

## KAZAKHSTAN: Immediate Measures for the Water Supply Kasalinsk/Novokasalinsk

Formerly, the Aral Sea was the world's fourth largest inland lake. Its surface is constantly diminishing due to the fact that part of its feeding rivers, the Amudarya and the Syrdarya, is diverted since about forty years to use their water for the irrigation of the extensive cotton and rice fields in Kazakhstan and Uzbekistan. After a rapid drying-up the lake is now divided into the greater South Aral Sea and the smaller North Aral Sea covering only 40 % of its former surface.

The lower course and the delta of the Syrdarya River as well as the northern and eastern parts of the lake are located in the area of the provincial capital town of Kyzylorda. Also located in this area is the district capital town of Novokasalinsk which – together with the district capital town of Aralsk – is most affected by the Aral Sea disaster and its immediate effects, i.e. salinization, industrial decay, and migration.

In 1994, the World Bank outlined an Action Programme for the support and rehabilitation of the towns affected by the Aral Sea disaster. Main components comprise urban and rural water supply, sewerage, hygiene education, and institution building on provincial and district levels as well as in rural communities.

In cooperation with the WB Programme, immediate measures in these areas are now being funded by the German Government through KfW for the towns of Novokasalinsk (36,000 inhabitants) and Kasalinsk and in four adjacent rural settlements. Project implementation lies under the responsibility of the Committee for Water Resources in the Ministry of Natural Resources and Environment in Kokschetau.

In March 2002, the Committee entrusted GITEC (in association with another German consulting firm and a local engineering institute) with the provision of consulting services for immediate measures to improve the supply of safe drinking water in Kasalinsk/Novokasalinsk and with the preparation of a feasibility study

for an optimized long-term solution for sustainable water supply in the project area.

The existing installations consist of a water treatment plant at the Syrdarya River, transmission mains to all project locations, and distribution networks in Novokasalinsk and Kasalinsk. An alternative solution will be investigated for a future supply of groundwater (via an existing transmission main from Aralsk) which is of higher quality but costly.

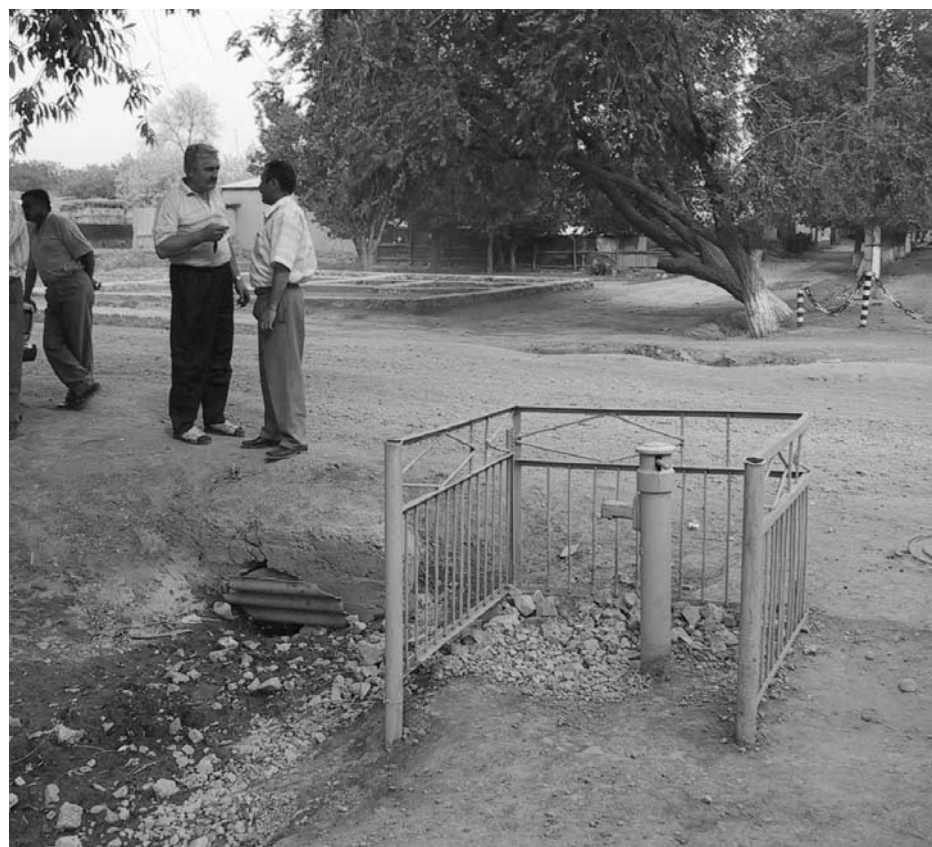
Our consulting services comprise the technical assistance to the Committee in preparation of tender documents and speci-

fications, tendering and award of contracts, supervision of construction, commissioning of installations as well as cost control and project monitoring. The feasibility study includes assessment of water resources, review of existing planning and investigation documents, pre-design and cost estimation, and elaboration of an implementation concept.

The first project phase has been carried out in May/June 2002 under the direction of Dipl.-Ing. H. Steinke; tender documents will be submitted in July. A period of 2 years is scheduled for the implementation of the immediate measures and the preparation of the feasibility study.

### KAZAKHSTAN: Public standpost in Kasalinsk

All standposts will be equipped with a measuring device in order to individually charge the water quantities supplied.



## DOMINICAN REPUBLIC: Reconstruction of Schools in the Regions of San Pedro de Macorís and Higüey

In September 1998, Hurricane "Georges" swept over the Dominican Republic with wind speeds of more than 200 km/h, leaving behind a path of severe destruction. Particular damage was caused to the Nation's educational infrastructure. It was assumed that some 1,300 schools, or 28%

and Securing the Basic Educational System in the rural areas and marginal urban communities of the Regions of San Pedro de Macorís and Higüey was conceived. The Project's objective was defined as: reconstruction of schools with a total of 215 classrooms, and procurement of

of the Ministry of Education represented by the Department for the Construction of Schools.

Since October 2001, GITEC (in association with a local consulting firm) is being rendering - under a contract with ONFED -



**DOMINICAN REPUBLIC:** Typical school building with several classrooms; concrete hollow-block masonry with reinforced concrete columns (left); all schools will have a reinforced concrete roofing as they shall serve as hurricane shelters (right).

of all educational facilities in the Dominican Republic, were affected. Some 200 schools were completely destroyed. The worst damages to educational facilities were caused in the National District and in the eastern parts of the country.

To assist the Government in the restoration and improvement of basic educational services, a Project for Reconstruction of Schools and for Assistance in Improving

furniture and educational material for the target schools.

Once completed, some 11,000 pupils will benefit from the Project. An amount of Euro 5 million was made available by the European Development Fund (EDF) for the reconstruction measures. The Project is being administered by the National Office for Administration of EDF-Funds (ONFED), under cooperation

technical assistance in project implementation, and actual supervision and control of construction works. Three contractors are presently engaged in reconstruction activities at 97 school sites with 1 to 12 classrooms each.

The construction supervision team, consisting of nine members, is being directed by our experienced staff member Dipl.-Ing.(FH) W. Nagel.

## TANZANIA: Urban Water Supply Songea

Funded through KfW, the project on Immediate Measures for the Water Supply of the Town of Songea in southern Tanzania is being carried out by Dorsch Consult, Munich, in association with GITEC and a local company. Three areas of the overall task fall under our responsibility, namely: (i) the socio-economic survey to establish the future water demand and the ability and willingness of the population to pay water rates; (ii) an environmental survey to present recommendations for the protection of the Matogoro Hills Forest Reserve water catchment area; (iii) financial and institutional advisory services to the Urban Water and Sewerage Authority (UWSA) of Songea.

The socio-economic survey was undertaken in March/April 2002 and led to a comprehensive socio-economic profile of the Municipality of Songea (supported by GIS-based mapping) with population figures and anticipated growth rates, water demand projections and water availability considerations, financial data and design parameters. Notes on health, sanitation, and solid waste management contain valuable information for the UWSA Songea. The survey was carried out by our staff member Mrs. M. Duerto (Dipl. Geogr., M.Sc. Env. Management).

While our financial and institutional advisory services will be rendered at a much later stage of the project, we have embarked in July/August 2002 in an environmental management study defining a long-term forest management plan and other protection measures to safeguard the Matogoro Hills water catchment area. It shall provide a suitable institutional framework and practical tools to monitor the interventions within the catchment area and to share the costs for protecting its water quality and quantity. The study will be carried out by W. Süß (M.Sc. Forestry).

## PHILIPPINES: Cold Chain Equipment Project

The Expanded Programme on Immunization (EPI) supported worldwide by WHO/UNICEF has been successfully implemented in the Philippines since 1976, with the overall goal to protect children from contracting preventable diseases through vaccination, like Measles, Tetanus, Pertussis, Diphtheria and Tuberculosis. To maintain high coverage levels and guarantee the quality of vaccines cold chain equipment the Government of the Philippines now intends to replace cold chain equipment that was bought during the late 1980s and early 1990s.

To achieve the overall goal of the Immunization Programme in the Philippines in improving the health status of infants, young children and mothers through administration of potent vaccines stored at optimum cold chain conditions the German Government through KfW is financing the replacement of cold chain equipment.

In February 2002, GITEC has been awarded by the Department of Health (DOH) in Manila the contract to assist in the execution of a project aiming at the modernization and expansion of cold chain equipment in 57 out of 88 provinces of the

country. The project covers the management and monitoring of all activities related to the procurement and installation of cold chain equipment and the supervision of construction and rehabilitation works for cold rooms. Additionally, the development of a maintenance concept will be carried out in close co-operation with the maintenance programme within the DOH.

The project will last for a period of 33 months and is geared by Mrs. M.C.B. Nubla, MBA, our local project leader with the support of Mr. W. Heesbeen who is a specialist in medical equipment management.

## PR OF CHINA: Combating Land Degradation in Dryland Ecosystems

Land degradation seriously affects the livelihood of 360 million people in the western region of the People's Republic of China (PRC) and poses an immediate threat to the economic welfare of the nation. The Chinese Government recognizes that a major effort is needed to address land degradation as a national development priority. Loss of land productivity and valuable habitats and the increasing incidence of dust storms are of particular concern.

Sustainable natural resources development has therefore been declared one of the two pillars of the Western Development Strategy, the main strategic policy of the Government that aims to balance regional disparities and to provide a sound base for sustainable development of two thirds of China's land area.

It is against this background that the Chinese Government requested the Asian Development Bank (ADB) to take a lead role in preparing a strategic PRC-GEF Partnership on Land Degradation in Dryland Ecosystems under Operational Program No.12 on Integrated Ecosystems Management. The PRC-GEF Partnership will act as a mechanism to support the implementation of the Western Development Strategy through combating land degradation and reducing poverty in selected eco-regions of national and global significance. Thereby the Partnership will achieve global environmental benefits through conservation of biodiversity, reduction of land degradation, and carbon capture.

In January 2002, a contract for Consultant's Services to the PRC-GEF Partnership project was awarded by ADB to an association formed by GITEC, another German forest services company, and the Chinese Academy of Forestry. The consulting services will focus on the formulation of the Country Programming Framework and an investment programme, which will integrate global environmental objectives into national

strategies and plans for combating land degradation in the western China.

The project team commenced duties in January 2002. Activities of GITEC cover short-term assignments of specialists in the fields of Biodiversity, Carbon Sequestration/Climate Change, Land Use Planning/GIS, and Project Economy. The services will be completed in December 2002.



**PR OF CHINA:** Example for the re-establishment of tree shelterbelt networks with diverse fast growing trees, completed by sand dune fixation forests

## KYRGYZ REPUBLIC: Tuberculosis Control Programme II

GITEC has been entrusted - in collaboration with the German Research Centre for Medicine and Bio-Sciences Borstel and a Kyrgyz consulting firm - by the Ministry of Health in Bishkek with the implementation of the Tuberculosis Control Programme II, which is to complement and to expand the Tuberculosis Control Programme I also executed by GITEC since 1998.

The programme's goal is to contribute to the improvement of the diagnosis and the treatment of different forms of tuberculosis on a country-wide level according to the DOTS strategy which is recommended by WHO. The programme is embedded in the Kyrgyz Health Reform Programme

MANAS which is supported by the World Bank and commenced in 1996 and which lists the prevention of tuberculosis as one of its focal areas.

In order to bring the rising number of tuberculosis cases within the country to a halt the programme plans to deliver Anti-TB drugs for short-course treatment, but also for the treatment of multi resistant cases, further to deliver medical-technical equipment to support the Ministry of Health in the execution of this important programme. The services to be provided by GITEC encompass the verification and specification of requirements, tendering and contracting activities, acceptance of

deliveries and monitoring of distribution, and supervision of installation and utilization of the equipment.

The project will run for a period of 48 months and is directed by Prof. Dr. M. Leichsenring, a specialist in Tuberculosis Prevention, who already signed responsible as leading specialist for the Tuberculosis Control Programme I. He will be supported in the field of laboratory equipment by Mrs. Dr. Rüsç-Gerdes, the head of the Department for Mycobacteriology at the Research Centre Borstel. Backstopping and logistical support is provided by Dr. med. Dipl.-Chem. Th. Wolff, the Head of the Health Department at GITEC.

## PERU: Water Supply and Sewerage Puno

Located at Lake Titicaca at an elevation of more than 3,800 m asl., the municipality of Puno faces an estimated population of some 146,000 inhabitants by the year 2010. With the aim to provide safe and permanent water supply to 80 % of the population and to connect 70 % of the population to the central sewer system until the year 2005, a project for rehabilitation and extension of the existing water supply and sewerage systems of Puno is being implemented under funding by the German Financial Cooperation/KfW.



**PERU:** View on districts of the town of Puno with existing waste water stabilization ponds

The foreseen increase of the quantity of water supplied and the respective sewerage requires the construction of works like water reservoirs and pump stations, the replacement of water mains and sewers, the installation of additional house connections, as well as the rehabilitation and

extension of the existing sewage treatment plant to curb further pollution of Lake Titicaca.

In December 2001, GITEC (in association with a Peruvian consulting firm) was awarded by the Puno Municipal Enterprise for Basic Sanitation (EMSAPUNO) a contract

to render consulting services for the project named. The services comprise (i) revision and verification of the existing final design study; (ii) completion of the inventory of the existing network in order to define future pressure zones; (iii) elaboration of a revised project concept with final design, cost estimates, and additions and improvements to the project; (iv) preparation of tender documents including implementation planning for national and international tendering; (v) assistance to the Client in tender evaluation and preparation of contract documents; and (vi) supervision of the implementation of all works.

The project team consists of 3 German and 8 local experts under the direction of Dipl.-Ing. H.D. Neidiger. Works on site commenced early 2002; the envisaged implementation period sums up to 40 months.

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