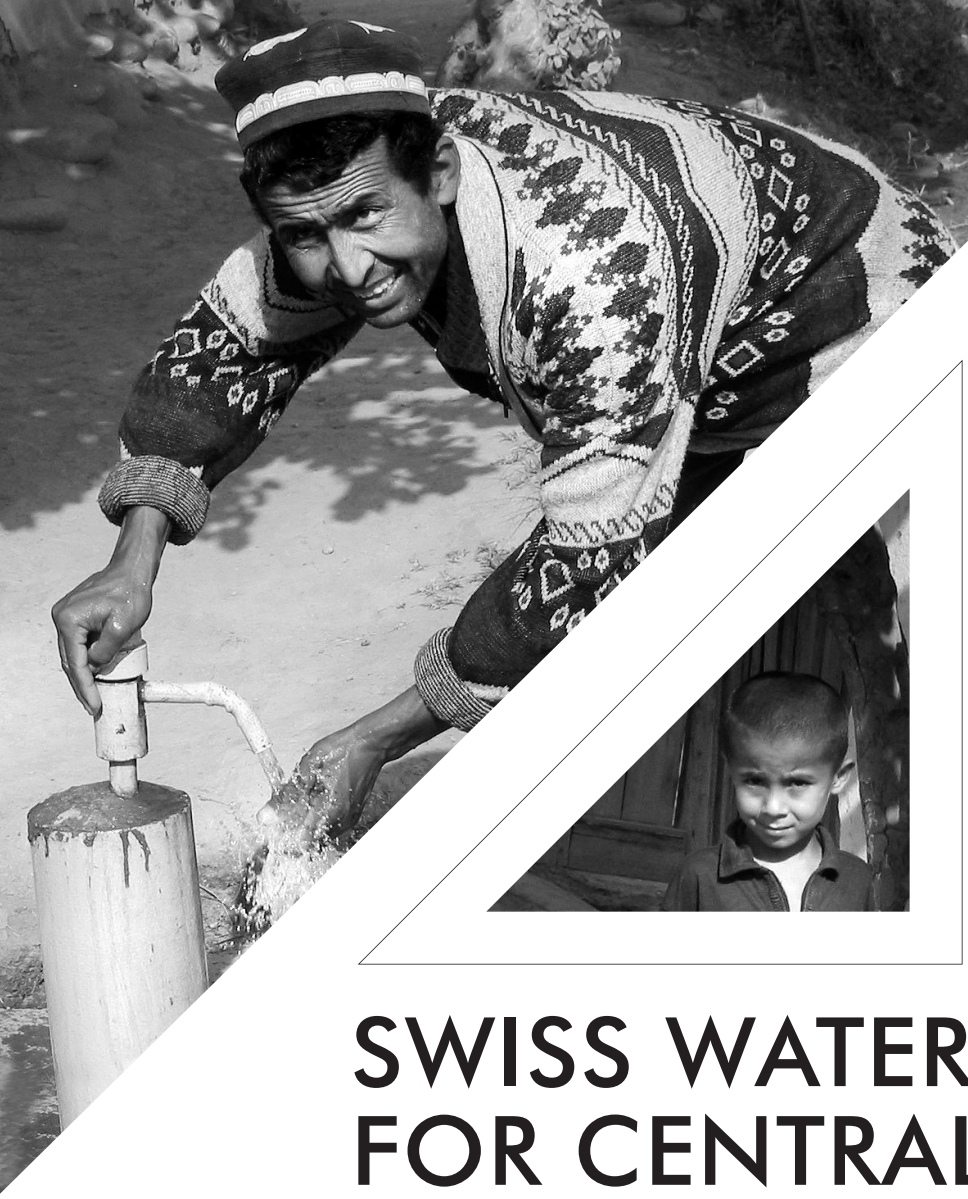

SWISS WATER STRATEGY FOR CENTRAL ASIA 2002–2006

DEZA DIREKTION FÜR ENTWICKLUNG UND ZUSAMMENARBEIT
DDC DIRECTION DU DÉVELOPPEMENT ET DE LA COOPÉRATION
DSC DIREZIONE DELLO SVILUPPO E DELLA COOPERAZIONE
SDC SWISS AGENCY FOR DEVELOPMENT AND COOPERATION
COSUDE AGENCIA SUIZA PARA EL DESARROLLO Y LA COOPERACIÓN

Staatssekretariat für Wirtschaft
Secrétariat d'Etat à l'économie
Segretariato di Stato dell'economia
State Secretariat for Economic Affairs
seco

Swiss Water Strategy for Central Asia 2002-2006

Strengthening Regional Water Management Capacities

This document has been approved by the heads of the Department for Cooperation with Eastern Europe and the CIS of the Swiss Agency for Development and Cooperation and the Directorate for Development and Transition of the State Secretariat for Economic Affairs in summer 2002.

Authors Jürg Krähenbühl, Johan Gely, Urs Herren
Cover Picture Jürg Krähenbühl

Table of Contents

Executive Summary ... 3

1 Context ... 8
1.1 Water Problems in Central Asia ... 8
1.2 Sector Strategy Development ... 9

2 The Swiss Water Sector Portfolio ... 9
2.1 The Swiss Programme 1996-2000 ... 9
2.2 Portfolio Development ... 9
2.3 Swiss Water Sector Commitments 2002 ... 10

3 Swiss Water Sector Strategy ... 12
3.1 Approach and Basic Principles ... 12
3.2 Objectives of the Swiss Water Sector Interventions ... 16
3.3 Geographical Focus ... 18
3.4 Coordinated Swiss Approach ... 19
3.5 Cooperation with other Donors ... 19
3.6 Co-Financing ... 20
3.7 Programmes and Projects ... 20

4 Budget ... 24

5 Review of the Strategy ... 24

Annex 1: Abbreviations and Accronyms ... 25
Annex 2: Tentative Budget ... 26
Annex 3: Map ... 27

Executive Summary

Context

Water is a key resource for Central Asia. The water related infrastructures (irrigation and drainage, hydropower, water supply and sanitation) are increasingly deteriorating; institutional, financial and managerial drawbacks lead to inadequate operation and management of the systems; water shortage is a growing problem leading to social and political conflicts and economic decline.

The strategic objectives of the Swiss assistance to the region are to attain sustainable economic growth through market-based economy, reduce poverty, improve governance, and promote regional cooperation and integration of the region in the world economy. The water sector has been chosen as response to key challenges posed to the region and as a domain critical to the achievement of these strategic objectives.

Parallel to the development of the Regional Mid-Term Programme Central Asia 2002-2006, SDC started working on a concept for its longer-term commitment to the water sector in Central Asia. The present Regional Water Sector Strategy paper is an outcome of this process.

The Swiss Water Sector Portfolio

The importance of regional water management for the security of the Central Asian region has been recognised by the Swiss foreign policy in the early nineties. First water projects were started in 1996 by **seco** and 1999 by SDC. In 2000 Switzerland decided to further develop its commitment to the water sector and several new projects have been initiated. Up to June 2002 SDC's total cumulative budget for the water sector is CHF 7.5 million, the cumulative commitments of **seco** total CHF 41.9 million.

Approach and Basic Principles of the Swiss Water Sector Strategy

The Swiss water sector programme emphasises the support to institutional development, capacity building and human resources development linked with infrastructure investments, the promotion of regional partnerships and donor coordination. Interventions are at the same time targeting the macro, meso and micro levels of the political and economic system. This requires inputs related to sector policy and the development of institutional and legal/regulatory frameworks, the development of management capabilities and organisational instruments and arrangements, the support to water users to improve water management on micro level; and, last but not least, to the provision of free access to sector-related information for all stakeholders in the system.

Core Sub-Sectors

The Swiss water sector strategy follows a programme approach focused on core sub-sectors shared and coordinated between both Swiss development agencies, SDC and **seco**. Thereby, **seco** concentrates on urban water supply and sanitation, hydro-meteorology, power production and distribution, dam safety and flood prevention while SDC focuses on integrated water resource management, regional hydro-meteorology, rural water supply and sanitation and the support to local water-related industries.

Combination of Institutional Development and Capacity Building with Infrastructure Investments

Swiss projects combine inputs to institution building, management and organisational support, human resource development and training with related physical inputs in infrastructure rehabilitation and development.

Private Sector Cooperation and Support

Three different approaches are envisaged to involve the private sector in Swiss water sector projects: Cooperation of SDC with the corporate private sector in joint projects and programmes in win- win situations, with the aim to reduce poverty and to create income and employment; participation of international companies in larger infrastructure projects under service or management contracts (co-)financed by **seco** including the promotion of local firms as subcontractors; and support to the local water-related industry with SDC providing seed money for initial assessments and **seco** assisting to mobilise Swiss and international private sector support instruments.

Policy Analysis and Dialogue

Entering into a policy analysis and dialogue on highest possible level, nationally and regionally, taking into account all conflicting issues, will be, as far as reasonable, an integrated part of the Swiss projects in the water sector.

Partners in this dialogue on national level would be key technical Ministries and Agencies (Agriculture and Water Resources, Environment, Energy, Communal Services). Switzerland shall also make effective contributions to the discussions on national and regional sector policies and will work out close relations with the Ministries of Finance, Cabinet of Ministers Offices and other relevant partners. Partners on regional level are CACO, IFAS, ICWC and the Shanghai Organisation for Security and Cooperation.

Transversal Issues

In line with the Regional Mid-Term Programme Central Asia 2002-2006, environment and gender are and will continue to be treated as transversal issues for all water sector activities. The awareness for environmental concerns and the promotion of gender equality shall be further promoted among actors and partners and considered while identifying, designing and implementing the projects.

The Swiss water sector programme promotes integrated water management on various levels under the principles of accountability and subsidiarity and thus contributes substantially to the strategic goal of the Swiss development assistance to foster "integrative, accountable and inclusive political systems leading to political stability."

Objectives of the Swiss Water Sector Interventions

Integrated Water Resource Management

During the planning period 2002-2006, SDC will continue and extend activities in integrated water resource management, focusing on political, regulatory, institutional, organisational and managerial issues combined with infrastructure improvements including inputs to the automation and technical improvement of primary canal systems.

Regional Hydro-Meteorology

The Swiss interventions in regional hydro-meteorology are designed to improve the existing network of hydrological and meteorological stations, to facilitate the exchange of hydrological and meteorological data and forecasting information among the National Hydro-Meteorological Services (NHMS's), and to provide forecasting information to various water users in all five Central Asian states. Switzerland provides equipment and software, technical, scientific, institutional and management support, training and staff development to the NHMS's.

During the planning period 2002-2006 the Swiss involvement will be continued with the intention that Switzerland would take over a leading and coordinating role in regional hydro-meteorology.

Water Supply and Sanitation

Smaller activities in rural water supply and sanitation have been initiated by SDC and are presently under implementation. During the planning period 2002-2006 a new consistent SDC programme in rural and small towns water supply and sanitation will be developed and its implementation will be started in Uzbekistan and Tajikistan.

Seco inputs are directed to the rehabilitation of water supply and sanitation systems in large and medium sized towns. **Seco** is strongly promoting public private partnerships in its water supply and sanitation operations through service or management contracts executed by the corporate private sector, emphasising technical and financial management, water sector policy (tariffs and subsidises), strengthening of water utilities and introduction of private sector management methods.

Flood Prevention and Dam Safety

Flood prevention and dam safety projects undertaken by **seco** aim at monitoring hazard bearing structures and natural environments, achieving efficient and safe management and operation of structures, plants and reservoirs, institutional strengthening of responsible organisations as well as promoting the interstate dialogue on water and energy management.

Geographical Focus

Activities will be concentrated on three priority countries – Kyrgyzstan, Tajikistan and Uzbekistan – with limited inputs to Turkmenistan and Kazakhstan in connection with regional programmes.

As the majority of **seco** interventions in the region are projects and programmes co-financed with multinational financing institutions without direct operational responsibility, concentration within the priority countries is presently of less significance for **seco** operations.

Coordinated Swiss Approach

With the establishment of joint Swiss Cooperation Offices in Bishkek, Dushanbe and Tashkent, the foundation is laid for an enhanced cooperation between SDC, **seco** and the Political Directorate IV of the Ministry of Foreign Affairs.

Cooperation with other Donors

It is essential to coordinate activities with those of other donors in order to profit from experiences, to achieve synergies and to avoid contra-dictionary approaches and duplications. In priority, cooperation has to be developed with the actors of relevance making a selection of quality.

Co-financing

Co-financing with international financing institutions is the traditional approach of **seco** to implement projects in the region. This allows strengthening of the influence of Switzerland as a partner in the political dialogue within the financing institutions and with the recipient countries.

Future co-financing of Switzerland will be carefully assessed and limited to projects in the core activities in the water sector, aiming at optimising coordination and cooperation with other donors, allowing influence to project design and steering, participation in the policy dialogue, and giving Switzerland a visible profile.

Programmes and Projects

Integrated Water Resource Management

Current projects are a contribution to the automatisation of sluice gates at Uchkurgan headworks in Narin River and the Integrated Water Resources Management Project (IWRMP) in the Ferghana valley. It is assumed that IWRMP will be continued in a third phase starting 2005. The current project will be complemented by limited inputs to the automatisation of pilot canal systems selected for the water management reform on canal level.

Regional Hydro-Meteorology

Current projects are the consolidation phase of **seco** inputs to the Aral Sea Basin Programme of the World Bank, the Regional Centre of Hydrology Project (SDC) and the Hydrological Forecasting Project in Tajikistan (**seco**). Activities in this sub-sector will be continued with the intention that Switzerland will take over a leading and coordinating role.

Water Supply and Sanitation

The main SDC project is currently the Community Water Management Project of the ISW in Ferghana valley. Additionally, the Regional Development and Dialogue Project in the Ferghana valley has a component of water infrastructure rehabilitation. New rural water supply and sanitation projects will now be developed in Uzbekistan and Tajikistan. Possible options of intervention will be further analysed and suitable projects identified in 2002/2003.

Seco inputs are directed to lager urban projects: Nukus sewage improvement, Samarkand and Bukhara urban water supply, Karakol water supply and a possible future co-financing of Dushanbe water supply project of the WB. Inputs to a financing strategy for the water supply sector in Kyrgyzstan to be jointly developed with WB are envisaged.

Flood Prevention and Dam Safety

Seco has started a first project in 2000, supporting the Government of Tajikistan in developing and operating a monitoring and early warning system for Lake Sarez, lasting until 2005. In addition, **seco** intends to co-finance the Dam and Reservoir Management component of the World Bank Water and Environmental Management Project (WEMP).

Private Sector Support

The proposed project includes the assessment of the local meteorological and hydrometrical instrumentation industry and the design of an appropriate support project. Suitable international cooperation partners for the local industry will be identified and liaison established with Swiss and international private sector support instruments. Similar projects will be initiated for other local industries in the water sector.

Regional Water-Related Information Base

Development of a coherent information tool relevant for sustainable water management in Central Asia through pro-active collection of information in five states and dissemination via internet and a half-yearly publication.

Indicative Budget 2002-2006

SDC

The anticipated total SDC budget for the water sector in Central Asia is 2.5-2.7 mill. CHF in 2002-2003. Water will continue to be one of the priority sectors of Swiss cooperation in the region. In view of this, depending on the general SDC budget situation, an increase of the water sector budget to 3.4 mill. CHF in 2004 and 4.3-4.6 mill. CHF in 2005-2006 is considered.

Seco

Based upon committed and planned projects, the water sector budget of **seco** is 3.3 mill. CHF in 2002, 11.8 mill. CHF in 2003, 8.6 mill. CHF in 2004, 6.9 mill. CHF in 2005 and 6.0 mill. CHF in 2005.

Review and Update of the Strategy

The present water sector strategy will be regularly reviewed and updated in the course of the annual planning of the COOF's and reviewed in the context of the regional mid-term planning 2007-2011.

1 Context

1.1 Water Problems in Central Asia

There is a consensus that the severity of the Central Asian's water problems require a strategic approach emphasising the equitable and sustainable management of water, addressing the looming freshwater crisis and responding to increasing concern.

Water is a key resource for Central Asia. The water related infrastructures, irrigation and drainage, hydropower, water supply and sanitation, are increasingly deteriorating; inadequate water sector policy and institutional, financial and managerial drawbacks lead to inadequate operation and management of the systems. Under-priced water resources are frequently misallocated, mismanaged and wasted. Fragmented public investment programming and sector management, and excessive reliance on overextended government agencies lead to inadequate utilisation of the scarce resources. Competing water demand between countries and sectors, and water shortage is a growing problem particularly for down stream countries of the two major river basins[1], leading to social and political disputes and economic decline.

All countries in Central Asia are facing common water resources management challenges:

- Lack of legal and regulatory framework and institutions required for managing water resources in an economically productive, socially acceptable and environmentally sustainable way.
- Inadequate knowledge of real sector costs within institutions and the population and consequently, absence of realistic water pricing.
- Exclusion of the relevant stakeholders from management responsibilities.
- Deteriorating system condition, operational inefficiencies and rapid increase of infrastructure and distribution costs of managing water in both irrigation and drinking water supply sectors, partly due to the fact that most of the water infrastructures have been reaching the end of their economic life (last infrastructure development was implemented during the 60s and 70s).
- Mismanaged and inequitable water allocation leading to waste and water scarcity.
- Increasing downstream/upstream, cross boundary tensions and inter-sector conflicts, mainly between hydropower and irrigation, both being of high importance to the national economies.
- Inadequate knowledge of the water resource base (meteorology, groundwater resources, hydrological forecasting).
- Unbalanced allocation of resources to large and small water infrastructures leading to neglect of the water requirements of the poor and the environment.

[1] Syr Darya and Amu Darya

1.2 Sector Strategy Development

The strategic objectives of the Swiss assistance to the region are to attain sustainable economic growth through market-based economy, reduce poverty, improve governance, and promote regional cooperation and integration of the region in the world economy[2].

The water sector has been chosen as response to key challenges posed to the region and as a domain critical to the achievement of these strategic objectives. It is a sector of concentration for both SDC and **seco**.

Switzerland has already made significant contributions to the water sector and is a recognised actor in Central Asia. All recipient countries demonstrate strong ownership and commitment for the ongoing and planned Swiss programmes and projects and consider them as high priorities, meeting their strategic needs in the sector.

In 2001 SDC, parallel to the development of the Regional Mid-Term Programme Central Asia 2002-2006 (RMTP)[3], started working on a concept for its longer-term commitment to the water sector in Central Asia. The present Regional Water Sector Strategy paper is an outcome of this process and is built on the experience of COOF Central Asia staff working in the sector and the Water Sector Consultant, is derived from the Rio and Dublin principles and is consistent with both SDC and **seco** strategic sector objectives described in the document mentioned above.

2 The Swiss Water Sector Portfolio

2.1 The Swiss Programme 1996-2000

The ecological disaster of the Aral Sea and the key importance of regional water management for the security of the Central Asian region has been recognised by the Swiss foreign policy since the early nineties. First projects were financed by **seco**, one focussing on hydro-meteorological services in the context of the Aral Sea Basin Programme of the World Bank (1996), a second on the improvement of the Nukus city sewage system (1997). SDC started the involvement in the water sector in 1999 by funding the rehabilitation of village water supply and drainage systems in the context of the Rehabilitation of Social Infrastructure Programme. Nevertheless, a convincing and consistent Swiss water sector policy did not exist.

2.2 Portfolio Development

In 2000, both SDC and **seco** decided to further develop their commitment in the water sector, addressing national as well as regional water problems in Central Asia. Subsequently, several new projects have been developed and started or committed between 2000 and 2002. Initial projects were chosen as windows of opportunity complementing or strengthening programmes initiated by other donors and as pilot experiences in the process of the development of a more strategic approach resulting in a consistent water sector strategy.

The Swiss intervention is a combination of work at country level complemented by selected regional programmes. The provision of grants is the only instrument used in financing water projects in the region.

[2] Regional Mid-Term Programme Central Asia 2002-2006 (RMTP).

[3] The RMTP is a joint planning paper of SDC, **seco** and the Political Affairs Division IV published in August 2002. It clarifies and strengthens the reference and analysis framework of Swiss policy in the area of international cooperation in Central Asia.

2.3 Swiss Water Sector Commitments 2002

2.3.1 *Commitments of SDC*

Up to June 2002, SDC's total cumulative budget for the water sector in Central Asia is CHF 7.50 Million including one country based operation and four regional programmes. Of this, irrigation and drainage (CHF 3.70 Mio.), rural water supply and sanitation (CHF 1.47 Mio.) and support to the hydro-meteorological sector (CHF 2.33 Mio.) are so far the main focus of intervention. The geographical area of concentration is the Ferghana valley.

Table 1: On-going Projects of SDC

Reference Location	Project Title	Brief Project Description	Organisational Set-up	Budget CHF Mio.	Implementing Organisation
7F-00680.01 KYR / TAJ	Rehabilitation of Social Infrastructure Programme, Tajikistan and Kyrgyzstan	Rehabilitation of rural water supply and drainage infrastructure as a crucial mean for the prevention of resources-related conflicts	Steering Committee: SDC, UNDP, KYR and TAJ Regional Authorities TAJ, KYR	1.10	UNOPS ITTIFOK FTI
7F-01282.01 KAZ / KYR / TAJ / TUR / UZB	Regional Centre of Hydrology	Complement and improve the existing network of hydro-meteorological stations and provide hydrological data, forecasting information to various organisations in the five states involved in the project	Steering Committee: 5 Countries National Hydro-meteorological Services / SDC / SNHGS / GEF	1.73	SNHGS 5 NHMS
KAZ / KYR / TAJ / TUR / UZB	Regional Centre of Hydrology	Complementary and supplementary activities 2002-2003	See above	0.60	SNHGS 5 NHMS
7F-01273.01 UZB	Contribution to the Automatisation of Sluice Gates	Contribution to automatisation of sluice gates for the Uchkurgan river woks in the northern part of Ferghana valley	No Steering Committee	0.33	BWO / SIC-ICWC
7F-00934.01 KYR / TAJ / UZB	Integrated Water Resources Management in the Ferghana valley, Phase I (Inception Phase)	The project mainly addresses possibilities for water saving and improvement of soil fertility, the reorganisation of water management and the elaboration of sustainable water allocation mechanisms	Steering Committee	0.57	IWMI / SIC-ICWC
7F-01565.01 KYR / UZB	Community Water Management in the Ferghana valley	Support a community based approach to water and hygiene in 10 villages in KYR and UZB by facilitating the sustainability of civil society organisation	Co-financing with CIDA Steering Committee	0.37	ISW
7F-00934.02 KYR / TAJ / UZB	Integrated Water Resources Management in the Ferghana valley, Phase II	See above	Steering Committee	2.80	IWMI / SIC-ICWC
Overall Budget of SDC				**7.50**	

2.3.2 *Commitments of **seco***

The total cumulative commitments of **seco** to the water sector up to June 2002 is CHF 41.9 Million in five country based operations plus one regional project. The contributions are focussed on urban water supply and sanitation (31.35 Mio.), flood prevention (4.80 Mio.) and support to the hydro-meteorological services (4.45 Mio.).

In addition, **seco** committed CHF 28.30 Million to the rehabilitation of the power sector in Kyrgyzstan and intends to support the power sector in Tajikistan in the future. Production and transmission of electricity has a significant link to water: Competing water demand between downstream countries needing water during vegetation periods while upstream countries are trying to use more water for electricity, specifically during winter periods, lead to increasing water disputes. Improved efficiency of electricity production and distribution allows cost savings and better use of water.

Table 2: On-going and committed Projects of seco

Location	Project Title	Brief Project Description	Organisational Set-up	Budget CHF Mio.[4]	Implementing Organisation
TAJ	Lake Sarez Risk Mitigation	• Implementation of monitoring and early warning system • Establishment of long-term safety measures for the lake Sarez	Sarez Agency as PIU International panel of experts for technical supervision	4.80	WB parallel / co-financing Sarez Agency
UZB	Rehabilitation of Nukus City Sewage System	Installation of a set of five pumping stations	PCU	7.50	WB parallel financing Nukus Municipality Vodokanal
Regional	Improvement of Hydro-meteorological Services	Construction/rehabilitation of meteorological and hydrological stations, implementation of flow forecasting technology	All 5 National Hydrometeorological Services take key decisions	3.50	WB / ASBP 2.1 parallel financing National Hydrometeorological Surveys, SNHGS
TAJ	Hydrological Forecasting in Tajikistan	Partly tied co-financing for equipment/software for rehabilitation of Tajik Hydromet	All 5 National Hydrometeorological Services take key decisions	0.95	WB parallel financing Tajik NHMS SNHGS
UZB	Samarkand and Bukhara Water Supply	• Rehabilitation • Institutional strengthening of water utilities through a public/private partnership • Strengthening of water utilities through improved financial management and commercial practices	Steering Committee and PCU	14.85	WB parallel / co-financing Ministry of Macroeconomics and Statistics of UZB Provincial Vodokanal
KYR	Karakol Water Supply	• Rehabilitation of the existing water supply system • Capacity building, introduction of new management • Approaches, reorganisation of the existing structures	Steering Committee and PIU	10.30	Bilateral financing Municipality Vodokanal Consultants and international Contractor
Overall Budget seco				**41.90**	

[4] 1 US$ assumed 1.65 CHF

Table 3: Projects that include significant Water Development Components

Donor Location	Project Title	Brief Project Description	Organisational Set-up	Budget CHF Mio.	Implementing Organisation
Power					
seco KYR	Tokmak, Orok, Lyermontova	Rehabilitation of the power distribution system (sub-stations)	PIU	14	WB parallel financing KSEH
seco KYR	Naryn II	Rehabilitation of the power distribution system (sub-stations)	PIU	6.8	WB parallel financing KSEH
seco KYR	Naryn III	Rehabilitation of the electricity distribution system in Koch-korka, Balykchi, Naryn town	PIU	7.5	Bilateral financing KSEH
seco pipeline TAJ	Power Rehabilitation	Refurbishment of Nurek and Regar switchyards	PIU	13.2	ADB Barkitojik
seco pipeline TAJ	Pamir Private Power	Live line tariff subsidy	Pamir Power Company	8.2	Pamir Power Company General contractor
Mountain Development					
SDC KYR /TAJ / KAZ	Central Asian Mountain Partnership	To support the efforts of local institutions and individuals aiming to improve sustain-ability of mountain develop-ment	Steering Committee: SDC / SDC sector service / CDE	4.5	CDE

3 Swiss Water Sector Strategy

3.1 Approach and Basic Principles

The Swiss water sector programme emphasises the support to institutional development, capacity building and human resources development linked with infrastructure investments, and the promotion of regional partnerships and donor coordination. Thereby, interventions are at the same time targeting the macro, meso and micro level of the political and economic system. This requires inputs related to sector policy and the development of institutional and legal/regulatory frameworks, the development of management capabilities and organisational instruments and arrangements including new models of public private partnership, the support of municipalities, water users and farmers to improve water management on micro level; and, last but not least, to the provision of free access to sector-related information for all participants in the system.

The main areas of emphasis are:

- To promote transparent decision making, decentralised governance and participatory approach in water operations under the principle of subsidiary[5].
- To promote managerial, financial and institutional innovations at all levels including new models of cooperation between the various stakeholders[6] and the introduction of water pricing and water rights, to encourage rational and efficient allocation of water, discourage waste, enhance water quality and ensure adequate water services.

[5] The subsidiarity principle ensures that decisions are taken as closely as possible to the citizens directly affected by them and under consideration of the possibilities available on national, regional and local level.

[6] Potential organisations responsible for water delivery could stem from the corporate private sector including local firms, the civic sphere (NGO's, community organisations) or be a public/private entity with autonomous finance capacity.

- To reconcile the competing objectives of countries and sectors (power generation, flood control, irrigation, industrial and domestic supply, environment), decrease conflicts in water use[7], support regional cooperation and information exchange.

- To foster demand-responsive versus supply-oriented approaches. This requires that water users and consumers be engaged in the process of selecting, financing, implementing and managing water services that meet their demands and willingness to pay.

The development and implementation of Swiss water sector projects are based on comprehensive[8] long-term planning and implemented in a sequenced and incremental way. They are characterised by a balanced learning and doing approach: projects and programmes are carefully monitored and regularly evaluated and the results of this process are directly transformed into action on project steering and management level, experiences in ongoing projects are used for the development and design of new project phases and projects.

3.1.1 *Core Sub-Sectors*

The Swiss water sector strategy follows a programme approach focused on core sub-sectors shared and coordinated between both Swiss development agencies, SDC and **seco**.

With the portfolio of ongoing, committed and planned projects SDC opts for a water sector strategy giving priority to issues related to:

- integrated water resource management,

- regional hydro-meteorology,

- rural and small urban water supply and sanitation,

- the support to water-related industries

emphasising the connection between the resource (defined by location, quantity, time and quality) and the major water-users (irrigated agriculture, urban and rural water supply, industry, power generation and environment).

seco on the other hand focuses on:

- urban water supply and sanitation,

- flood prevention and dam safety,

- regional hydro-meteorology,

- hydro-power and distribution of electricity.

3.1.2 *Combination of Institutional Development and Capacity Building with Infrastructure Investments*

Experience in a similar context elsewhere shows that inputs in institutional development and reform alone are not sufficient to guarantee project success. Interventions in institution and capacity building have to be combined with related physical inputs in infrastructure rehabilitation and development, including automation, communication and remote control. Thereby, management and organisational support will be included to guarantee maintenance and sustainability.

---

[7] The principles of *beneficial uses* are to be specifically defined which means that mutually agreed and legally protected benefit sharing mechanisms are negotiated from the onset.

[8] The Regional Water Sector Strategy should be used as a mean to highlight where and when to selectively intervene and then ensure that the targeted interventions are realistically schedule and funded.

3.1.3 *Private Sector Cooperation and Support*

In a concept note of SDC[9], a draft concept for a possible future cooperation between SDC and the private sector and rules for cooperation in public private partnerships have been elaborated. The main objective of a cooperation of SDC with the private sector is poverty reduction through the creation of employment and income. This concept can only be realised where the private sector and development cooperation complement each other and create win-win situations for both partners. Options to implement this concept in the water sector in Central Asia will be carefully assessed in the course of project development and design.

Seco is following a different approach on how to involve the private corporate sector in the water programme, more geared towards private participation in larger infrastructure projects, i.e. urban water supply and sanitation, under public private partnership (PPP) arrangements. Thereby, PPP projects are promoted as pilot projects in order to gain experience, which can later be used in other regions and sectors. PPP can basically be a service contract, management contract, BOT or concession. In the water sector in Central Asia so far only service or management contracts are envisaged.

The support to the development of local water-related industries is the third approach to involve the private sector in the Swiss water programme. **Seco** intends to contribute to an IFC regional venture capital fund designed to support local private sector initiatives with equity participation and credits. Specific water-related private sector projects will be launched during the planning period 2002-2006 with SDC providing seed money for initial assessments and where possible assistance from **seco** co-financed funds for sector development will be searched for.

3.1.4 *Policy Analysis and Dialogue*

Entering into a policy analysis and dialogue at highest possible level, nationally and regionally, taking into account all conflicting issues, will complement the involvement of Switzerland in the water sector on operational level.

Since different countries present different challenges, the design of projects and programmes or of relevant reforms and the time frame for their implementation crucially depend on the internal dynamics of each country. In Central Asia, the independence brought about new paradigms for the riparian states of the Aral Sea basin:

- monopolisation of the water resource at the expenses of downstream neighbouring countries
- upstream/downstream tension
- inter-sectoral water use conflict.

International water cooperation is essential but highly controversial in Central Asia, solutions in this area take a long time and require a high level of commitment[10]. Switzerland is to support this process with great care and under principles described above.

Partners in this dialogue on national level would be the key technical Ministries of Agriculture and Water Resources, the Ministries of Environment and the Ministries and National Agencies of Energy. Switzerland shall also increase its capability to make effective contributions to the discussion on national sector policies and will therefore work out close relations with the Ministries of Finance, Cabinet of Ministers Offices and all relevant partners at this level.

[9] Towards a Concept for the Cooperation of SDC with the private Sector, Urs Heierli, 27 March 2002.

[10] The World Bank first foray in the regional cooperation, the Indus Water Treaty in the 1960s, was solved only because the Bank worked at it for 10 years and had the personal commitment of Bank President Eugene Black. It is notable as being the only case where the Bank helped establish formal procedures for allocating water between countries.

Partners on regional level are CACO (funded after the dissolution of ICKKTU), IFAS, ICWC and the Shanghai Organisation for Security and Cooperation. The future development of IFAS as a donor-initiated, and CACO as a newly funded regional organisation is insecure and has to be carefully followed up in view of a future cooperation.

From the perspective of regional water management, priority should be given to the promotion of a free regional hydro-meteorological data exchange and to the development of a multinational agreement for the formation of a regional Hydro-meteorological Commission (independent, under IFAS or as part of an Aral Sea Basin Water Commission as proposed by TACIS).

A special emphasis should be put on the support of already existing International Water Law Initiatives which are already existing such as the United Nation Convention on the Law of Non-Navigable Use of International Water Courses and the Helsinki Rules on the Uses of Waters of International Rivers not yet ratified by enough countries to be bring into force but could serve as model for the design of future Basin Water Agreement in the region.

The proposed establishment of a regional information base as a first project to actively promote the political dialogue in the water sector will allow SDC to play a coordinating role among the interested donor organisations like UNDP, World Bank, ADB, USAID, CIDA, and UNECE/SPECA.

3.1.5 *Transversal Issues*

In line with the Regional Mid-Term Programme Central Asia 2002-2006, environment and gender are and will continue to be treated as transversal issues for all water sector activities. The awareness for environmental concerns and the promotion of gender equality shall be further promoted among actors and partners and considered while identifying, designing and implementing the projects.

Swiss water sector programmes and projects will follow the principles set in the Regional Mid-Term Programme 2002-2006.

3.1.5.1 *Environment*

Most of the water sector projects are directly contributing to improved environmental management, as they are concerned with the sustainable use of a scarce resource under multifunctional pressure.

Flood prevention, and management and mitigation of environmental damages are to be promoted in association with the implementation of all water related projects throughout the region. Measures to conserve and protect soil and water resources and to improve the efficient use of water are long-term tools to improve the environmental situation, to reduce risks of flooding and to mitigate the effect of drought.

3.1.5.2 *Gender*

Women are always included in the assessment of needs, decision-making processes and project implementation. Most of the Swiss projects are contributing to reverse gender inequality as they promote fair and equal accessibility to water resources.

(Memorandum to the executive Directors and the President. “Bridging Troubled Waters: Assessing the Water Resources Strategy since 1993”. P 32)

3.1.6 *Conflict Prevention*

One of the strategic goals of the Swiss development assistance in Central Asia is to foster "integrative, accountable and inclusive political systems leading to political stability." One of the prominent factors endangering political stability in the region lies in poor water management and in the problems related to the distribution of water between countries and sectors.

The Swiss water sector programme promotes integrated water management on various levels under the principles of accountability and subsidiarity and thus contributes substantially to the strategic goals of the Swiss development assistance in the region.

A Peace and Conflict Impact Assessment (PCIA)[11] will accompany the Swiss water sector programme to support programme and project planning, management and implementation.

3.2 Objectives of the Swiss Water Sector Interventions

3.2.1 *Integrated Water Resource Management*

During the planning period 2002-2006, SDC will continue and extend activities in integrated water resource management (focused on irrigation and drainage) and coordinate activities with those of other donors. Thereby, Swiss cooperation will focus on political, regulatory, institutional, organisational and managerial issues combined with infrastructure improvements at farm and inter-farm level, preferably in areas where other donors and organisations provide physical rehabilitation and modernisation of mayor infrastructures.

Limited inputs to the automation and technical improvement of primary canal systems including hydrological measurement and data transmission installations will be provided in connection with SDC water management projects. A contribution by the concerned Ministries in this complementary approach is a must; capacities and capability will be carefully assessed and supported by appropriate contractual arrangements strictly followed in the implementation phase of the Swiss projects.

Provided the objectives of the ongoing project in four provinces and three countries in Ferghana valley can be achieved, the extension of the project to the whole Ferghana valley will be envisaged.

3.2.2 Regional Hydro-Meteorology

The Swiss interventions in regional hydro-meteorology are designed to improve the existing network of hydrological and meteorological stations, to facilitate the exchange of hydrological and meteorological data and forecasting information among the national Hydro-Meteorological Services (NHMS's), and to provide forecasting information to various water users in all five Central Asian states. Switzerland provides equipment and software, technical, scientific, institutional and management support, training and staff development to the NHMS's.

Interventions in regional hydro-meteorology are closely interlinked with those in integrated water resource management. Reliable flow forecast information is the essential base to improve water allocation mechanisms. The linkage between flow forecasting and water management will be pilot tested in the framework of the IWRM Project in Ferghana valley.

SDC focuses on capacity building, institutional and organisational development in the framework of the project "Regional Centre of Hydrology". In particular, the NHMS's of the five countries will be strengthened in order to make them capable to fully participate in a regional data collection, evaluation and dissemination system, and to improve cooperation and communi-

[11] PCIA is a tool which allows for a systematic analysis of the interrelationship between development programmes and a conflict context, in the view of increasing the peace-building potential of projects and minimising their risk to unintentionally do harm.

cation with the water users. This approach requires intensive networking with national and regional organisations involved in the sector, the users of hydro-meteorological data and with other donor organisations and projects.

During the planning period 2002-2006 the Swiss involvement will be extended with the intention that Switzerland would take over a leading and coordinating role in regional hydro-meteorology.

Seco interventions in hydro-meteorology have been and will be directed to the construction and/or rehabilitation of hydrological and meteorological stations and to the supply of equipment, hardware and software for data processing and evaluation, related technical assistance, and strengthening of the cooperation between the five NHMS. The data basis and Internet platform developed under **seco** projects will be used for further activities under the SDC project.

3.2.3 *Water Supply and Sanitation*

Similar to the situation in irrigation water management, physical infrastructures in water supply and sanitation are deteriorating, leading, in combination with institutional, managerial and operational drawbacks, to declining reliability of the systems and high water losses. In many areas throughout the region, the availability of pure drinking water has become a major problem for the population. The lack of cost consciousness and ownership of the users results in decreasing discipline.

Consequently there is a high demand to improve the situation. Water supply agencies in Uzbekistan, Tajikistan and Kyrgyzstan have expressed their strong interest in a future cooperation with Switzerland.

Smaller activities in rural water supply and sanitation have been initiated by SDC and are presently under implementation. During the planning period 2002-2006 a new consistent SDC programme in rural and small towns water supply and sanitation will be developed and its implementation will be started in Uzbekistan and Tajikistan.

Seco inputs are directed to large and medium sized towns: Nukus sewage improvement, Samarkand and Bukhara urban water supply, Karakol water supply, and the planned Dushanbe water supply project. **Seco** is strongly promoting public private partnerships in its water supply and sanitation operations through service or management contracts executed by the corporate private sector.

3.2.4 *Flood Prevention and Dam Safety*

Flood prevention and dam safety are sub-sectors, which fall in the **seco** mandate in Central Asia. These projects strategically aim at monitoring hazard bearing structures and natural environments, achieving efficient and safe management and operation of structures, plants and reservoirs, institutional strengthening of responsible organisations as well as promoting the interstate dialogue on water and energy management.

3.2.5 *Support to the Local Water-Related Industry*

The local water-related manufacturing industry would potentially be capable to deliver various equipment and materials required in water sector projects in Central Asia. Often their technology is outdated and the quality of their products does not meet international standards. With moderate technical and financial inputs to modernise and to improve or to restart their businesses, these companies could become again relevant players in the local or even regional market as they could offer their products at very competitive prices and substitute the presently imported supplies.

Within the planning period 2002-2006, a programme to support the local water-related industries with priority to the hydro-meteorological equipment industry will be developed and implemented. Thereby, SDC will support the assessment of the situation to trigger the process. A private sector support package (SOFI) is available from **seco** to facilitate cooperation between companies in developed and in developing countries, to promote exports and to support local enterprises through various promotional instruments. These instruments will be mobilised where possible and feasible to facilitate the process of developing the local water-related industries.

3.2.6 *Humanitarian Aid*

Crisis interventions in connection with floods and drought are the task of the Humanitarian Aid Division and the Humanitarian Aid Corps of SDC. If possible and feasible, humanitarian aid efforts after floods and droughts are to be converted into long-term development strategies.

3.2.7 *Other Uses of Water*

Other uses of water including industry, aquaculture and navigation are not considered.

3.3 Geographical Focus

3.3.1 *Recipient Countries*

In line with the Regional Mid-Term Strategy 2002-2006, activities of the water sector programme will be concentrated on three priority countries – Kyrgyzstan, Tajikistan and Uzbekistan. Limited inputs will be provided to Turkmenistan and Kazakhstan only in connection with regional programmes.

The new geopolitical paradigm brought about by the resolution of the crisis in Afghanistan will have an influence on how Afghanistan will manage, regulate and control the tributaries of the Amu Darya in its northern provinces, tributaries which are contributing substantially to the Amu Darya overall discharge. A cross-border intervention in border areas between Afghanistan, Tajikistan and Uzbekistan in the region of the Amu Darya upper sources is to be considered on a mid-term perspective, with a primary focus on integrated water resources management and hydrological flow forecasting and discharge measurement.

3.3.2 *Geographical Areas of Intervention*

The present geographical area of intervention of SDC in the water sector is mainly the Ferghana valley. This strategy of geographic concentration will be continued during the planning period 2002-2006. This will allow multiple use of local know how, networks and relationships.

Under a long-term perspective, the most probable additional future areas of intervention will be:

- Sukhandarya Province of Uzbekistan, Khatlon Province of Tajikistan, and Takhar, Kunduz, Samagan and Balk provinces in Afghanistan. This would require a new approach of cooperation within SDC, i.e. between two different geographical divisions (CIS and Asia I)[12].

- Priority regions for rural water supply in Kyrgyzstan, after completion and assessment of the World Bank and ADB rural water supply projects.

- Karakalpakstan Republic and Khorezm Province in Uzbekistan, and Dashauz Province in Turkmenistan as crisis regions may become an area of intervention under the aspect of emergency relief.

[12] In addition coordination mechanisms for overall supervision, control and monitoring of future cross-border water projects implemented in this area will have to be discussed between the Cooperation Offices in Dushanbe, Islamabad and Tashkent.

As the majority of **seco** interventions in the region are projects and programmes co-financed with multinational financing institutions without direct operational responsibility of **seco**, and are based on a more sectoral focus, geographical concentration within the priority countries defined above is of less importance and has so far not been defined.

3.4 Coordinated Swiss Approach

With the establishment of joint Swiss Cooperation offices in Bishkek, Dushanbe and Tashkent, the foundation is laid for an enhanced cooperation between SDC, **seco** and the Political Directorate IV of the Ministry of Foreign Affairs. The latter is expected to play its role in the support of the decision making process on political level. It is recommended to put this cooperation in concrete form on project level. This will be realised in:

- regional hydro-meteorology, where the actual coordinated approach will be continued in order to avoid overlaps and duplications,
- industrial and private sector development and financing, in particular in the framework of the proposed analysis and possible support to the industry producing hydro-meteorological and water supply equipment and materials.
- Other areas of cooperation may arise during the planning period 2002-2006.

3.5 Cooperation with other Donors

Cooperation with other donors in the sector is essential to coordinate activities, to profit from experiences of others, to achieve synergies and to avoid contradictory approaches and duplications. In priority, cooperation has to be developed with the actors of relevance making a selection of quality. In fact the envisaged cooperation of SDC with other donors has already started in concrete projects:

- with USAID and the World Bank in regional hydro-meteorology, possible future partners could be NATO and WMO.
- with USAID in irrigation water management, possible future partners could be CIDA, TACIS and the French cooperation (Economic and Trade Department, Ministère de l'Economie des Finances et de l'Industrie).
- with CIDA in rural water supply.
- discussions have been initiated with UNECE/SPECA as a potential partner for the proposed regional information base on water and energy.

Seco is largely cooperating in various projects and programmes with international financing institutions:

- With the World Bank in urban water supply and sanitation (Nukus, Bukhara and Samarkand, in future Dushanbe), hydro-meteorology, flood prevention (Lake Sarez) and dam safety.
- With the Asian Development Bank (information exchange).
- With the International Finance Corporation in the regional venture capital fund.

Another future cooperation partner may be the OECD.

3.6 Co-Financing

Co-financing with international financing institutions (WB, EBRD, ADB, IFC) is the traditional approach of **seco** to implement projects in the region. This allows strengthening of the influence of Switzerland as a partner in the political dialogue within the financing institutions and with the recipient countries. Nevertheless, an increasing number of parallel financing and bilateral projects (recently approved: Karakol water supply) will allow gaining direct field experience, increasing the visibility of Switzerland and balancing the **seco** project portfolio between multilateral and bilateral projects.

Future co-financing of SDC will be carefully assessed and limited to projects in the core activities in the water sector as defined above, and shall aim at optimising coordination and cooperation with other donors in the sector.

The financial volume of Swiss inputs to co-financed projects shall allow influence to the project design, steering and monitoring, giving Switzerland a visible profile as project partner. Projects with large financial volumes where Swiss inputs are marginal contributions to the total project costs will be avoided.

3.7 Programmes and Projects

3.7.1 *Integrated Water Resources Management*

Two projects have been launched by SDC in 2001:

- The contribution to the automatisation of Uch Kurgan Naryn river works in the northern part of Ferghana valley. The project assists the BWO Syr Darya in improving and automating the operation of 25 sluice gates. The project has been completed in June 2002.

- The Integrated Water Resources Management Project in the Ferghana valley (IWRMP-Ferghana) is designed to improve and to reorganise the institutional arrangements for water management in Ferghana valley, comprising parts of Kyrgyzstan, Tajikistan and Uzbekistan. The project intends to improve water productivity, first tested at pilot sites with subsequent extension to larger areas; to promote decentralised and participatory irrigation management through water users associations (WUA); and to reorganise water management organisation on the basis of hydraulic boundaries. Improved water demand forecasts will allow improved and adapted water allocation planning by water managers at all levels, and sustainable use of water.

It is assumed that the latter project will be continued in a third project phase after evaluation in late 2004.

The majority of project activities of IWRMP Ferghana are implemented along the trans-boundary South Ferghana canal and its sub-systems. Together with the Tajik section of the big Ferghana canal, this canal system will serve as a pilot area for the implementation of the water management reform envisaged as one of three components of the project.

The current project will be complemented by limited inputs to the automatisation of these canal systems. These inputs shall be phased in accordance with the development of the water management reform. The existence of automated systems with data transfer and remote control is the indispensable technical prerequisite to manage water distribution along hydrological boundaries.

To achieve success in the reform of the water management along pilot canals the following shall be undertaken:

- Further situation analyses and development of a strategic plan including implementation concept on how to implement the reformed water management organisation for the concerned canal systems, including technical requirements for automatisation and control.

- Development of a phased implementation schedule.

- Attract, if possible, inputs to the modernisation and automatisation of major head gates and outlets from other donors.

- Facilitate the transfer of hydro-meteorological data and the use of flow forecast models planned by the hydro-meteorology project (RCH) for all river catchments of the pilot canals.

- Get political consent to the legal, institutional and organisational reform needed to achieve water management reorganisation.

- Adapt the level of intervention to the capacity, capability and current reform process of the three countries involved.

3.7.2 *Regional Hydro-Meteorology*

Hydro-meteorology is an early field of intervention of Switzerland through the contribution to the World Bank Programme 2.1, "Improvement of Hydro-Meteorological Services", and the creation of the Swiss Aral Sea Mission (SASM) in 1996.

Current projects are:

- Consolidation phase of **seco** inputs to the World Bank Aral Sea Basin Programme (ASBP). The monitoring stations established in the context of the Lake Sarez project will be integrated into the regional hydro-meteorological observation system.

- The SDC project "Regional Centre of Hydrology" which intends to strengthen the National Hydro-Meteorological Services (NHMS) of the five countries in order to make them capable to fully participate in a regional data collection, evaluation and dissemination system.

  The project is presently executed under an isolated structure – the Swiss project office called "Swiss Aral Sea Mission SASM" – and is lacking a suitable legal and institutional base and project organisation. A project agreement has therefore to be signed either with a regional organisation, preferably IFAS, or with the Governments of the recipient countries. Subsequently, the project organisation with steering committee and project implementation unit has to be established.

- Hydrological forecasting in Tajikistan where, via a **seco** funded project, the construction and/or rehabilitation of hydrological and meteorological stations, the supply of equipment and software for data processing and evaluation including staff training, and the establishment of flow forecast models for additional river catchments is planned.

Activities in this sub-sector will be continued and extended with the intention that Switzerland will take over a leading and coordinating role:

- Develop a vision and strategic plan including an implementation concept on how to develop and support the regional meteorological and hydrological data collection, processing, evaluation and dissemination system over the next decade.

- Provide support to the five NHMS to become able to undertake flow forecasts in their own territory and to exchange information, facilitate processes of self-confidence building, which by itself will increase regional cooperation.

- Facilitate the transfer of hydro-meteorological data and flow forecasts to the water users and managers (Basin Water Organisations BWO's, national organisations and institutions

responsible for water supply, energy, and environmental issues). Synergies with areas of intervention of Swiss water projects in Ferghana valley shall be promoted.

- Liaise and coordinate activities with regional organisations and other donors in the sector.

- Initiate and assist in the development of the political, institutional and legal basis for the establishment of a future Regional Hydro-Meteorological Commission with a permanent secretariat under the umbrella of a top-level regional agreement.

The SDC project "Regional Centre of Hydrology" will be evaluated in early 2003 with subsequent project preparation for a second project phase. Thereby the above recommendations shall be considered.

3.7.3 *Water Supply and Sanitation*

Two smaller water supply and sanitation projects of SDC are presently under implementation:

- A component of the Rural Social Infrastructure Rehabilitation Project (Kistakuz and Andarak) implemented by RRDP/UNOPS.

- The co-financing (with CIDA) of the Community Water Management Project of the International Secretariat of Water (ISW) in Ferghana valley (Ferghana Province of Uzbekistan and Osh Province in the Kyrgyzstan).

Following the strategy outlined above, and given the geographical priorities set out in chapter 3.3, SDC has decided to develop new rural water supply and sanitation projects in Uzbekistan and from 2004 in Tajikistan. Possible options of intervention will be further analysed and suitable projects identified in 2002/2003 with the following priorities:

- Development of a rural water supply and sanitation project in the Uzbek part of Ferghana valley, preferably in Provinces with ongoing SDC activities in the water management sector (Ferghana and Andijan Provinces).

- Development of a rural water supply and sanitation project in the Tajik Ferghana valley or in the Southern part of Tajikistan (second priority). In the South, this may include soil and water source protection and conservation, and integrated community-based watershed management approach. Priority regions to be further assessed are the Provinces of Sogh and Khatlon.

Thereby, integrated projects for one or more villages/settlements or small towns in the defined geographical areas will be selected and developed, combining physical inputs with support to institution building and system management under the principle of cost-based water use. New models of users participation and/or public private partnership for rehabilitation/extension, management and operation will be developed and applied.

In the framework of the Regional Dialogue and Development Project (RDDP), SDC will continue to implement water supply and sanitation projects in the border region of Batken and Sogh.

The decision on a probable extension of the Community Water Management Project of ISW in Ferghana valley will be based on the results of an evaluation.

Current and future projects of **seco** include the following:

- Nukus sewage project which may be extended by 1 to 2 years under the present budget. A future potential follow-up project will be discussed after evaluation of the current project phase.

- Samarkand and Bukhara urban water supply project which has been started recently and will last until 2007.

- Karakol water supply project is in the process of final project preparation, the first project phase will be implemented between 2002 and 2004.

- A possible future co-financing of the Dushanbe water supply project of the Word Bank is presently assessed.

- A financing strategy for the water supply sector in Kyrgyzstan to be developed jointly with the World Bank is envisaged in 1-2 years.

3.7.4 *Flood Prevention and Dam Safety*

Seco has started a first project in 2000, supporting the Government of Tajikistan in developing and operating a monitoring and early warning system for Lake Sarez with the aim to protect the population from potential floods from this naturally dammed up mountain lake. The project will last until 2005.

In addition, **seco** intends to co-finance the Dam and Reservoir Management component of the World Bank Water and Environmental Management Project (WEMP), which includes safety assessments and rehabilitation of artificial dams in questionable condition throughout the region, including the improvement of operation and management and the establishment of monitoring and warning systems.

3.7.5 *Support to the Local Water-Related Industry*

A fist project in this domain will be initiated in 2002, related to the hydro-meteorological equipment industry.

Various donors provide various types and brands of imported hydro-meteorological equipment at considerable cost with subsequent problems in repair and maintenance during operation including availability of spare parts. On the other hand, there is a local manufacturing industry in Central Asia with idle capacities. It appears that the local industry would be capable to deliver at least part of the required equipment and could maintain and repair imported and local equipment at much lower cost, provided they receive moderate technical and financial support to improve or to restart their businesses.

In the framework of a feasibility study, the general situation, technical competence, financial standing and the market situation of the local industry will be analysed and possible support mechanisms developed, followed by an attempt to liase and match local industries with international firms and with private sector support facilities of **seco** (Study Fund, SOFI, SDFC, IRG), and other multinational or bilateral organisations (IFC Regional Fund, EBRD, DEG, etc.).

During the planning period 2002-2006 similar projects will be initiated for other local industries in the water supply and sanitation sector.

3.7.6 *Regional Water-Related Information Base*

A coherent information tool relevant for sustainable water management in Central Asia does not exist. The proposed project will establish a regional information base related to water including hydropower, hosted by an existing regional organisation. It will maintain a web site and distribute a half-yearly publication. It will facilitate information sharing on existing and forthcoming policies, strategies, programmes and projects of national government, non-government and regional organisations, donor organisations and agencies. Government and regional organisations will in addition be followed up with regard to institutional and organisational development, bilateral and multilateral agreements and national legislation.

The information will be pro-actively collected and regularly updated by contracted local experts in each of the five Central Asian countries with a potential future extension to North Afghanistan.

Table 4: Planned Projects by Priority / New Projects Phases 2002-2006

Donor Location	Project Title	Brief Project Description	Proposed Organisational Set-up	Proposed Implementing Organisation
SDC KAZ / KYR / TAJ / TUR / UZB	Regional Centre of Hydrology, Phase II	New Project Phase 2004-2006	Steering Committee	5 NHMS
SDC KYR / TAJ UZB	Integrated Water Resources Management in the Ferghana valley, Phase III	New Project Phase 2005 onwards	Steering Committee	To be defined
SDC UZB	Contribution to the Automatisation of Pilot Canals	Complementary to the Integrated Water Resources Management Project Ferghana	Steering Committee	To be defined
SDC KAZ / KYR / TAJ / TUR / UZB	Regional Information Base on water and Water-related Energy	Creation of an regional regurlarly updated information base related to water and hydropower	Hosted by an existing regional organisation	SIC-ICWC
Seco TAJ	Dushanbe Water Supply	Co-financing of the World Bank urban water supply project		WB
SDC KYR / UZB	Support to the Water related Industry	Feasibility and match making studies	Private sector project	To be defined
SDC UZB	Rural Water Supply and Sanitation	Rural Water Supply and Sanitation project in the Uzbek Ferghana valley	Steering Committee and Village Water Committee	To be defined
SDC TAJ	Rural Water Supply and Sanitation	Rural Water Supply and Sanitation project in the Tajik Ferghana valley	Steering Committee and Village Water Committee	To be defined
Seco UZB	Rehabilitation of Nukus City Sewage System, Phase II		PCU	Nukus Municipality Vodokanal
Seco KAZ / KYR / TAJ / TUR / UZB	Dam Safety and Reservoir Management	Contribution to the rehabilitation and improved management of dams in the Amu-darya and Syr-Darya rivers, establishment of a monitoring and warning system		WB
Seco KYR UZB	Financing strategy for water supply in Kyrgyzs-tan			Co-financing with World bank and OECD

4 Budget

The anticipated total SDC budget for the water sector in Central Asia is 2.5-2.7 mill. CHF in 2002-2003. Water shortage, inadequate management and growing water allocation problems between sectors and countries lead to increasing social and political conflicts and economic decline. Water will therefore continue to be one of the priority sectors of Swiss cooperation in the region. In view of these considerations, depending on the general SDC budget situation, an increase of the water sector budget to 3.4 mill. CHF in 2004 and 4.3-4.6 mill. CHF in 2005-2006 is considered.

Based upon committed and planned projects, the water sector budget of **seco** is 3.3 mill. CHF in 2002, 11.8 mill. CHF in 2003, 8.6 mill. CHF in 2004, 6.9 mill. CHF in 2005 and 6.0 mill. CHF in 2005.

5 Review of the Strategy

The present water sector strategy will be regularly reviewed and updated in the context of the annual operational planning of the cooperation offices in Central Asia. A complete revision will be made in 2006 in the framework of the regional mid-term planning 2007-2011.

Annex 1: Abbreviations and Acronyms

ADB	Asian Development Bank
ASBP	Aral Sea Basin Programme
BVO	Basin Water Organisation
CA	Central Asia
CACO	Central Asia Cooperation Organisation
CHF	Swiss Franks
CIDA	Canadian International Development Agency
CIS	Community of Independent States
COOF	Local Swiss Cooperation Office of SDC/**seco**
EBRD	European Bank for Reconstruction and Development
FTI	Foundation for Tolerance International
GEF	Global Environmental Facility
ICKKTU	Interstate Council of Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan
ICWC	Interstate Commission for Water Coordination
IFAD	International Fund for Agriculture Development
IFAS	International Fund for the Aral Sea
IFC	International Finance Corporation
ISF	Irrigation Service Fees
ISW	International Secretariat of Water
ITTIFOK	Local Tajik NGO active in Soght Province
IWMI	International Water Management Institute
IWRMP	Integrated Water Resources Management Project in the Ferghana valley
KAZ	Kazakhstan
KYR	Republic of Kyrgyzstan
NHMS	National Hydro-Meteorological Service
OECD	Organisation for Economic Cooperation and Development
O&M	Operation and Maintenance
PPP	Public Private Partnership
RDDP	Regional Dialogue and Development Project
RMTP	Regional Mid-Term Programme Central Asia 2002-2006
RRDP	Rural Rehabilitation and Development Project
SASM	Swiss Aral Sea Mission
SDC	Swiss Agency for Development and Cooperation
SDFC	Swiss Development Finance Corporation
seco	Swiss State Secretariat for Economic Affairs
SIC-ICWC	Scientific Information Centre of the Interstate Commission for Water Coordination
SNHGS	Swiss National Hydrological and Geological Service
SOFI	Swiss Organisation for Facilitating Investments
SPECA	Special Programme for the Economies of Central Asia (UNECE)
TACIS	Technical Assistance for the Commonwealth of Independent States (EU)
TAJ	Tajikistan
TUR	Turkmenistan
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNOPS	United Nations Office for Project Services
USAID	United States Agency for International Development
UZB	Uzbekistan
WB	The World Bank
WEMP	Water and Environmental Management Project (WB)
WMO	World Meteorological Organisation
WUA	Water Users Association

Annex 2: Tentative Budget

SDC

(million CHF)

Country	2002	2003	2004	2005	2005
Regional (*)	2.3	2.2	2.0	2.0	2.0
Uzbekistan	0.4	0.6	0.9	1.8	2.0
Kyrgyzstan	0	0	0	0	0
Tajikistan	0	0	0.5	0.6	0.6
Total	**2.7**	**2.7**	**3.4**	**4.3**	**4.6**

(*) Some 400'000-500'000 CHF per year are additionally available for the water-related component of the Regional Dialogue and Development Project.

seco

(million CHF)

Country	2002	2003	2004	2005	2005
Regional	0.1	0	0	0	0
Uzbekistan	2.4	8.0	5.0	1.4	1.0
Kyrgyzstan	0	3.5	3.5	2.5	1.0
Tajikistan	0.8	0.4	0.2	3.0	4.0
Total	**3.3**	**11.9**	**8.7**	**6.9**	**6.0**

The map shows rivers and lakes, canals and projected canals (dotted lines) as well as areas of current or potential water related tension in Central Asia.