (RZGW Krakow) embracing the area of the Vistula basin from the Przemsza river mouth up to the Sanna river mouth;
- c) the water region of the Middle Vistula/Środkowa Wisła (RZGW Warszawa) embracing the area of the Vistula basin from the Sanna river mouth up to the village of Korabniki;
- d) the water region of the Lower Vistula/Dolna Wisła (RZGW Gdańsk) embracing the area of the Vistula basin from the village of Korabniki up to the Vistula sea estuary and also the basin of Baltic Coastland rivers;



MAPS OF THE VISTULA BASIN WATER REGIONS (RZGW Gliwice - the total area of the Upper Oder and the Small Vistula basins).

This division reflects the natural conditions of the basin and will be included in the PRO-GRAMME.

Additionally, the PROGRAMME will include the Żuławy/Marshland area because of its uniqueness and the advanced work on the Żuławy Law, which will constitutive an integral part of the Vistula Law.

The PROGRAMME demands international co-operation in the areas where Poland shares its water basins with its neighbouring countries.

The creators of the PROGRAMME aim to correlate the water regions with the administrative division of the country in the future.

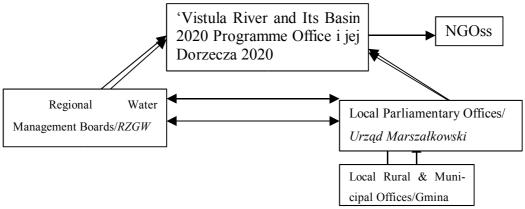
#### PROGRAMME Design System

The 'Vistula and Its Basin' Programme Office accepted the following system to design the PROGRAMME:

- - Protection of water sources and underground and surface water purity control;

- Emergency prevention (flood and drought prevention);,
- Environmental protection and protection of natural resources and landscape;
- Economic development of the basin (hydropower engineering, inland navigation and bridge crossings, tourism, etc.).
- ✓ It was agreed that the data used in the PROGRAMME would be accessed from the following sources:
  - Regional government offices,
  - Regional Water Management Boards (Regionalny Zarząd Gospodarki Wodnej -RZGW)

The data collection and research system used by the PROGRAMME initiators can be presented as follows:



#### **PROGRAMME Structure**



The PROGRAM must be constructed in such a way that it will stimulate initiation of various local programmes and economic initiatives functioning in accord with the sustainable development principle.

The PROGRAMME should mainly incorporate such local activities without which local development will not be possible. For example, prospective reactivation of tourist activity on the Vistula requires its waterways to be regulated and water treatment plants to be built, etc.

#### **Anticipated Conflicts**

Any action provokes conflicts of interests. The PROGRAMME designers anticipate the following:

- conflicts between the economic and environmental lobbies like in case of the Niesz-awa Dam, Nature 2000 Programme, the Lower Vistula Stepped Falls
- · conflicts of local interests and loyalties in the basin area
- conflicts between the governmental and self-government bodies
- international conflicts

The PROGRAMME initiators aim to facilitate compromise in the areas of conflict. Without reaching mutual agreements, the PROGRAMME cannot possibly be implemented.

#### **External Preconditions**

Being a branch of science, water economy also belongs to those sectors of the national economy that are closely connected with other areas of economic activity. Generally speaking, the main aim of water economy is to rationally shape and take advantage of the underground and surface water sources. The rational forming and use means here that the sources available are used in an optimal way, according to established criteria justified socially and economically.

Activities related to water economy boil down to those undertaken by the government and the national regional and local administration in order to properly:

- make quantitative and qualitative description of the water sources according to the needs of their users and consumers, taking protection of the natural environment into account;
- control overbank discharges at flood time.

#### There are some basic principles governing water management the world over:

- drainage basin principle assuming that water management should be exercised within the areas of respective water basins;
- active community principle engaging members of the community in the workings of the system of control over the processes of utilisation and development of water sources;
- administration principle consisting in the State's statutory control of and supervision over the water resources in the country;
- central planning and funding principle leaving strategic decisions and basic financial resources in the hands of central authorities;
- **market principle** aiming to put water economy on the market.

#### Strengths and Weaknesses of the PROGRAMME

Strengths and Weaknesses Analysis:

#### > Strengths:

- gathering all important governmental and non-governmental circles around a shared idea of the PROGRAMME and its prospective implementation;
- a global PROGRAMME for the entire basin stands a better chance than dispersed small-scale initiatives;
- a high degree of social acceptance to the PROGRAMME by local communities and authorities;
- co-ordination of investment activities conducive to effective financing of individual undertakings and decreasing the amount and range of encroachment upon the natural environment

#### >Weaknesses:

- Low degree of approval by decision-makers at various levels with regards to allotting funds, the reason being the PROGRAMME'S long-term planning and the results to be seen long after the decision makers' term of office;
- Conflicts of interests and loyalties mentioned above

## Synthesis of Main Problems Present within the PROGRAMME

#### **Identifying Fundamental Problems**

The PROGRAMME'S fundamental problems are:

- unsatisfactory surface and underground water purity;
- inadequate flood control, especially in urban areas;
- inadequate drought control, especially in rural areas, including a lack of satisfying rural irrigation systems;
- unsatisfactory condition of river ecosystems and their degradation, especially with regard to ichthyofauna, migratory birds, wetlands and riverside forests;
- degradation of cultural heritage sites directly linked with the Vistula water system and its basin;
- economic infrastructure underdevelopment in the Vistula river basin, especially with regard to the degradation of waterways and navigation routes, road and bridge facilities, etc.;
- inadequate utilisation of the hydro-engineering potential within the Vistula basin;
- lack of possibilities to implement regional programmes stemming from the problems mentioned above.

#### Classification of Problems into Local and Translocal - Main Criteria

Local problems are those which:

- can be solved at the level of local rural and municipal authorities (gmina), district (powiat) and regional (województwo) governments and funded from the financial resources of the region (województwo),
- do not in principle affect the implementation of the PROGAMME in general.

#### Translocal problems are those:

- solving which is absolutely essential if the PROGRAMME is to be implemented;
- which cannot be solved at the local level of self-government (due to a lack of expertise);
- which are insoluble without external financial support (state budget and various funds, aid funds included).

# Description of problems and issues present within water regions based on data gathered by Regional Water Management Boards (RZGWs)

#### Small Vistula Water Region (RZGW Gliwice)

Main Water Management Problems in the Region

water supply: the RZGW in the region supervises a water system based on interbasin water transfer and retention reservoirs. The primary water intakes and water treatment plants are located in the Vistula drainage basin. The system embraces the Small Vis-

tula catchment, Dziećkowice catchment and, located outside RZGW Gliwice, the Sola river catchment. The central water production and transfer network, which is part of the whole system, is managed by the Upper Silesian Watermain Company.

Among the main factors unfavourably influencing the surface water quality in the region is the pollution of sewage and industrial affluent and, especially,the surface water salinity caused by mining water. The high population density, a big ration of population using the municipal sewerage network, the inadequate sewage treatment plant throughput and the general ineffectiveness of the plants all cause a considerable oxygen deficit and a high organic compound content.

The surface water within the RZGW Gliwice, especially in the Upper Silesia Industrial Zone is the element of the environment of the highest rate of degradation. Therefore, soon after it had been set up, RZGW Gliwice set itself a priority task to 'verify the regional water management plans to shape water resources within the RZGW area of activity'. As a result, the newly drafted long-term town and country development plans now include entries concerning reservation of specific areas of land on which retention reservoirs will be built.

flood control: Modernisation work and a general overhaul of the Vistula Czarne reservoir is in progress now. The work mainly aims to increase the flood water capacity of the reservoir, which will much better protect the low-lying areas. As there was a pressing need to increase the flood protection system of tourist spots and farming villages, the channel of the Brennica river has been improved. There has also been constructed a draft proposal of the Przemsza river catchment flood protection programme.

#### Upper Vistula Water Region (RZGW Kraków)

Main Water Management Problems in the Region

- Floods:
- Apart from their vital role played in the economy and agriculture of the region, the surface water runoff\_fluctuations observed in this area have their social dimension, especially during extreme runoffs, both low and high. While the former causes water deficits or even drought in especially unfavourable circumstances, the latter brings about floods. The Upper Vistula basin is an area where rainwater indicators and runoff depths surpass their average values in Poland.

The mountainous character of the basin causes a high flood hazard. Hydrologically, the waters of the Sola and Dunajec basins, followed by those of the Raba and Skawa, cause the highest flood hazard in the region. It is a characteristic feature of the Upper Vistula basin that bankflows do not occur all over the basin but are limited to specific catchment areas. Another critical factor determining the degree of flood hazard in the basin is colonisation and its development over the years. For ages people have been settling along the rivers, whose valleys have already lost their primary function of managing high waters. This mainly concerns the Vistula, Dunajec, Raba and Sola. The high range and degree of damage caused by the flood of 1997 proved that the flood had been caused not only by natural elements. The flood turned into a disaster due to

the poor technical condition of both the passive and active flood control structures and the equipment available.

#### - Water Use and its Protection:

The primary water supply source in the RZGW Krakow region is the surface water resources constituting 90% of the total water intake. A considerable amount of water intake is reserved to serve the Silesian agglomeration (within the RZGW Gliwice supervision). The significant pollutants there are surface washings containing large quantities of biogenic content, which gets into the watercourses with rainwater from arable land, green crop land and forest areas. The Upper Vistula water degradation caused by discharge of saline bottom water from Upper Silesian coal mines is another grave problem. The awareness of pollution processes that have lasted for many years now is deeply rooted in the consciousness of the inhabitants of the Upper Vistula water drainage basin. In fact, the river is a barrier hampering the development of the region.

#### - Reservoir Storage

Reservoir storage, especially in relation to flood control, is both inadequate and characterised by uneven distribution.

#### - River Maintenance

- About 30% of river channelling systems need renovation. 517km of streams and rivers need to be regulated in their entire length, while other 290km need river bank protection at specific stretches.

#### - Priority Plans

Recent extreme hydrological phenomena have drawn our attention to a necessity to restate investment needs and draw up a coherent and complex strategic plan of the Upper Vistula basin water management system. The work was initiated by the implementation of the 'Pilot Programme of the Sustainable Development of the Upper Vistula Basin Water Management System', which is to constitute an integral part of the Vistula Basin programme drawn up in compliance to the European Union Framwork. Among the programme priorities is a continuation of construction work on Świnna Poreba reservoir on the Skawa River. The reservoir will substantially improve the water storage potential of the region, simultaneously upgrading the flood protection system of Krakow. The above-mentioned needs settle the question of constructing Krempna reservoir on the Wisłoka and the continuation of preparatory work to start building the following reservoirs: Niewistka on the San, Grybów on the Biała Tarnowska, Młynne on the Łososina and Rudawka Rymanowska on the Wisłok. Moreover, the already begun construction projects aiming to make the Vistula stretch from Oświecim to Krakow should be completed.

#### Middle Vistula (Środkowa Wisła)Water Region (RZGW Warsaw)

#### Main Water Management Problems in the Region

#### - Water Protection

There are no natural water courses carrying 1st class purity water to feed the Middle Vistula and its basin. The rivers managed by Warsaw RZGW are transit waterways for pollutant loads from Silesia (Śląsk), Small Poland (*małopolska*), Ukraine and Belarus. A vital water protection issue here is how to improve the quality of water at the consumer intakes. In order to protect those intakes, work must be undertaken to treat the sewage and waste discharged into the rivers in their upper courses, including the Vistula – quality improvement of the sewage discharged in Puławy, starting up a sewage treatment plant in Góra Kalwaria, improving the Jeziorka river water quality and building a sewage treatment plant for left-bank Warsaw; the Pilica – quality improvement of the sewage discharged into the Narew in Ostrołęka, Zambrów, Pułtusk and protection of Zegrzyński Reservoir direct water catchment.

#### - River Maintenance

At present the Middle Vistula is embanked in its overall length. However, there is a constant need to protect its embankments from lateral erosion. That requires stabilising the active channel of the average annual water level.

#### Lower Vistula (Dolna Wisła) Water Region (RZGW Gdańsk)

#### Main Water Management Problems in the Region

- flood control:
- Floods occurring in the Lower Vistula basin are due to the downflow of water from the Middle Vistula basin, ice discharge from Włocławek reservoir and the local conditions within the coastal zone of the Baltic Sea, mainly manifested by storm winds hindering the passage of water and ice and forcing the water of Gdańsk Bay into river mouths. A major flood hazard, especially at the Vistula outlet, is caused by ice jamming, happening in the autumn/winter season when an ice sheet forms, and also in spring at the time of ice floating. Ice-jamming floods often accompany storm water lifting on the Vistula at the Gdańsk Bay side. At such time the river threatens Gdansk Warplands/Żuławy Gdańskie (the left bank of the river), Great Warplands/Żuławy Wielkie (the right bank of the river) and the city of Gdańsk itself. In case of ice-jamming flood hazard, icebreakers are sent from the side of Gdańsk Bay upriver, starting from the Vistula River mouth. The area of Great Warplands, most of which is below the sea level, is threatened with being flooded by the storm-lifted seawater coming from Vistula Bay.

#### **Priority Issues**:

- The Lower Vistula management with a view to open its channel for navigation and successfully exercise flood control;

- Construction of 'Nieszawa' water screen in order to protect Włocławek screen and other strategic infrastructure in the region;
- Protection of water resources, with regard to their quantity and quality, in water catchments where municipal surface water intakes for the towns of Gdańsk,
- Bydgoszcz and Toruń are located;
- Creation of flood control programmes for Gdańsk, Great and Elbląg Warplands (Żuławy) as part of water resources use conditions.

# Construction of the Lower Vistula CASCADE (*Stepped Falls*) to Be Completed in 2020 as a System of Multi-purpose Water Reservoirs, with a Particular Focus on Safety and Economic Development.

Being a non-governmental organisation assembling the majority of towns located on the Vistula, the Union of the Vistula River Towns univocally proclaims itself in favour of the completion – by the year 2020 – of the Lower Vistula River CASCADE. At present the Union does not intend to impose any detailed technological solutions, however. First and foremost, such solutions must be compliant with the current laws, including environmental regulations. At this stage it is absolutely essential to engage in new research work on locational and environmental studies in connection with economic and social effects of the prospective project. The study should result in determining the number of water drops/screens, their height, location and ways of limiting environmental threats by taking advantage of the most modern technologies and expertise in this field.

It must be noted that it is the UVT's strong conviction that Nieszawa Water Screen/Drop should be constructed in such a way as if it were to be the last water drop on the Vistula river.

#### Vistula Warplands

Vistula Warplands (Żuławy Wiślane) are situated in the Vistula Delta. Their southern border reaches Kwidzyń, while Kaszuby Lake District moraine constitutes their western border, Elbląg Plateau – eastern, and Vistula and Gdańsk Bays are to the north. The total area of Żuławy is about 150 000 ha. About 30% of Żuławy are below the sea level, the area which would be flooded if not for the constant work of pumping stations. The area abounds in arable and grazing land, which is the richest in Poland. There are practically no forests. The main industry is limited to food processing. Quite interestingly, Gdańsk Refinery is located in Żuławy.

Water management plays a major role in Żuławy. The whole area is criss-crossed by drainage ditches, and pump-drained canals, which carry water to 105 pump stations, thus maintaining the appropriate level of ground water. The land is crossed by the Vistula, its delta river arms (Nogat, Szkarpawa, Martwa Wisła) and other natural water courses, such as the Motława, Radunia, Tuga, Elbląg. These rivers (mainly the Vistula), together with sea waters, cause a considerable flood hazard to entire Żuławy, due to storm water lifting and ice-jamming. Moreover, apart from farmlands, the city of Gdańsk,

Elbląg, Nowy Dwór Gdański, Nowy, Staw, Malbork and many other human agglomerations are in grave danger of flooding.

On behalf of the State Treasury, the Żuławy water management system is run by the Regional Land Melioration and Water Structures Boards in Gdańsk (pomorskie region) and in Olsztyn (warmińsko-mazurskie), by the Regional Water Management Board in Gdańsk (an institution being an independent element of government administration, answerable to the Minister of Environmental Protection) and, only to some extent (the Elbląg river), by the Municipal Office in Gdynia (answerable to the Minister of Infrastructure). All these institution complement each other in their efforts in managing the water economy of Żuławy.

Many years of neglect of flood control systems caused in July 2001 and in early 2002 flood damage estimated at a sum surmounting 500 million PLZ (counting only the damage suffered in the pomorski and warmiński region). Potential damage might be considerably greater if measures are not taken to allot more money for strategic construction projects on and maintenance of the existing water structures and the basic drainage and inland surface water installations in this area.

The budget funds at the disposal of the heads of regional parliaments (marszałek) as part of commissioned governmental projects and those controlled by the Minister of the Environmental Protection are absolutely inadequate to the needs of the region. Recently, those resources hardly sufficed to satisfy the minimum needs to finance a project in Żuławy (over 10%), while they covered only one-third of the maintenance costs.

Experts ring the warning bells, saying that wet years usually follow dry ones. Moreover, global atmospheric changes cause extreme climatic phenomena (see: the rainfalls in the summer of 2001, the heavy snowfalls at the turn of 2002 and the sudden warming). Although there is nothing like 100% natural phenomena hazard control, notwithstanding the difficult financial situation of our State, even if we cannot safeguard ourselves, we must do our best to minimalise potential losses.

It is worth mentioning that Żuławy do not stand for agriculture only; they also offer thousands of jobs in a variety of businesses. This area also boasts rich cultural heritage of a European dimension, a heritage going several centuries back in time (built by e.g. the Mennonite settlers and immigrants from the eastern lands of the 2<sup>nd</sup> Polish Republic), and a unique, anthropogenic natural environment. **First and foremost, however, it is the habitat of 250 000 people, whose State should secure them at least a minimum safety.** 

Statutory expenditure cannot serve water management as such. That requires drawing specific guidelines and establishing such directions, both current and planned, that not only will the present state affairs be maintained – because at present our water management considerably hinders development – but it will be continuously improved. It should be clearly and decidedly emphasised that it is not the water economy that is the ultimate aim. Water management must serve the people, assist them in their prosperity and safety, protecting them from the flood and drought hazard and ensure them ecological safety as well.

It is vital that the backwardness, which is the legacy of the previous years, must be done away with. The present condition of the water structures in Żuławy does not protect

even them from flooding or ground waterlogging, which might cause a calamity in which people, economy and nature might bear incalculable losses, and Żuławy might practically get erased from the map of Poland, thereby from the map of Europe as well. A long-term strategic programme that will create favourable conditions for embarking on projects aiming to make up for the years of neglect and avoiding losses is a great chance for Żuławy. Consistent implementation of the programme will cause that on its completion the need for financial resources to be spent on water management construction projects in Żuławy will substantially decrease.

Because of the unique situation of Żuławy (both in Poland and Europe, where only the Netherlands are in a similar situation, which is much better, though), the way water management projects have been financed so far is inadequate. Żuławy need special resources, which in turn calls for new legal foundations. It should be emphasised that our long-term planning should aim to change the whole water management system in our country, for example adopting a system similar to the one that is used in the Netherlands.

#### **PROGRAMME Aims**

#### Main Aims of the PROGRAMME

The most important element of any programme is a definition of the aims to be reached on its completion. The PROGRAMME aims to accomplish are:

- 1. flood, drought and other emergency protection;
- 2. the Vistula basin ecosystem improvement;
- 3. surface and underground water quality improvement;
- 4. creating conditions for economic and agricultural development in the Vistula basin, in compliance with the sustainable development principle
- 5. environmental protection in general

The aims of the PROGRAMME should be drawn up in a way that they should generate results that would be concrete and easy to monitor.

#### Flood, Drought and Other Emergency Protection.

The following results of strategic activities aiming to improve flood, drought and other emergency protection should be achieved:

- flood damage hazard should have been limited to 20% by the year 2020 as compared to the year 1997;
- by the year 2006 this hazard should have been limited to 60%;
- drought damage hazard should have been limited to 25% by the year 2020 as compared to the year 2003
- hydrotechnical structure breakdown damage hazard should have been limited to 90% as compared to the year 2003

#### The Vistula Basin Ecosystem Improvement

On completion of the PROGRAMME implementation process, the biological diversity in the entire basin area must have been improved, with a special focus on water ecosystems:

- a) ichtyofauna reintroduction of natural migratory fish species;
- b) birds maintaining and improvement of ecological corridors;
- c) fauna restoration of the original natural habitats of riverside animals, with some caution, however, as to the restitution of some species such as beavers.

#### Surface and Underground Water Quality Improvement.

- Reaching such a degree of water quality that it will be possible to:
  - Use simple water treatment techniques to supply water to people and industries;

- Swim in rivers and lakes, including the entire length of the Vistula by the year 2020

# Facilitating Economic and Agricultural Development in Compliance with the Sustainable Development Principle.

The PROGRAMME implementation process must facilitate activities of local governments and businesspeople in the following areas:

- Sufficient amount of water for farming and animal raising;
- Water recreation, safe places to swim and sail, opportunities to get a complex tourist product;
- Cross-river traffic facilities (for people and goods);
- Water supply for industry;
- Inland navigation, especially for tourist and recreational purposes;
- Hydro-power engineering as a primary renewable energy source; which Poland is bound to use by EU regulations;
- Creation of numerous new jobs as a favourable side-effect of the PRO-GRAMME

### **Problem solving**

#### **Establishing Priority Tasks - Criteria**

The objective of the criteria establishment process is, first and foremost, to most objectively draw up a list of priority tasks to be carried out and also to prevent local lobbying. A lack of clear criteria might cause situations where a local lobby manages to implement projects that are not among the top priorities to be carried out immediately.

Entry of this document divides problems into local and translocal. From among the translocal issues, the following need to be identified:

- Water quality (surface and underground water quality and systematising sewage management processes in co-ordination with the National Municipal Sewage Treatment Programme);
- Flood control (construction of retention reservoirs in the Upper Vistula basin and on Carpatian tributaries of the Vistula, renovation of flood embankments of the Vistula and its tributaries;
- Upper Vistula valley (construction of a water screen below Włocławek Nieszawa), and also- the prospect of the Lower Vistula Cascade;
- Water supply for the people at the time of drought (constructing retention reservoirs, mainly in the Middle Vistula basin);
- flood control in Żuławy;
- modernisation of navigation routes for tourist and freight purposes (revitalising the system
  of waterways in Masuria and Warmia, rebuilding of water structures of E 70 Oder-Baltic
  route, modernisation of waterways such as Zalew Zegrzyński (artificial lake) Masurian
  lakes and regional stretches of the Middle Vistula, e.g. the Puławy stretch, modernisation
  of the upper Vistula waterway);
- restitution of various migratory fish species.

#### **Primary Priority Tasks**

Priority tasks embrace the following fields:

- a) flood control
- b) drinkable water sources protection
- c) waterways
- d) water ecosystems
- e) environmental protection in general.

The tables attached to the PROGRAMME present the major tasks to be completed in the Vistula basin. The content of the tables is open to change, also due to the changing conditions. The tables may be accessed under the following Internet address: <a href="https://www.zmn.org.pl">www.zmn.org.pl</a>

## Participants of the PROGRAMME

#### This draft PROGRAMME has been prepared by:

- > the governmental administration, especially the Minister of Environmental Protection as a plenipotentiary of the Government for the Vistula 2020 Programme
- > self-government administration units at all levels of power
- > unions of towns and municipal and rural authorities (gmina)
- > academic research institutes
- > NGOs, including ecological (e.g. WWF) and economic organisations (e.g. TEW and TRMEW)
- > businesses
- > private persons
- > 'Vistula River and Its Basin' Programme Office

#### Financial Resources of the PROGRAMME

#### Financing the Programme:

- > The foundation of the PROGRAMME success is its financial standing. The fiasco of the previous programmes has stemmed from a lack or mismanagement of funds.
- >The synergy effect should be reached through having a variety of financial sources:
  - National budget most conveniently within the framework of the Long-term PRO-GRAMME Act of Law;
  - National funds, especially from the National Environmental Protection and Water Management Fund (NFOŚiGW), the Regional Environmental Protection and Water Management Fund (WFOŚiGW) and the EcoFund;
  - EU funds whose beneficiaries are local government institutions and businesses;
  - Private funds, with special regard to public-private partnerships.