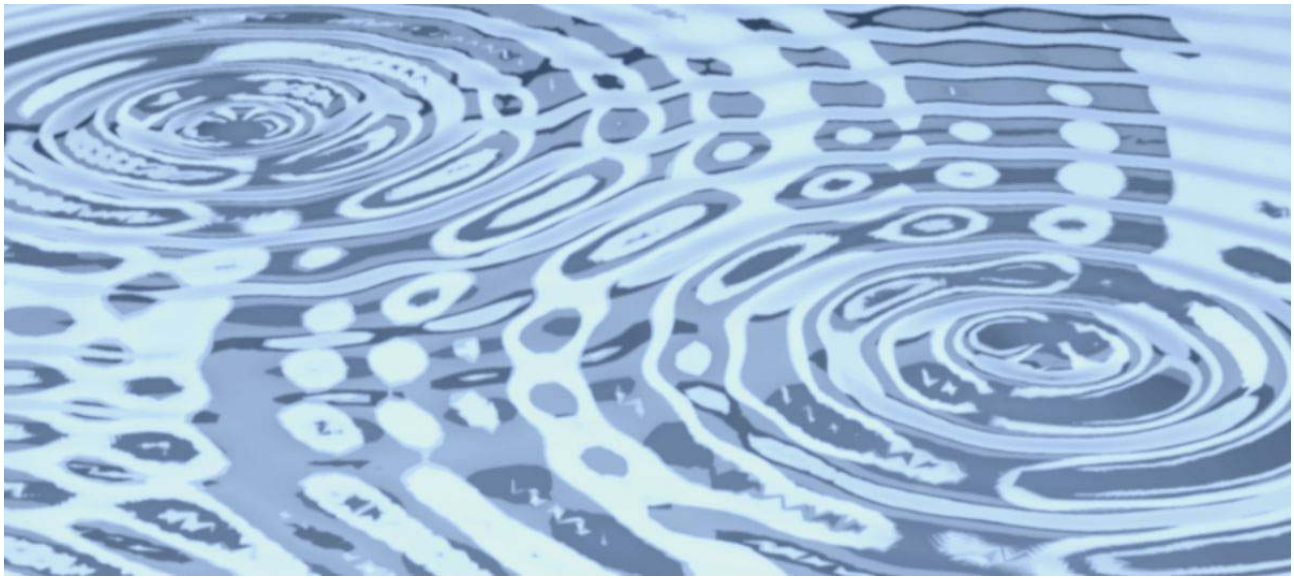
Österreichische
Entwicklungszusammenarbeit

Bundesministerium für auswärtige Angelegenheiten
Sektion VII, Entwicklungszusammenarbeit



Evaluation of Austria's Development Cooperation and Assistance to CEECs/NIS in the Water Sector (Water Supply and Sanitation)

Main Report (Final Version)

skat_consulting
Consultancy Services
for Development

July 2003

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St.Gallen, July 2003

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Executive Summary

Introduction

The Water and Sanitation Sector Policy (WSSP) serves as the basis for decisions affecting the selection, planning, implementation, survey, monitoring and evaluation of projects and programmes in the Austrian Development Co-operation (ADC). Its strategy aims at a holistic approach with respect to the sustainable management of resources in water supply and sanitation. This approach embraces measures and considerations on all levels, including natural resources, technical infrastructure and social economy. It also considers the crosscutting themes of poverty reduction, gender balance, sustainable livelihoods, relevance, and impact.

Based on five selected cases, the goal of the present evaluation is the analysis of the sector policy's programmatic aspect, its application and implementation in the relevant programme regions and sections of the EZA/OZA[1]. In the spirit of learning-by-doing, the evaluation also seeks to identify dynamic development factors that help to improve programmes and projects.

The present summary is a short résumé of the most important findings and recommendations resulting from the cross-analysis of five country consultations and from the assessment of the sector as a whole.

General Remarks

In general, it can be said that most EZA projects and programmes (and partially also those of the OZA) are embedded into the WSSP, in particular with respect to:

- Management and technologies
- Building of decentralized capacities and institutions on all levels
- Cross-cutting themes of poverty alleviation, gender balance, and good governance

The strategic thrust behind these activities is to achieve a sufficient basic service level, specifically aiming at sustainable improvements in water supply and standards of hygiene in rural and urban areas, with particular emphasis in the following areas:

- Water and sanitation services in sufficient quantities, quality, and access as a basic supply to all concerned in a region
- Protection of the water resources in the catchment areas
- Securing of supply (from the technical, organisational, legal and institutional point of view)
- Financially feasible, and economically viable interventions (investments and operation, cost accuracy, and financial sustainability).

While sector-specific programme strategies exist in the EZA, they are non-existent in the OZA. This illustrates a (persistent) gap in co-operation in conceptual and programmatic work as well as in operational fields. Since programmatic considerations could lend themselves particularly well to universal adoption, polarizing of approaches should be avoided, and co-operation intensified.

Socio-cultural and Socio-economic Aspects

In general, the sector programme interventions that were examined during the evaluation are adapted to their respective host environments. Needs as well as decision-making and communication cultures are generally taken into consideration in a significant way. In principle, attention is also generally paid to social and gender-specific questions during implementation of most projects. Across projects however, significant variations in approach and effectiveness were noted in the treatment of socio-cultural challenges.

The consistent mobilization and the active involvement of the municipalities into the construction and maintenance of water supply projects has, in some cases, led to the creation of fresh self-help activities that make considerable contributions towards improved living conditions for the people involved. In Uganda, for

[1] Austrian Development Co-operation and Austrian Co-operation with Eastern Countries

instance, the involvement of local leaders has been built into the planning, implementation and operation of the installations during the **mobilisation process**. Awareness building and an illustration of the process are successfully supported by means of playgroups.

Although target groups are intensively involved in the decision-making processes in the projects of Cape Verde (with much attention being paid to **socio-cultural aspects**)**,** it is recommended that further relevant data should be collected on the processes within the consumer groups, to serve as a basis for assessing effectiveness and impact of the measures adopted. In addition, we suggest the inclusion of training in hygiene and sanitation into all future programmes.
Interventions in the urban environment of Quetzaltenango (Guatemala) focus mainly on the technical aspects of water supply. Local conflicts regarding the access to water resources have been solved partially through consumer associations.

The **involvement of the people** into decision-making processes in Albania and Bosnia & Herzegovina has been dealt with and achieved only marginally due to the specific environment and the characteristics of the projects.

While elaborating the concepts of the sector programmes, it is important for the staff of co-ordination offices, project managers and local partners to pay more attention to the local knowledge and traditional values of communities and households in their participatory planning and assessing methods.

Although poverty reduction is one of the central priorities of all projects, most do not foresee concrete steps towards meeting this objective. Only the Cape Verde project concentrates on the productive use of water, i.e. on the successful cultivation of agricultural produce through irrigation.

The understanding of the gender concept among the staff of the Austrian EZA and OZA varies quite considerably, and a lack of practical approaches was observed regarding implementation in the projects. It is therefore important to achieve a **common** understanding and to pursue a consistent and coherent approach in order to ensure that the needs of all parties involved are taken into account.

Despite the fact that the projects take into consideration the principles of gender equality, no conclusive assessment can be made as to the economic status of the consumers, the access to water and the involvement into the decision-making process during planning and implementation, because gender-sensitive monitoring systems are largely absent in the projects.

Only Uganda disposes of a gender specific planning and monitoring system, but the data cannot be used to steer the projects as yet. Special activities that involve women are carried out in Uganda, Guatemala and Cape Verde.

Local, but also Austrian project staff expressed their wish to receive support from external specialists, in particular with regard to gender and poverty related planning, implementation and impact monitoring. It would therefore be useful to develop specific backstopping arrangements.

Relevance and Impact

In all five of the country programmes, there has been a confirmation of **need and demand**, on the one hand by the affected people themselves, but also from the side of the responsible government offices. While rehabilitations and extensions of systems are required mostly in urban settings, there is a specific need for the construction of new settlements in rural areas. Measures in the field of sanitation are considered as being less urgent.

National sector policies exist in all partner countries, though form and quality vary considerably. However, not all Austrian Coordination Offices show the same strong involvement towards policy dialogue. In principle, the programmes fit perfectly well into the national environment, and are characterized by their innovative approaches in contexts that are often challenging. The programmes frequently offer good

alternatives and opportunities to help shape national policies. However, these opportunities are not always capitalised upon due to capacity limitations.

The EZA/OZA are generally regarded as innovative[2] and reliable[3] institutions by their partner organisations. But in most countries, they are not sufficiently informed about the sector policy, or they are not informed at all. Further dissemination of the policy would lead to a better understanding of the Austrian sector's objectives and their comparative advantages. A more user-friendly design and the inclusion of conflict prevention and peace enhancement aspects would also increase its attractiveness.

The comparative advantages of the Austrian EZA/OZA can be summarised as follows:

- clear focus on water supply and sanitation
- identification of niches in areas of high potential for broad impact
- understanding and flexibility to respect (and to respond to) the demands of the users as well as to the existing context
- small team of experienced and committed professionals - who are open to current global learning and who have a vision for a sustainable future
- experience of community based water supply management in Austria
- historical background of Austrian involvement in Balkan countries

Although it is too early to reach a conclusion concerning the impact of interventions on poverty levels, some trends can nevertheless be observed, and changes become more evident the closer the observer gets to the user. A good example to illustrate this statement is the River Basin Project of Cape Verde, where economic benefits and added value have materialized through agricultural production and ease of access to water. On the other hand, no conclusive evidence is available regarding a positive impact of the improved water supply system on public health - due to the lack of basic information and to the complexity of health questions in general. Nevertheless, it is a safe assumption that health conditions do in general improve thanks to a better access to clean water when combined with measures taken in the sanitation sector.

In summary, it can be said that the interventions regarding need and demand are **relevant** and coherent with the WSSP. Yet it is recommended to develop and pursue a more programmatic approach that also takes into account the opportunities offered by WSSP. Innovative approaches should be analysed and documented in a more systematic manner, in order to integrate lessons learned into the national policy dialogue. It is also recommended that the programmes should put more emphasis on an active sector co-ordination among donors and responsible institutions. Finally, it is recommended to operate **by focusing** in those fields where a clear comparative advantage exists.

Efficiency and Effectiveness

Water supply has improved significantly in all projects, both in its quality and quantity. However, only the setting-up of reliable operation and maintenance systems can guarantee the long-term sustainability of these investments. Uganda has developed an interesting concept in this respect, which enables consumer groups to become part of an umbrella organization in support of operation and maintenance. Cost recovery remains a challenge to all projects. While public sensitisation has ensured that the projects of Uganda and Bosnia & Herzegovina have made good progress in awareness building (with regard to a respectful usage of water and the protection of natural resources), the other projects have just initiated this important process. One project of Cape Verde promotes the decentralization of services. This initiative may be an important contribution towards ensuring sustainable supply, provided that an optimal balance is achieved between the private and public sectors concerning their respective responsibilities. Sanitation has barely been considered (except in Uganda) despite the well-known fact that the impact on health conditions through clean water supply is lessened if measures are not simultaneously taken in this sector.

[2] By contributing to new approaches, such as water resources management in catchments or river basin management
[3] Through professional backstopping of the programmes and through long-term partnerships

The high degree of coverage can be further improved through the introduction of appropriate regulatory framework conditions, through the improvement of planning (introduction of master plans), through further development of alternative systems, and through the introduction of effective measures in the field of sanitation.

Water Resources Management

Only Cape Verde has selected river basin management as its project approach, and applies it consistently. Other country programmes limit their measures to the protection of catchment areas and to information campaigns on the safe handling of water. According to the current state of knowledge and experience, projects that do not follow the river basin management approach will increasingly face conflicts in relation to access to safe resources. These conflicts have a very negative effect on both reliability and sustainability.

The positive experiences gathered in Cape Verde should gradually be fitted into the concepts of all the other EZA/OZA water supply projects. A consistent adoption of the water resources management approach (involving all target groups of the related catchment areas as well as the responsible government bodies) has been shown to contribute substantially towards the improvement and sustainability of water supply and sanitation projects. This is particularly relevant in those regions where soil and water pollution has reached alarming levels through mismanaged solid and liquid waste, for instance in Bosnia & Herzegovina. The observation also holds true in areas where irrigation plays an important role in the cultivation of agricultural produce, directly contributing towards income creation and poverty reduction.

Comprehensive water resources management should always be combined with other development measures that benefit the catchments. All water resources ought to be taken into account, and alternative systems such as rainwater and separating systems, or combined systems, should be examined for their appropriateness, especially in remote areas and scattered settlements. Measures in the sanitation sector are a must for improvements in the quality of life and better levels of public health in the catchments.

Technology and Quality of Work Conducted

In general, appropriate technologies are applied, but the quality of the work carried out is not always in line with the required standards. Only the quality of the two projects (in Bosnia & Herzegovina and in Albania) may be described as being sufficient. In all projects, there are settlements that remain uncovered and which are difficult to access. More complicated systems, higher costs, and more demanding maintenance measures are to be expected in such places.

The following measures are recommended to improve the quality of the work and hence the durability of systems:

- To improve planning by developing master plans and by formalizing monitoring, particularly with regard to quality management
- To select technology by taking into account the needs for operation and maintenance
- To strengthen the planning capacities and to enhance quality awareness of all parties involved through adequate training
- To utilise synergies (learning) within and between ADC projects, and the projects of other donors.

Capacity-building and Institutional Development

Capacity building and training measures aiming to strengthen the partner institutions rate highly in most projects. Despite this fact, there is neither a strategy nor a conceptual framework that regulates the implementation of these measures in any of the projects. The management capacities of partner organisations are still very poor, and all the water supply plants visited are overstaffed.

The principle of equality between different gender, social, and ethnic groups is not being honoured with respect to recruitment, training and organisational development, as demonstrated by the private sector-like management of the water supply plant in Guatemala.

Training measures are usually organized at the beginning of an intervention when new devices or installations are introduced. So-called refresher trainings to follow the completion of interventions (which are most important to ensure good operation and maintenance of the installations concerned) do not take place in most cases.

Training measures should be pursued in order to preserve a sufficient level of knowledge and awareness, not forgetting the technical skills needed to operate and maintain systems in the long term. The measures should be periodically checked and adapted to new requirements. Comprehensive training and follow-up training concepts (based on accurate needs analysis) should support knowledge and skills. Measures should also contribute to personal career development and job satisfaction.

The organisation of most programmes on the country and project levels is overly complicated and confusing, with many actors whose roles and responsibilities are not entirely clear. This has led to problems of communication and even conflicts, especially in Cape Verde. In some cases, local partners are involved only marginally into the decision-making process.

Organisational structures should be as simple as possible, and responsibilities must be decentralized and delegated. Programme organisations should be embedded into well-functioning existing structures, whenever this is feasible.

Privatisation of supply services is being increasingly discussed in the programmes. While the water supply plants in Bosnia & Herzegovina and Albania are still trying to achieve more independence from the municipalities, this process has been successfully concluded in Guatemala, and can be regarded as an innovative alternative to the IMF/WB privatisation approach. The involvement of the private sector into operation and maintenance of the systems is insignificant in all programmes, and non-existent in Guatemala, Bosnia & Herzegovina and Albania.

The needs of all parties concerned (partner institutions included) should be fully considered in the decision-making process - right from the elaboration of concepts and intervention planning. The responsibility for operation and maintenance should be progressively decentralised, i.e. delegation down to the lowest possible level. Implementing agencies should enjoy the required level of autonomy for successful service provision.

The common practice of granting only one-year credit lines prevents reliable mid-term planning and affects not only the implementation of projects but also the institutional development of the local partner institutions.

In order to ensure sustainability of achievements in most of the projects, continuous support measures are required through optimised and structured training and backstopping interventions, i.e. consolidation of achievements instead of new interventions

Operation and Maintenance/Sustainability

The introduction of efficient and effective operation and maintenance schemes is a *sine qua non* for the sustainability of any infrastructure. In a considerable number of the projects consulted, maintenance schemes were not considered during planning and design of the schemes. Against this background, it is not surprising that the success regarding operation and maintenance varies greatly between the different country programmes. Whilst remarkable results have been achieved in rural areas of Uganda, only modest results can be reported regarding preventive maintenance in predominately urban settings.

In all of the projects, the biggest challenges are the establishment of sustainable institutional structures and the introduction and enforcement of cost recovering tariffs. In Uganda, the programme (in collaboration with participating communities) is in the process of establishing an umbrella organisation, responsible for the operation and maintenance of their system. While such a system is suitable for rural areas, the preferred

profile for service providers in urban areas is a publicly owned company, organised on private sector principles and given the required autonomy to manage its affairs.

It is now up to the programmes to test these approaches. For this, the required regulatory framework should be provided and cost-covering tariffs introduced.

The Sector Policy and its Application

The ADC water sector policy reflects the state of the art in a comprehensive way. However, lessons learned from within projects are not considered sufficiently. It is now time to capitalise on these experiences, to include them in a new version of the policy and to make them available to all actors involved. The importance of the river basin development approach, the links between land management and water resources management and the importance of operation and maintenance have to be emphasised. Poverty alleviation, sustainable livelihoods and gender balance aspects need more attention and have to be adjusted following the current global discussion.

In view of the engagement in the Balkans, a policy section dealing with emergency humanitarian aid and measures for peace building and conflict prevention should be added.

The sector policy deals comprehensively with key issues but is not easy to read and thus not attractive enough to be implemented. The instruments presented in the appendices are not complete and are compiled in an unsystematic way. Although most project staff members know about the existence of the document, familiarity with its contents (and their application in practice) is more limited. Only a few of the project partners seem to be aware of the policy.

The sector policy in its present form is a valuable document, lacking a mechanism for its translation and application into practice. The document should therefore be revised regarding its appearance and the instruments and tools it contains. The reintroduction of a revised document should be proactively conducted, and mechanisms for regular updating should be developed. For a better dissemination of the contents, the document should be translated into languages in common usage. In addition, a short version or a presentation in modules could be considered.

The sector policy demonstrates ADC's active participation in policy dialogue and donor coordination, underlining ADC's comparative advantage in the sector. However, observations in the countries visited show that the level of participation and involvement could be further enhanced. Only the programmes in Cape Verde and partly in Uganda proactively contribute to the ongoing policy dialogue.

In view of ADC's acknowledged comparative advantage in the water sector, it is recommended that successful approaches should be disseminated and that active contribution to the national sector policy dialogue and planning should be promoted.

Institutional Development, Monitoring and Evaluation

No formal organogram of the Ministry of Foreign Affairs exists to define key organisational structures, functions and interfaces. As a consequence, lines of command and communication flow along the paths of least resistance and are often interpreted and followed differently. This has led to communication problems and conflicts on more than one occasion.

The roles of the Sector Representative at central and country level are often outsourced. This leads to a situation whereby sector know-how can only be found outside the Section. Since no structured knowledge management system exists, there is a clear danger that valuable knowledge gets lost with the frequent changes of external consultants.

The position of the country desk is difficult and remains largely administrative in nature. This situation leads to frequent rotations within ADC. The role of consultants in line management positions is similarly

problematic as they are responsible for independent external consultations as well as for the implementation of the intervention, without having the necessary authority to act.

Monitoring and Evaluation (M&E) are at the base of any informed management decision. The absence of a structured and systematic M&E system within EZA/OZA raises questions regarding the reliability of internal and external assessment mechanisms for managing the efficiency and effectiveness of projects. The only thematic information on the status of projects can be obtained from the reporting of implementing agencies and occasional backstopping reports.

The improvement of this situation through the introduction of clear organisational structures and a comprehensive Information Management System is an absolute precondition for increasing efficiency and effectiveness of the organisation. Knowledge and experience within ADC is immense, yet remains inaccessible. The introduction of a knowledge management system - as the basis for mutual exchange and continuing learning of the organisation - is therefore recommended.

Until today, there are no formal contacts or linkages between the organisational units of EZA and OZA although they are under the same organisational umbrella and they share a lot of common ground thematically. It is therefore important that a platform is established to allow mutual learning and to foster and capitalise on potential synergies.

Zusammenfassung der Schlussfolgerungen und Empfehlungen

Einführung

Die Sektorpolitik Wasserversorgung und Siedlungshygiene (WSSP) bildet die Entscheidungsgrundlage für die Auswahl, Planung, Durchführung, Prüfung, Kontrolle und Evaluierung von Projekten und Programmen in der österreichischen Entwicklungszusammenarbeit. Strategisch verfolgt sie einen ganzheitlichen Ansatz hinsichtlich eines nachhaltigen Ressourcenmanagements in der Wasserversogung und Siedlungshygiene. Dieser Ansatz umfasst Massnahmen in allen Bereichen, einschliesslich natürliche Ressourcen, technische Infrastruktur und Sozioökonomie. Er berücksichtigt auch die transversalen Themen Armutsbekämpfung, Gender, Lebensqualität, Relevanz und Impakt.

Ziel der vorliegenden Evaluierung ist die Analyse der Sektorpolitik in ihrer Programmatik, Anwendung und Umsetzung in den relevanten Programmregionen und Arbeitsbereichen der österreichischen Entwicklungs- und Ostzusammenarbeit (EZA/OZA) anhand von fünf ausgesuchten Fallbeispielen. Die Evaluierung soll im Sinne eines Erfahrungslernens dynamische Entwicklungsfaktoren für die Verbesserung von Programmen und Projekten identifizieren.

Das vorliegende Kapitel ist eine kurze Zusammenfassung der wichtigsten Erkenntnisse und Empfehlungen aus der Querschnittsanalyse der fünf Länderkonsultationen und einer Beurteilung des Sektors insgesamt.

Allgemeines

Generell wird festgestellt, dass die meisten Projekte und Programme der EZA, teilweise auch diejenigen der OZA, in die WSSP eingebettet sind, speziell hinsichtlich:

- Management und Technologien
- Aufbau dezentralisierter Kapazitäten und Institutionen auf allen Ebenen
- Transversaler Themen Armut, Gender und Gouvernanz

Die strategische Hauptstossrichtung der daraus resultierenden Aktivitäten zielt auf eine ausreichende Grundversorgung hin, insbesondere die Verbesserung einer langfristigen Wasserversorgung und der hygienischen Standards im ländlichen und städtischen Raum, im speziellen:

- Wasser und sanitäre Versorgung in ausreichender Menge, Qualität und Zugang als Basisversorgung für alle Betroffenen in einer Region
- Schutz der Wasserressourcen in Einzugsgebieten
- Versorgungssicherheit (technisch, organisatorisch, rechtlich und institutionell)
- Finanzierbarkeit und Wirtschaftlichkeit (Investitionen und Betrieb, Kostenwahrheit und finanzielle Nachhaltigkeit)

Während in den Ländern der EZA sektorspezifische Programmstrategien existieren, fehlen diese in der OZA gänzlich. Dies signalisiert die (noch) fehlende Zusammenarbeit in konzeptionell-programmatischen wie auch in operativen Bereichen. Da insbesondere die programmatischen Ansätze eine universale Anwendung durchaus erlauben würde, sollte eine Abgrenzung vermieden und eine Zusammenarbeit aktiv gefördert werden.

Sozio-kulturelle und sozio-ökonomische Aspekte

In den konsultierten Sektorprogrammen werden Interventionen in der Regel auf das entsprechende Umfeld abgestimmt. Dabei werden den lokalen Bedürfnissen und der entsprechenden Entscheidungs- und Kommunikationskultur weitgehend Rechnung getragen. Grundsätzlich wird bei der Umsetzung in den meisten Projekten den sozialen und genderspezifischen Fragen Aufmerksamkeit geschenkt. Die allgemein konsequente Mobilisierung und der aktive Einbezug der Gemeinden in den Bau und Unterhalt von Wasserversorgungsprojekten führten in einigen Fällen zu neuen Selbsthilfeaktionen, die wesentlich zur

Verbesserung der Lebensqualität der betroffenen Bevölkerung beitragen. Natürlich sind Unterschiede in der Bewältigung sozio-kultureller Herausforderungen zu verzeichnen.
In Uganda zum Beispiel wird sichergestellt, dass für Planung, Durchführung und Betrieb der Anlagen lokale Führer in den **Mobilisierungsprozess** einbezogen werden. Zur Veranschaulichung und Bewusstseinsbildung der Beteiligten werden Theatergruppen erfolgreich eingesetzt.

Obschon bei den Projekten in Kap Verde die betroffene Bevölkerung intensiv in die Entscheidungsprozesse eingebunden und den **sozio-kulturellen Aspekten** viel Aufmerksamkeit geschenkt wurde, wird empfohlen, vermehrt relevante Daten über die Abläufe innerhalb der Konsumentengruppen zu sammeln, als Basis für die Beurteilung der Effektivität und des Impaktes der Massnahmen. Des weiteren schlagen wir vor, bei zukünftigen Programmen ein Training in Hygiene und Sanitation einzubauen.

Im städtischen Umfeld von Quetzaltenango, Guatemala, konzentrierten sich die Interventionen hauptsächlich auf die technischen Aspekte der Wasserversorgung. Lokale Konflikte bezüglich des Zugangs zu Wasserressourcen konnten teilweise durch die Konsumentenvereinigungen gelöst werden.

Der **Einbezug der Bevölkerung** in Entscheidungsprozesse in Albanien und Bosnien und Herzegowina konnte wegen des spezifischen Umfeldes und des Charakters der Projekte nur am Rande behandelt und realisiert werden.

Generell ist darauf zu achten, dass die Mitarbeiter in den Koordinationsbüros, Projektverantwortliche und lokale Partner bei der Konzeption von Sektorprogrammen vermehrt lokales Wissen und traditionelle Werte der Gemeinden und Haushalte in partizipative Planungs- und Beurteilungsmethoden einbauen.

Armutsbekämpfung gilt in allen Projekten als zentrales Anliegen. Konkrete Massnahmen fehlen jedoch in den meisten Projekten. Lediglich ein Projekt auf den KapVerden konzentriert sich auf die produktive Verwendung von Wasser, nämlich auf die erfolgreiche Erzeugung von landwirtschaftlichen Produkten durch Bewässerung.

Das Verständnis unter den MitarbeiterInnen der öesterreichischen EZA and OZA hinsichtlich des Konzeptes von **Gender** ist sehr unterschiedlich und es mangelt an praktischen Ansätzen für die Umsetzung in den Projekten. Es gilt deshalb, ein **gemeinsames** Verständnis zu erlangen, um einen konsistenten und kohärenten Ansatz zu verfolgen und um sicher zu gehen, dass die Bedürfnisse und Interessen aller Beteiligten berücksichtigt werden.

Obschon die Projekte bei der Planung den Prinzipien der Gendergleicheit Rechnung tragen, können wegen der in den Projekten durchwegs fehlenden strukturierten Monitoringsysteme keine schlüssigen Beurteilungen hinsichtlich des ökonomischen Status der Konsumenten, des Zugangs zu Wasser und des Einbezugs in Entscheidungsprozesse während der Planung und Umsetzung abgegeben werden.

Einzig Uganda verfügt über ein genderspezifisches Planungs- und Monitoringsystem, obschon auch diese Daten noch nicht beurteilt und zur Steuerung der Projekte genutzt werden. Spezifische Aktivitäten, in welche Frauen involviert sind, werden in Uganda, Guatemala und Kap Verde durchgeführt.

Lokale, aber auch österreichinsche Projektmitarbeiter äussern den Wunsch, vermehrt durch externe Spezialisten unsterstüzt zu werden, ganz speziell auch hinsichtlich gender- und armustbezogener Planung, Umsetzung und Impaktmonitoring. Es sollten deshalb zweckmässige Backstopping-Arrangements entwickelt werden.

Relevanz und Impakt

In allen fünf Landesprogrammen werden **Bedarf und Nachfrage** bestätigt, einerseits durch die betroffene Bevölkerung und andererseits durch die verantwortlichen Regierungsstellen. Während sich in städtischen Agglomerationen der Bedarf eher auf Rehabilitationen und Systemerweiterungen konzentriert, sind in

ländlichen Gebiten in der Regel Neubauten erforderlich. Massnahmen im Bereich der Siedlungshygiene werden als weniger dringend empfunden.

In allen Partnerländern existstieren **nationale Sektorpolitiken**, wenn auch in verschiedenster Form und Qualität**.** Die österreichischen Koordinationsbüros sind jedoch veschieden stark in den Policy Dialog involviert. Die Programme fügen sich in der Regel bestens in das nationale Umfeld ein und sind durch ihre innovativen Ansätze im oft schwierigen Umfeld charakterisiert. Die Programme bieten oft gute Alternativen und Möglichkeiten, die nationalen Politiken mitzugeastalten, welche jedoch wegen managelnder Kapazität nicht immer umgesetzt werden können.

Die EZA/OZA wird von den Partnern im allgemeinen als innovative (Beiträge zu neuen Ansätzen, z.B. Management von Wasserressourcen in Einzugsgebieten, d.h. River Basin Management) und zuverlässige (professionelle Begleitung der Programme und langfristige Partnerschaften) Partnerin charakterisiert. In den meisten Ländern wird die Sektorpolitik den Partnerorganisationen jedoch nicht oder nur ungenügend kommuniziert. Eine weitere Verbreitung würde zu einem besseren Verständnis der österreichischen Anliegen im Sektor und ihres komparativen Vorteils führen. Eine etwas handlichere Aufmachung und die Berücksichtigung der Aspekte Konfliktprävention und Friedensförderung könnten die Attraktivität steigern.

Die komparativen Vorteile der österreichischen EZA and OZA können wie folgt definiert werden::
- klare Fokussierung auf Wasser und Siedlungshygiene
- Identifikation von Nischen mit grossem Potential für breiteren Impakt
- Verständnis und Flexibilität auf den Bedarf der Nutzniesser einzugehen und deren lokale Kontext
- kleines Team von erfahrenen und professionellen Mitarbeitern
- Erfahrung mit basisorientierten Wasserversorgungen in Oesterreich
- Oesterreichs historische Vergangenheit im Balkan

Obschon es sicher noch zu früh ist, Auswirkungen der Interventionen auf die Armutssituation zu beurteilen, lassen sich einige Trends beobachten. Die Wirkungen sind sicher besser sichtbar, je näher man dem Benutzer ist. Dies geht klar im River Basin Project in Kap Verde hervor, wo durch landwirtschftliche Produktion und einfachen Zugang zu Wasser ein wirtschaftlicher Nutzen und Mehrwert entstanden ist. Wegen fehlender Basisinformation und der Komplexität der gesundheitlichen Einflüsse kann der positive Impakt der verbesserten Versorgung mit Trinkwasser auf die Gesundheits-/Krankheitsentwicklung jedoch nicht schlüssig nachgewiesen werden. Trotzdem ist es eine anerkannte Tatsache, dass mit verbessertem Zugang zu sauberem Wasser in Kombination mit Siedlungshygienemassnahmen sich eine Gesundheitsverbesserung einstellt.

Zusammenfassend kann gesagt werden, dass die Interventionen hinsichtlich Bedarf und Nachfrage **relevant** und kohärent mit der WSSP sind. Es wird jedoch empfohlen, einen programmatischeren Ansatz zu entwickeln, unter Berücksichtigung der Möglichkeiten, welche die WSSP bietet. Zudem sollten innovative Ansätze systematischer analysiert und dokumentiert werden, um lessons learned in den nationalen Policy Dialog einfliessen zu lassen. Sektorkoordination unter Gebern und verantwortlichen Institutionen sollte durch die Programme aktiver gefördert werden. Es wird ebenfalls empfohlen, in Bereichen mit klarem komparativen Vorteil **fokussiert** zu operieren.

Effizienz und Effektivität

In allen Projekten konnten signifikante Verbesserungen bezüglich qualitativer und quantitativer Versorgung erzielt werden. Nachhaltigkeit kann jedoch nur erreicht werden, wenn zuverlässige Betriebs- und Unterhaltsorganisationen aufgebaut sind. In dieser Hinsicht hat Uganda ein interessantes Konzept entwickelt, das Konsumentengruppen ermöglicht, in eine Dachorganisation einzutreten, die sie im Betrieb und Unterhalt unterstützt. Cost Recovery bleibt für alle Projekte eine Herausforderung. Während die Projekte in Uganda und Bosnien und Herzegowina durch Öffentlichkeitsarbeit gute Fortschritte in der Sensibilisierung der Bevölkerung für den verantwortungsvollen Umgang mit Wasser und den Schutz natürlicher Ressourcen erzielt haben, sind die anderen Projekte erst in der Anfangsphase dieses wichtigen Prozesses. Ein Projekt in Kap Verde fördert die Dezentralisierung der Dienstleistungen. Diese Initiative kann ein wichtiger Beitrag zur

nachhaltigen Versorgung werden, sofern es gelingt, eine optimale Rollenverteilung zwischen privatem Sektor und öffentlicher Hand zu entwickeln. Abgesehen von den Projekten in Uganda wurde der Siedlungshygiene kaum Aufmerksamkeit geschenkt, obschon bekannt ist, dass der positive Impakt der Trinkwasserversorgung auf die Gesundheitssituation ohne entsprechende Massnahmen in diesem Bereich nur beschränkt ist.

Der bereits beachtliche Versorgungsgrad kann weiter verbessert weden durch die Einführung angepasster regulativer Rahmenbedingungen, die Verbesserung der Planung (Einführung von Masterplänen), die Weiterentwicklung von alternativen Systemen sowie die Einführung von wirkungsvollen Massnahmen im Bereich Siedlungshygiene.

Wasserressourcen-Management

Lediglich das Programm in Kap Verde hat Wasserressourcen-Management in Flusseinzugsgebieten (River Basin Management) als Projektansatz gewählt und führt dieses auch konsequent durch. Andere Landesprogramme beschränken ihre Massnahmen auf den Schutz der Fassungsgebiete und Informationskampagnen über den sicheren Umgang mit Wasser. Aufgrund des heutigen Standes des Wissens und der Erfahrungen muss jedoch festgestellt werden, dass Projekte, die diesen Ansatz nicht verfolgen, zunehmend mit Konflikten über den Zugang zu sicheren Ressourcen konfrontiert werden, welche die Zuverlässigkeit und Nachhaltigkeit der Versorgung in hohem Masse beeinträchtigen.

Da ein konsequentes Wasserressourcen-Management unter Einbezug aller Zielgruppen im jeweiligen Flusseinzugsgebiet sowie den entsprechenden Regierungsstellen substantiell zur Verbesserung und Nachhaltigkeit von Wasserversorgungs- und Siedlungshygieneprojekten beiträgt, sollten die positiven Erfahrungen in Kap Verde zunehmend in die Konzeption aller Wasserversorgungs-Projekte der EZA/OZA einfliessen. Dies vor allem auch in Gebieten, wo die Verschmutzung des Wassers und der Böden durch flüssige wie auch feste Abfallstoffe alarmierende Ausmasse erreicht, wie etwa in Bosnien und Herzegowina, oder in Gegenden, wo neben der Trinkwasserversorgung auch die Bewässerung zur Produktion landwirtschaftlicher Erzeugnisse einen wichtigen Beitrag zur Einkommensverbesserung und damit zur Armutsbekämpfung leistet.

Umfassendes Wasserresourcen-Management sollte immer mit anderen Entwicklungsmassnahmen im Einzugsgebiet einhergehen. Zudem sollten alle Wasserressourcen berücksichtigt und alternative Systeme wie Regenwassersysteme, Trennsysteme und kombinierte Systeme eigesetzt werden, speziell in abgelegenen Gebieten und in Streusiedlungen. Massnahmen im Bereich Siedlungshygiene sind unabdingbar für die Verbesserung der Lebensqualität und der Gesundheitssituation in den Einzugsgebieten.

Technologie und Ausführungsqualität

Generell werden angepasste Technologien angewandt, wobei die Ausführungsqualität nicht immer die erforderlichen Standards erfüllt. Lediglich in den beiden Projekten in Bosnien und Herzegowina und in Albanien kann die Ausführungsqualität als befriedigend bezeichnet werden. In allen Projekten gibt es noch nicht versorgte Siedlungen, die schwierig zu erschliessen sind. Kompliziertere Systeme, höhere Kosten und ein Unterhalt, der höhere Ansprüche stellt, sind zu erwarten.

Folgende Massnahmen werden zur Verbesserung der Ausführungsqualität und damit der Dauerhaftigkeit der Systeme empfohlen:

- Verbesserung der Planung durch die Entwicklung von Masterplänen und Formalisierung des Monitorings vor allem hinsichtlich des Qualitätsmanagements
- Technologiewahl unter Berücksichtigung der Erfordernisse für Betrieb und Unterhalt
- Stärkung der Planungskapazitäten und Förderung des Qualitätsbewusstseins aller Beteiligten durch entsprechende Weiterbildungsmassnahmen
- Ausschöpfen der Synergien (Lernen) innerhalb und zwischen den ADC Projekten, wie auch Projekten anderer Geber

Aufbau von Kapazitäten und Institutionelle Entwicklung

In den meisten Programmen nimmt der Aufbau von Kapazitäten durch Aus- und Weiterbildungsmassnahmen sowie Massnahmen zur Stärkung der Partnerinstitutionen einen grossen Stellenwert ein. Dennoch besteht in keinem der konsultierten Programme eine Strategie oder ein konzeptioneller Rahmen für die zuverlässige Durchführung dieser Massnahmen. Managementkapazitäten in den Partnerinstitutionen sind nach wie vor schwach, und der Personalbestand in den besuchten Wasserwerken übersteigt die Erfordernisse durchwegs.

Den Prinzipien der Gleichheit zwischen den Geschlechtern und den verschiedenen sozialen und ethnischen Gruppen wird bei der Rekrutierung und Weiterbildung sowie bei der Organisationsentwicklung, beispielsweise im privatwirtschaftlich organisierten Wasserwerk in Guatemala, nicht Folge geleistet.

Aus- und Weiterbildungsmassnahmen in Form von Training finden allgemein zu Beginn einer Intervention statt, wenn neues Gerät oder Anlagen eingeführt werden. Sogenannte Refresher Trainings nach Beendigung der Massnahmen, welche für Betrieb und Unterhalt der Anlagen von grosser Bedeutung wären, finden in den meisten Fällen nicht mehr statt.

Um das nötige Wissen, das Bewusstsein und auch das technische Können bezüglich Betrieb und Unterhalt der Versorgungssysteme aufrechtzuerhalten, sollten Trainingsmassnahmen weitergeführt werden. Diese sollten regelmässig überprüft und den neuen Anforderungen angepasst werden. Umfassende Aus- und Weierbildungskonzepte, die auf sorgfältigen Funktions- und Bedarfsanalysen basieren, sollen helfen, das Können und Wissen zu fördern. Sie sollen aber auch zum persönlichen Weiterkommen und zur Zufriedenheit am Arbeitsplatz beitragen

Die Organisation der meisten Programme ist auf Landes- wie auch auf Projektebene äusserst kompliziert und unübersichtlich, mit vielen Akteuren und unklaren Rollen und Verantwortungen. Dies hat vor allem in Kap Verde zu Kommunikationsproblemen und Konflikten geführt. In einigen Fällen wird der lokale Partner nur marginal in die Entscheidungsprozesse einbezogen.
Organisationsstrukturen sollten so einfach wie nur möglich sein, Verantwortungen dezentralisiert und delegiert werden. Programmorganisationen sind möglichst in existierende und funktionierende Strukturen einzubetten.

Die Privatisierung der Versorgungsdienstleistung inklusive der Ressourcen wird in den Programmen zunehmend diskutiert. Während die Wasserwerke in Bosnien & Herzegowina und Albanien eher eine grössere Autonomie gegenüber der Gemeinde anstreben, ist dieser Prozess in Guatemala bereits erfolgreich abgeschlossen und kann als innovative Alternative zum IMF/WB Privatisierungsansatz gesehen werden. Der Einbezug des privaten Sektors in Betrieb und Unterhalt der Systeme ist in allen Programmen unbedeutend und in Guatemala, Bosnien und Herzegowina und Albanien inexistent.

Die Bedürfnisse aller Beteiligten, inklusive Partnerinstitution, sollten bereits bei der Konzeption und der Planung eines Vorhabens vollumfänglich im Entscheidungsprozess berücksichtigt werden. Die Verantwortung für Betrieb und Unterhalt sollte vermehrt dezentralisiert, d.h. auf die tiefstmögliche Stufe delegiert werden. Durchführungsorganisationen sollten eine weitgehende Autonomie geniessen, um die Dienstleitung erfolgreich ausführen zu können.

Die Praxis der Vergabe von Einjahreskrediten verunmöglicht eine seriöse mittelfristige Planung und beeinträcht nicht nur die Durchführung, sondern auch die institutionelle Entwicklung der lokalen Partnerorganisationen.

Um die Nachhaltigkeit des Erreichten zu sichern, sind in den meisten Projekten Folgeunterstützungsmassnahen durch optimiertes, besser strukturiertes Training und Backstopping der verschiedenen Akteure von grösster Wichtigkeit, also Konsolidierung des Erreichten anstelle neuer Interventionen.

Betrieb und Unterhalt/Nachhaltigkeit

Die Einführung effizienter und effektiver Betriebs- und Unterhaltsysteme ist eine Voraussetzung für die Nachhaltigkeit jeder Infrastruktur. In einer grossen Anzahl der Projekten wurden Unterhaltssysteme nicht eingeplant. Vor diesem Hintergrund ist es nicht erstaunlich, dass der Erfolg im Bereich Betrieb und Unterhalt in den verschiedenen Programmen von Ort zu Ort beträchtlich variiert. Während im ländlichen Raum in Uganda gute Ergebnisse erzielt wurden, wiesen urbane Gebiete im präventiven Unterhalt nur wenige Fortschritte auf.

In allen Projekten bleibt die Etablierung nachhaltiger institutioneller Strukturen und die Einführung und Durchsetzung von kostendeckenden Tarifen die grösste Herausforderung. In Uganda wird ein für ländliche Gegenden geeignetes System entwickelt, welches die durch eine von den Gemeinden getragene Dachorganisation unterstütz. In städtischen Gebieten wird eher eine Organisationsform angestrebt, die den öffentlichen Wasserwerken mehr Autonomie einräumt.

Es gilt nun, diese Ansätze zu testen. Dazu sollten die erforderlichen regulativen Rahmenbedingungen geschaffen und kostendeckende Tarife eingeführt werden.

Die Sektorpolitik und deren Anwendung

Die Wassersektorpolitik reflektiert in hohem Masse den aktuellen globalen Diskussionsstand (state of the art) des Sektors. Aktuelle, neue Erkenntnisse aus den eigenen Projekten berücksichtigt sie jedoch nicht. Es gilt nun, diese Erfahrungen zu kapitalisieren und in eine neue Version der Politik einzubauen und allen Akteuren zugänglich zu machen. Die Wichtigkeit des River Basin Development-Ansatzes und die Verbindung zwischen Landmanagement und Wasserressourcen-Management sowie Betriebs- und Unterhaltsfrage muss betont werden. Armut, Livelihood und Gender verlangen mehr Aufmerksamkeit und müssen dem aktuellen Stand der globalen Diskussion angepasst werden.

Im Hinblick auf das Engagement im Balkan sollte die Sektorpolitik durch ein Kapitel über Konfliktprävention und Friedensförderung ergänzt werden.

Die Sektorpolitik präsentiert sich als umfassendes Werk, ist aber aufgrund der unübersichtlichen Struktur offensichtlich unattraktiv in der Anwendung. Die in den Anhängen vorgestellten Instrumente sind nicht vollständig und auch nicht systematisch zusammengestellt. Obschon die meisten Projektverantwortlichen der EZA und viele der OZA um die Existenz des Papiers wissen, ist der Wissensstand bezüglich Inhalt und vor allem hinsichtlich der Anwendung beschränkt. Nur wenige Projektpartner scheinen über die Politik informiert zu sein.

Nichtsdestotrotz ist die Sektorpolitik in ihrer heutigen Form ein wertvolles Dokument, das jedoch für die Umsetzung über keine Mechanismen verfügt. Das Papier sollte deshalb hinsichtlich Erscheinung, Instrumente und Werkzeuge überarbeitet und proaktiv eingeführt werden. Desgleichen sollten Mechanismen zur regelmässigen Aktualisierung erarbeitet werden. Zur besseren Dissemination der Inhalte wird empfohlen das Papier in die gängigen Landessprachen zu übersetzen. Ebenso könnte eine Kurzfassung oder die Aufteilung in Module überlegt werden.

Die Teilnahme an der aktuellen Sektordiskussion (Policy Dialogue) und die aktive Geberkoordination werden in der Politik als komparative Vorteile der EZA verstanden. Die Beobachtung in den konsultierten Ländern lässt jedoch darauf schliessen, dass die Teil- und Einflussnahme eher gering ist. Lediglich in Kap Verde und z.T. in Uganda wird proaktiv am nationalen Sektorgeschehen mitgearbeitet.
Aufgrund des anerkannten komparativen Vorteils der OeEZA im Wassersektor wird empfohlen, durch aktive Teilnahme an der aktuellen Diskussion erfolgreiche Ansätze zu verbreiten und bei der nationalen Sektorplanung mitzuarbeiten.

Institutioneller Aufbau, Monitoring und Evaluation

Das BMaA verfügt über kein formales Organigramm, das neben der Organisationsstruktur auch die Funktionen und Schnittstellen beschreibt. Dieser Umstand hat dazu geführt, dass Dienst- und Kommunikationswege, dem Opportunitätsprinzip folgend, oft unterschiedlich verstanden und eingehalten werden. Dies hat nicht nur in einem Falle Kommunikationschwierigkeiten und gar Konflikten ausgelöst.

Die Rolle der Fachreferenten innerhalb der Zentrale und auf Landesebene wird oft ausgelagert. Dies führt dazu, dass das Fach-und Sektorwissen nicht selten ebenfalls ausserhalb der Sektion liegt. Da kein strukturiertes Wissensmanagementsystem unterhalten wird, besteht die Gefahr, dass dieses Wissen mit dem laufenden Wechsel der externen Konsulenten verlorengeht.

Die Position des Landesdesks ist grösstenteils für administrative Belange zuständig und entsprechend unbefriedigend, was zu häufigen Rotationen innerhalb der EZA führt. Die Rolle von Konsulenten in Linienfunktionen ist ebenfalls problematisch, da diese einerseits für unabhängige Beratung, andererseits aber für die Durchführung zuständig sind, jedoch nicht über die dafür notwendige Autorität verfügen.

Monitoring und Evaluation (M&E) dienen als Grundlage zur informierten Entscheidungsfindung und sind Voraussetzung für ein erfolgreiches Management jeder Organisation. Fehlt ein strukturiertes und systematisches M&E System innerhalb der EZA/OZA, wird die zuverlässige interne und externe Beurteilung der Effizienz und Effektivität von Projekten in Frage gestellt. Die einzige thematische Information über den Projektfortschritt ist aus der Berichterstattung der Durchführungsorganisationen und gelegentlichen Backstoppingberichten zu entnehmen.

Eine Verbesserung dieser Situation durch die Einführung klarer Organisationsstrukturen und eines umfassenden Informations Managament Systems ist unabdingbare Voraussetzung für die Steigerung der Effizienz und Effektivität der Organisation. Das Wissen und die Erfahrung innerhalb der EZA/OZA ist immens, wird jedoch nicht zugänglich gemacht. Es wird deshalb empfohlen, ein Wissensmanagement-system eizuführen, als Grundlage für den gegenseitigen Austausch und das kontinuierliche Lernen der Organisation.

Bis heute bestehen kaum Berührungspunkte zwischen den beiden Organisationseinheiten von EZA und OZA, obschon diese organisatorisch unter demselben Dach angesiedelt sind und thematisch viele Gemeinsamkeiten aufweisen. Es ist deshalb wichtig, dass eine Platform geschaffen wird, die das gemeinsame Lernen fördert und Synergien schafft.

Abbreviations and Acronyms

ADC	Austrian Development Cooperation
AGROGADO	Farmers' and cattle raisers' association of Ribeireta
AIDS	Acquired Immuno Deficiency Virus
BDS	Business Development Service
BiH	Bosnia and Herzegovina
BMaA	Bundesministerium für auswärtige Angelegenheiten (Ministry of foreign affairs)
CBO	Community Based Organization
CEEC/NIS	Central and Eastern European Countries/Newly Independent States
CO	Coordination Office
DGASP	Direcção General da Cooperação Internacional
DWD	Directorate of Water Development
DWO	District Water Office
DWSSP	District Water Supply and Sanitation Programme
EMAX	Municipal water company
EMPAGUA	Municipality of Guatemala's water and sewerage service provider
ESA	External Support Agency
EU	European Union
EZA/OZA	Entwicklungs- und Ostzusammenarbeit
FBH	Federation of Bosnia and Herzegovina
GIS	Geographical Information System
GNP	Gross National Product
GoU	Government of Uganda
GTM	Gabinete Técnico Municipal
GWCC	General Water Consult Corporation
HIV	Human Immuno Deficiency Virus
HRD	Human Resources Development
ID	Institutional Development
IGWA-SIG	Institut für Wasservorsorge, Gewässerökologie und Abfallwirtschaft - Abteilung Siedlungswasserbau, Industriewasserwirtschaft und Gewässerschutz
IIZ	Sector Agency
IMF/WB	International Monetary Fund/World Bank
IMG	International Management Group
INFOM	Instituto de Fomento Municipal
INGRH	Instituto Nacional de Gestão dos Recursos Hídricos
I-PRSP	Interim Poverty Reduction Strategy Paper
JD	Junta Directiva
M&E	Monitoring and Evaluation
MoH	Ministry of Health
MWLE	Ministry of Water, Lands and Environment
NGO	Non-Governmental Organization
O&M	Operation and Maintenance
PEAP	Poverty Eradication Action Plan
PLA	Participatory Learning and Action
RBM	River Basin Management
RS	Republica Srpska
SAAS	Serviços Autónomos Agua e Saneamento

Abbreviations and Acronyms (continued)

SODIS	Solar Water Disinfection
SWAP	Sector Wide Approach to Planning
SWM	Solid Waste Management
swTws	South Western Towns Water and Sanitation Project
swUws	South Western Umbrella of Water and Sanitation
TSU	Technical Support Unit
TWB	Technisches Büro für Kulturtechnik und Wasserwirtschaft
UN	United Nations
UO	Umbrella Organisation
USAID	United States Agency for International Development
W&S	Water and Sanitation
WSB	Water and Sanitation Board
WSC	Water and Sanitation Committee
WSSB	Water Supply and Sanitation Board
WSSP	Water and Sanitation Sector Policy

A Background

A 1 Introduction to Austria's Water and Sanitation Sector Support

The Water and Sanitation Sector Policy (WSSP) forms the basis for decision-making processes regarding selection, planning, implementation, controlling and evaluation of projects and programmes of the Austrian Development Cooperation (ADC). It also defines the targets and strategies for the sector.

The goals for the water supply and sanitation sectors have been determined as follows:

- Easily accessible water and sanitary services in sufficient quantity and quality as a basic level of care for all stakeholders
- Protection/management of sources in the catchment area or river basin (qualitative and quantitative)
- Security of supplies (technical, organisational, legal and institutional)
- Financial and economic feasibility (investment and operation, real costs, financial sustainability)

Strategically, the sector policy advocates a holistic approach towards sustainable water resources management and water supply and sanitation. This approach encompasses measures in all sectors (natural components, technical infrastructure and social components) and at all levels.
Particular emphasis is given to cross cutting issues such poverty, gender, sustainable livelihoods, access, relevance and impact.

A 2 Evaluation

A 2.1 Objectives

The overall objectives of the current evaluation are to identify factors for the improvement of projects and programmes and to contribute to learning and knowledge sharing. This should consider the overall organisation, and particularly the relevance and sustainability of results. The focal points of the evaluation have been:

- The relevance of the Water and Sanitation Sector Policy (WSSP) to the overarching policy and strategy of the Austrian Development Cooperation (ADC) as a whole
- The state of the art, global learning and sector experiences
- The WSSP and its implementation within respective programme regions and working fields, i.e. efficiency and effectiveness regarding achievement of set objectives;
- The definition, application and effectiveness of sector-policy instruments, processes and capacities
- The sustainability of projects with special consideration accorded to decentralisation, regional development and gender aspects.

A 2.2 Methodology and Mode of Implementation

In consultation with ADC Vienna, five target countries were selected from ADC's current geographic footprint in CEECs/NIS. These countries were Cape Verde, (the "identification mission" – see below), Uganda, Guatemala, Bosnia & Herzegovina and Albania. The evaluation was comprised of three distinct phases:

Phase I involved a comprehensive desk study, an initial consultation in Vienna and the conduct of an identification mission in Cape Verde. The findings of Phase I of the evaluation (including the results of the identification mission) are compiled in the Interim Report (Annex 2). The purpose of this interim report was twofold:

- to review and assess the preparation of the overall evaluation methodology and to review and assess the results of the Identification Mission in Cape Verde, particularly in terms of process and approach, methodology, tools, schedule, logistics and collaboration with the Coordination Office; and
- based on the above, to refine the manner in which the next phases of the evaluation should continue.

Based on the findings and recommendations of the Interim Report, case study reviews were conducted in the remaining four countries during **Phase II**. In order to maintain continuity and a balanced cross analysis between the different investigations, the core team had to be present throughout all field studies: The field studies in principle comprised the following steps:

A 2.2.1 Mission Preparation:

Selection and study of the most important project documents in consultation with country desks and the programme representatives.

A 2.2.2 Implementation of the mission:

- Conduct an introductory workshop with the programme staff in each country in order to establish clear & common objectives and expectations
- Finalise each mission programme (including interview partners, etc.)
- Conduct programmed field assessments and compile the materials obtained from the analysis
- Conduct a one-day workshop (to include stakeholder and SWOT analyses)
- Conduct a debriefing with key persons of the programme and its partners.

All of the above activities had to be accomplished within a time allocation of eight days per country mission - including international travelling time.

A 2.2.3 Reporting:

Due to the short intervals between the country missions - sometimes only one week - the field analysis for each assignment could not always be compiled in the reporting format before the next assignment fell due. In addition, the structure of the report often required adjustment due to the different project arrangements in the various countries. This process considerably delayed the process of cross analysis and the preparation of the draft report at the end of the series of field missions.

In **Phase III**, a draft of the evaluation findings was submitted to the BmaA/ADC for circulation amongst the concerned country desks and respective programme representatives. The feedback generated from this circulation as well as received during the presentation of the draft report was then incorporated into the final version of the document.

The evaluation was conducted by an interdisciplinary core team of international consultants with profound knowledge and experience of projects, programmes and institutions in the water supply and environmental sanitation sectors - including transversal themes such as poverty alleviation, gender balance and good governance. The international team was complemented by local or regional sector experts and supported by local assistants and translators wherever necessary.

A 2.3 Coverage and Limitations

After having been engaged in the evaluation process personally and at times also enthusiastically, it is not surprising that the staff of the Coordination Offices (CO) and their partners were expecting substantial inputs for their individual programmes. However, the limited period and strategic focus of the consultations did not allow for comprehensive country evaluations at an operational level. It is unfortunate that recommendations

given in the Interim Report (which were aimed at mitigating such frustrations) could not be realised in all the field missions.

However, the striking momentum that the sector evaluation has created at country level should be taken as an opportunity for further learning and improvements of the country programmes. The recommended joint workshop at the end of the evaluation activities would be an appropriate means to round up this learning process.

The consideration of social and cultural aspects is limited in scope to the extent to which the ADC's involvement in the project areas has been based upon locally developed problem-solving strategies and legitimacy aspects. It was possible to examine traditional authority and cultural forms of expression for information transformation in some cases. In the limited time available for each evaluation, it was not always possible to examine other aspects in detail - such as the symbolic and spiritual side of handling natural resources.
Time constraints in Bosnia & Herzegovina and Albania prevented the conduct of pocket voting exercises (Annex 3) with users. However, information was gathered through transect walks (Annex 3) with visits to homes and businesses.
In Quetzaltenango, transect walks and interviews with users in the urban and rural area replaced the pocket voting exercise, as it was not possible to arrange a meeting with users for that purpose.

A 3 Reporting Format, or How to Read this Report

In order to avoid unnecessary disappointment, the reader is also advised to consult section A 2.3 "Coverage and Limitations", which has been agreed upon between ADC and the consultant.

It is important that the reader understands that the draft report is addressed to a number of different audiences. In order to navigate through the report and to locate the information required quickly and easily, the readers attention is drawn to the following important points:

Each country analysis (and to a certain extent also certain sub-sections of the cross-country analysis) has been produced as a stand-alone document. This implies that repetitions may occur - for example in the sections discussing conclusions for each country and then again in the sections discussing cross-cutting (strategic) conclusions. Other repetitions may also occur between the country analyses where similar field situations were encountered across countries. These unavoidable circumstances have combined to add seemingly unnecessary bulk to the report for those who wish to read it from cover to cover.

The Report is a composition of the work of three specialists, each one focussing on their own field of expertise (social / institutional / technical). Although a common framework has been applied for reporting as much as possible, some differences in style and language could not be avoided. These differences have intentionally not been harmonized so that the authenticity of the underlying contributions is retained – it is hoped that other professionals working in each of the 3 specific fields mentioned above will derive maximum benefit from this policy.

The reporting is divided into four main sections:

Part A: Introduction to the Evaluation

Part B: Country Level Evaluations (Findings and Assessments, Conclusions and Recommendations)

Part C: Cross Country Analysis

Part D: Austria's Development Cooperation and Assistance to CEECs/NIS

B Country Consultations

B 1 Cape Verde

B 1.1 Background

B 1.1.1 Country Profile

Cape Verde is a small island state located some 300 nautical miles off the west coast of Africa. This archipelago is made up of ten islands and numerous small islets, covering an area of 4,033 square kilometres. The demographics have been changing over the last twenty years, mainly due to emigration. Presently, the population is about 456,000 and growing at an annual rate of 2,4%. The Cape Verde climate is arid to semi-arid composed of two seasons. The dry season normally runs from November to July with strong winds, and the rainy season runs from August to October.

According to Portuguese history, the islands were discovered in 15th century and were found to be uninhabited. The first settlements appeared shortly after this discovery and consisted of Africans and Europeans, brought in either as slaves or as slaves who had run away. 500 years of interweaving among races has ensured that the social fabric of the Cape-Verde people is unique and embodies the mixtures of several cultures. On July 5th 1975, the country became an independent state and since then, it embarked on the long journey of promoting social justice and well being of its citizens.

Ecologically, the islands are very fragile and natural extremes are in some instances worsened by ill-judged man made interventions.

Deprived of natural resources and with very limited human resources, Cape Verde is a disperse territory lacking basic infrastructure. Aid has therefore been one of the main sources of economic revenue. Behind aid, remittances from emigrants make up a large part of the gross national product (GNP). In the past ten years, tourism has been gaining in importance. However, its contribution to the overall economy is still insignificant, amounting to only to 3,55% of GNP (1999). What used to be an agriculturally-minded country is now watching this activity fading away, mainly because of the scarcity of water.

Traditionally, the Cape-Verde economy is based on the service sector. In 1995, the tertiary sector represented 64% of GNP and the secondary and primary sectors represented 17% and 19%, respectively. According to data collected in 2000, the annual income per capita was estimated to be $1,200 USD.

Politically, Cape Verde is comparatively stable. During the first fifteen years of independence, the country was ruled under a one-party system. In the late 80's when the winds of change were blowing across Europe, political reform also occurred in Cape Verde and a multi-party system came into effect that prompted a change of government. Since then, several elections have been held in an orderly manner; these elections were labelled as having been free and fair. With these political reforms, the private sector got an impulse and the economic environment changed in that people become more entrepreneurial and less averted to risk-taking endeavours.

At the head of the political structure, a National Assembly of 72 members is elected every 5 years by 17 electoral circles (municipalities). The party with the majority of seats in National Assembly forms a Government that is led by a Prime Minister. The political organization is parliamentarian and the President of the Republic plays a symbolic role with the mandate to act as the guarantor of constitutional provisions. However, whatever power he might have can be overturned by the parliament. Mayors - who are elected every four years - head the Municipalities.

B 1.1.2 Water and Sanitation Sector

Water is very scarce and is increasingly becoming a highly priced commodity. Despite this, water is either wasted or managed poorly and it seems that the efforts being devoted to reverse such practices have so far not been successful.

Data obtained in 1997 indicate that 42% of the urban population is serviced by the water network, 45% through water fountains and 13% with water tankers and other means. In the rural areas, the scenario is even worse.
On average, more then 50% of the Cape-Verde population lacks proper sanitation.

With regard to solid waste management, no formal system exists to either collect, treat or dispose of waste. According to the existing legislation, municipal authorities should care for proper management of solid waste. However, most of the waste generated is simply dumped within the vicinity of communities.

Water tariffs vary from place to place, and according to water use and means of distribution. However, the issue of considering water as a vital public good that is indispensable for life but also a good with an economic value is not clearly defined.
There are efforts taking place to introduce a more integrated approach towards water resources management, including rainwater harvesting and surface water catchments.

B 1.1.3 Austrian Development Cooperation (Objectives /Strategies /Summary of Achievements)

On the Strategic Level:

The overall orientation and approaches of the programme supported by the ADC as defined in the "*Rahmenprogramm* 1999" and the Annual Programmes have been analysed with regard to the WSSP and the national framework conditions.
Overall, it can be said that the Austrian programme is well embedded in the overall W&S Strategy of Cape Verde, focussing on:

- Decentralization of authority, duties, responsibilities and service provision to the municipal level;
- Building up of capacities to plan and manage water resources in a sustainable way.

In general, the programme also complies with the aims and objectives laid out in the WSSP of ADC, particularly in the fields of:

- Management and technology,
- Development of decentralised capacities and institutions at all levels,
- Cross cutting issues such as gender, poverty and good governance.

The main thrust of the ADC's activities in the water sector concern covering basic human needs, more specifically safeguarding long-term supplies of drinking water (basic supply) and hygienic standards in rural districts and semi-urban areas.
The following objectives in the water sector have been set in order to achieve the above aims:

- Water and sanitation in adequate quantity, quality and accessibility as a basic supply for the **whole population of a region;**
- Conservation of water resources in catchment areas, both quantitatively and qualitatively;
- Technical, organisational, legal and institutional safeguarding of supplies;
- Feasibility of financing and running costs – investment and operation, real cost analysis, financial sustainability.

Overall strategic efforts have been undertaken to translate ADC's WSSP into action. This is reflected in the orientation and approach towards:

- Planned and integrated river basin water resources management in the Ribeireta and Ribeira Seca projects
- Decentralisation of water supply services in collaboration with the Servicos Autonomos and the Gabinete Technicos.

Important requirements of the WSSP - such as environmental sanitation including solid waste management (SWM) - have not been tackled. Similarly, mechanisms to involve communities in decision-making processes and mechanisms to address gender and poverty aspects have not been developed.

In the national context, the Austrian W&S sector initiatives are either part of a World Bank-guided programme for Energy, Water & Sanitation or are implemented within INGRH (Instituto Nacional de Gestão dos Recursos Hidricos) and DGASP (Direcção Geral Cooperação Internacional).

The engagement of the ADC in the sector is characterised by the local partners as being **innovative** (contribution to new approaches), **reliable** (coaching/backstopping of the programmes/projects through external, professional sector specialists) and **sustained** (long term partnerships).

On the other hand, ADC sector policy has **not been communicated** to partner institutions, there is **no active role** of the Government and the donors in sector coordination, ADC's role in the policy dialogue[4] is **marginal**, and cross-cutting themes (such as community participation and gender equity) are **not accorded sufficient attention**.

On the Operational Level:

The assessment focused on the coherence and consistency of the projects with the respective overall country programme and the annual programmes. Three projects have been selected for assessment - Ribeireta (1911), Servicos Autonomos (1912) and Gabinete Tecnicos (1913). Due to time constraints, Ribeira Seca and the projects in S. Cruz could not be inspected and assessed.

Box 1: Integrated River Engineering Project, Riberieta (1911)

The objective of the project is the improvement of the living conditions and the environmental situation of the population and building up of capacity within the community in the sustainable and autonomous use of the natural resources - water, soil and plants.

The expected results of phase 1 (1997 –2002) are as follows:

- Population manages the natural resources of the river basin;
- Improved water balance through protection measures;
- Technical infrastructure for water use (irrigation/drinking water);
- Increased production of irrigated and dry agricultural cultivation.

The main achievements of the project can be summarised as follows:

- Physical targets of the project have been achieved i.e. construction of structures for river protection, transverse structures for ground water recharge, drainages, reservoirs, boreholes, drinking fountain, terraces and tree planting.
- Training has been provided to the community and AGROGADO (farmers and cattle raisers' association of Ribeireta) in various technical fields and awareness creation has been conducted. Local institutions have provided training.
- Water resources have improved.
- Agricultural production has increased and levels of public health have reportedly improved.
- Institutional capacity of AGROGADO has been strengthened.

[4] For example regarding.the promotion of environmental sanitation, health, strategic planning, etc.

Box 2: Serviços Autónomos Agua e Saneamento, SAAS (1912)

The objective of the project is to establish autonomous services for the provision of energy, water and sanitation, SAAS in all 5 rural municipalities of Santiago.

The expected results for the period from 1998-2001 are as follows:
- The SAAS are legally established and the employees are trained to fulfil their technical and administrative jobs,
- The office infrastructure is in place,
- A mode of cooperation between the different SAAS is established (e.g. for laboratories, etc.),

The main achievements of the project can be summarised as follows:
- The organisational structure has been established and implemented and action plans prepared,
- Training has been provided in the field of human resources management, accounting, PC application, etc.
- Coverage in the municipalities has increased substantially and existing water supply systems improved (water losses, maintenance, etc.)

Box 3: Gabinete Técnico Municipal, GTM (1913)

The objective of the project is to support the rural technical planning department of the rural municipalities of Santiago in strategic and sectoral planning.

The expected results for the period from 1997-2003 are as follows:
- Institutional capacity in GTM is strengthened,
- The basis for the strategic planning is established, particularly in the field of water supply,
- Cooperation between central units in the water sector is established.

The main achievements of the project can be summarised as follows:
- GIS-based municipality maps have been prepared,
- A database with sector related information has been established,
- Each municipality has developed annual sector programmes.

B 1.2 Findings and Assessments, Conclusions and Recommendations

B 1.2.1 Cultural Aspects, Gender Balance and Poverty Reduction/Sustainable Livelihoods

Findings and Assessments:

Socio-cultural Aspects

The Ribeireta River Basin Management project was initiated in response to a request for assistance by AGROGADO, Ribeireta community's growers association. Efforts by local residents resulted in the formation of AGROGADO, with the aim of improving local living conditions. AGROGADO has served as the coordination body and contact point for development initiatives in Ribeireta since its inception in 1991. The approach of ADC to the river basin management project has been to provide support for AGROGADO's work and to promote the involvement of the women and men of Ribeireta in the development and implementation of the river basin management plans.

Project SAAS provided support to the newly established autonomous water and sanitation services (Serviços Autónomos) of five municipalities of the island of Santiago. The link with users is less visible in this project. The Serviços Autónomos that were visited indicated that no water user associations had formed to date and that channels for communication with users have not been established.

Activities aimed at raising the awareness of users about their own roles and responsibilities together with those of the new Serviços Autónomos have not been developed or employed. Before decentralization started in Cape Verde nine years ago, water services were provided by the central government. During interviews, Serviços Autónomos staff felt that a culture of payment still needed to be cultivated among users in urban and rural areas.

Poverty Reduction / Sustainable Livelihoods

ADC's involvement in the Ribeireta River Basin Management project was guided by the priority policy objective of combating poverty. Achievements identified by members of AGROGADO included improved water supply, social development initiatives and increased agricultural production levels. Areas of weakness noted by the association members have been the lack of hygiene and sanitation measures. However plans are in place to commence construction of latrines in the future. How construction would be financed and whether social marketing and hygiene education activities for women and men would accompany the placement of sanitation facilities was unclear.

In the context of Project SAAS, access to safe water for domestic and productive purposes has increased and is more reliable in the urban/small town areas in each of the five municipalities involved in the project (Santa Catarina, São Domingos, São Miguel, Tarafal and Santa Cruz). It was not clear was who uses the water, what they us it for, who does the work and who benefits.

Water tariffs set by INGRH for domestic use and for irrigation are based on a flat rate, the level of which does not consider a household's ability to pay. However, a tariff study is being conducted by the national government and in at least one of the municipalities visited, a survey to determine which households can not afford the household connection fees was planned. Households unable to pay the connection fee will receive a subsidy for connection to the city's supply network.

Despite these achievements, the rural populations (who form the majority in each municipality) are either not served, or only have access to the more expensive (relative to the urban network supply) water kiosks or truck-delivered water. Additionally, none of the three Serviços Autónomos had developed a policy or strategy regarding provision of water services for the urban or rural poor, or the currently un-served rural population. No socio-economic or demographic information was available in the three Serviços Autónomos visited regarding these widely dispersed un-served areas outside the small towns such as Tarafal and Assomada.

Gender and Social Equality

In both the SAAS and River Basin Management project, both sexes are involved at different levels and in varying capacities. In general terms, gender stereotyped roles and responsibilities predominate in the division of tasks, responsibilities and benefits in Cape Verde society. However, both men and women hold senior posts within the ADC Country Coordination Office, the Serviços Autónomos, SEREC[5] and the executive committee of AGROGADO. Efforts by the Coordination Office Representative and Sector Representative in the ADC Country Coordination Office have had a positive impact on the general situation.

The understanding and application of a balanced gender concept in relation to water and sanitation programme activities remains limited to 'women's participation'. Gender-sensitive approaches to the division of work, to decision-making and control and to access to resources and benefits are not considered. Planning, monitoring and reporting are not yet specific for sex and other social characteristics. Gender-

[5] the consultancy firm responsible for the Gabinete Technicos (Technical Unit Establishment) project

disaggregated information and data are not collected and assessed, either in a participatory manner or otherwise, in order ensure that project activities and outcomes do not disadvantage or burden already vulnerable groups (e.g. the aged, the infirm, the young, women, men, etc.) in each particular setting. Information about gender conditions and relations and changes therein, as related to effective user practices and systems management, was not gathered.

Conclusions and Recommendations:

Socio-cultural Aspects, Gender and Poverty Reduction / Sustainable Livelihoods

The SAAS and River Basin Management projects have already paid significant attention to socio-cultural aspects, gender awareness and poverty reduction/sustainable livelihoods. The following are areas where it is felt that further improvements can be made:

- **Data collection and analysis.** Disaggregated data on how women and men of different locations and groups are informed, take part in planning and management decisions, access training and paid or unpaid jobs at different levels. Such data will provide key insights and form a baseline for future benchmarking. Socio-economic data disaggregated by sex, age, urban/rural, etc. should be used to facilitate the use of indicators for the measurement of impact, effectiveness of projects
- **Integrating hygiene and sanitation.** This approach should be added to future water-related initiatives. Participatory hygiene and sanitation, made gender and poverty specific could be incorporated into subsequent phases of the Ribeireta and SAAS projects. ADC can play a supporting role in the development of a Cape Verde sanitation strategy
- **Capacity development.** Recurrent awareness raising and capacity building is recommended for Serviços Autónomos staff and ADC project staff/local partners. Topics could usefully include practical techniques for participatory project planning and monitoring in both poverty- and gender-sensitive ways[6].

B 1.2.2 Community Participation / Empowerment / Ownership

Findings and Assessments:

From key informant interviews with the Serviços Autónomos, it became clear that the means to enhance community and household level involvement in making decisions about the level and types of service, management options, infrastructure, tariffs, etc. have not been articulated as outputs of project activities.

AGROGADO has a strong commitment and involvement of community members (both men and women) in decision-making processes. This level of involvement preceded the river basin management project and has resulted in consistent community involvement in the various river basin management project activities, although at varying levels.

The results from 'pocket voting' exercises on participation, involvement in decision-making and ownership issues indicated that:

- Only male project staff were informed about the River Basin Management project details;
- Decision making processes are conducted jointly by women and men association members;
- The location of 'water fountains' (communal taps) was selected jointly by women and men in the community; and
- The infrastructure of the project is perceived by the women participants (only 1 male in attendance) to be jointly owned by male and female association members.

All household members (women and men) in Ribeireta are eligible to join the association, to participate in meetings and have voting powers in their own right. One of the assumptions of the project was that membership, participation and interest of all community members would take place naturally. No project

[6] for example methodologies for conducting Participatory Rural Appriasals (PRA), and customised PHAST techniques

strategy was undertaken to ensure that women and men from households and the poor were equitably involved. in this process

Communication about project activities takes place via community and association meetings. At the pocket voting exercise, association members expressed the view that any arising issues or changes in the executive committee are addressed in assemblies and voted upon by association members. The project proceeded according to the expressed interests and needs of members that participate in association meetings.

Due to time constraints, it was not possible to assess how representative attendance at regular meeting is. In the three Serviços Autónomos visited, communication channels with users are informal, taking place by word of mouth, or via intermittent community meetings. There are no specific provisions to ensure that the more marginal groups are reached. If user associations do exist, they are not consulted. No formal strategy for involving users in decision making processes or for dealing with user inquiries or complaints has been established.

Discussing the implications during key informant interviews and focus group discussions, association members explained that there are community members who live significantly farther away from the tap stands and from the association headquarters. There are also households with elderly or infirm household members. They considered it likely that these households were less well informed and had less influence in the association overall due to these circumstances.

Conclusions and Recommendations:

Community Participation / Empowerment / Ownership

Both projects are examples of the decentralised management of water with the active participation of the user communities. The assessment shows certain areas that would benefit from strengthening, as follows:

- **User representation.** In order to build links between the new autonomous water service provider and users, ADC is encouraged to support local partners (*Serviços Autónomos*, local consultants and contractors) to establish guidelines on establishing more representative user groups for decision-making and on establishing user associations in rural and urban areas. Male and female heads in each household should have their own voice in decision-making processes. Public accountability for service delivery and accounting can further enhance transparency and trust building
- **Service expansion and customer relations.** The *Serviços Autónomos* can be supported with the development of communication and customer service procedures, in particular with improved means of accessing and responding to the needs of the rural users in a gender- and poverty-specific manner. The project can also help the *Serviços Autónomos* to access information (in the form of literature, briefing, exposure visits, etc.) on innovative ways of expanding services to the poor and to adapt financing systems to meet the specific situations of the poor, without sacrificing the goal of cost recovery. In particular, written information is widely available from case studies (in Spanish and English) from Central and South America.

B 1.2.3 Relevance and Impact

Findings and Assessments:

In this section, the key contextual aspects (which are described in more detail elsewhere) are summarized and the relevance of the various project interventions are assessed:

Needs and Demands of Target Group

Because of the arid and semi-arid climate and the competitive use of water both for domestic and productive (mainly agriculture) use, stress on the available water resources is very high. Accordingly, the project's target groups (both urban and rural populations, both women and men) very clearly expressed their insistent needs and demands for water – both for domestic and productive use.

Both projects (ASAAS and River Basin Management) are attending to the water issue with the active participation of the user communities with a decentralised management approach. The initial project achievements are very clearly indicating that the ADC supported interventions are highly relevant regarding the need and demand of the target groups.

Partner Country Policy

The objectives in Cape Verde's 2001 Interim Poverty Reduction Strategy Paper (I-PRSP) include promoting good governance; developing human capital; promoting social development and cohesion; and developing basic and economic infrastructures. The I-PRSP pays particular attention to improving the productive capacity of the poor with a focus firstly on the need to improve micro-finance policy and provide training and secondly, on the need to improve economic and social infrastructure for poor communities. Finally, the I-PRSP emphasizes the need to focus on measures that reduce poverty of women, as the poverty analysis upon which it is based stresses that women are particularly vulnerable.

In light of these policy options and focus areas, the ADC projects prove highly relevant in contributing to the objectives of Cape Verde's development strategy for the coming years. The innovative and piloting approaches that have been developed (in particular regarding river basin management) are particularly valuable contributions to the up-coming national policy on water resources and river basin management.

Coherence with ADC's Sector Policy

ADC's sector policy is discussed in chapter D 1 and is therefore not recalled here. ADC's support to the Cape Verde water sector programme is coherent with all principal areas of its policy: The entry point of the programme is contributing to the reduction of poverty. It sets access to increased quantities of safe water for basic human needs as a priority; it has a clear regional focus; it utilizes ADC's comparative advantages to the extent that this is possible; it follows a balanced strategic approach etc. Support from the project for Serviços Autónomos to pay greater attention to the provision of services to un-served rural areas and a greater emphasis on sanitation and hygiene will align the Cape Verde country programme more closely with ADC sector policy.

Impact

Both the Government of Cape Verde and ADC place poverty alleviation at the top of their long-term development objectives. Although it is too soon to assess the impact on poverty reduction at this stage, some trends can already be detected. The water sector programme has made significant contributions on all five points listed in the partner country policy (see **above**). Most obviously, the provision of irrigation facilities in river basin programmes contributes substantially to additional incomes. Plans to replicate the River Basin Management and ASAAS projects in other Municipalities and on islands of Cape Verde are underway. Local partners expressed that the approach and experiences gained through these projects are relevant and useful to the overall aim of reducing poverty in Cape Verde.

Conclusions and Recommendations:

In summary, it can be concluded that ADC's assistance to the water sector in Cape Verde is relevant in considering the needs, the sector environment and ADC's sector policy. However, the impact towards the long-term project objective could be enhanced through the consideration of the following opportunities:

- Enhancement of gender and poverty perspectives in project rules, processes and data collection can further strengthen the relevance for and the impacts of the three projects on national poverty alleviation.
- The benefits of the river basin development approach may be expanded through a more clear linkage between water resources and land management. Further, additional livelihood opportunities may be explored to reduce the stress on both nature and people. (Other specialised agencies may be involved for these complementary activities).
- Assessing (drawing the lessons learned) and documenting the ADC experiences to facilitate and to support replications in Cape Verde and other countries.

- Enhancement of coordination and exchange with other regional programmes and stakeholders at national level (including other donors) with the aim to adjust the approach to the national strategy and also (more importantly) to influence the ongoing sector review.

B 1.2.4 Effectiveness: Access and Functioning

Findings and Assessments:

Safe Drinking Water

Significant improvements have been achieved and/or are on the way in terms of securing safe drinking water and reliability of supply. However, certain aspects of service standards remain relatively low. The time needed for the collection of drinking water is reduced in some cases from hours to a few minutes. Children and women are those who benefit most from this improvement. Awareness creation for proper use of water and hygiene has been partly initiated, but results and effects of this initiative have yet to emerge.
The following two aspects continue to place the effects of improved drinking water provision at risk:

- Some households in the supply area still have to fetch their drinking water from distances of more than 15 minutes walk from their homes.
- The strict water management and pricing of water at water kiosks leads partly to unhygienic practice.

The impact of both factors is that those households concerned consume significantly less water (less than 10 litres per person per day) than those unaffected, which puts hygienic improvements at risk.

Sanitation

Only very limited attention has been paid so far to this aspect; for obvious reasons, it is not perceived as being a priority issue at this stage.

Irrigation

The introduction of the drip irrigation system reduces water consumption and facilitates in many instances additional harvests. However, reliable functioning and system sustainability are put at risk since the primary distribution infrastructure is still installed in a temporary fashion (e.g. pipes remain partially or wholly exposed to the elements).

Decentralization

The initiative of *Serviços Autónomos*" is a move in the right direction. The approach complies with current global best practices. The process has not been completed and crucial activities are either ongoing or have reached the planning stage. These key activities include a study on an essential tariff structure, the preparation of a HRD concept, and personnel reductions. Management capacities are limited and require strengthening. Threats to this programme include political interference and power interests

Conclusions and Recommendations:

Considering the time of project involvement and the external means that have been made available, access and functioning have been increased to a reasonable degree. These factors will be further enhanced if the mission's recommendations are implemented. In summary, these recommendations address the following areas:

- Facilitation of supportive regulatory & legal frameworks, both for the service providers and for the provision of services.
- Further development and consolidation of a well functioning O&M system (c.f. section B 1.2.9).
- Consolidation of institutional strengthening and capacity building at all levels.
- Exploration of alternative supply systems - including rainwater harvesting and combinations of complementary supply system modules etc.
- Enhancement of campaigns for increased user involvement - in particular to enhance awareness for proper use of water, consideration of water as an economic good, importance of hygiene.

- Development and implementation of effective sanitation measures.

Effectiveness:

Overall improvements in access to water services have been achieved through the *Ribeireta* and *ASAAS projects*. However, in order for project contributions to the reduction of poverty in Cape Verde to be more effective, ensuring access to a sufficient quantity of safe water by marginalised groups in the project areas (such as households with aged or infirm members, households headed by single females and outlying rural communities) calls for further attention.

B 1.2.5 Water Resources Management

Findings and Assessments:

Water resources management represents a major pillar of the river basin development initiative. Experience shows that water resources management initiatives are more effective when they are coupled with other development aspects in the respective river basin – this is particularly true with respect to (agricultural) land management and livelihood opportunities. It is precisely in these areas where great potentials of the ADC-supported river basin development projects are located.
In summary, the achievements in this field are as follows:

- The project has been developed with intensive participation from the beneficiary community, with the result that the projects are largely "owned" and managed by them.
- User and farmer's groups have been formed.
- Water resources protection has been enhanced - but it is still at risk in the absence of environmental sanitation measures.
- The infiltration of surface water has possibly been increased through various measures such as terracing, afforestation etc. However, the technical implementation of this component is insufficient in terms of design standards and construction quality (distribution networks and storage tanks are already leaking etc.).

Conclusions and Recommendations:

The river basin development approach (including water resources management) is a remarkable and innovative initiative. The pilot projects implemented so far contain valuable learning and the potential for replication within and outside the region. The approach and the projects have not yet been finalized. Therefore, the suggestions provided below are intended to further develop and fine-tune the approach, aiming at sustainable solutions:

- Enhance dialogue and contribute to national strategy and policy development in water resources management
- Enhance the involvement of beneficiaries from the planning stage, leading to solutions that are more user-oriented
- Promote the empowerment of beneficiaries in the handling of finances (e.g. counter signatures), leading to capacity building for sustainability
- Provide on the job training in technical skills, leading to improvements in construction quality, subsequent cost savings and enhanced service life and sustainability
- Document the approaches that were adopted, the planning tools that were used and the lessons that were learned, thus facilitating replication of the initiatives
- Facilitation of "horizontal" exchanges between farmers from other river basins, thus lending further support for replication of the initiative
- Explore alternative supply systems - including rainwater harvesting and storage at domestic level and the use of dual supply systems (e.g. raw water for domestic use, protected water for drinking) etc.

- Strengthen current project activities with environmental sanitation measures. Such measures should include awareness creation and social marketing - eco-sanitation may be well accepted since it provides benefits for agriculture production.

B 1.2.6 Efficiency: Management and Programme Implementation

The efficiency of the project is evaluated against project management, organizational structure and programme implementation requirements, as shown in Table 1, below.

Table 1: Management & Programme Implementation (Cape Verde)

Pre-requisites	Assessments and Recommendations
Project Management:	
Transparent, clear accountable project management framework, applied with flexibility	The project management structure is too complicated - too many actors are involved, increasing the potential for misunderstanding and conflict. The structure is not understood by all stakeholders involved. Essential management instruments are lacking, such as defined communication, steering and reporting paths and procedures. The role of the Austrian representation is not defined.
Consideration of long-term management structure from outset of project	The long-term local management structure has not been sufficiently empowered from the outset of the project. This may have contributed to increased efficiency at the beginning, but an opportunity for institution and capacity building was missed.
Organization Structure:	
Optimal ratio regarding means used for project administration as compared to project implementation.	Although the balance between project administration / implementation could not be assessed in detail, it seems that the ADC Coordination Office has to spend too much time on administrative matters, to the extent that inputs into strategic issues are lacking.
Clearly defined tasks and responsibilities coupled with the required competences.	Tasks and responsibilities are not always backed up with corresponding levels of competence. Establishment of clear job descriptions will clarify the work organization. Communication gaps do exist, which indicates that the line of command is not always clear.
Programme Implementation:	
Availability of required data, and effective monitoring system for project steering.	The existing monitoring and data collection system is weak. Reporting is inconsistent and is lacking a common framework and language. These deficiencies put the present efficient performance at risk. An effective monitoring system (as well as corresponding and systematic data collection and analysis procedures) should be developed as a matter or urgency.
Transparency and consensus about the agreed contributions by the different stakeholders (contractual arrangement)	Contributions by the different stakeholders seem to be clear but they should be increasingly clarified and laid down by contractual arrangements.
Potential of existing resources are assessed and utilized.	Existing resources do not seem to be fully utilized as yet, nor are they being reinforced in a systematic way. The project should take a strategic decision in this regard. This means additional time should be spent identifying locally existing capacities and investments may be made into the improvement of their performance (i.e capacity building). This capacity building may be provided through local agencies such as "Business Development Service" (BDS) providers. The project component "*Serviços Autónomos*" provides an opportunity to translate such a strategy into practice.

B 1.2.7 Technology and Implementation Quality

Findings and Assessments:

In general, appropriate technologies are applied - the introduction of the drip irrigation technology provides a very good example of this. Nonetheless, potential for improvements remains. Quality levels in terms of design and implementation are generally low. Water losses seem to have reduced due to the metering of consumption. However, the strict water management and pricing of water supplied at kiosks provokes restrictive and unhygienic usage. Reliability of supply and reasonable accessibility is not provided in all cases. No technical options are provided for the selection of appropriate sanitation facilities.

Conclusions and Recommendations:

In the view of the strengths and weaknesses regarding technology choice and implementation, the following recommendations are made. They are intended to contribute to enhancing the service life, lowering cost and increasing sustainability:

- Improvements of design and construction quality through the following measures: (1) enhancement of quality awareness of suppliers and clients; (2) more capacity building at all levels, including planners[7], supervisors and craftsmen/women[8]; (3) upgrading the status of craftsmen/women, (4) enhancement of opportunities for the involvement of women and the poor through new skills training, influencing choices on technology, design and service levels[9].
- Water quality monitoring with lab-equipment needs to be complemented with regular sanitary surveys
- Exploration of more cost effective technologies (e.g. ferro-cement)
- Exploration of dual supply system (possibly at household level)
- Exploration of water treatment at household level (e.g. SODIS)
- Facilitation of access to global sector experience and knowledge

B 1.2.8 Human Resources and Institutional Development

Findings and Assessments:

The objectives of all projects assessed in Cape Verde underline a strong focus on capacity building through human resources development measures and at on strengthening the institutional framework. However, there is no clear country strategy that would provide a framework as a basis for institutional building and HRD measures based on clearly identified needs.

Although the institutional capacity of AGROGADO has been strengthened, the organisation and implementation arrangement of the **Ribeireta** project is characterised by its many actors and partners (more than 10 different formal or informal links and partnerships have been identified). Such an arrangement is too complex and fosters a potential for conflicts. The only link to the municipality exists through the Local Coordination Commission – a project interface that cannot be considered sustainable in the long term. There are also no clear communication and steering arrangements and the role of the Austrian representation remains unclear.

A number of trainings have been provided to various stakeholders. However the approach is cursory with little concrete follow up by the local training institutions.

There is no formal institutional linkage from the **SAAS** to the users. Particularly in the rural areas, users are not represented in the municipalities. Services are provided on a first-come, first-served basis. So far,

[7] Take into consideration different design criteria for storage tanks (with demand projections for 20 years) and principal supply mains (with demand projections for 50 years).
[8] Refers to observations made concerning spring catchment construction, masonry and concrete work
[9] For example, the production of household rainwater tanks (in ferro-cement) by women

environmental sanitation services are not provided by the SAAS. However, a new policy for sanitation is presently being developed by INGRH.
Although SAAS' efforts towards strengthening decentralised structures is considered to be the right move towards a sustainable institutional framework, some weaknesses prevail:

- The institutional and management structures are complicated and the lack of accountability prevails at various levels.
- Management capacities are generally weak whilst parts of SAAS appear to be over-staffed.
- The project and/or government are/is still too strongly and directly involved in implementation while the private sector plays only a marginal role.
- Mayors do not support SAAS sufficiently but misuse their vehicles and interfere in the decision-making processes.
- Empowerment at household and community levels remains limited.

During project phase 1, a number of training courses have been provided to SAAS and have contributed to a better performance of the SAAS. However, clear job descriptions that would form the basis for the design of future training still do not exist.

Institutionally, the **GTM** do not have a very important role within the municipalities and are not integrated into the planning processes of the municipality. There are no formal links to the SAAS and INGRH that could potentially make use of this planning tool developed.

In summary, some improvements on the institutional and capacity development fronts can be reported. However, through the integration of the projects in existing structures (with clear division of tasks and responsibilities as well as need based HRD measures), interventions still can be enhanced.

Conclusions and Recommendations:
HRD measures should be designed based on clear needs that are based on a functional analysis within a leaner, more transparent and accountable organisation. Tasks should be divided between the users, the public and the private sectors.
In view of this, a uniform approach based on the lessons learned and in cooperation with sector representatives is required and a country policy for human resources and institutional development should be developed.

Organisational structures of the projects and the partner institutions (including the CO) should be as simple as possible. They should aim for decentralised roles and responsibilities and should remain lean and transparent. In addition, the expansion of the concept of SAAS to other services[10] should be envisaged and transparent linkages to the river basin development organisation should be established. Lobbying for decentralisation approaches should take place through workshops, exchange of best practices, exposure visits, etc.

Women hold management and decision making positions among programme staff, in the Executive Board of AGROGADO (the Ribeireta Farmer's Association), and in the Serviços Autónomos. However, the recruitment policy and practices of the CO and of local project staff do, not explicitly articulate gender equity principles in human resources development. The approach and interest of the presiding Representative prevails and a change of office[11] could result in less representative staffing in all of the mentioned institutions.

[10] For example, environmental sanitation
[11] For example, if a future representative does not view gender- and equity- staffing concerns from the same perspective as the current imcumbent.

B 1.2.9 Operation and Maintenance / Sustainability

Findings and Assessments:

The setting-up of an efficient and effective O&M system is one of the main determining factors in achieving sustainable impacts on any initiative involving physical infrastructure of any form. The degree to which sustainable O&M systems have been established varies between the different projects. Generally (across all projects), O&M systems have not yet been given the attention required to reach the ultimate threshold of true sustainability.
Steps which have already been taken towards efficient and effective O&M include the selection of technologies that are generally simple and O&M friendly[12] and the achievement of reasonable levels of user participation and involvement that have in turn generated some "ownership" feelings.
The biggest hurdle to improving O&M procedures to the point of real system sustainability is the need to rework the current rather complicated institutional set up into a simpler and more accountable form.

Conclusions and Recommendations:

On all projects, progress made on O&M is lagging behind progress made on other fronts and this situation is overshadowing the long-term sustainability of the gains achieved so far. Therefore O&M has to be attended to with greater urgency. The recommendations below outline the principal areas that call for consideration when developing or improving the O&M concepts for the various projects:

- Facilitating and supporting the establishment of enabling rules and regulations and legal framework.
- Supporting the ongoing tariff study and advocating a tariff structure that considers affordability of basic services by the poorer sections of society - possibly through cross subsidies from higher service standard.
- Development of simple institutional set ups that foster decision making and controlling as close as possible to the user community. Criteria that call for consideration are – more businesslike management systems at all levels (following the principle of accountability), performance remuneration and, where appropriate, competition. Synergies with swTws Uganda (see Section below) may be studied in this regard. In particular, the arrangement with an umbrella organization, which provides the required support services to its member communities, seems to be a promising model.
- Increased empowerment and enabling of users during planning and implementation through their involvement in decision making[13] and through their involvement in handling of finances during implementation (e.g. counter signature).
- Continuation of capacity building - in particular through reinforcement of horizontal exchange (e.g. between user and/or farmer groups) and through refresher training at all levels.
- Reinforcing (and systematizing) monitoring, reporting and learning loops.
- Backstopping and support for households to sustaining the use, operation and maintenance of latrines and ecosan sanitation systems - which still need to be introduced - will result in more sustainable improvements in health and hygiene standards over time.

[12] Spring catchments providing water by gravity are the preferred technology.
[13] For example, users should have a say in the selection of contractors. Contractors will only treat users as clients if the contractors understand that users have a choice in the awarding and payment of contracts.

B 2 Uganda

B 2.1 Background

B 2.1.1 Country Profile

Uganda is a landlocked country on the equator in East Africa. The country contains a varied landscape of savanna, dense forests, and tall mountains, as well as almost half of Lake Victoria - the largest lake in Africa and the primary source of the Nile River.

Uganda is an ethnically diverse nation with a deeply ingrained intellectual and artistic culture. Poor but developing, Uganda's economy is predominantly agricultural. Uganda was the home of several powerful kingdoms (most notably Buganda and Bunyoro) before the arrival of European colonists in the late 19th century. Uganda became a British protectorate in 1894, and its present borders were established in 1926. It gained independence from British rule in 1962. In the 1970s and early 1980s, the nation endured two bloody dictatorial regimes (under Idi Amin and Milton Obote) and two wars. In 1986 Uganda came under the control of pragmatic leader Yoweri Museveni, who has introduced democratic and economic reforms. Kampala is Uganda's capital and largest city.

Uganda covers a total area of 241,038 sq km. It is a country of remarkable physical contrasts. It forms a plateau declining gradually from 1,300 m in the south to 750 m in the north. The southern portion is a forest zone, although much of it has been cleared for farms. Much of the north is open savanna (grassland with sparse trees and shrubs), though it also contains semi-desert. There are small areas of bamboo and rain forests. The Western Rift of the Great Rift Valley (a series of geological fissures more than 5,000 km in length, along which the Earth's crust is splitting apart) runs through western Uganda. Mountains rise on the eastern and western borders of Uganda, 13 of which are more than 4,100 m high. Most of Uganda's mountains are volcanic in origin. Earthquakes, occasionally quite severe (up to 7 on the Richter scale), are common in the Western Rift Valley.

Because it is an agricultural country, Uganda's soils are its most important resource. It has small amounts of mineral resources, mainly copper, cobalt, nickel, gold, tin, tungsten, beryllium, iron ore, limestone, phosphates, and apatite. For most of its electric power, Uganda depends on hydroelectricity from the Owen Falls Dam on the Nile at Lake Victoria. At present, 26 percent of the land area is cultivated and 9 percent is used for permanent crops such as coffee and bananas. Demands for farmland, firewood, and charcoal (which is made from wood) have destroyed Uganda's forests at an alarming rate[14] , Currently, 21 percent of the land area remains forested.

Uganda's temperatures are moderate throughout the year. Except for its northeastern border area and small areas in the southwest, Uganda usually receives sufficient rain throughout the country to permit crops to grow once or even twice a year. Most areas of the country have distinct dry and wet seasons, though the Lake Victoria area receives rain throughout the year.

The 1991 Uganda census counted 16,671,705 people. By 2002 the population had grown to an estimated 24.7 million Ugandans, giving the country a population density of 102 per sq km. The estimated growth rate of the population in 2002 was 2.9 percent.

Poverty and disease are interlinked problems in Uganda that are compounded by poor sanitation, unclean water, and inadequate housing. Only 52 percent of the population has access to clean water. Although food is easily grown in Uganda, sporadic droughts cause severe famines. Uganda suffers from a very high infection rate of the human immuno-deficiency virus (HIV) that causes the acquired immuno-deficiency syndrome (AIDS). The International Bank for Reconstruction and Development (World Bank) estimated 820,000 Ugandans were infected with AIDS in 1999.

[14] 2 percent each year in the period from 1990 to 1996

B 2.1.2 Water and Sanitation Sector

Only about 52% of the Ugandan population has access to safe water and basic sanitation. The figures mark considerable disparity between (and within districts) and between the big towns and rural growth centres. To improve access to water supply and sanitation facilities, the Government of Uganda (GoU) has included investment in the water and sanitation sector as a key component of its Poverty Eradication Action Plan (PEAP). GoU is directing significant resources to the sector under the Poverty Action Fund. These funds are largely disbursed as conditional grants to the districts under the District Water Supply and Sanitation Programme (DWSSP).

Under the decentralisation policy, district governments are the overall planning authorities and take the responsibility for service provision in the water and sanitation sector. They are also the principal players in the development and management of water resources. In this way, central resources are channelled from the centre through to the districts. The DWSSP calls for increased planning and management capacity at district level so that district authorities can effectively assume greater responsibility given the increase in resources accessible at district level. Under the Ministry of Water, Lands and Environment (MWLE), the Directorate of Water Development (DWD) is responding to this challenge by setting up Technical Support Units (TSU) to provide technical and management support to districts. The aim of the TSU is to facilitate the building of local government capacity to handle water and sanitation development.

B 2.1.3 Austrian Development Cooperation (Objectives /Strategies /Summary of Achievements)

ADC's support to the water and sanitation sector in Uganda started in 1990 by co-financing a major part of the Kampala 2nd Water Project. In 1994 Austria was the first bilateral donor to provide funds for the improvement of water and sanitation in a cluster of rural growth centres and small towns in the South West of Uganda under the "Rural Towns Water and Sanitation Programme".

The "South Western Towns Water and Sanitation Project" (swTws), which is the subject of this country assessment, started in 1996. It aims at providing water supply and sanitation facilities to 19 small towns and rural growth centres in the South West of Uganda. In addition to improving the water and sanitation situation in the project area, the programme also contributes significantly to the development of policies and guidelines for the Rural Water Supply and Sanitation Sub-sector through intensive dialogue with the GoU Important programme objectives include the promotion of personal and community health (by ensuring basic sanitation though safe excreta management), the promotion of gender equity in water and sanitation management and the promotion of appropriate and environmentally friendly technologies (photovoltaic 'PV' systems, eco-sanitation, etc.).

Basic guiding principles include community involvement and participation in decision-making processes (based on a demand driven approach), financial and institutional responsibilities of all stakeholders (such as central and local governments, private sector and the communities), and sustainability through responsible O&M.

As such, the swTws strategically complies with the ADC WSSP, the ADC Uganda Country Programme as well as with various national water and sanitation sector policy and strategy documents.

The project concept and strategy (as well as implementation processes and arrangements) are well documented and a reporting system is in place. The project is closely accompanied by the Austrian CO and conceptually supported by an external backstopping arrangement.
By the end of March 2002, 17 out of 19 towns - including the headquarters of Kisoro district - had been fully covered with water supply and sanitation facilities. Institutionally, the project has been setting up Water and Sanitation Committees (WSC) and Boards (WSB) and has been providing training to all of the towns. During the first phase of the project, the South Western Umbrella of Water and Sanitation (swUws) was conceived with the aim of assisting the WSB/WSC with technical as well as managerial aspects of Operation and Maintenance of their respective schemes.

B 2.2 Findings, Assessments, Conclusions and Recommendations

B 2.2.1 Cultural Aspects, Gender Balance and Poverty Reduction/Livelihood

Findings and Assessments:

Socio-cultural Aspects

The South Western Town Water and Sanitation (swTws) Project approach was based on the expressed demand of community members. They also provided background information about the history of the town's water and sanitation practices and facilities. Information on aspects such as sanitation status, traditional/existing water sources, gender relations and environmental circumstances was gathered and then used to design a tailored approach to developing water supply and sanitation services in each of the 19 small towns and rural growth centres.

Male traditional leaders played key roles. They initiated requests for their communities' involvement in the project and mobilized community members to participate in the realisation of schemes and to commit to implementation agreements. The project used a wide range of sensitisation and mobilization techniques (such as drama), which proved to be an effective means of delivering information in an appropriate manner to users in the small towns and rural growth centres. However, information regarding who participated or was involved (and in which activities) from the communities and households (women/men) was not available.

Gender and Social Equality

Awareness raising about the need to involve both women and men in the swTws project has been an important component of the project's approach since inception. Gender issues are addressed in trainings and through informational drama productions. The presence of women is required at community meetings, Water Board and Committee meetings, etc. This approach has contributed to increased awareness about the roles of both sexes in water supply and sanitation in households and the community.

Understanding about the concepts of gender and gender equality among swTws project staff varies. When multi-disciplinary teams visit the field, this is not as problematic as when individual staff members with less experience in working with a gender-perspective visit the field alone. Technical staff indicated that they leave all matters related to gender to the Mobilization and Sanitation Officers.

The rating exercise (on institutional, policy and project management approaches to gender issues) conducted with the ADC Programme Officer and the consultant contracted to provide backstopping assistance demonstrated that they have a clear understanding about what the concepts of gender and gender equality entail and their relevance in the project's work. However, they expressed that they would like more sector-specific inputs from the BMaA/ADC gender- specialists to assist with gender and poverty-sensitive planning, operationalisation, and impact measurement.

Socio-economic information is gathered by the project on household access to water supply, sanitation, hygiene status and behaviour change in households. However, data is not specific for sex or social characteristics and therefore the roles, responsibilities and benefits accruing to women and to men are not clearly visible. Such added visibility would then allow the assessment of whether any particular group is being negatively impacted or excluded from the project However, monitoring systems are not designed to gather gender or poverty specific data.

Poverty Reduction / Sustainable Livelihoods

Achievements in combating poverty in the activity areas of the swTws project include a significant reduction in water tariffs[15] and notable success in realising the policy on basic sanitation coverage (pit latrines with a sanitary platform or 'sanplat'). *Total* coverage was realised in *all* of the project communities (except for one) following the implementation of the water and sanitation projects. A drop in the rate of coverage could

[15] In one rural growth centre the tariff has reduced from 200 shillings/jerry can prior to the scheme to 25 shillings/jerry can after the implementation of the scheme.

however be witnessed after one year due to "lack of follow up by communities after handover". Furthermore, repairs to water supply networks are conducted in a timely manner.

The women and men members of Water Boards/Committees were aware of the establishment of the Umbrella Organisation that they can turn to for support for larger repairs and a supply of spare parts. Consequently, in the rural growth centres and small towns visited, the outcome of the project has been a regular supply to users at a more affordable rate than that prior to the project.

Focus group discussions and key informant interviews indicated that there are households in the participating communities that are unable to afford water tariffs or the required contributions for sanitation facilities. Such circumstances are now resolved on an ad-hoc basis. Although there is no institutionalised form of exclusion of the poorer people, these households generally have no other alternatives than reverting to the unprotected sources for their water supply and disposing of their human waste in surrounding fields. The ad-hoc problem solving has not yet been upgraded to a more formal strategy for adjusting the procedures and options to meet the needs of these households.

Regarding sustainable livelihoods, productive uses of water that are commonly practiced in rural and peri-urban areas typically include home beer brewing for sale, cement brick making and running small canteens. Although domestic water needs are addressed in the project, supply for productive purposes was not explicitly considered in the design of schemes and the planned regularity of supply quantities.

Finally, in one rural centre, the Water Committee identified the poorest members of the community as the previous water vendors, whose source of income diminished once the rural centre's scheme was operational. Thus, although the scheme has resulted in greater quantities of more affordable safe water for the majority of the users, the livelihoods of the water vendors has been impacted negatively and their role in the existing water management system of the rural centre was not factored into the development of the scheme.

Conclusions and Recommendations:

The swTws project has paid considerable attention to social and gender aspects in project design and implementation. It is now time to work on internal consistency and monitoring and reporting.

- **Training**. Training for all staff to have a common understanding about the concept of gender and its relevance (not only to the project work overall, but in their specific fields of expertise) would ensure a consistent and coherent approach to addressing the needs and interests (domestic, productive, reproductive) of all users[16]. Training and backstopping for swTws staff is further needed on how to disaggregate their data collection and monitoring processes by sex and by socio-economic class.
- **Management.** There is a need for swTws to assist the 19 schemes already incorporated to develop formal strategies for addressing the needs of the vulnerable members of their communities. This includes the livelihood needs of women and men, the development of network extension plans for un-served newly settled and future settlement areas, and for sustaining the sanitation programme, and to link varying consumption/use to pricing. Social mapping with welfare ranking can help Water Boards plan, monitor and account for performance.
- **Planning.** The following phases of the project plan to incorporate another 25 small towns and rural growth centres. The project is therefore advised to incorporate development of formal strategy for inclusion of vulnerable groups from inception onward. Other recommended activities are (1) to conduct a participatory assessment (both in existing schemes and in feasibility studies for development new schemes) of whether the quantity of supply of water is meeting women's and men's small scale productive needs as well as domestic consumption needs and (2) to include network extension plans into planning and training for new schemes.
- **Monitoring and Evaluation.** Collecting information on possible social impacts at the inception stage and disaggregation of swTws data by sex and socio-economic class for all planning and monitoring processes

[16] Male, female, aged, youth, able-bodied, infirm, *Batwa* or other marginalized ethnic groups, rural and urban residents, etc.

can help avoid negative impacts for existing vulnerable individuals and groups (widows, youth, elderly, etc.)

B 2.2.2 Community Participation / Empowerment / Ownership

Findings and Assessments:

Communities, through the establishment of Water Boards or Committees, lead their own process of involvement in the water and sanitation schemes of the swTws project. The experience of pursuing and fulfilling the goal of establishing a community water scheme based upon their own demand has had the result of greater confidence among some key informants interviewed - who expressed that they would undertake future initiatives for the improvement of their community's living conditions.

The project provided training and capacity building for leadership and management skills for the Boards and Committees to make it easier for them to carry out their tasks. However, participants of the training and capacity building initiatives were not involved in any form of training or capacity needs assessment. Follow-up opportunities for the members of the Boards or Committees to request further training in their particular fields of responsibility, e.g. book keeping, were not available.

Although the project has principles and a strategy on working towards gender equality in planning and decision-making and in management, the absence of segregated monitoring and analysis of project processes makes adherence difficult to assess. At a participatory pocket-voting exercise conducted in Kisoro with a group of 12 users and looking at how decisions had been made. Two swTws project staff and two staff members from the Water Board revealed that:

- Male project staff were the most informed about the project and most involved in the decision making about the water tariffs;
- Men beneficiaries were the most involved in the decisions about location of the public water taps;
- Overall, women beneficiaries were the "owners" of the scheme in Kisoro.

Discussions after the exercise revealed that the participants meant that the women "benefited" the most from the improved water supply and sanitation facilities when they voted that women beneficiaries "own" the scheme. Regarding the gender bias in decision making however, participants commented that this was largely due to the fact that male project staff had been the most visible in their site visits and therefore they were felt to be more in charge of decision making processes.

Conclusions and Recommendations:

The following areas were identified to strengthen participation and empower disadvantaged groups:

Training. Involve users and Board/Committee members in identifying their capacity building and training needs. Recurrent awareness raising and training opportunities for Water Committee/Board members on participatory planning and assessment methods. Examine and update the gender-training module of the Awareness Creation Training Manual for training communities to incorporate new learning and methods for working with gender and equity in water and sanitation. This could happen in conjunction with capacity building workshop for swTws staff on working from a gender- and poverty-sensitive approach to ensure they are all familiar with the materials and their applications in their respective fields of work (technical or social).

Linkages for livelihood and health. Explore other existing development initiatives and build synergies, e.g. income generation and empowerment projects for women such as small-scale production of bricks or sanplats. Establish links with the hygiene work conducted by District Health Workers for maximum impact of health and hygiene promotion activities

B 2.2.3 Relevance and Impact

Findings and Assessments:

In the following section, the key contextual aspects (which have been described in the previous sections) are summarized and the relevance of the project interventions are assessed:

Partner Country Policy

The Government of Uganda's Draft Water Sector Gender Strategy for 2003 – 2007 identifies the 'poor' in Uganda to be overwhelmingly represented by subsistence farmers, widows, female-headed households, youth, the elderly and the sick. The strategy's vision statement is: 'Gender mainstreamed in all tasks of the water sector for enhanced empowerment, sustainability and poverty alleviation'.

It further establishes the objectives of mainstreaming a gender approach which include:

- Sector policy and policymakers facilitate the gender mainstreaming process, allocate adequate resources to strategy implementation and monitor for effectiveness
- Water sector feeding and executing bodies partner to build capacity for gender mainstreaming and support improved numerical balance of women and men staffing in the sector
- The water sector empowers men and women from national up to community level and addresses inequality in welfare, access, participation and control

The strategy is for use by actors involved in the sector and the Sector Wide Approach to Planning (SWAP) process period 2003 – 2008.

Other key national policy documents which give priority to poverty and gender issues in the water and sanitation sector include:

- The 1997 Poverty Eradication Action Plan (PEAP)
- The revised PEAP (2000)
- The Uganda Poverty Reduction Strategy Paper
- The National Water Policy in 1999
- The Sector Wide Approach to Planning (SWAP) process

Needs and Demands of Target Group

As stated earlier, the overall coverage with adequate drinking water and sanitation in Uganda is around 50%. In the hilly area of the South Western Region, this coverage is likely to be lower because the water sources are mostly located in the valleys. Accessibility of safe drinking water is very difficult for many households (walking distance of up to 5 kilometres). Community members' demands must comply with the project requirements for eligibility for involvement. This includes contributing to the community portion of the investment (in cash or kind) and participation in meetings. In addition, latrines must be constructed at all households before improvements for drinking water are undertaken. Community members are not obliged to pay fees to become members of a particular scheme

In the view of these conditions - coupled with social marketing measures - it is not surprising that demands for improvements of the drinking water situation are high. ADC's intervention in this regard is therefore relevant.

Uganda's Sector Environment

The Ugandan Government has been reforming the water and sanitation sector for the past four years. This reform promises much. It is intimately linked to the government's poverty alleviation plans, and financed largely by debt relief funds. The reform process has involved a comprehensive assessment of the sector. The key strategies to emerge include more decentralised delivery of services, increased private sector participation, and the need for a programmatic, sector-wide approach (SWAP). The sector reform process is

still ongoing. Decentralised service provision is in its infancy, and it will take some time before the appropriate institutions are identified and are able to develop sufficient capacity to carry out their functions effectively.

Considering this sector environment, ADC's support to the swTws is very timely, and its focus on developing a regional model (including the facilitation through an umbrella organisation) is both appropriate and innovative. However, a pro-active contribution to the national sector dialogue seems to lag behind because of insufficient capacities. This means that the potential the swTws offers is not optimised to a level that might support effective sector reform at national level.

Coherence with ADC's Sector Policy

ADC's sector policy has been summarized in chapter D 1 and is therefore not recalled at this place. ADC's support to the swTws is coherent with all principal areas of its policy: It has a clear regional focus; it utilizes ADC's comparative advantages to the extent that this is possible; it follows a balanced strategic approach etc. However, areas that now require strengthening are: (1) the ability of the Water Committees and the Umbrella Organisation to ensure that access and control over resources is equitably provided for all groups in the 19 established schemes and any new schemes, (2) the strengthening of capacities at district level and (3) the effective protection of the catchment areas - even taking a water resources management view (c.f. recommendations in the respective chapters).

Impact

Both the Government of Uganda and ADC place poverty alleviation at the top of their long-term development objectives. Although it is too early to assess the impact on poverty reduction at this stage, some trends can already be observed. Access to safe drinking water and sanitation has increased. Hygiene and health improvement are likely to follow suit - despite the missing benchmarks. Contributions to the improvement of livelihood remains questionable - previous water vendors lost their jobs, income-generating activities are not realised.

Conclusions and Recommendations:

In summary, it can be concluded that ADC's assistance to the water and sanitation programme in Uganda is relevant in considering the needs, the sector environment and ADC's sector policy. However, the impact towards the long-term project objective could be enhanced through consideration of the following opportunities:

- Extension of programme to the higher rural areas in need - mostly very remote.
- Piloting a river basin development approach including water resources management, which incorporates effective protection and which may include land management.
- Piloting additional livelihood opportunities e.g. water for productive uses (at cost covering tariffs) and/or involvement of other specialised agencies for complementary activities.
- Assessing (drawing the lessons learned) and documenting the swTws experiences to facilitate and to support replications in Uganda and other countries.
- Enhancement of coordination and exchange with other regional programmes and stakeholders at national level (including other donors) with the aim of adjusting the approach to the national strategy and also (even more importantly) to influence the ongoing sector review. The limiting capacity at ADC's country office for the required policy dialogue and advocacy may be reinforced through an increased focus in the water and sanitation sector.

B 2.2.4 Effectiveness: Access and Functioning

In a first step, access and functioning are assessed and relevant recommendations developed in Table 2, and Table 3. Based on this assessment, effectiveness is evaluated in a second step.

Table 2: Access & Functioning with respect to Safe Drinking Water (Uganda)

Findings and Assessments	Conclusions and Recommendations
Access	
The service standard is generally low – for example, the walking distance to tap stands is between 250 and 500m. This reduces the use of water, which affects hygiene and therefore reduces effectiveness	Optimisation of service standard taking in consideration affordability
The long-term local management structure has not been sufficiently empowered from the outset of the project. This may have contributed to increased efficiency at the beginning, but an opportunity for institution and capacity building was missed.	Consideration of long-term management structure from the outset of project
The strictly applied cost covering tariffs are partly limiting the collection of safe drinking water from the tap stands (e.g. tariffs are partly beyond the ability to pay at all times by the poorest sector).	Cost covering tariffs should be maintained (sustainability), but the project should also look at service options aimed at particularly low income groups, such as facilitated usage of alternative safe sources and/or livelihood opportunities
Functioning:	
Reliable and sufficient supply for 24 hours a day and remarkably quick repair response times (interruptions < 8 hours) contribute to a high level of functioning	Enhancement of preventive maintenance to secure the high standard of functioning
The water quality is periodically monitored. However, no systematic sanitary surveys are conducted, which would attend not only to water quality at a given spot at a given time but would also signal future risks for contamination through in-appropriate use etc.	Introduction of periodical participatory sanitary surveys to enhance the awareness of the importance of maintaining safe water quality

Table 3: Access & Functioning with respect to Hygienic Sanitation (Uganda)

Findings and Assessments	Conclusions and Recommendations
Household level latrines are generally of simple design (san-plat or VIP). They seem to be mostly properly used and maintained (results from random survey only).	Promotion and proper use of simple latrines should be continued. The private sector (e.g. women groups) may be encouraged to take up latrine construction as a business opportunity.
Access to public latrines/ecosan systems and showers is limited to travellers and others who can afford these services. Use by community members is low due to inability to pay the fees. In turn, the functioning of the services suffers since revenue is insufficient to recovery operation and maintenance costs. Effectiveness of this aspect of the scheme is therefore not reaching its potential	While the introduction of the ecosan system is very positively recognized, additional attention has to be paid to its application and dissemination. Public latrines and showers seem not to be the appropriate solution for rural communities.

Effectiveness:

It is too early to fully assess effectiveness at this stage; whether O&M is effective enough to ensure the sustainability of project gains will only become apparent after some years of operation. However, the currently achieved level of functioning and accessibility suggest a reasonable effectiveness, regarding both water supply and sanitation. Effectiveness can and will be further enhanced, if the above recommendations are realized.

B 2.2.5 Water Resources Management

Findings and Assessments:

Water resources management is partially realized. Examples include (1) withdrawal at the spring site is limited to 70 % of the yield, (2) rainwater harvesting has been introduced and partially explored and (3) eco-sanitation has been introduced as an eco-friendly excreta management system. However, no comprehensive water resources management is practiced considering the different available resources and interests of different consumers. Nevertheless, the immediate intake area around sources (50 x 100 m) is protected with perimeter fencing - this land is normally bought by the community. Outside this area, there is no visible protection of the extended intake area - and traditional cultivation that seeks to maximize production at the expense of soil erosion is still ongoing. A certain level of commitment towards the protection of the spring source by the people living in its vicinity is achieved through the free supply of drinking water.

Conclusions and Recommendations:

Water resources management is definitively an area that has not yet received sufficient attention. Although this does not immediately affect current project activities, the issue should be addressed in order to explore realistic potentials, to avoid inevitable conflicts over water access in the future etc. - in other words, in support of truly sustainable solutions. The following recommendations provide suggestions for the development of an effective water resources programme:

- Exploration of a river basin development approach in a selected pilot area, taking into consideration the following aspects; (1) water and land management, since both resources are very much interlinked in particular in cases of scarcity - the appropriate government departments may be consulted for coordination and advice; (2) comprehensive consideration of all available water resources in the selected area together with the interests of the different consumers - e.g. for drinking, production etc.; (3) effective protection of both water and land resources through appropriate measures; (4) support and creation of additional livelihood opportunities for people living in the area – however, since it is not expected that the swTws programme will become involved in complementary sector development beyond the field of water, other players should be encouraged to become active in the selected river basin.
- Exploration and development of cultivation methods in the extended intake areas that benefit both the farmers and the source protection (creation of win-win situations).
- Enhancement of consideration of rainwater as a readily available water resource, especially for remote and dispersed settlements.
- Aiming at combined supply systems to optimise spring-, ground-, surface-, and rainwater use - especially for systems that require pumping.
- Introduction of dual supply systems (e.g. raw water for general domestic use, protected or treated water for human consumption)

B 2.2.6 Efficiency: Management and Financial Operations

The efficiency of the project is evaluated by establishing the pre-requisites for an efficient project management, organization structure and programme implementation and then by assessing how far the project performs against these criteria (see Table 4, below).

Table 4: Management and Programme Implementation (Uganda)

Pre-requisites	Assessments and Recommendations
Project Management:	
Transparent, clear accountable project management framework, applied with flexibility.	The project management structure is clear and straightforward. Increasingly service provision is delegated to the private sector where appropriate. In this line it may be considered that not only the construction work is outsourced but also the planning and supervision. Accountability could be increased if the users' authority in selecting and supervising the private sector is increased. This increased authority together with the up-coming UO will facilitate a management structure, which will be from the outset of the projects similar to the long-term arrangement.
Consideration of long-term management structure from outset of project	The backstopping arrangement through IWGA-SIG seems to be effective and efficient. Contributions to a sustainable sector approach and to capacity building seem to be the emphasis of this support. These support services should be in future clearly capacity and demand oriented (e.g. TOR to be developed by swTws staff)
Organisational Structure:	
Optimal ratio regarding means used for project administration as compared to project implementation.	Considering the composition of the programme's staff and their involvement in project implementation respective in administration the ratio towards time spent for implementation is positive.
Clearly defined tasks and responsibilities coupled with the required competences.	Tasks and responsibilities seem to be clear, which are also linked to high commitment of the staff. Nevertheless, clear job descriptions should be defined in the view of staff turn over, the upcoming UO and the desired increased private sector involvement.
Programme Implementation:	
Availability of required data, and effective monitoring system for the project steering.	The existing monitoring and data collection system is weak. The experience of the staff together with its long-term involvement in the programme compensates partly for it. This obvious weakness puts the presently efficient performance at high risk. An effective monitoring system as well as systematic data collection and analysis need to be urgently developed.
Transparency and consensus about the agreed contributions by the different stakeholders (contractual arrangement).	Contributions by the different stakeholders are clear but they should be increasingly clarified and laid down by contractual arrangements (e.g. services provided by UO).
Potential of existing resources and means are assessed and utilized.	Existing resources may be increasingly facilitated by UO and used for the support services required by WSSBs (e.g. usage of capacity at DWO level).

B 2.2.7 Technology and Implementation Quality

Findings and Assessment:

In general, appropriate technologies are applied. Some technologies - such as photovoltaic pumping and eco-sanitation - require systematic monitoring to understand their appropriateness in the context of Uganda. In other cases - such as for storage tank construction – alternative technologies may be tested. The construction quality of the applied technologies is reasonable. However, further improvements are possible - masonry and concrete work are examples in this category. Design criteria are applied with certain flexibility according to the context (e.g. different growth factors are applied for expanding centres and remote towns). Preference is given to "O&M friendly" designs – for example, high investment would receive preference over lower O&M requirements.

The communities still to be supplied are mostly living in areas that are difficult to reach because of their remoteness; a lack of adequate sources in the neighbouring supply area; the dispersed nature of some settlements; or water lifting is required, etc. Higher per capita costs are therefore to be expected for future supply systems.

Conclusions and Recommendations:

The presently applied technologies seem to be appropriate and the implementation quality is reasonable. Nevertheless, recommendations are suggested below to enhance the service life, lower costs and increase sustainability:

- Improvements in design and construction quality through the following measures: (1) enhancement of quality awareness of suppliers and clients; (2) more capacity building at all levels, including planners[17], supervisors and craftsmen/women[18]; (3) upgrading the status of craftsmen/women; (4) enhancement of opportunities for the involvement of women and the poor through new skills training, influencing choices on technology, design and service levels[19].
- Water quality monitoring with lab-equipment needs to be complemented with regular sanitary surveys
- The development of methods (aeration, addition of lime) to neutralize the acidity of water where required should be continued and consolidated. Additionally, measures should be investigated to protect the constructions (e.g. through SIKA coating).
- Monitoring of rainwater harvesting systems that have already been introduced and extracting the lessons learned from this monitoring process. Because of their intrinsic simplicity of household systems in terms of management, it is expected that household level systems will be the easiest to replicate.
- Exploration of more cost effective technologies (e.g. ferro-cement)
- Exploration of combined supply systems (c.f. section B 2.2.5 on Water Resources Management).
- Exploration of dual supply system (possibly at household level)
- Exploration of water treatment at household level (e.g. SODIS)
- Facilitation of access to global sector experience and knowledge

B 2.2.8 Human Resources and Institutional Development

Findings and Assessments:

Training is seen by the Project as the main initiative to improve skills, create awareness and change attitudes; a wide range of training measures have successfully been conducted in all projects. Different methods have

[17] Take into consideration different design criteria for storage tanks (with demand projections for 20 years) and principal supply mains (with demand projections for 50 years).
[18] Refers to observations made concerning spring catchment construction, masonry and concrete work
[19] For example, the production of household rainwater tanks (in ferro-cement) by women, involvement of previous water vendors in the management of new schemes, etc.

been applied to different groups - such as social mobilisation of communities, training of artisans, system operators, and Water and Sanitation Committee/Board members. To support the training programme, manuals for training, mobilisation and O&M have been produced.
However, training generally takes place only during the early project stages and no follow-up in the form of refresher training is organised by the project during O&M phases.

In the past, swTws project has worked rather independently - with only little involvement of the District Water Office (DWO) in identifying, planning, designing and implementation of water supply and sanitation systems. This could be justified during the 1st project phase as new approaches had to be tested and concepts developed.

As stated earlier, the main objective of the swUws is to support members of the association in the post project phase, i.e. during O&M. The setting-up of swUws started in August 2002 and since that time, the manager has been recruited and an office (plus equipment) has been established. Out of 17 completed systems, 14 have already become members of the association. It is planned in the future that more than 50 systems will join the association. The total annual budget is about 170 million Uganda Shillings (US$ 85,000). However, after a brief analysis of the project plans and budgets, there remain serious doubts whether this amount can be recovered through membership contributions.
The programme has introduced an approach that links sanitation with the provision of water supply. In order to gain access to water supply, communities are obliged to install toilets in all households. This new approach can be viewed as a success - it has worked in most of the communities involved. However, still much follow-up has to be done regarding proper use of toilets and the frame of the ongoing health education programme.

The programme clearly shows the importance of a consistent approach. Severe problems occur in cases where organisations provide entire physical infrastructure systems, the water and even the maintenance services free of charge, whilst neighbouring communities may have to bear a substantial part of these costs for their own systems.

Conclusions and Recommendations:

In order to maintain a profound level of knowledge, awareness and skills, continued training throughout O&M should be provided to all relevant stakeholders. These trainings should be reviewed continuously through structured performance monitoring and the needs of the different actors should be formulated in advance. Similarly, training should be provided to District and Sub-County Water Office staff. Training should not only increase knowledge and skills but also contribute to personal enhancement (job satisfaction) and provide incentives and career development opportunities. Training must be based on comprehensive needs and functional analyses for all positions involved. Special training measures should be designed for the development of the local private sector, including contractors and consultants.

With regards to a possible withdrawal of the project, an approach has to be developed and initiated that increasingly involves the DWO in all activities - including training. In view of the limited capacities of DWO in this regard, the local private consultancy sector should be involved and promoted.

In order to prevent duplications, TSU should be incorporated into the project. This appears to be a logical step, as the project already assumes some roles of the TSU.

With the establishment of swUws, communities are now receiving professional support towards O&M of their systems. However, to ensure that the association becomes financially self-sustained, a more business-like approach should be introduced. It is therefore recommended that during the forthcoming Austrian consultancy mission, a comprehensive business plan will be developed.

Successful lessons learned from this innovative approach should be fed into the policy dialogue and should influence sector policies and strategies at the national level.

B 2.2.9 Operation and Maintenance (O&M) / Sustainability

Findings and Assessments:

Significant steps have already been made towards establishing a sustainable O&M system. O&M "friendly" technologies are chosen and may be preferred against higher investment costs. For example, a remote spring providing water by gravity (and requiring minimal maintenance) is preferred to a local groundwater source (requiring a complex water lifting device), even in cases where the spring development requires a higher investment because of the distance involved.

The roles and responsibilities of the stakeholders involved in O&M are more or less clearly defined. Just to mention some key roles:

- Users are involved in the implementation and given responsibility through their Water Supply and Sanitation Boards for the management of O&M. Users are mobilized for efficient and effective use of the facilities. WSSBs are mostly gender balanced.
- The private sector - consisting of the scheme operator and tap stand wards - is mainly responsible for the implementation of O&M
- The public sector - consisting of the Sub County – legally owns the water supply facilities and is entrusted by the government to secure the supply of water. The later responsibility has been delegated to the WSSBs.
- An Umbrella Organisation (wsUws) of associated WSSBs has recently been formed, with the purpose of providing backstopping services on specific legal, institutional, political and technical issues. This device aims to give the WSSBs a common voice, to supervise overall performance (monitoring) and to provide support in problem solving (including facilitating access to the required expertise, which may be located in the private sector). Additionally, an O&M training manual has been elaborated that clarifies the tasks and duties of each stakeholder. Initial training has been provided for all levels - note that this training is not followed up after a scheme has been commissioned, however. Finally, cost covering tariff have been set and are strictly enforced.**Conclusions and Recommendations:**

Despite the many efforts already made towards setting up effective O&M systems, recommendations are provided below to enhance the sustainability of these initiatives - in further support of sustainable service delivery. The following measures are proposed:

- Increased involvement of users in decision-making – for example, users should have a say in the selection of contractors[20].
- Involvement of users in handling of finances already during implementation (e.g. counter signature)
- Continuation of capacity building in particular through reinforcement of horizontal exchange (e.g. between WSSB) and refresher training for all levels.
- The O&M manual requires updating with the emergence of the swUws. Separate duties should be compiled for each stakeholder in handy, specific manuals respective instruction leaflets.
- Maintaining cost covering tariffs but piloting additional livelihood enhancing opportunities
- Development and application of businesslike management systems at all levels, which follow the principal of accountability, performance remuneration and, where appropriate competition.
- Reinforcing and systematizing of monitoring, reporting and learning loops.
- Providing backstopping and support with a view to sustaining the use, operation and maintenance of household latrines and ecosan sanitation systems in existing and new schemes. This will result in more sustainable improvements in health and hygiene standards over time.

[20] Contractors will only treat users as clients if the consultants understand that users have a choice concerning the awarding and payment of contracts.

B 3 Guatemala

B 3.1 Background

B 3.1.1 Country Profile

Guatemala is located in Central America and shares borders to the north and west with Mexico, to the southeast with El Salvador and Honduras, to the northeast with Belize and the Caribbean Sea and to the south with the Pacific Ocean. The landscape is predominantly mountainous and heavily forested. A string of volcanoes rises above the southern highlands along the Pacific, three of which are still active. Within this volcanic area are basins of varying sizes, which hold the majority of the country's population. The region is drained by rivers flowing into both the Pacific and the Caribbean. One basin which is surrounded by volcanoes (to the west of the capital) has no river outlet and has thus formed Lake Atitlán, To the northwest, bordering on Belize and Mexico, lies the low, undulating tableland of El Petén.

The Mayans were dominant through much of Central America from the fifth until the eighth century when their civilisation declined and a variety of other ethnic groups moved into the region. Europeans arrived in the 15th century, and Guatemala was one of the territories overrun by the Spanish conquistador Cortés in the 17th century. Pressure on their empire during the early 19th century forced the Spanish to concede independence to their American colonies, principally Mexico, into which Guatemala was briefly incorporated in 1822. Subsequent plans to fuse the countries of the Central American isthmus were equally short lived. Guatemala enjoyed comparative stability, punctuated by brief periods of upheaval, under a series of dictators who were content to keep the country under a quasi-feudal regime underpinned by a small clique of land-owning families.

The government of Colonel Arbenz Guzman attempted various land reforms in the early 1950s, but was overthrown by a US-backed invasion. The country then slid into a state of almost perpetual civil war between a series of right-wing military governments and various leftist guerrilla movements. The conflict was characterised by a level of human rights abuse that was exceptional even for a civil war, the legacy of which still casts a shadow over the country today. In 1996 the government signed a peace agreement, formally ending a conflict that was responsible for the deaths of more than 100,000 people and the creation of approximately 1 million refugees. Although Guatemala has completed a successful transition from military to civilian government, the military retains considerable political power today.

The most recent polls in November 1999 brought the *Frente Republicano - Guatemalteco* (FRG) with its presidential candidate Alfonso Portillo Cabrera into power. Under the 1986 constitution, legislative power is vested in a single-chamber assembly with 80 members who are directly elected every four years. The President, also elected every four years, holds executive power.

In 2001, Guatemala's population was estimated to be 12.9 million with an annual growth rate of 2.6%..
In terms of ethnic composition, Mestizos (mixed Amerindian-Spanish or assimilated Amerindian - in local Spanish called Ladino) make up approximately 55% of the population, Amerindian or predominantly Amerindian account for roughly 43% and 2% are whites and others. Guatemala is predominately rural - approximately 65% the population lives in rural areas, although urbanisation is accelerating.

B 3.1.2 Water and Sanitation Sector

In common with that other Central American neighbours, the potable water and sanitation sector in Guatemala is characterised by low coverage, poor quality services and deteriorating physical assets. Only about 63% of the Guatemalan population have access to safe water supply and basic sanitation.
The municipalities are responsible for providing the services, but there is no coherent planning for the sector and there is no technical or economic regulation. Although the municipalities are legally responsible for the provision of water and sanitation services, they are often unable to give priority to the rural services. Where these exist, generally the communities themselves provide them. There are no means of ensuring that tariffs guarantee the sustainability of the services while making sure that consumers receive good value for money.

The Ministry of Health (MoH) has established potable water standards but they are not monitored, much less enforced.
The Government of Guatemala has had no formal policy for the sector despite the fact that it is heavily subsidised. However, in 1997 the *Instituto de Fomento Municipal* (INFOM) was charged with the management of sector policy and strategy. INFOM and EMPAGUA, the Municipality of Guatemala's water and sewerage service provider, have formed a coordinating group that has defined the following guidelines for modernisation:

- Separation of policy, regulatory and operating functions
- Improvement of the technical and administrative capacity of the operators
- Creation of sustainability and autonomy in administration and financing of the services for urban and rural areas
- Maximum involvement of the communities.

There are a great number of donor agencies involved in the water sector. However, no active coordination is assumed by the Government - resulting in inefficiency and duplication of efforts.

B 3.1.3 Austrian Development Cooperation (Objectives /Strategies /Summary of Achievements)

The Austrian support to the water and sanitation sector in Guatemala started in 1996 with a focussed input in to the municipality of Quezaltenango in the framework of the project XELAGUA. Quetzaltenago is the old Indian capital of Guatemala with a population of 170'000 and an urban and rural area of about 120 km^2. Piped water supply coverage of the municipality today is about 90%.

The feasibility study carried out in 1996 identified deficiencies in the organisational structure and clear deficits in the capacity of the municipal administration to manage and operate the water supply system through its water department. The municipal water department neither had sufficiently trained technicians to plan and supervise construction, operation and maintenance of the system nor had it the required physical and administrative infrastructure. In addition there existed no technical data about the system such as maps and drawings. The high losses had not only to be attributed to the bad condition of the ageing pipe network but also to the many illegal connections. In 1996, only 38% of the produced water was sold. Although no contamination could be detected at the sources, the quality deteriorated gravely during distribution due to the many leakages. The irregular and insufficient supply naturally resulted in dissatisfaction amongst the population.
Against this background, the Austrian supported programme (in line with art. 79 of the Health Law[21]) aimed at "providing an adequate drinking water supply to the urban population, considering a sustainable handling of water resources and thus achieving users' satisfaction". This was to be achieved through:

- The establishment of a new autonomous utility with sufficient administrative and managerial capacity for planning, construction, operation and maintenance
- Technical improvements of the water supply system, based on the newly developed master plan
- Sensitisation of the population regarding the value of the service provided (willingness to pay) and resource protection (water, waste water, hygiene).

With the aim to provide coverage to the users of the entire municipality through the newly established water utility, ADC support was expanded from the urban (XELAGUA Urbana) to the rural areas (XELAGUA Rural) in 2001.

On behalf of ADC, Horizont 3000 had been acting as the counterpart to the municipality, responsible for institutional relations and general management of the project. All the technical aspects, such as physical and

[21] "It is the obligation of the municipalities to supply the communities located within their jurisdinctional territory with drinking water, according to the municipal law and the requirements of the population, in the context of the State policies in this matter and assigned in the present law"

financial planning and supervision were subcontracted to TWB (Technisches Büro für Kulturtechnik und Wasserwirtschaft).

The main achievements/milestones during Phases 1 through 4 can be summarised as follows:

- Development of digital maps, including an inventory of the existing system.
- Diagnosis of water losses and rehabilitation of parts of the distribution network and reservoirs.
- Concept for re-structuring of the water department and the sensitisation campaign.
- Development of the master plan and a concept for water metering.
- Sensitisation and information campaign for population and municipality regarding the system as well as environmental aspects.
- Establishment of a functional water utility EMAX, continuation of sensitisation campaign.

B 3.2 Findings and Assessments, Conclusions and Recommendations

B 3.2.1 Cultural Aspects, Gender Balance and Poverty Reduction/Livelihood

Findings and Assessments:

Socio-cultural Aspects

In the early 1990s, ADC conducted an initial assessment of the state of the water supply network of Quetzaltenango. Its outcomes determined the approach taken to achieve the objective of the *XelAgua project*. Sufficient water resources were available, although they were not being appropriately managed. Thus, one of the first activities of the ADC-supported project was an extensive planning process that resulted in the development of a water resources and services Master Plan.

Mitigation of conflicts that existed among different groups of users in the municipality about access and control over water resources was one of the priority reasons for developing a solution to the obsolete network and inadequate water supply in the municipality.

The decision to establish the municipal water company, EMAX, was based upon the desire of users and the post-1995 political leaders to bring an end to the practice of nepotism which had led to the problematic situation of inappropriate placement of boreholes and inadequate supply by the network in the first place.

Poverty Reduction/Livelihoods

Urgent measures undertaken to repair and rehabilitate the existing water supply network had the result of establishing a regular supply of water for domestic and business users within the urban area of Quetzaltenango Municipality, and fewer and shorter breakdowns of the system.

In the rural areas, the project also introduced alternative, lower-cost technologies for water collection and storage such as rainwater harvesting cisterns. This approach allows the poorer rural households to manage a certain reserve quantity of water for productive and domestic purposes in the dry season. Households that could afford the construction of cistern systems now save money as they no longer have to purchase water delivered by tankards and they spend less time fetching water from town, in some cases a journey of over 16 kilometres.

The rating exercise on the institutional approach to poverty indicated that the project undertook specific activities to incorporate the poor and their needs. Project staff gave a number of examples and stated that the poor were specifically mentioned in project documentation. For instance, decisions about the order in which village residents would receive water cisterns was based upon the community's prioritisation of who was most in need.

The Master Plan was designed to provide water to all residents of the targeted areas, irrespective of sex, class, ethnicity or other distinguishing socio-economic factors. In the urban component of the project, however, little or no attention was placed upon accessing the needs of the urban poor. During the establishment of EMAX, poverty issues were not considered and they are not part of the institution's policy or strategy for water services delivery to Quetzaltenango.

Agriculture is the main livelihood activity in the rural areas of Quetzaltenango. Users in two separate villages explained that they depend on rainfall and mist for growing their crops. In support of the livelihoods of the women and men in the dry season, the project could have looked into the possibility of the water supply also being used for small-scale production activities in and around the homes. This would have been a supplementary source of income, in particular during the agricultural off-season and would help in financing the O&M costs of the service.

Gender and Social Equality

The rating exercise on the institutional approach to gender revealed that XelAgua project staff considered 'gender' as meaning 'women's involvement'. They stated that women were explicitly mentioned in the project planning and monitoring systems. Additionally, they gave examples of efforts to involve women specifically in the rural component of the project such as motivating women to be the signatories on the contracts for the construction of household cisterns. However, this turned out to be an unacceptable proposition to the women due to their perceptions and realities regarding ownership versus control over financial resources and responsibility for payment within household systems.

Despite these views, XelAgua project monitoring systems have not been designed to collect gender-specific information regarding economic status of users, access to services, involvement in decision-making processes and benefits. The Project Team expressed that this was not a priority in the urban component of the project which focused on the transformation of an institution (the municipal water department into EMAX). In the rural component of the project, socio-economic information (i.e. rich/poor) was collected, but gender-disaggregated data regarding access, control and benefits for different groups was not. It was not possible to use the information to monitor for potential positive or negative impact upon various user groups and in turn, use it to adjust programming activities to minimize potential negative impacts upon users.

As with the issue of poverty, gender-specific aspects were not considered or incorporated into the policy and procedures of EMAX Water Company upon its establishment.
Human resources policy and procedures have not been formulated to ensure equity of employment and advancement opportunities for women and men and strategies are not in place to access the specific needs of the range of user groups within the municipality (both rural and urban).

Conclusions and Recommendations:

Identification and addressing of socio-cultural and management problems have helped improve the water supply and made rehabilitation and repairs pay off. The following action is now recommended to develop the project further.

- **Livelihoods.** Conduct a participatory assessment in the urban and rural areas served by EMAX in order to assess the extent to which water supply is meeting the productive needs of users (e.g. for irrigation, small scale production, etc). Sector projects can also link with or incorporate strategic opportunities for rural and female users, e.g. income generation activities, training in construction or maintenance, etc. Link health, hygiene and sanitation awareness raising (esp. in rural areas), including men's as well as women's roles in improving health status and well being, to achieve more secure livelihoods for vulnerable populations/communities.
- **Capacity building.** The establishment of new institutions such as EMAX has to take place following locally relevant gender-inclusive HRD, customer relations and overall management policies and practices. Consultation of EMAX and project staff with Guatemalan gender-focused organisations is recommended to explore locally relevant institutional approaches to gender equity. Increased ADC backstopping support is needed for project implementers and EMAX for very practical capacity building and training on

working from a gender-sensitive perspective. Local and ADC sector specialists can also give more concrete inputs on how to mainstream gender in project proposals, design, implementation and monitoring systems. Training of project and EMAX's staff on methods of data collection disaggregated by sex and class can bring skills to assess and interpret collected disaggregated data into policy and strategy for providing sustainable services to users, irrespective of class, urban/rural residence, sex, etc.

B 3.2.2 Community Participation / Empowerment / Ownership

Findings and Assessments:

Key informant interviews and transect walks were used in Quetzaltenango in order to explore the experiences and perceptions of male and female users regarding participation, ownership and empowerment. The objectives of the Xelagua project to rehabilitate and extend the water supply network in the municipality of Quetzaltenango and provide support for the establishment of an autonomous municipal water company, EMAX, were developed in consultation with the Municipality of Quetzaltenango and representatives from the various municipal Users Associations.

The decision to set up an autonomous Municipal Water Company was taken by a committee comprised of representatives from Water User Committees, Municipal representatives, the existing Water Department of the Municipality of Quetzaltenango and representatives of other municipal departments who had attended a seminar to discuss the way forward in dealing with the municipality's water problems. The consequent process of development of a Master Plan for extension of the network in the urban area and the connection of the outlying rural areas to the network was also conducted with representation from the communities involved. No information was available or could be found that indicated how many of the representatives were women and/or represented the poor in either the seminar or the planning process. Additionally, in spite of the participation, the Master Plan does not consider socio-economic issues - only technical issues regarding the supply network. Finally, sanitation and hygiene did not feature in the project.

Water Committees are represented on the EMAX Supervisory Board. The urban Water Committees/Associations have two seats and the rural Water User Committees/Associations hold one seat. Elections for the selection of the representatives to the Supervisory Board are held in the 16 municipal Water Committees. It was expressed by Water Committee members and users interviewed that the time and financial commitment to act as the Committee Representative (a voluntary position) was too demanding for women due to their domestic responsibilities. Strategies to ensure that the interests and needs of women and the poor are fairly represented in the decision-making arena about EMAX's operations were not evident.

The representatives of both the rural and urban Water User Committees gave examples of other social development initiatives - such as rural road development, sanitation and hygiene promotion, etc., - that the committees plan to (or have already) undertaken. However, issues of committee formation, representation of interests and accountability (e.g. how to account, to whom, on what matters) are not established and have not been a by-product of the process of involvement in XelAgua.

Synergies with other development processes in the communities involved were not evident. Key informants identified other development initiatives such as health, women's empowerment, micro-enterprise activities, but they were clear that the activities of the XelAgua project had not established links with these other activities.

Conclusions and Recommendations:

A system of upward representation involves users in the water service management in their areas. Further progress is possible on becoming more poverty sensitive:

- **Poverty sensitive indicators.** Project document formats (e.g. monitoring checklists) to include poverty-sensitive indicators, including (1) access to and control over services by poorer users; (2) the range of productive uses of water in communities (3) involvement of poorer users in decision making; (4) access to and participation by poorer community members in capacity building and training opportunities; (5)

potential synergies with other community/social development processes at community and municipal levels for integrated livelihoods support.

- **Recurrent capacity building and training for project staff**. This would involve awareness raising methods for users and local counterparts about how to access and work with vulnerable groups in households and communities (E.g. Methodology for Participatory Assessments, Action Monitoring for Effectiveness, etc). Improved links with other stakeholders (Ministry of Health and District Health Inspectors) and ADC projects (Gender) active in the project area can strengthen user and community involvement in all water and sanitation activities and enable them to build upon opportunities for integrated approach to supporting their livelihoods. The un-served areas and households in areas where XelAgua project was, and EMAX is active, deserve to be identified, e.g., through social mapping. This can be followed by a participatory process to explore options for service provision.
- **Financing.** It is recommended to increase transparency of EMAX tariff system for urban and rural users, with the different tariffs clarified, and to establish customer service and communication strategy. More information on how financing and payments systems can be tailored to the specific situations of the poor is another way of raising access for the poor without jeopardizing cost-recovery. Case material exists from other parts of Latin America.

B 3.2.3 Relevance and Impact

Findings and Assessments:

In the following section, the key contextual aspects (which have been described in the previous sections) are summarized and the relevance of the project interventions are assessed:

Partner Country Policy

The Municipal Council sets the regulatory laws and EMAX, the municipal water company is the body to develop the rules and enforce them.

Guatemalan policies addressing poverty and gender include:

- *El Acuerdo sobre Identidad y Derechos de los Pueblos Indígenas;*
- *El Acuerdo sobre Aspectos Socioeconómicos y Situación Agraria; and,*
- *El Acuerdo sobre Fortalecimiento del Poder Civil y Función del Ejército en una Sociedad Democrática.*

Each of these policies confirms that the objectives of democratisation and social development in Guatemala must include attention to the needs and interests of the poor and marginalized groups in their principles, and in particular, the largely rural indigenous population, and women.

Needs / Demands of Target Group

The overall coverage with adequate drinking water and sanitation in Guatemala is around 60%. At the outset of the project, the supply situation in Quetzaltenango city was chaotic - if water was available at all, it would be of unsafe quality. Though sufficient water resources were at hand, a lack of professionalism and low motivation at the municipal water department ensured that they were not professionally managed. Some individuals or user groups helped themselves, tapping existing water resources in an uncoordinated way and distributing them according to their own preferences. In the rural outskirts of the city, the situation was even worse. In some cases water had to be fetched from as far away as 16 kilometres distance.

In view of this situation, the municipality (a determined major) took the initiative to capitalise on his good relationship with an experienced external sector agency (IIZ) and a donor (ADC) willing to provide the necessary financial support. An initial feasibility study confirmed the urgent need and identified the principal deficiencies in the organisational structure and existing capacities. The demands by the municipality were confirmed and expanded by the user committees, who participated in the planning process. Hence ADC's interventions are relevant regarding needs and demands.

The project treated the different target groups as one cohesive category. Poor, middle class and better off women and men in urban and rural areas could not express their respective needs and demands. Consequently, no differentiated policy and strategy was developed and the participation process did not recognise and involve women and men from the different socio-economic strata.

Guatemala's Sector Environment

At national level, sector organisation is reportedly inefficient, unreliable and corrupt. Nevertheless, art. 79 of the Health law states that municipalities are responsible for supplying their communities with drinking water. At municipality level, the working environment is highly politicised. In the view of this very unfavourable sector environment, the project's answer - consisting of the establishment of an autonomous service provider that is still accountable to the municipality and users - is very appropriate.
In conclusion, it can be said that the project complies with the meagre national sector policy. Furthermore, it goes beyond the inefficient policy and contains a valuable innovative model to improve the sector at regional and national level. This opportunity has not yet been realised.

Coherence with ADC Sector Policy

ADC's sector policy is summarized in chapter D 1 and is therefore not recalled at this place. ADC's support to the Quetzaltenango Municipality is coherent with most of the principal areas of its sector policy: It has a clear regional focus; it follows a balanced strategic approach; it utilizes ADC's comparative advantages to the extent possible – although the question may be asked at this place whether the size of the municipality (170'000 inhabitants) is appropriately matched with the capacity of ADC. However, areas that now require strengthening are the following: (1) consolidation of EMAX; (21) complementation with environmental sanitation; (3) management of political risks; (4) differentiated policy which attends to the needs the poor and marginalized groups etc. (c.f. recommendations in the respective chapters).

The focus on improving supply to users of sufficient quantities of safe water for basic human needs in the Municipality of Quetzaltenango complies with ADC sector policy. The benefits of regular supply, quicker repairs in the urban area and the development of local reserve systems to counter times of shortage (due to lack of rain or technical faults) in both the urban and rural components of the project accrue to both poor and rich users alike. Specific attention to women users and the poor in the XelAgua approach are also in compliance with the ADC sector policy - although as already mentioned, these aspects can be strengthened.

Impact towards Long-term Development Objective

Similar to ADC, Guatemalan policies are addressing poverty and gender. They confirm that the objectives of democratisation and social development in Guatemala must address the needs and interests of the poor and marginalized groups, and in particular, the largely rural indigenous population and women. Although it is too early to assess the impact on poverty reduction at this stage, some trends can already be seen. Access to safe drinking water has increased. Time saving is obvious, particularly in rural areas. In the absence of improvements in environmental sanitation, substantial health benefits remain questionable. No direct contributions to the improvement of livelihood are realised (e.g. productive use of water).

Conclusions and Recommendations:

In summary, it can be concluded that ADC's assistance to the water and sanitation programme in Guatemala is relevant regarding the needs, the sector environment and ADC's sector policy. ADC's involvement in niches of high need and in piloting innovative approaches can lead to high impacts despite ADC being a relatively small ESA. However, the impact towards the long-term project objective could be enhanced through the consideration of the following opportunities:

- Pro-actively facilitate improvement in environmental sanitation: (1) in an **urban** context, encourage the involvement of an interested external support agency, coordinate and share experiences (e.g. master plan) and (2) in a **rural** context, involve capable NGO (e.g. hygiene promotion & eco-sanitation).
- Extend to a river basin development approach - consider settlements above and below the supply area.

- Enhance and consolidate the institutional and economic sustainability through tailored external support in particular to EMAX. The move for the required paradigm change in the management of service provision demands a period of 5 to 10 years.
- Explore the enhancement of delegation of management to the levels below the municipality (water committees).
- Manage the political risks involved through the establishment of regulations.
- Analyse and document the innovative piloting process for the provision of sustainable drinking water within a municipal area. Disseminate the solution for replication and lobby at national level for an appropriate sector policy.

B 3.2.4 Effectiveness: Access and Functioning

Findings and Assessments:

Safe drinking water: Significant improvements have been achieved in securing a safe and more reliable drinking water supply. In urban areas, 40% of consumers receive water 24 hours per day and additional improvements are on the way. However, some rural communities are only supplied for 4 hours every second day. The impact of this situation upon rural residents is one of added insecurity for their livelihoods, as the water supply is needed not only for domestic consumption but also for productive purposes. Improvements were realized with priority in the neediest areas; innovative new supply systems are provided to the remote but highly needy rural areas (e.g. through rain water harvesting).

Sanitation: No attention has been paid so far to this aspect since it is beyond the capacity of the project for obvious reasons. Some initiatives by other agencies seem to be on the way but their realization has not been confirmed.

Conclusions and Recommendations:

Despite the achievements made in increasing both urban and rural users' access to increased quantities of safe water (particularly in the rural areas) problems with the regularity and quantity of water supply persist. Additional attention by ADC and local partners (including EMAX) to resolving these operation and maintenance matters together with users will result in more sustainable systems and increase users' willingness to pay. The following recommendations are intended to support this process:

- Enhancement of reliability of supply through continued reinforcement of the present system (storage tanks and distribution mains), and timely reporting of faults, prompt attention and professional service provision.
- Maintaining transparency to the users regarding the master plan and its schedule for implementation in conjunction with the required funding (accountability for confidence building).
- Development of a cost covering tariff system that allows for cross subsidies from wealthier users (those with house connections) to the poorer sector (those with access to public facilities only).
- Participatory development of appropriate rules, regulations, and advocacy/assistance for legalisation.
- Enhancement of client oriented attitude by the service provider, EMAX. Improved services will lead to increased willingness to pay. This fact may be used as an opportunity to pay rewards for good performance.
- Exploration of delegation of management to the lowest essential level (e.g. water committees) to increase proximity to the users and resulting in increased accountability. Increased involvement and training of private sector for clearly defined tasks.
- Sensitisation for proper use of water should be continued e.g. campaign with flyers etc.

Effectiveness:

It is too early to fully assess the effectiveness at this stage. Whether the improved O&M system remains sustainable with the new institutional set up will only be demonstrated after some years of operation. However, the achieved level of functioning and accessibility is already producing greater effectiveness regarding the water supply. Effectiveness can and will be further enhanced if the above recommendations are realized. But the full benefits of reliable water supply (e.g. impact on health) can only be achieved if such changes are complemented with parallel improvements in environmental sanitation.

B 3.2.5 Water Resources Management

Findings and Assessments:

Water resources management is only realized partially, as follows: (1) spring protection is partially realized; (2) a hydro geological study revealed that no additional wells are required and that the extracted ground water is sufficiently covered (ca. 70 m) and therefore protected; (3) awareness creation is conducted regarding the proper use of water; (4) weekly water quality monitoring is conducted. Against this background, untreated wastewater and solid waste is directly dumped into the main river and/or nearby brooks.

In the view of the challenges the project had to face at its outset, it is understandable that water resources management has not been a priority. However, neglect of water resources management will affect the sustainability of the supply and eventually this will lead to conflicts among parties with different interests (e.g. people living downstream). It could have been expected that water resources management is included more prominently in the master plan.

Conclusions and Recommendations:

Water resources management has not been a priority so far, and for understandable reasons. However, it requires urgent attention to secure the benefits so far and to ensure the sustainability of the project outputs. The following recommendations provide suggestions for the development of an effective water resources management programme:

- Improvement of source protection in an extended intake area through the introduction of production methods that benefit the farmer and ensure source protection (e.g. biological farming).
- Exploration of additional measures to prevent wastage of drinking water (cost covering tariffs)
- Exploration of dual supply systems (e.g. harvested rain water for drinking water purposes and unprotected or untreated water for general domestic use) in the areas of water scarcity.
- Exploration and piloting a river basin development approach, taking into consideration the following aspects; (1) water and land management, since both resources are very much interlinked in particular in cases of scarcity - the appropriate government departments may be consulted for coordination and advice; (2) comprehensive consideration of all available water resources in the selected area together with the interests of the different consumers - e.g. for drinking, production etc.; (3) effective protection of both water and land resources through appropriate measures; (4) support and creation of additional livelihood opportunities for people living in the area – however, since it is not expected that ADC will become involved in complementary sector development beyond the field of water, other players should be encouraged to become active in the selected river basin.
- Continuation and reinforcing the promotion and coordination of the involvement of an international agency for the support of appropriate environmental sanitation measures (including solid waste management).

B 3.2.6 Efficiency: Management and Programme Implementation

The efficiency of the project is evaluated by establishing the pre-requisites for efficient project management, organization structure and programme implementation - then by assessing how far the project performs against these criteria (see Table 5, below).

Table 5: Management & Programme Implementation (Guatemala)

Pre-requisites	Assessments and Recommendations
Project Management:	
Transparent, clear accountable project management framework, applied with flexibility.	The PM is clear to the counterparts. The XELAGUA project management had to remain operational for too long (political reasons) before handing over to EMAX, resulting in high initial efficiency, but placing mid-term efficiency at risk.
Consideration of long-term management structure from outset of project	The expatriate project coordinator has been too dominating over a certain period (effects as above).
Organisational Structure:	
Optimal ratio regarding means used for project administration as compared to project implementation.	The means that have been used for project administration seem to be below 10%. This indicates relatively high efficiency!
Clearly defined tasks and responsibilities coupled with the required competences.	Competences were not always matched with requirements – particularly with respect to the selection of short-term experts and in taking the local context into account (e.g. tariff study). This experience calls for considerable care in the selection of experts and may suggest that a greater consideration of regional competences should be entertained.
Programme Implementation:	
Availability of required data, and effective monitoring system for the project steering.	Data collection and processing for efficient project steering seem to have been available at all times. Attention has to be paid to enable EMAX to maintain this tight monitoring and efficient project steering (capacity building).
Transparency and consensus about the agreed contributions by the different stakeholders (contractual arrangement). Potential of existing resources and means are assessed and utilized.	It can be expected that the involvement of the private sector for clearly defined tasks may lead to improvements in efficiency. That is why existing capacities within the private sector may be explored and possibly upgraded before being utilized for specified tasks - at present, the private sector seems to be weak and corrupt.

Overall, it can be concluded that the project has been efficiently realized. Nevertheless, some lessons can be drawn from Table 5 both for the project assistance as well as for the project partners.

B 3.2.7 Technology and Implementation Quality

Findings and Assessments:

Significant achievements have been made regarding technology choice and implementation. The development of a master plan is a remarkable achievement in itself. It has been implemented to a level of 30% to 40%. The water sources for the urban (and partly for the rural) areas of the municipality are comparatively trouble-free in that sufficient safe ground water is available near to the supply area as well as a good spring that provides water by gravity. Some of the rural areas are less favourably located on hillsides,

well above any safe water source. Rainwater harvesting has been introduced in those areas. Random site observations suggested that construction quality is acceptable, but provides room for improvement. Designs do not always consider O&M requirements sufficiently (e.g. access to storage tanks; rain water harvesting systems, finishing at pumping stations etc.).

Conclusions and Recommendations:

The technologies presently applied seem to be appropriate and the implementation quality is reasonable. Nevertheless, recommendations are suggested below to enhance the service life, to lower the cost and to increase sustainability:

- Translation of the master plan into a realistic implementation plan - including budgeting and securing of funding.
- Choice of technologies and equipment with increased attention to O&M requirements.
- Improvements of design and construction quality through the following measures: (1) enhancement of quality awareness of suppliers (EMAX, subcontractors) and clients; (2) more capacity building at all levels, including planners[22], supervisors and craftsmen/women; (3) upgrading the status of EMAX staff, craftsmen/women; (4) exploration of opportunities for the involvement of women and poor through new skills training, influencing choices on technology, design and service levels[23]
- Attention to proper finish of constructions and installations (e.g. pump heads, protective trenching of distribution mains, etc.)
- Exploration of simpler rainwater harvesting technology (e.g. introduction of surface ferro-cement drinking water tanks to avoid pump installations, which can readily breakdown or malfunction).
- Water quality monitoring with lab-equipment to be complemented with periodical sanitary surveys.
- Exploration of re-use of wastewater for the irrigation of home gardens.

B 3.2.8 Human Resources and Institutional Development

As mentioned above, one of the main objectives of the XELAGUA project was the restructuring of the municipal water works into an autonomous water utility - a utility that fulfils the necessary technical and administrative requirements, that manages and operates facilities and supply infrastructure independently and is capable to plan and manage water resources in a sustainable manner.

On the way towards achieving this objective, **institutionally** XELAGUA has gone through a number of important stages:

Phase 1 (97/98): Preparation of concept for the restructuring of the Water Department

Phase 2 (98/99): Development of the institutional component

Phase 3 (99/00): Elaboration of the new organisational structure, selection and training of the cadre, development of internal and operational processes.

Phase 4 (01/02): Establishment of a functional water utility EMAX, withdrawal of direct executive involvement of XELAGUA

In this process, the main stakeholders and partners were:

The users/clients: Household/families, enterprises, public facilities/institutions

The water committees: Board, assembly, and representative in Junta Directiva of EMAX

The municipality: EMAX including Junta Directiva, Municipal Council, Major, Municipal Accountant, Union of Workers, Media, Private Sector

[22] Take into consideration different design criteria for storage tanks (with demand projections for 20 years) and principal supply mains (with demand projections for 50 years).
[23] For example, the production of household rainwater tanks (in ferro-cement) by women.

Institutionally, there have been no direct links to the national level (i.e. MoH), which is reportedly inefficient, unreliable and corrupt. In response, the project pursues a bottom-up approach. The aim is to have an impact at national level through promotion of good governance at the municipality level.

The Project XELAGUA

Findings and Assessments:

Remarkable results have been achieved in a complex, highly politicised environment within a relatively short period. This includes:

- Transition of the municipality's water department into EMAX, a set-up that operates much like the private sector, with less bureaucracy and increased accountability.
- Improvement of performance of technical infrastructure and thus improved reliability of supply services
- Improved control of water consumption and quality
- Decreased leakages
- Improved strategic management tools, i.e. master plan and documentation (digital maps, data base)
- Improved administration and management

XELAGUA's project organisation with its lean local team and short-term technical and institutional input and backstopping by H 3000/TBW and ADC can be considered as an efficient arrangement that has allowed the withdrawal of technical assistance after a comparatively short project duration.

Initially however, there was a comparatively strong input and influence from ADC experts in the project; decisions were often taken unilaterally and without consultation with the local counterpart. The project pursued a strong technical focus, without a clear strategy that would also consider community participation, gender, health and poverty aspects. In this respect, it clearly did not comply with ADC's WSSP.
The practice of phased (year by year) allocation of funds by ADC not only affected reliable mid-term planning but also the implementation and institutional development of the programme.

Conclusions and Recommendations:

Right from the beginning of the project, partner institutions should be fully involved in all decision – making processes including planning. Transversal themes such as gender, poverty and health considerations should increasingly be included in all project components and integrated at all institutional levels. ADC should allocate funds over three-year time frames - i.e. project phases should not be shorter than three years in order to enable reliable mid-term project planning.

EMAX and its Partners

Findings and Assessments:

The concept of institutionally establishing an autonomous municipal utility can be considered as an innovative alternative to the IMF/WB privatisation approach that is currently pursued in Guatemala. However, despite many efforts of the project, full autonomy has not yet been achieved - there is still an unresolved legal dispute with the workers' unions, a reported lack of political will from the Municipal Council and persistent resistance of municipal accountants. Consequently, financial planning and management of the utility is severely constrained. In addition, the urgently required setting of new (higher) tariffs to achieve cost recovery is not possible.
On a more positive note, the fact that the municipality is now allocating a special budget to EMAX is a step in the right direction.

Conclusions and Recommendations:

- EMAX should continuously improve its services and thus get credibility among clients, creating a environment that is conducive to tariff increase.
- EMAX and the users should lobby within the Municipal Council to create the necessary ownership and political will

- For higher efficiency and accountability, the involvement of the private sector in construction and maintenance activities should be explored;
- Linkages to the national level should be established in order to become involved in the national policy dialogue
- The ongoing consolidation process within EMAX should be further supported through a continuation of the ADC backstopping arrangement;
- Lessons learned from the transformation process should be documented for replication within the region and elsewhere.

Junta Directiva (Supervisory Board of EMAX)

Findings and Assessments:

As the name suggests, Junta Directiva (JD) is the supervisory board of EMAX and represents the main decision-making body for strategic and economic issues. Besides the municipality, users and the private sector are also represented in the JD, which meets regularly. As such, the JD could be a useful steering instrument. However, the influence of the Municipality is currently too strong as it still controls the funds, and often the concerns of users are therefore not considered adequately.

Conclusion and Recommendations:

- The potentials, opportunities and authorities of the JD in terms of personnel and finances should be better utilised
- Municipal Council should respect the new autonomous status of EMAX
- More continuity in Junta Diretiva's composition should be ensured

Water Committees / Associations

Findings and Assessments:

Water Committees are formed to apply for water supply services within a specific area of the municipality. As such, they have also become very important advocates of users during O&M as they represent the interests of users in relation to EMAX

Conclusions and Recommendations:

- Water Committees should be supported through capacity building measures as they are the closest link to the users/clients;
- Lessons learned and good practices by successful committees should be promoted in other areas;
- Successful initiatives of communities that manage and administer their systems on their own (delegation of responsibilities to the lower levels) should be promoted.

Human Resource Development

As mentioned elsewhere in this report, institutional development and **Human Resources Development**/Capacity Building should go hand in hand.

Findings and Assessments:

During the transition of the Water Department, all trained people (mainly plumbers and operators) were transferred to EMAX. In addition, a considerable number of new staff (administrative and management) was employed. At present EMAX employs 142 people. It is questionable whether all of these positions are still justified. Despite the new working environment, negative attitudes and low morale prevail among certain categories of employee. This negatively affects the performance of the utility.

Training took place during the establishment of EMAX mainly at management and administrative levels, or during the introduction of new technologies and equipments. However, no follow-up (refresher training) is planned and no resources have been reserved to carry out such training.

Conclusions and Recommendations:
An important measure to develop human resources is training. Training improves skills, creates awareness and changes attitudes. Training interventions should be demand-based and should be geared towards increasing knowledge and skills. They should contribute to personal enhancement (job satisfaction) and should provide incentives and career development opportunities.

EMAX should develop a comprehensive HRD concept, based on a functional analysis of all the positions existing/required and an assessment of training needs. This exercise should include:

- Strategic planning and management of EMAX (long-term strategy, business plan, marketing, etc.) for management and Junta Diretiva
- Financial planning, management and administration (software)
- Exposure to new technologies for technical staff
- Refresher training for field staff
- Review and adjust salary structure
- Review number of staff; assess the possibility of privatizing certain tasks

Water Committees:

- Information should be provided regarding the functioning of the system, its management (O+M) including perspectives and plans (master plan). Training should include community mobilisation skills, water use and hygiene education, particularly in rural areas.
- Local private sector including contractors and consultants:
- So far, the local context prevents an open approach towards privatization. However, trends should be carefully followed and opportunities explored.

B 3.2.9 Operation and Maintenance / Sustainability

Findings and Assessments:
Significant steps have already been made towards establishing a sustainable O&M system. An efficient reporting and communication system has been introduced for breakdowns and service provision. Transport and equipment has been provided together with training - all aiming at prompt repairs and professional, timely services. Initiatives have been taken to enhance the motivation of staff, such as the provision of uniforms. It could already be observed that EMAX staff is appreciating that their reputation has increased in parallel with the improvements in service provision. Urgent rehabilitations have been implemented - but are not completed - according to the master plan, which contribute to a more reliable supply.

Conclusions and Recommendations:
Despite the many efforts already made towards setting up effective O&M systems, recommendations are provided below to enhance the sustainability of these initiatives - in further support of sustainable service delivery. The following measures are proposed:

- **Introduction of cost covering tariffs**: Highly professional input is required to establish cost covering tariffs and even more so to develop and negotiate the process for its introduction.
- **Continuation and reinforcing of capacity building for EMAX staff:** in terms of (1) basic refresher and "new equipment" training for repair teams and operators, (2) enhancement of *client oriented attitude*, (3) continuous improvement of O&M concept based on the results of systematic monitoring.

- **Securing reliable spare part supply:** This implies (1) consideration of *efficient supply chain* already when selecting the technology and/or equipment; (2) ensuring efficient stock management.
- **Enhancement of user involvement:** Explore the potential of water committees regarding management support (e.g. water fee collection etc.). Their proximity to the users gives them some advantages. They may be provided with training accordingly.

B 4 Bosnia and Herzegovina

B 4.1 Background

B 4.1.1 Country Profile

Bosnia and Herzegovina (BiH) is located east of the Adriatic Sea, where it shares borders with Croatia to the north, south and west – and with Serbia and Montenegro to the east. Within the country's post-Dayton Accord borders, Bosnia is almost evenly divided into a joint Muslim-Croat Federation (about 51% of the territory) and a Serb state, the Republika Srpska (about 49% of the territory). The Republic BiH has a population of about 3.5 million. The people are manly Serb (40%), Muslim (38%), with Croat (22%) minorities. The capital Sarajevo hosts 350,000 inhabitants.

At the beginning of the 20th century, Bosnia was a part of the Austro-Hungarian Empire. This multiethnic empire was beginning to clash with neighbouring Serbia, a Slavic country that had won its independence from the Ottoman Empire in 1878. As Serbia grew stronger and spread its influence, disputes with its neighbour grew, finally culminating in the assassination of Austrian Archduke Franz Ferdinand by Serb nationalist Gravrilo Princip, which ignited World War I. With the defeat of the Austrian Empire at the end of the war, Bosnia became part of the newly formed Kingdom of Serbs, Croats and Slovenes -- Yugoslavia's first incarnation. Serb leaders felt that the country was not a collection of equals, but a union of Southern Slavs under the protection and control of the Serbs, a role they had earned because of their prior independence and military power. This enraged the Croatians and Macedonians, and left the country in a continuous struggle until it collapsed under the German invasion at the beginning of World War II. A similar conflict resurfaced at the end of World War II, with the creation of the second Yugoslavia under Marshall Josip Tito. Tito, however, was able to keep the ethnic rivalries in check by purging nationalists and playing them against each other.

After Tito's death in 1980, this conflict resurfaced. The Yugoslavian government became increasingly dominated by Serb nationalists, and Bosnia and Herzegovina, Slovenia, Croatia and Macedonia declared their independence in 1992. Bosnian Serbs opposed independence, fearing they would be marginalized in their new country by Bosnian Croats and Muslims. Shortly after independence was declared, Bosnian Serbs began their "ethnic cleansing" programs in Serb-controlled territory in northern Bosnia. Attacks on Sarajevo, with the support of the Yugoslavian military, soon followed. The country degenerated into a horrific civil war. It was only in late 1995 when the Dayton Peace Accord ended 43 months of war, creating a fragile compromise and a complicated state structure. The concept to reconstructing BiH is based on a loose connection between two Entities, which are built on diverse principles. The Republika Srpska (RS) operates according to a centralist concept, whilst the Federation of Bosnia and Herzegovina (FBH) consists of various cantons. The central government plays only a minor role with the authority over external affairs and a limited number of inter-Entity matters.
Since 1995, the international community has been engaged to an unprecedented extent in political, economic and social fields of reconstruction.

B 4.1.2 Water and Sanitation Sector

Improvement of the water supply and wastewater services was identified as a major priority among the programmes selected for the reconstruction of BiH after the war. The international donor community prepared and supported an Emergency Water Construction Programme, and implementation began in 1996. The donors formed an International Management Group (IMG) to coordinate the provision of assistance. Regular meetings were held between the years 1996 and 2000. The Austrian Coordination Office participated regularly in these meetings, with a limited influence due to its limited financial volume in the sector. Since 1999, the Office of the High Representative (OHR) decided to get involved in sector coordination and a water sector policy group was established.

With the assistance of the EU in 2001 the water resources management reform was initiated in BiH. Although water resources are apparently sufficient in quantity, they are severely threatened by widespread

pollution and deforestation. Against this background, the EU promotes a river basin management approach that is decentralised and based on natural catchment areas across inter-Entity and international boundaries.

B 4.1.3 Austrian Development Cooperation (Objectives /Strategies /Summary of Achievements)

Due to the war in Bosnia and Herzegovina, peace building has been a programme priority objective for BMaA activities in the Former Yugoslavia. The cities chosen to participate in the water sector project had been declared by the UN as "open cities" - which meant that stability had been established and they were therefore eligible for assistance. The intention was to profile the open cities as examples of the principle that peace was possible in communities that had been torn apart during the war.
Support from the Austrian Government to the water sector started already during the war, with contributions to the repair of the water distribution network of Sarajevo and the Moscanica treatment plant. In 1996, the water sector became a priority area of Austrian support to BiH and this has been continuing until today. After the war, Austria prepared a sector support programme consisting of a number of individual projects and interventions in various municipalities. However, an overall programme strategy was not (and still has not been) developed. The focus of the activities was on repairing war damage, including those stemming from the lack of maintenance during the war. In addition to the rehabilitation of existing facilities, new facilities were also financed. Provision of equipment to the water utilities (such as trucks, tools and spare parts) complemented the Austrian construction projects. During recent years, institutional strengthening and capacity building have become increasingly important. To date, Austria has provided an amount of about 12 million Euro to the water and environmental sanitation sectors.

Political considerations formed the main criteria for the selection of partners (municipalities), as well as actual needs on the ground. In addition, interventions in the water sector had to be embedded into the Austrian overall programme, with a geographical focus on Central Bosnia and the RS.

In the course of 1996, four municipalities in FBH were selected for the water programme, and in 1997, the only municipality in RS (Mrkonjic Grad) was included in the so-called "six towns water programme". The municipality of **Mrkonjic Grad**, being subject of this assessment, has a population of 24,000 with 10,000 people living in the urban part. The majority of the population is Serbian but other ethnicities are gradually settling in the municipality.

The determining factors for the admission of Mrkonjic Grad into the six towns water programme were: analysis of the latest election results, political structure within the municipality, number of returnees, and the declaration of Mrkonjic Grad as the first "Open City[24]" in the RS. In view of the prevailing fragility of the situation, it was an additional concern of the Austrian Government to demonstrate to the people - through the quick realisation of a project - that peace pays off (peace dividend).
The project has evolved over five distinct phases:

- Rehabilitation and reconstruction of the water supply system
- Supply and installation of water meters
- Improvement of the water supply and waste water and solid waste disposal infrastructure
- Institutional strengthening
- Environmental protection campaign

The local project partner is the municipality and the water utility (Vodovod) of Mrkonjic Grad. Monitoring project activities - including liaison with ADC's country Coordination Office - has been assumed by an external consultant (Kommunalkredit Austria). The programme is supervised by the Coordination Office in Sarajevo, which at the same time also assumes the role of the country desk. Implementation of the project has been entrusted to the Austrian consultancy company, Setec.

[24] UNHCR concept of rewarding municipalities for political correctness

The main achievements resulting from the project are:

- Drinking water of sufficient quality and quantity is supplied to more than half of the residents of the municipality.
- The system is functioning, providing reliable service 24 hours per day.
- Technical measures (the introduction of pressure zones) have reduced breakages and thus maintenance downtimes. In addition, water losses have been minimised.
- The Vodovod is able to assume its responsibilities in terms of operation and maintenance.

B 4.2 Findings and Assessments, Conclusions and Recommendations

B 4.2.1 Cultural Aspects, Gender Balance and Poverty Reduction/Livelihood

Findings and Assessments:

Socio-cultural Aspects

The cities chosen to participate in the water sector project had been declared by the UN as "open cities" which meant that stability had been established and they were therefore eligible for assistance. The intention was to profile the open cities as examples of the principle that peace was possible in communities that had been torn apart during the war.

Poverty Reduction/Livelihoods

The water supply network in Mrkonjic Grad is a metered, piped water supply to households and businesses in the town centre, as well as a number of the outlying communities around the town considered as 'rural' areas. Customers pay for household water meters which the water works installs after inspections have verified that the site is suitable for a connection.

Communities living along the pipeline from the source to town are included in the network supply. In the present situation, 55 – 60% of the municipal population is served. Other outlying communities are not served by the network and they manage their own decentralised systems. Demand in these areas is not expected to grow as outward migration from rural areas is on the increase. Despite this, outlying communities have to buy water and have it transported to their homes during the summer season when their sources are dry.

Connection fees for the urban and rural households are different. Households in the rural areas do not have sewer connections and thus pay lower connection and monthly fees than urban households. Generally, new customers are people who are building new homes and who have enough money to include connection costs in their overall construction costs. A block tariff allowing poorer households that use less to pay less is not used.

There is a 66% recovery rate for the services delivered by the KDP Park Mrkonjic Grad Water Works. The Mayor, Deputy Mayor, the Director of the KDP and other interviewees expressed that inability of users to pay due to depressed economic circumstances (unemployment, low salaries, low productivity) is high. In the Water Works Director's words, 'it is difficult to cut off people's access to water if they have no jobs and no earnings'.

The lowest rate of recovery is among the small enterprises. The KDP Director's view is that this is due to a lack of education about users' responsibilities, new business owners who don't see the need to pay and the difficulty in carrying out enforcement of payments as disconnection of one business requires digging up main roads and the disconnection of other, paying, users along the same branch of the network. Newly registered businesses are not required to commit to payment for services, so cannot be held accountable.

No enquiry into what the concrete reasons may be behind this low rate of payment has been conducted. It is therefore unclear whether users also have other reasons for non-payment - such as prohibitive lump sum down payments for connections and/or an inconvenient tariff or payment system. It is also unclear whether

users are aware of the longer-term impacts of non-payment on service delivery, or whether they could suggest other forms of payment control they would support more actively.

There is also no policy or strategy for dealing with non-payers (those who can afford to pay for services, but don't) and households that cannot afford to pay. Nor are participatory problem identification and solving techniques (Participatory Learning and Action, PLA), such as welfare classification, social mapping and tariffing, part of the stock-in-trade of the water company. Examples of the successful application of participatory problem solving and planning methodologies are available, for instance from the state of Kerala in India, and can be provided upon request.

Gender and Social Equality

The entry point for the Mrkonjic Grad project was to provide support for the establishment of a municipal company to provide water, wastewater and solid waste removal services. The overall aim was to contribute to the building of an institution that provided services to all community members irrespective of ethnic or religious differences. Territorial boundaries of the municipality changed with the Dayton Agreement and so far, no information on the post-war ethnic composition of the municipality has been collected by the municipality or by other institutions. In the brief time available for visiting Mrkonjic Grad the most significant factor influencing people's access to services provided by KDP appeared to be the location of their residence – e.g. urban or rural.

Transect walks and key informant interviews revealed that rural communities not located along the network pipeline from the source had not yet been connected to the network supply and rely upon local sources and wells. Areas outside the urban centre do not receive the solid waste removal services at all.

Finally, gender-disaggregated information about users was not collected prior to the inception of the project, or at any other time. The project views a household as a homogeneous unit rather than as a sum of its members who have different roles, responsibilities, needs and interests for water, wastewater and solid waste removal services. Consequently, monitoring systems are not disaggregated by gender and social and economic groups and measuring the impact of the project upon the various groups of users (women, men, aged, young, rich/poor, ethnic groups) can only be approximated.

Conclusions and Recommendations:

- **Training.** Firstly, support from the project for capacity building of KDP Park Mrkonjic Grad water works, to strengthen and refine their approach to awareness raising campaigns for users, e.g. new business owners with high level of non-payment.

Secondly, training for CO staff and Municipal Water Works staff to ensure a common understanding about the concept of gender and its relevance would ensure a consistent and coherent approach to addressing the needs and interests (domestic and productive) of all users – male, female, aged, youth, able-bodied, infirm, rural and urban residents, etc.

Lastly, training and backstopping for Water Works staff is recommended on how to disaggregate data collection and monitoring processes for by sex and socio-economic class and on how to interpret this information into policy and project objectives and strategies.

- **Planning.** Recommended planning activities are (1) to conduct a participatory assessment (both in existing schemes and in feasibility studies for development new schemes) of whether the quantity of supply of water is meeting women's and men's small-scale productive needs as well as domestic consumption needs and (2) to include network extension plans into planning and training for new schemes.
- **Monitoring and evaluation.** Firstly, conduct a baseline study of the composition of users disaggregated by sex and class in order to gain an overview of the served and un-served groups in Mrkonjic Grad, including information on uses (productive and domestic) of water by each group.

Secondly, collect information on possible social impacts and disaggregation of KDP Park Mrkonjic Grad data by sex and socio-economic class for all planning and monitoring processes can help avoid negative impacts for existing vulnerable individuals and groups (poor, elderly, ethnic minorities, etc.)

- **Management.** Firstly, articulate (with support from Vienna) a locally relevant strategy for incorporating a gender-sensitive approach to project design, implementation and monitoring based upon baseline data collected.

Secondly, attention to raising awareness of sanitation issues and the need to pay, and linkages between varying consumption/use and pricing will increase the sustainability of the project.

Finally, social mapping with welfare ranking can help Water Works to plan, monitor and account for performance and positively influence users about the relationship between payment for service and the sustained service levels.

B 4.2.2 Community Participation / Empowerment / Ownership

Findings and Assessments:

Users interviewed did not feel that they had played a role either in the rehabilitation of the Mrkonjic Grad Water Works or in the development of new services. From key informant interviews with the Water Works, it was confirmed that enhancement of community and household level involvement in decisions about level and types of service, management options, infrastructure, tariffs, etc. have not been articulated as outputs of project activities. Nor have users been asked to evaluate the service or been involved in specific activities for the identification and solving of user problems. The single social activity undertaken has been a one-way and largely undifferentiated information campaign.

From the Water Works and the Mayor's Office, the team learned that the awareness raising campaign component of the project included:

- Information on environmental issues and the value of water;
- Fliers/bulletins about water and main technical information about access to clean water
- A televised advertisement campaign broadcast at prime time about solid waste management and disposal and other different messages
- As all users were considered to be the same, the campaign was not tailored to the specific interests and information needs of the better off and the poor, rural and urban communities, women and men, domestic users and small enterprise owners.

Users interviewed had not received any information from the Water Works regarding the services, awareness raising about need to pay or other topics. Users interviewed in Mrkonjic Grad were of the view that the water delivery and waste removal systems belong to the Water Works. The time available for the evaluation team visit did not permit for interviews with rural users or residents of un-served communities.

Conclusions and Recommendations:

The following opportunities were identified to strengthen participation and create awareness among Water Works staff users about their respective roles and responsibilities with regards to sustained water and sanitation services in Mrkonjic Grad:

- **Training:** KDP Park Mrkonjic Grad water works, and other newly established institutions, are recommended to develop a gender-sensitive HRD policy and strategy with backstopping support from Vienna or local gender specialists.
- **Planning:** KDP Park Mrkonjic Grad could develop a strategy to increase representative involvement of users (women, men, different ethnic groups, youth, business owners, etc.) in the decision making

processes about the water, waste water and solid waste removal services (service level, tariffs, management options, etc.) which will help to address the issue of non-payment.

- **Linkages for livelihoods:** Future projects to establish links with other strategic development initiatives in the area of project activity

B 4.2.3 Relevance and Impact

Findings and Assessments:

In the following section, the key contextual aspects (which have been described in the previous sections) are summarized and the relevance of the project interventions is assessed:

Partner Country Policy

The BiH draft law on gender equality mandates that citizens, irrespective of sex, class, ethnicity, etc. have the right to equal access to economic resources and the decision-making processes that influence social development. Of significant relevance, Section 4, Article 10 regarding "all forms of resources" (including water resources) states that:

"Equal treatment and equal opportunities and elimination of discrimination shall be ensured in the same way for women in rural areas, in order to ensure their economic subsistence as well as subsistence of their families."

Policy or law on poverty reduction in BiH was not located in the research process. But this is not to say that it does not exist, in final or draft form.

Needs and Demands of Target Group

The municipality of Mrkonjic Grad has been selected based on political considerations ("Open City") as well as on actual needs on the ground. In the view of the extremely fragile political situation at the outset of the project, a principal objective was to demonstrate to people (through the quick realisation of the project) that peace pays off..

The physical achievements of the project - consisting of reliable supply of sufficient safe drinking water for more than half of the population of the municipality - is highly appreciated by the users. The people interviewed (in particular the leaders) are very proud of the achievements and seem to be well aware that they deserved these service improvements because of the "Open City" status. The low willingness to pay for services that is prevalent is probably a general reaction in the aftermath of war rather than an indicator of low demand for services. The project's current campaign for "water is an economic good" comes therefore at the right time.

A transect walk through the urban centre of Mrkonjic Grad provided the opportunity to interview users about their satisfaction with the service level provided by the KDP Park Mrkonjic Grad Water Works. Users expressed that they did feel that it would make a difference if they were to launch their complaints or enquiries with the Water Works. Other users, both new business owners and shop employees expressed that they had not received any information or contact from the Water Works at the time of connection or in response to complaints about over-full solid waste receptacles and connection problems.

BiH's Sector Environment

In the early stage of the project the Austrian Coordination Office (CO) participated regularly in the International Management Group to coordinate the provision of assistance within the agreed Emergency Water Construction Programme. Currently the Office of the High Representative coordinates the sector together with a water sector policy group. Unfortunately, the CO is no longer actively involved in this coordination process – perhaps feeling that it is not a sufficiently significant actor in the sector.
Because of the early involvement in coordination, the BMaA/ADC is certainly doing the right thing considering the national context. However, the currently missing participation in coordination at national level seems to prevent two key opportunities from being realised - firstly, ADC projects are not benefiting

from the more recent river basin management approach and secondly, the innovative and piloting model for the service provision at municipality level does not receive the required attention for replication at national level. This second point would be of significant importance at this point in the conduct of policy dialogue to provide a viable alternative to the move towards privatisation.

Coherence with ADC Sector Policy

ADC's sector policy has been summarized in chapter D 1 and is therefore not recalled at this place. The project activities in Mrkonjic Grad comply with ADC sector policy regarding provision of support for the establishment of local institutions and the provision of water and sanitation services to the population. However, the opportunity exists for the KDP Park Mrkonjic Grad Water Works (Vodovod) to build closer contacts with the users through the suggested participatory processes and through exploration of synergies with other local social and economic development processes. Further in line with ADC sector policy, projects in BiH need to develop more explicit strategies for accessing the interests and needs of male and female users to ensure that already vulnerable, or disadvantaged groups, are not additionally burdened by project activities or excluded from the benefits of improved water and sanitation services.
In view of ADC's inclusion of Balkan countries within its overall geographic coverage, its sector policy has to include a section dealing with conflict prevention and peace building.

Impact

Long-term development objectives in BiH (including peace and democracy building, economic growth) and sustainable provision of services such as water, waste water and sanitation are guiding principles of the project activities undertaken by the Austrian Coordination Office in the region. Further emphasis on supporting livelihood strategies of users, contributions to the empowerment of women and men users by facilitating their participation in their processes of development will increase the impact of sector activities on social and economic development in the region as well as contribute to the peace building process. Though it is probably too early to assess the impact at this stage, the achievements described above clearly indicate that the project is contributing to the intended impact.

Conclusions and Recommendations:

In summary, it can be concluded that ADC's assistance to Mrkonjic Grad is relevant regarding the three key areas and contributes to the desired impact. However, its relevance and impact towards the project objectives could be further enhanced through the consideration of the following opportunities:

- ADC will have to take a firm decision about the extent of their involvement in BiH in the future. A critical mass of project activities has to be identified and focused to ADC's areas of comparative advantage. Accordingly, the required means (personnel and funding) has to be provided. It is suggested that ADC uses its limited funds to support the inputs in its areas of comparative strength. For example, ADC could focus exclusively on the development of sustainable approaches, institution and capacity building (so-called "software" activities), whilst encouraging bigger ESAs to fund the costly hard ware.
- A more programmatic approach should be developed and implemented, taking into consideration the different aspects of the ADC sector policy. This is required to achieve the desired sustainability and impact. The pragmatic approach so far applied was justified in the view of the urgent situation at the outset of support provision.
- The lessons learned in the Mrkonjic Grad project should be systematically analysed and documented. These lessons learned may then be pro-actively used as contributions to the sector policy dialogue in BiH. The active participation in the policy dialogue may also lead to adjustments of the ADC approach and secure the integration into the national context including seeking legal support for the selected institutional framework.

B 4.2.4 Effectiveness: Access and Functioning

Findings and Assessments:

Significant improvements have been achieved regarding the following aspects:

- Sufficient drinking water of safe quality is supplied to more than half of the population of the municipality (located mainly within the city).
- There is a reliable service for 24 hours and quick response service for any repairs.
- Technical measures (pressure zones) have been introduced to reduce breakages and water losses.
- An institution has been built up, which is capable of providing the required services.

Missing elements, which may endanger continued access and functioning in the future are the following:

- Cost recovery through payment of water fees is still low.
- The service provider (KDP Park Mrkonjic Grad Water Works) is not yet established as an autonomous institution.

Conclusions and Recommendations:

Considering the time of project involvement and the means provided, access and functioning have been achieved to a reasonable degree. These will be further enhanced if the mission's recommendations are implemented (c.f. respective sections). In summary, these recommendations concern the following areas:

- Facilitation of a supportive regulatory legal framework, both for the service provider as well as for the provision of services.
- Development and implementation (including funding) of a master plan, which considers the supply of the entire municipality, gradual rehabilitation of old system, future extensions etc.
- Consolidation of institution and capacity building at all levels (municipality, service provider)
- Enhancement of campaign for increased user involvement and in particular to enhance the willingness to pay.

Effectiveness:

It is too early to fully assess the effectiveness at this stage. Whether the improved O&M system remains sustainable through the new institutional set up will only be demonstrated after some years of operation. However, the achieved level of functioning and accessibility already results in a more effective water supply. Effectiveness can and will be further enhanced, if the above recommendations are realized. Impact on peace building is discussed in section B 4.2.3 under the subheading" Coherence with ADC Sector Policy").

B 4.2.5 Water Resources Management

Findings and Assessments:

Although a systematic and comprehensive water resources management approach is missing, the following contributions towards it have already been made or are on their way:

- The project consists not only of a water supply component but also includes measures for adequate wastewater disposal and solid waste management. These complementary actions contribute substantially to the protection of the water resources in the river basin concerned. The currently implemented project component "Environment Campaign" has a very clear aim to enhance awareness of the population in the municipality regarding proper use of water, water being an economic good, preventing toxic material being disposed of into waste water; recycling of specific material etc.

- Water resources in BiH are apparently sufficient in quantity but they are severely threatened by widespread pollution and deforestation. Against this background the EU promotes a river basin management approach that is decentralized and based on natural catchment areas.

Conclusions and Recommendations:

Water resources management is certainly an area that has not yet received sufficient attention. Although this does not immediately affect current project activities, the issue should be addressed in order to explore realistic potentials, to avoid inevitable conflicts over water access in the future etc. - in other words, in support of truly sustainable solutions. The following recommendations provide suggestions for the development of an effective water resources programme:

- Coordination with the EU river basin management initiative, exploration of collaborations.
- Development of a comprehensive water resources management plan and integrating the existing and ongoing components.
- Investigating the potential for combined systems (comprising use of any combination from spring-, ground-, surface- and rainwater) for remote and/or dispersed households - especially for systems that require pumping.

B 4.2.6 Efficiency: Management and Programme Implementation

The efficiency of the project is evaluated by establishing the pre-requisites for efficient project management, organization structure and programme implementation – then by assessing how far the project performs against these criteria – see Table 6, below).

In summary, it can be concluded that the efficiency has been high regarding project management, organization and implementation. This is especially the case for the provision of the support services to the project. The high efficiency has been partly achieved by sacrificing on some longer-term objectives. Examples in support of this statement include: (1) avoiding time consuming involvement of local project implementer but missing an opportunity for institution and capacity building; (2) meagre involvement of users; (3) pragmatic instead of programmatic approach including limited involvement of Coordination Office. Since the mission's recommendations are based on emphasis towards increased effectiveness and sustainability a reduced efficiency has to be expected in future.

Table 6: Management and Financial Options (Bosnia & Herzegovina)

Pre-requisites	Assessments and Recommendations
Project Management:	
Transparent, clear accountable project management framework, applied with flexibility.	The project management structure is clear but possibly too complicated regarding the support structure. Actually, the monitoring consultant substitutes more or less the coordination officer on project management issues. This results in very little involvement of the coordination officer in fieldwork and limits direct contacts with the beneficiaries. This seems not to affect efficiency, but may be point of concern for the project steering (see below).
Consideration of long-term management structure from outset of project	The implementing agent, Setec, seems to perform very efficiently. However, the local project implementer, KDP Park Water Works has not been involved in all project management issues (e.g. supervision of subcontractors). Although this does not affect the immediate efficiency, it means a lost opportunity for capacity building.

Organisational Structure:	
Optimal ratio regarding means used for project administration as compared to project implementation.	Considering the composition of the programme support staff and their involvement in project implementation as well as administration, the ratio towards time spent for implementation is positive. This seems to be less the case for the involved Water Works staff, where still ample room for institution building remains.
Clearly defined tasks and responsibilities coupled with the required competences.	Tasks and responsibilities seem to be clear. However, the director of Water Works seems to be overloaded, which is partly linked to the weaknesses in other positions but also to his high level of commitment. In any case, job descriptions should be reviewed and an HRD concept developed accordingly (c.f. section B 4.2.8)
Programme Implementation:	
Availability of required data, and effective monitoring system for the project steering.	The existing monitoring and data collection system is weak. This obvious weakness puts current efficiency at high risk. An effective monitoring system and systematic data collection and analysis procedures need to be urgently developed. This will be even more important for the steering of the proposed (more programmatic) approach. For the same reason, it is suggested that the division of work between the Monitoring Consultant and the Coordination Office is reviewed.
Transparency and consensus about the agreed contributions by the different stakeholders (contractual arrangement).	Contributions by the different stakeholders are clear. Involvement of private sector may be considered increasingly. At the same time, contractual arrangements should be improved.
Potential of existing resources and means are assessed and utilized.	The use of existing resources may be increasingly considered, since quick improvements are no longer so urgently required. This may be also be facilitated by the on-going environment campaign.

B 4.2.7 Technology and Implementation Quality

Findings and Assessments:

The available sources seem to be of good quality and sufficient quantity. The catchment area could not be visited but it seems to be located within a forested area. However, long-term protection measures may still be investigated. The technologies applied seem to be appropriate. It has been beyond the mission's intention to assess in detail the designs and calculations used, but the system of using different pressure zones seems to be appropriate. Breakdowns and water losses (though a systematic monitoring is not yet available) could be significantly reduced. New constructions are of very good quality, which indicates the availability of qualified contractors as well as professional supervision capacities (in this case by Setec). The communities that have not yet been served are situated mostly outside the city area. A kind of master plan has been developed. However, this plan does not sufficiently care for all future development aspects. The following aspects are missing from this plan: (1) rehabilitation needs of existing distribution network; (2) future extension requirements (in consultation with city planning); (3) estimation of future consumption pattern etc.

Conclusions and Recommendations:

The applied technologies seem to be appropriate and the implementation quality is comparatively high. Nevertheless, recommendations are suggested below:

- Development of a realistic, comprehensive master plan - including budget and funding requirements.
- Maintaining and further anchoring at local level the high design and construction quality through the following measures: (1) enhancement of quality awareness of suppliers and clients; (2) more capacity

building at all levels, including planners[25], supervisors and craftsmen/women[26]; (3) enhancement of opportunities for the involvement of private sector (even small contractors including women) through new skills training both for implementation and maintenance, choices on design and service levels

- Water quality monitoring with lab-equipment needs to be complemented with regular sanitary surveys.
- Investigating the potential for combined systems (comprising use of any combination from spring-, ground-, surface- and rainwater) for remote and/or dispersed households - especially for systems that require pumping.
- Facilitation of access to regional and global sector experience and knowledge.

B 4.2.8 Human Resources and Institutional Development

Findings and Assessments:

The evolution of the water supply project *Mrkonjic Grad* is characterised by its pragmatic approach. In the beginning of the project, the most pressing immediate needs (resulting from war damage) were addressed through rehabilitating and reconstructing the water system. This stage was then followed by the improvement and expansion of the system and finally complemented with institutional strengthening and capacity building measures as well as an environmental (information) campaign.

Institutional development and capacity building measures were planned in the following fields:

- Restructuring of the organisation of the water works;
- Support in planning (development and implementation of a business plan), and public relations (information, awareness creation)
- Training on computer applications, i.e. basic software, applications for water billing, etc.

However, these measures were initiated in a relatively late stage of the project, i.e. after much of the planning, design and construction works were completed. Whilst the presence of the consultant was comparatively intensive during the reconstruction phase and substantial progress could be achieved, in the second stage only punctual inputs have been made. This also explains the fact that comparatively few results have been achieved in the institutional field, so far.

The Vodovod has established a functioning organisational structure. A good relationship exists with the major, who is a member of the management board responsible for the statutes of the utility and for physical and financial planning - including investment plans. Financially, the management board controls the utility. However, tariffs are set by the major himself and personnel matters (such as hiring and firing) are heavily influenced by the Municipal Council.
This arrangement is comparatively vulnerable as decisions are politically biased. It can only function if there is a good relationship between the Vodovod and the Municipality.

Conclusions and Recommendations:

In the frame of an excellent collaboration between the Vodovod of the municipality of Mrkonjic Grad and the Austrian Government (represented by the consultant), substantial improvements of the physical infrastructure in the field of water supply, waste water disposal and solid waste management have been achieved. However, the planned institutional strengthening and capacity building measures that should enable the Vodovod to reliably manage, operate and maintain the systems have not been fully realised.

Against this background, a continuation of planned institutional strengthening measures is recommended. However, more attention should be given to the following aspects:

[25] Take into consideration different design criteria for storage tanks (with demand projections for 20 years) and principal supply mains (with demand projections for 50 years).
[26] Refers to observations made concerning spring catchment construction, masonry and concrete work

- Further **human resources development and capacity building measures** (particularly training) are required and should be based on the needs of the Vodovod. They should be identified based on an assessment of training needs that takes into consideration the individual functions of the respective staff. They should be designed such that they improve knowledge and skills, provide career development and increase the motivation of the staff. A human resources development scheme should be developed that considers not only immediate training needs but outlines ongoing requirements regarding administration, management, operation and maintenance.
- **Institutionally**, more autonomy should be given to Vodovod particularly in terms of personnel and financial management. Ongoing efforts towards privatising components of the services should be followed and analysed carefully. In addition, the management of the utility still needs to be further strengthened in procedural but also legal and regulatory matters. In order to sustain the achievements made so far further specialised external backstopping support is required.

An important lessons learned in Mrkonjic Grad is that institutional strengthening measures and capacity building should be included as early as the project design stage and important stakeholders should be included in decision making processes from the outset - including strategic planning (master planning), design and implementation.

B 4.2.9 Operation and Maintenance / Sustainability

Findings and Assessments:

Significant steps have already been made towards a sustainable O&M system: An efficient reporting, communication and response system has been introduced regarding breakdowns and service provision. Transport and equipment have been provided together with some training, all aiming at ensuring prompt repairs, professionalism and timely services. Urgent rehabilitations have been implemented (but are not completed), which contribute to a more reliable supply. Users' satisfaction has obviously increased together with the reputation of the service provider. The ongoing environment campaign is aiming at sensitizing the users for proper use of water and to promote it as an economic good (enhancement of willingness to pay). Presently the recovery of cost through water fees is low. This is to be attributed to an inadequate water fee as well as to low discipline for payment.

Conclusions and Recommendations:

Despite the many efforts already made towards setting up effective O&M systems, recommendations are provided below to enhance the sustainability of these initiatives - in further support of sustainable service delivery. The following measures are proposed:

- **Introduction of cost covering tariffs**: Highly professional input is required to establish cost covering tariffs and even more so to develop and negotiate the process for their introduction in a politicized environment.
- **Continuation and reinforcing of capacity building for Vodovod staff:** in terms of (1) basic refresher and "new equipment" training for repair teams and operators, (2) enhancement of *client oriented attitude*, (3) continuous improvement of O&M concept based on the results of systematic monitoring.
- **Securing reliable spare part supply:** This implies (1) consideration of *efficient supply chain* already when selecting the technology and/or equipment; (2) ensuring efficient stock management.
- **Enhancement of user involvement:** Explore the potential of water committees regarding management support (e.g. water fee collection etc.). Their proximity to the users gives them some advantages. They may be provided with training accordingly.
- **Continued support to the ongoing environment campaign:** through the provision of information and important messages.
- **Development and establishment of a consumer/client satisfaction monitoring system:** including participatory assessment of the different user groups (c.f. section B 4.2.2).

- **Enhancement of user involvement:** explore the potential of water committees regarding management support (e.g. water fee collection etc.). Their proximity to the users gives them some advantages. They may be provided with training accordingly.

B 5 Albania

B 5.1 Background

B 5.1.1 Country Profile

Albania borders on the southeastern the Adriatic Sea. It shares its southern border with Greece, Macedonia lies to the east, and Serbia and Monte Negro (as well as the province of Kosovo) lie beyond its northern border. The interior of the country is mostly mountainous and over 36% is forested. As is usual in the Mediterranean regions, the plains are extensively planted with olives, citrus and vineyards. A few large lakes, one of them the deepest in the Balkans (Lake Ohrid, at 294m) stretch along the borders with Montenegro, Serbia, Macedonia and Greece.

The Republic of Albania has a population of 3.5 million. The people are mainly Albanians with Greek, Vlach, Macedonian and Gypsy minorities. 700´000 people inhabit Tirana, the capital city.

Major industries consist of cement, chemicals, food processing, hydropower, mining, oil, textiles, clothing and timber. The annual income per head is estimated to be US$ 863 and annual inflation is running at about 7%.

Historically, Albania was mainly under Turkish rule until 1912, when a short-lived independence was achieved before Albania was swept into World War I. In 1920, Albania once again gained its independence, which it maintained for the next 18 years before being invaded by Italy on the eve of World War II. When Italy surrendered in 1943, Albania was subsequently taken over by Nazi Germany. Enver Hoxha and his communist partisans began a guerrilla war against the Nazi occupation and controlled most of Albania by 1944. That same year, the communists proclaimed Albania a republic and elected Hoxha its premier. Over the next three decades, Albania allied itself with other communist countries (Yugoslavia, China, and the U.S.S.R.) before eventually turning its back on them in 1978. The country spent the next 10 years in complete isolation. Finally, in 1990, Albania ended 44 years of communist rule and established a multiparty democracy. The transition has proven difficult, as corrupt governments have tried to deal with high unemployment, a dilapidated infrastructure, widespread criminality, and disruptive political opponents. International observers judged local elections in 2001 to be acceptable and a step toward democratic development, but identified serious deficiencies, which should be addressed through reforms in the Albanian electoral code.

Traditionally, Albania has been 70% Sunni Muslim, 10% Roman Catholic (mostly in the north) and 20% Albanian Orthodox, making it the only European country to have a Muslim majority. From 1967 to 1990 it was also the only officially atheist state in the world.

Albania has hot, dry summers and cool, wet winters. Summers along the coast are moderated by sea breezes. Around 40% of annual rainfall occurs during the winter months, and in winter, the central mountains are very cold as continental air masses move in.

Environmental pollution is a major cause for concern; nearly all of the raw sewage produced is pumped into the rivers untreated, and instances of leaking effluent and deliberate discharges of chemicals from industry have grown to unacceptable proportions.

B 5.1.2 Water and Sanitation Sector

Water resources of Albania are abundant in all the regions of the country, with an uneven seasonal distribution. The available quantity of surface water also strongly decreases during summer months; fluctuations in groundwater availability are less marked. The situation regarding water quality is not well known. However, in urban areas, the most important environmental problem from a human health perspective is the contamination of the drinking water resulting from the absence of sewage treatment and solid waste management.

Approximately 85% of the population has access to piped drinking water and 50% of the population is served by a sewerage system. However, service level in terms of quantity and quality is poor. Most water systems are subject to shortages because of leakage and wastage. In addition, the problem of illegal connections is growing because of increased rural-urban migration. Utility revenues are insufficient to meet operation and maintenance costs, physical support facilities are inadequate and preventive maintenance is rarely practiced. The consequences of years of neglect are now becoming increasingly pressing and evident, The government has given high priority to the rehabilitation of urban water supply networks and the expansion of rural water supplies, the rehabilitation of waste water systems and the provision of wastewater treatment.

Significant foreign aid is being provided in the sector through the World Bank, USAID, EU and a number of bilateral donor governments, including Austria. Besides financial assistance into the water and sanitation infrastructure, support is increasingly needed in institutional capacity building at operational and policy levels.

B 5.1.3 Austrian Development Cooperation (Objectives /Strategies /Summary of Achievements)

In view of the dramatic supply and disposal situation in **Shkodra** and in response to a request from the Government of Albania in 1995, the Austrian Government decided to include rehabilitation of the water supply and sewage systems into its country programme with Albania.
The town of Shkodra is located in the north of Albania on the shores of Lake Shkodra. It has a population of about 110,000 inhabitants, spread over an area of 10 km^2.

The immediate measures were implemented as emergency steps without any preliminary study. Between late 1996 and early 1997, a feasibility study for the rehabilitation of the water supply and sewerage system was conducted. The study was undertaken in collaboration with the responsible Ministry and the local Government of Skodra. Partner organisations in the municipality have been the water works and the Sewage Company. The feasibility study recommended implementing the project in two distinct phases, a pilot phase and an implementation phase.
During the pilot phase I (1997 – 1999) that covered about 10% of the project area, the following activities were carried out:

- Construction of a building to house the administration and management of the water utility.
- Survey of the sewerage network including the identification of the so-called "hot spots", i.e. priorities to be addressed first.
- Rehabilitation of about 10% of the pipe network, including the installation of water meters and reconstruction of adjacent structures and logistical support.

Based on the results of the pilot phase, the implementation phases II (1999 –2002) and III (2002-ongoing) were designed to include:

- Implementation of the measures identified as hot spots in the waste water component
- Rehabilitation of the entire water supply system, including the rehabilitation of wells and the pumping station, and the rehabilitation and expansion of the pipe network,

Institutional strengthening activities have been an integral part of the activities and have focussed mainly on on-the-job training for operators and maintenance staff, support in organisational and administrative matters, management support and definition of organisational structures and implementation procedures

The local project partners are the municipality and the water utility of Shkodra. The ADC Coordination Office in Tirana supervises the programme. Since 1998, the project has been implemented by the Austrian consultancy company, GWCC (General Water Consult Corp.).

The main achievements of the project so far can be summarised as follows:

- Regular flooding of the inner city has been stopped through the measures in the waste water component which explicitly focussed on the rehabilitation of the storm water system
- 24 hours supply of sufficiently high quality drinking water is supplied in most of the areas of the town through increased production
- Water billing has been substantially improved
- Cost recovery has tripled (from 20 to 60%)

B 5.2 Findings and Assessments, Conclusions and Recommendations

B 5.2.1 Cultural Aspects, Gender Balance and Poverty Reduction/Livelihood

Findings and Assessments:

Socio-cultural Aspects

Key informant interviews with stakeholders in Shkodra highlighted that the Austrian technical cooperation staff and the consultants contracted to implement the project have been persistent in their "correct" and "in-depth" manner of approaching project stakeholders including the community members of the four villages and the town of Shkodra included in the project. In the view of the stakeholders, this has resulted in the project being formulated and implemented with attention to traditions and customs of users and community members. Time limitations did not allow for visits to the outlying rural areas to confirm these statements.

Poverty Reduction/Livelihoods

Technical achievements such as an increase in production of water by 500l/sec., the construction of a new pumping station, new water pumps and a restructuring of the electricity supply have resulted in more reliable delivery of greater quantities of safe water for domestic and productive uses in the city of Shkodra and a number of surrounding villages.

Ongoing improvements in the waste and storm water collection systems for Shkodra and the involved villages will minimize financial and physical damages experienced regularly by residents and businesses during heavy seasonal rains. Impact in terms of increased security for users' livelihoods will be significant once the systems are operating and properly maintained.

The feasibility study undertook to collect extensive data from a range of domestic and productive users regarding the current water and sanitation service level at the time of the study and the willingness of users to pay for different levels of water and sanitation services. Socio-economic data was collected at a household level during the feasibility study of the project. Additionally, a consumer survey was conducted, also at household or family level in six selected areas. However, five of the areas were in the city of Shkodra and only one of the 'suburban' areas was included in the survey. The survey data did not include detailed information in any of the cases regarding the economic status of households or household members or information regarding access to and control over water resources of the poorer users.

Gender and Social Equality

The feasibility study did not make a distinction between various groups of users, but considered households/families as homogeneous units without internal variation of needs and interests. Similarly, planning and monitoring processes and reporting procedures do not disaggregate information about users by sex, ethnicity, age, religion, etc. Consequently, assessing the impact of the project, whether positive or negative, upon the various groups of users is difficult to do because of the gender-neutral approach that was taken.

Residents in two sections of Shkodra are unserved by the municipal water works. The residents of these areas are Roma and their status as official residents appears to be a contentious issue. In one of the settlements, water supply is provided by a Christian order of monks located nearby. Enquiries revealed that

disagreements in the municipality and the municipal water company about recently re-drawn municipal boundaries played a role in the lack of inclusion of the areas where the Roma live. Their presence in the area of project activity is also not noted in the project planning and implementation strategy documents, possibly because of the above-noted absence of socio-economic and gender differentiation.

Linkages between the ADC project and other development initiatives in or surrounding Shkodra were not evident. Initiatives funded by other donors or led by local NGOs or Community Based Organisations (CBOs) for the empowerment of women or support to micro-enterprise development, for instance, do exist. The emphasis of the project however, has largely been one of institution building and infrastructure development/rehabilitation, although an awareness raising campaign about the need for users to conserve water and to pay for the service has been implemented. The institutional development component has not extended to capacity building on consumer consultations and evaluations using participatory and/or survey methods.

Conclusions and Recommendations:

Areas on which the project can now focus to ensure on-going improvements in the service level and thereby increase the willingness of users to pay include:

- **Training.** Capacity building for Shkodra Water Works is recommended to strengthen and refine their approach to awareness raising campaigns for users. Training on working with participatory methods of planning and assessment with community members will capacitate both the staff of the Water Works to improve customer service and staff from the local consultants and the Austrian Bureau for Technical Co-Operation to provide backstopping for these efforts.
- **Monitoring and evaluation**. Conduct a baseline study of the composition of users disaggregated by sex and class in order to gain an overview of the served and unserved groups in Shkodra, including information on uses (productive and domestic) of water by each group. This will also make it possible to measure impacts of the service over time, such as behaviour change, increased willingness to pay, etc.
- **Planning.** Articulate, with support from Vienna, a locally relevant strategy for incorporating a gender-sensitive approach to project design, implementation and monitoring based upon baseline data collected (see above).
- **Management**. Shkodra Water Works is encouraged to investigate reasons for lack of service to user groups within municipal boundaries and for strategy development to include these groups.

B 5.2.2 Community Participation / Empowerment / Ownership

Findings and Assessments:

The approach taken by the project in Albania to provide support for the establishment of a municipal water company was developed in conjunction and in accordance with the interests of the Albanian partners. Development of local government capacities and efficient and sustainable institutions such as the Water Works are intended to ensure that services are more demand responsive as the responsible institutions are located more closely to users in the communities.

Despite the achievements made in strengthening local institutions to manage and provide water and waste water services to the users, participatory planning, design and implementation methods for supply and service levels to users were not evident.

Non-payment for water services has decreased from 80% in 2001 to 40% in 2003. Stakeholders interviewed felt that this is the result of improved of water level of water and sanitation services. However, approximately 30% of the population remain without a 24-hour service - these are predominantly the residents living on upper floors of blocks of flats.

Conclusions and Recommendations:

The following areas were identified to strengthen participation of user groups in Shkodra:

- **Planning**. It is recommended that the Shkodra Water Works conduct a participatory assessment to establish who the users are (sex- and class-disaggregated data collection), what their uses for water are (domestic and productive), to what extent the services are meeting their needs. Based upon the information and data collected through the participatory process, a strategy to increase representative involvement of users (women, men, different ethnic groups, youth, business owners, etc.) in the decision making processes about the water, waste water and solid waste removal services (service level, tariffs, management options, etc.) is encouraged.
- **Linkages for livelihoods.** The project and the Shkodra Water Works are advised to establish links with other strategic development initiatives in the area of project activity (e.g. as micro-enterprise support, health or women's empowerment initiatives) to explore synergy opportunities between the provision of water and sanitation services and other empowerment and livelihood-supporting activities for longer term impact of the services.

B 5.2.3 Relevance and Impact

Findings and Assessments:

In the following section, the key contextual aspects (which have been described in the previous sections) are summarized and the relevance of the project interventions are assessed:

Partner Country Policy

The Government of Albania undertook to generate and disseminate gender-disaggregated (by sex and by class/socio-economic status) data and information for planning and evaluation of social development processes based upon the recommendations of the Committee for Women and Family *Platform for Action, 1999 – 2000*.

Needs and Demands of Target Group

Years of neglect resulted in a critical supply and disposal situation in Albania in general, and in Shkodra in particular. Revenues were insufficient to meet O&M cost, preventive maintenance was rarely practiced, illegal connections were commonplace etc. Consequently, supply was insufficient and unreliable - if it worked at all. In the view of this situation and in response to a request by the Albanian Government, the Austrian Government decided in 1995 to assist with the rehabilitation of the water supply and disposal systems for Shkodra municipality.

In the meantime and thanks to a pragmatic, step wise approach attending with priority to "hot spots" (areas of highest need), the situation has very significantly improved. Through essential measures in storm water management, regular flooding in the centre of the city could be brought under control. Sufficient safe drinking water is now provided and approximately 70% of the citizens enjoy a 24-hour service. Additional improvements are still ongoing to enhance and secure the service provision. The improvements in service provision are highly appreciated by the target groups and are obviously very relevant in this regard.

Time limits in the visit to Shkodra did not permit interviews or participatory exercises with users and residents of Shkodra and the outlying rural areas, to discuss and assess how their needs and demands have been addressed by the project.

Albania's Sector Environment

Because if the dramatic situation, the government of Albania is giving high priority to the rehabilitation of urban supplies and to the expansion of rural water supplies - as well as to the rehabilitation of waste water systems and treatment plants. Albania is following a policy of decentralized service provision to ensure that services are more demand responsive and institutions are closer to users (and therefore being increasingly accountable).

The approach taken by the project to provide support for the establishment of an efficient and sustainable Water Works and strengthening the local governments complies very much with the Albania policy. Benefits in this regard can be realized in both directions: the Government of Albania can make use of the lessons learned in Shkodra in the current sector policy development while the Water Works will benefit from an enabling legal environment provided by the government.

Coherence with ADC's Sector Policy
The project activities in Shkodra comply with ADC sector policy regarding provision of support for the establishment of local institutions and the provision of water and sanitation services to the population. However, an opportunity also exists for the Shkodra Water Works to build closer contacts with the users through the suggested participatory processes and exploration of synergies with other local social and economic development processes. Further in line with ADC sector policy, projects in Albania need to develop more explicit strategies for accessing the interests and needs of male and female users to ensure that already vulnerable, or disadvantaged groups, are not additionally burdened by project activities or excluded from the benefits of improved water and sanitation services.

In view of ADC's inclusion of Balkan countries within its overall geographic coverage, its sector policy has to include a section dealing with conflict prevention and peace building.

Impact
Long-term development objectives in BiH (including peace and democracy building, economic growth) and sustainable provision of services such as water, waste water and sanitation are guiding principles of the project activities in Shkodra undertaken by the Austrian Coordination Office. Further emphasis on supporting livelihood strategies of users, contributions to the empowerment of women and men users by facilitating their participation in their processes of development will increase the impact of sector activities on social and economic development in the region, as well as contributing to the democracy building process. If needs and interests of users are not being met (40% non-payment could be an indication), identifying measures to be taken with the participation of users and monitoring processes to further provide service levels for which users are willing to pay will lead to greater sustainability of the services. Greater attention paid to the needs and interests of un-served and marginalized groups, such as the Roma communities, and the enhancement of their involvement will bring the approach taken in Shkodra further in line with ADC's sector policy. Though it is probably too early to assess the impact at this stage, the achievements described above clearly indicate that the project is contributing to the intended impact.

Conclusions and Recommendations:
In summary it can be concluded that ADC's assistance to Shkodra is relevant in three key areas and contributes to the desired impact. However, its relevance and impact towards the project objectives could be further enhanced through consideration of the following opportunities:

- A more programmatic approach should be developed and implemented taking into consideration the different aspects of the ADC sector policy. This is required to achieve the desired sustainability and impact. The pragmatic approach adopted so far was justified in the view of the urgent situation in the early stages of the intervention.
- The institution and economic sustainability should be further enhanced and consolidated through continued, tailored external support. The required paradigm shift demands a consolidation period (to anchor such changes) of 5 to 10 years.
- A master plan may be developed in consultation with the different stakeholders and interest groups, taking into consideration the different conditions in the various supply zones (e.g. affordable service standards may be developed for the poorer sector).
- Delegation of management to the lowest possible levels (e.g. water committees in different supply zones) may be explored.
- The innovative piloting process in the Shkodra project should be systematically analysed and documented. The lessons learned may then be pro-actively used as contributions to the sector policy

dialogue in Albania. The active participation in the policy dialogue may also lead to adjustments of the ADC approach and secure the integration into the national context including seeking legal support for the selected institutional framework.

- ADC should: (1) maintain clear focus in the area of comparative advantage and facilitate / coordinate the involvement of complementary (bigger) donors to provide the required funding and to attend to the wastewater and solid waste management issues;

B 5.2.4 Effectiveness: Access and Functioning

Findings and Assessments:

Significant improvements have been achieved regarding the following ways:

- Sufficient drinking water of safe quality is supplied to the majority of the population of the municipality.
- There is a reliable 24-hour service for 70% of the population and quick response when repairs are needed.
- Technical measures (pressure zones) have been introduced to reduce breakages and water losses.
- An institution (Water Works) has been built up, which is capable of providing the required services.

Missing elements, which may endanger continued access and functioning in the future are the following:

- Cost recovery through payment of water fees is still low.
- The service provider (Water Works) is not yet established as an autonomous institution.

Conclusions and Recommendations:

Considering the time of project involvement and the means provided, access and functioning have been achieved to a reasonable degree. These will be further enhanced if the mission's recommendations are implemented. In summary, these recommendation concern the following areas:

- Facilitation of supportive regulatory legal framework both for the service provider as well as for the provision of services.
- Development and implementation of a master plan (including funding) that considers the supply of the entire municipality, the gradual rehabilitation of the old system, necessary future extensions, etc.
- Consolidation of institution and capacity building at all levels (municipality, service provider)
- Enhancement of the campaign for increased user involvement, in particular to raise the current levels of willingness to pay.

Effectiveness:

It is too early to fully assess effectiveness at this stage. Whether the improved O&M system remains sustainable through the new institutional set up will only be demonstrated after some years of operation. However, the achieved level of functioning and accessibility already results in a more effective water supply. Effectiveness can and will be further enhanced, if the above recommendations are realized.

B 5.2.5 Water Resources Management

Findings and Assessments:

A systematic, comprehensive water resources management approach is missing. Groundwater protection has been attended to by introducing three grades of protection zones around the intake points. However, buildings observed in zone 3 show that some trespassing of these protection zones is already occurring. The urgent storm water management measures are reducing flooding incidents effectively. Untreated wastewater is still disposed of into Buna river and is therefore causing environmental problems.

Conclusions and Recommendations:

Water resources management is certainly an area that has not yet received sufficient attention. This has to be considered against a background of the prioritised demand for drinking water as a basic need and the limited means and capacities available in the sector. However, measures regarding water resources management have to be taken in the near future to secure the sustainability of basic services in the region. The following recommendations provide some suggestions for the development of a more comprehensive water resources management programme:

- As a matter of urgency, secure the protection of the groundwater sources that are required for Shkodra's present needs and future developments.
- Launch an "Environment Campaign" (similar to BiH) to increase awareness of the value of safe water and of the environment.
- Further explore and coordinate the involvement of other external sector agencies in handling the issue of water resources management, including environmental sanitation (wastewater disposal and solid waste management).

B 5.2.6 Efficiency: Management and Programme Implementation

The efficiency of the project is evaluated by establishing the pre-requisites for efficient project management, organization structure and programme implementation - and by assessing how far the project performs against these criteria (see Table 7, below).

Table 7: Management and Financial Options (Albania)

Pre-requisites	Assessments and Recommendations
Project Management:	
Transparent, clear accountable project management framework, applied with flexibility.	The project management structure is clear and straight forward regarding the support structure.
Consideration of long-term management structure from outset of project	The implementing agent (GWCC) seems to perform very efficiently. However, the local project implementer (Water Works) may have been empowered more prominently from the outset of the project while GWCC would have acted more as a backstopper and capacity builder. Although, this arrangement would initially have had negative effects on efficiency, it would have provided an opportunity for capacity building and long-term benefits.
Organisational Structure:	
Optimal ratio regarding means used for project administration as compared to project implementation.	Considering the composition of the programme support staff and their involvement in project implementation as well as administration, the ratio towards time spent for implementation is positive. This seems to be less the case for the involved Water Works staff, where still ample room for institution building remains.
Clearly defined tasks and responsibilities coupled with the required competences.	Tasks and responsibilities seem to be clear. Nevertheless, job descriptions should be reviewed and an HRD concept developed accordingly (c.f. section B 5.2.8)

Programme Implementation:	
Availability of required data, and effective monitoring system for the project steering.	The existing monitoring and data collection system is weak. This obvious weakness exposes the present performance to high risk. An effective monitoring system as well as systematic data collection and analysis need to be urgently developed. This will be even more important for the steering of the proposed (programmatic) approach.
Transparency and consensus about the agreed contributions by the different stakeholders (contractual arrangement).	Contributions by the different stakeholders are clear. Involvement of private sector may be considered increasingly. At the same time, contractual arrangements should be improved.
Potential of existing resources and means are assessed and utilized.	The use of existing resources may be increasingly considered, since quick improvements are no longer so urgently required. This may be also be facilitated by the proposed environment campaign.

In summary, it can be concluded that the efficiency has been comparatively high regarding project management, organization and implementation. This is especially the case for the provision of the support services to the project. The high efficiency has been partly achieved by sacrificing on some longer-term objectives. Examples in support of this statement include: (1) avoiding time consuming involvement of local project implementer but missing an opportunity for institution and capacity building; (2) meagre involvement of users; (3) pragmatic instead of programmatic approach. Since the mission's recommendations are based on emphasis towards increased effectiveness and sustainability, a reduced efficiency has to be expected in future.

B 5.2.7 Technology and Implementation Quality

Findings and Assessments:

The natural situation is rather favourable regarding drinking water supply for Shkodra. Sufficient groundwater of safe quality is available close to the city. Hills are bordering the city on the opposite side of the sources and are therefore ideally located for the positioning of storage tanks. As stated earlier, the distribution system is in very poor condition in terms of leakage, illegal connections, malfunctioning pumps etc. The identification and prioritisation of so-called "hot spots" (deficient system elements whose rehabilitation would have the highest effects) has been a very well engineered approach, producing a high impact within a short period of time and with optimal use of the means available. As a result of this approach, pumping capacity has increased, some of the weakest and most strategic piping sections have been replaced, etc. During the site visit, the new main from the pumping station to the new storage tank was about to be completed. Whether it was the right decision to locate this main outside the supply area and only use it for transporting water to the storage tank remains open - it is beyond this mission to study design parameters in detail. It is important that the rehabilitation work is continued and the system is divided into essential supply zones, so that consumption and water losses can be better monitored and management responses can be tailored accordingly.

Conclusions and Recommendations:

The applied technologies seem to be appropriate and the implementation quality is reasonable. Nevertheless, some suggestions are provided below to increase sustainability:

- Development of a realistic, comprehensive master plan - including budget and funding requirements. This master plan should not only define the continuation of the rehabilitation in distinct phases but should also consider the supply of un-served areas and future development.

- Maintaining and further anchoring at local level the high design and construction quality through: (1) enhancement of quality awareness of suppliers and clients; (2) more capacity building at all levels, including planners[27], supervisors and craftsmen/women[28]; (3) enhancement of opportunities for the involvement of private sector (even small contractors including women) through new skills training both for implementation and maintenance, choices on design and service levels.
- Water quality monitoring with lab-equipment needs to be complemented with regular sanitary surveys.
- Facilitation of access to regional and global sector experience and knowledge.

B 5.2.8 Human Resources and Institutional Development

Findings and Assessments:

Throughout the implementation of phases I through to III, institutional strengthening and capacity building have been declared objectives and stand as a separate project component of the project. However, due to the strong involvement in the implementation of large-scale construction measures, hardly any institutional and human resources development activities were carried out[29] particularly during phase II (99-02). In absence of an overall concept for institution and human resources development, the HR and ID measures implemented during phase II appear to be somewhat random, with little chance of being sustained.

Since May 2002, water supply and wastewater have been combined under the umbrella of the Shkodra Water Works. This adds another 50 employees for the wastewater department to the 130 staff already in the water supply department. A Chief Engineer under the Director of the Water Works heads both departments. Institutionally, the Water Works are under the municipality and are owned by the state.

Structurally, the organisational set up appears to be appropriate to manage, operate and maintain the water and waste water systems in the town. However, there are still basic management instruments missing, such as job descriptions and deployment plans.

Conclusions and Recommendations:

Besides the technical components of water and sanitation projects, institutional strengthening and capacity building measures have to be planned and built into the project design. In addition, sufficient capacity, capability and resources have to be allocated for this important project component. In the Shkodra water supply project, human resources development measures have clearly not received sufficient attention.
In view of this and during the ongoing phase III, capacity building measures (particularly training) should be increased, based on the needs of the organisation and designed in such a way that they increase knowledge and skills, provide career development and thus increase motivation.

Institutionally, the decentralisation process which has reportedly been initiated by the Government should be continued and more autonomy given to the Water Works in order to increase ownership within the municipality and the communities.

More emphasis should be also given to:
- Institutional capacity building and strengthening for investment policy, including planning and coordination of capital inputs and the development of a capital investment strategy in the sector
- Environmental protection issues, including a regulatory framework the protection of the water environment
- Institutional capacity building and strengthening at the operational level of the utility

[27] Take into consideration different design criteria for storage tanks (with demand projections for 20 years) and principal supply mains (with demand projections for 50 years).
[28] Refers to observations made concerning spring catchment construction, masonry and concrete work
[29] With the exception of on-the-job training. This training focussed mainly on the operation of new tools, plants and equipment.

- Assistance to the development of a regulatory framework to oversee the proposed privatisation of the utilities

The experiences of Shkodra are representative for many other projects in the sector and show that institutional strengthening will only work if all relevant stakeholders are involved in the decision making process, starting with strategic planning, design, implementation as well as operation and maintenance. This will not only increase their skills in future management of the system but will also increase the sense of ownership and thus sustainability.

B 5.2.9 Operation and Maintenance / Sustainability

Findings and Assessments:

The existing O&M system has to be considered in conjunction with the ongoing rehabilitation process. While a comprehensive O&M system has been introduced in the rehabilitated pumping station, the distribution network is maintained in a more ad hoc manner. This means reactive repairs are conducted according to arising needs, but no systematic preventive maintenance is carried out. Although there are two officers responsible for answering clients' complaints, Water Works is still at the very beginning of practicing a client-oriented attitude. Non-payment for water services has decreased from 80% in 2001 to 40% in 2003 and illegal connections seem to have reduced. These improvements have to be attributed to the improved service levels. Presently cost recovery through water fees is still low. This is attributed to an inadequate water fee as well as to the level of discipline for payment, which remains comparatively low despite the steeply rising trend since 2001.

Conclusions and Recommendations:

Despite the appreciation of the ongoing process in introducing an effective O&M system, some hints are provided below to enhance the sustainability of O&M and accordingly the sustainability of service delivery:

- Introduction of cost covering tariffs including exploration of cross subsidy opportunities for the poorer sector: Highly professional input is required to establish cost covering tariffs and even more so to develop and negotiate the process for its introduction in a politicized environment.
- Continuation and reinforcing of capacity building for Water Works staff regarding the following aspects: (1) basic refresher and "new equipment" training for repair teams and operators; (2) enhancement of client oriented attitude; (3) continuous improvement of O&M concept based on the results of systematic monitoring.
- Securing reliable spare part supply: This implies (1) consideration of efficient supply chain already when selecting the technology and/or equipment; (2) securing efficient stock management.
- Enhancement of user involvement: Explore the potential of water committees regarding management support (e.g. water fee collection etc.). Their proximity to the users gives them some advantages. They may be provided with training accordingly.
- Development and establishment of a consumer/client satisfaction monitoring system including participatory assessment of the different user groups (c.f. section B 5.2.2).
- Reinforcing the consumer awareness campaign

Despite an appreciation of the ongoing process towards setting up effective O&M systems, recommendations are provided below to enhance the sustainability of these initiatives - in further support of sustainable service delivery. The following measures are proposed:

- **Introduction of cost covering tariffs**: including exploration of cross subsidy opportunities to support the poorer sections of society: Highly professional input is required to establish cost covering tariffs and even more so to develop and negotiate the process for their introduction in a politicized environment.

- **Continuation and reinforcing of capacity building for Water Works staff:** in terms of (1) basic refresher and "new equipment" training for repair teams and operators, (2) enhancement of *client oriented attitude*, (3) continuous improvement of O&M concept based on the results of systematic monitoring.
- **Securing reliable spare part supply:** This implies (1) consideration of *efficient supply chain* already when selecting the technology and/or equipment; (2) ensuring efficient stock management.
- **Enhancement of user involvement:** Explore the potential of water committees regarding management support (e.g. water fee collection etc.). Their proximity to the users gives them some advantages. They may be provided with training accordingly.
- **Development and establishment of a consumer/client satisfaction monitoring system:** including participatory assessment of the different user groups (c.f. section B 5.2.2).
- **Reinforcing the consumer awareness campaign:** regarding proper use of water, respecting water as a precious economic good, protecting the environment. Synergies may be utilized with the environment campaign in BiH programme).

C Cross Country Analysis

In this section of the report, key issues of special interest are assessed across the 5 country programmes evaluated in section B, "Country Consultations".

C 1 Cultural Aspects, Gender Balance and Poverty Reduction/Livelihood

C 1.1 Socio-cultural Aspects

The sector programmes in Cape Verde, Uganda, Guatemala, Bosnia and Albania have each been developed based upon locally identified needs and interests. None of the country programmes is insensitive or blind to local socio-cultural aspects such as traditional decision-making processes, methods of communication and questions of legitimacy and traditional authority. However, comparison shows that some programmes appeared to have performed better than others.

In particular, the approach taken in the *SWTWS project* in Uganda has ensured that the design, implementation and operation process are conferred legitimacy through the role of traditional leaders in community mobilization and as representatives of the community in official agreements. The use of drama for awareness raising among scheme operators, committee members and users has proven effective in terms of transmitting messages and has been well received by the different stakeholders in that context.

In Cape Verde, experiences and lessons learned about how to incorporate socio-cultural aspects from the *River Basin Management* project[30] can be translated into opportunities for the *ASAAS* - the support to autonomous municipal services project. Greater efforts by the Serviços Autónomos to involve users, both rural and urban, in planning, monitoring and decision making processes is recommended to ensure that socio-economic aspects surrounding water and sanitation behaviours, uses and values of different users informs the policies and procedures that govern services delivery by the new institutions.

In Quetzaltenango, the approach taken in the *XelAgua project* focused more on the technical aspects of rehabilitating and extending an existing water supply network. Despite this, attention was paid to ongoing local conflicts over water resources, possible solutions and to some extent, the involvement of User's Associations[31] in decision-making and implementation processes. Opportunities for the now established EMAX municipal water enterprise to enhance attention to socio-cultural aspects regarding water and sanitation services include – (1) conducting participatory planning and assessment processes to address the issues of hygiene and sanitation, (as yet not included in their activities) and (2) conducting a participatory planning, assessment and adjustment process to increase the effectiveness of the schemes that have been implemented thus far.

The establishment of municipal enterprises in Mrkonjic Grad in BiH and Shkodra in Albania has taken place under distinctly rare circumstances because of the decentralization and peace building processes that both BiH and Albania have commenced within recent years. The history of services in these contexts was one of provision to urban centres, with the rural communities going largely unserved. Although time constraints did not permit visits to these rural areas, indications from Albania are that a socio-cultural assessment was conducted (although the extent to which it was participatory in nature is not known) and that decision-making processes in Mrkonjic Grad were largely taken by project and Water Works staff. The project design and approach are found therefore to more strongly reflect socio-cultural aspects in Shkodra than the project design and approach applied in Mrkonjic Grad.

In comparison with each other, the projects evaluated have addressed socio-cultural aspects in different ways and to different degrees. Those faring the best are *the SWTWS project* in Uganda and the *Ribeireta River Basin Management project* and to a somewhat lesser extent the *Shkodra Water Works project* in Albania, although further verification of the methods used to conduct the socio-cultural assessment is needed.

[30] Such as the important role the AGROGADO Grower's Association has played in shaping the process of project implementation from initial problem identification onwards.
[31] Although this was largely limited to male representation.

Opportunities for the country sector programmes of Cape Verde, BiH and Guatemala to give greater consideration to socio-cultural aspects have been mentioned elsewhere in the project-specific sections of this report. In general, training and capacity building on participatory planning and assessment methods for ADC and CEEC/NIS country representatives, project staff and local partners will contribute to realizing sector projects that are informed by knowledge, values and traditional practices of local users, households and communities.

C 1.2 Poverty Reduction/Livelihoods

Poverty reduction is the guiding principle of each of the projects visited, either explicitly, or implicitly.

Sector programmes with explicit attention and strategies for addressing poverty include the rural component of the *XelAgua project* in Guatemala, the *Ribeireta River Basin Management Project* and the *SWTWS project* in Uganda. Sector projects in Cape Verde (Serviços Autónomos), BiH and Albania are explicitly clear in that contributing to poverty reduction is the paramount aim; however, examples of project activities that are poor-specific were not evident.

In respect to livelihoods, only the Ribeireta River Basin Management project pays significant attention to the productive uses of water and the role this plays in local and regional development. Furthermore, baseline data (where collected) and monitoring systems in Guatemala, Bosnia and Albania are not designed to collect data disaggregated by class and/or ethnicity[32] in order to allow for impact assessment. In Cape Verde and Uganda, it was found that efforts are made to disaggregate data by class; however, whether the emerging information is used to adjust project policy and design to further contribute to livelihood strengthening is not known.

C 1.3 Gender

The Uganda sector programme, rated at 2, scored highest in the category of "institutional support for gender and poverty". The other country sector programmes all scored 1. Only in the *SWTWS project* are some planning and monitoring systems gender-specific, and even in that instance, assessing data collected in order to adjust projects and schemes has yet to take place to minimize any potential negative impacts for vulnerable groups. In the other country sector programmes, information and data are collected and recorded in gender-neutral terms. Specific activities to involve women were reported in Uganda, Guatemala and Cape Verde.

Understanding about the concept of gender varies among ADC sector staff. Some staff expressed that it refers to "women's involvement" while others understand gender to refer to the socially defined roles, responsibilities and benefits that accrue to men and women depending upon the place, time, and society in which they live. Generally, personal definitions varied within programmes as much as between country sector programmes. Sector staff in all of the programmes considered gender aspects to sector programming as being relevant to their work. Without exception, the need was expressed for more concrete capacity building so that sector staff are able to work from a gender perspective in planning, implementing, monitoring and adjusting policies and planned activities.

C 1.4 Lesson Learned

Specific attention to accessing and addressing the articulated needs and interests of the poor will help to ensure that projects are nurturing equity and contributing to the overall goal of poverty reduction.

[32] For example, Batwa, Roma, in settings where ethnicity bears significant influence on an individual's access to development processes and benefits.

C 2 Community Participation / Empowerment / Ownership

C 2.1 Community Participation

The *Ribeireta River Basin Management* and the *swTws* projects rated highest in terms of community participation. In these contexts, users indicated that they played a significant role in decision-making processes regarding tariffs, location of facilities and choice of technology. Areas requiring additional attention include participatory monitoring and assessment systems and ways to ensure that chosen management systems are representative of the entire range of interests and needs in a community.

ASAAS (Cape Verde), *XelAgua* (Guatemala) and *Mrkonjic Grad* (BiH) projects scored lowest in the area of community participation. In each of these cases, the articulated perception (by country sector staff and local partners alike) was that establishment of a municipal water services enterprise did not call for an emphasis on the participation of users, except for payment of services. It was not possible to assign a score to the project in Shkodra given the available information.

C 2.2 Empowerment and Synergies

None of the projects had explored possibilities of synergies with other development activities in the project areas. Examples of synergies in some the areas of activity do exist and have been mentioned in the relevant country analysis sections. Despite this, users from Uganda, two of the rural areas of Quetzaltenango and Ribeireta community in Cape Verde expressed the view that they would undertake other initiatives.

C 2.3 Ownership

Results from the pocket voting exercises in Ribeireta (Cape Verde) and Kisoro (Uganda) indicated that users felt that both men and women users were the owners of the schemes implemented in those settings. Transect walks and key informant interviews in Quetzaltenango and two outlying rural communities in Guatemala and in Mrkonjic Grad revealed that with the establishment of municipal water enterprises, users felt that the new municipal enterprises were the owners of the water supply networks, not the users in those settings. Information of perceptions about ownership was not available from the information collected in Albania.

Access to increased quantities of safe water, including for the poor, has increased because of each of the projects. However, this achievement has been realized without specific attention or activities that specifically target women, the poor or other marginalized groups in Bosnia and Albania. The approaches there have tended to take a blanket approach, having assumed that all groups of users/stakeholders would be served equitably. But, at least in Shkodra, enquiries revealed that the country sector staff was unaware that unserved groups existed.

Specific measures to address access by the poor in the rural component of *XelAgua project* were undertaken, but not in the urban component. In the *swTws* project as well, access for all groups of users has been a strength of the project. However, unserved and unrepresented groups (such as the Batwa and the previous water vendors) were identified by users and project staff alike as marginalized groups which have not benefited equitably in terms of improved access the water supply and sanitation facilities, along with other stakeholders in the areas where the project has been active.

Lastly, issues of equitable access for all stakeholders in Ribeireta have also not been entirely resolved. Households whose access is constrained due to distance to water kiosks, lack of capacity to fetch and additional burdens such as care taking of elderly and invalid household members were identified by users interviewed. Despite this, a strategy for addressing the needs of these households and the different individual users in them had not yet been articulated because of project activities or otherwise. Likewise, the opportunity exists for any future phases of project *ASAAS* to give greater emphasis to improving access and encouraging the involvement of rural users in the participating municipalities.

C 2.4 Lesson Learned

Use of participatory methods for planning, design, monitoring and assessment will contribute to a stronger sense of ownership among users.

C 3 Relevance and Impact

C 3.1 Findings and Assessment

C 3.1.1 Needs and Demands of Target Groups

All 5 ADC country programmes are based on clear needs for basic water supply and sanitation services. In particular, demands regarding water supply have been expressed either by the target group or by the government agency concerned. While in the urban centres needs are more oriented towards rehabilitation, the needs in rural communities are more basic in the absence of any supply system. Sanitation is perceived as a less pressing need and is neglected or handled with second priority in most programmes, except for swTws Uganda and partly in Mrkonjic Grad.

In conclusion, it can be said that all water supply programmes are very relevant regarding needs and demands.

C 3.1.2 Partner Countries Sector Environment

Although the sector environment varies considerably across partner countries, national sector policy development in all countries (possibly to a less extend in Guatemala) is either in progress or a policy already exists in draft form. In all countries, ADC is involved in the policy dialogue - but to very different degrees across countries, and never to the extent desired. Nevertheless, ADC's interventions in all countries comply with the partner country policies as far as they are formulated. All ADC programmes are piloting innovative approaches in otherwise conservative (and unsustainable) institutional environments. This means that the ADC programmes offer valuable alternatives and great opportunities to shape and improve the up-coming national sector policies. These opportunities are generally not realised to the extent desired, mainly because of capacity problems.

C 3.1.3 Coherence with ADC Sector Policy

Despite the fact that the ADC sector policy is either unknown or considered irrelevant by many of the stakeholders involved (c.f. reaction to the policy in the Balkans), no programmes have opted to go against the principles it enshrines. However, there are a number of opportunities where an increased consideration of ADC's sector policy would result in greater effects and benefits (such as empowerment, self-control, equity, broader dissemination by focussing on ADC's comparative advantages, etc.). This move would bring the projects closer towards overall sustainability. To make it more attractive, ADC's sector policy may be presented in a more user-friendly manner and may also consider aspects such as conflict prevention and peace building.

C 3.1.4 Impact

The declared long-term objective of poverty reduction is the guiding principle in all projects, either explicitly (rural projects), or implicitly (urban projects). Although it is too early to assess the impact on poverty reduction at this stage, some trends are emerging. The effects are more visible the closer the projects are to the people. For example, the Ribeireta River Basin Management project pays significant attention to the productive use of water and the direct effects on livelihoods are easily recognized. Time saving because of improved access and a more reliable supply are other improvements that translate into economic benefits. Impact on health improvement seems to be questionable in most of the projects at this stage because in the absence of any measures regarding safe sanitation (except for swTws, Uganda and Mrkonjic Grad). Negative side effects include prevailing inequalities in terms of supply in some cases, and people (water vendors) losing their livelihoods because of the improved water supply in one case.

C 3.1.5 Comparative Advantages of ADC

The comparative advantages of ADC in the water and sanitation sector can be summarised as follows:

- clear focus on water supply and sanitation
- ability for the identification of niches in areas of high potential for broad impact
- sensitiveness and flexibility to respect and to respond to the demands of the users as well as to the existing context
- small team of experienced and committed professionals who are open to current global learning and have a vision for a sustainable future
- experience of community based managed water supply in Austria
- historical background of Austria in Balkan countries

C 3.2 Conclusions and Recommendations

In summary, it can be concluded that ADC's support to the various projects is elevant regarding the needs and the country sector environments. Coherence with the ADC sector policy is taking place insofar as the policy guidelines are not breached, but the potential of the policy is not exploited to the full in all projects. This negatively affects sustainability and overall project impact. The recommendations summarized below provide some suggestions for the enhancement of relevance and impact:

- A more programmatic approach should be developed and implemented in all projects[33] by taking into consideration the different aspects and guidelines of the ADC sector policy (e.g. enhancement of gender and poverty perspectives, etc.).
- Consideration of a river basin development approach, including water resources and land management, environmental sanitation, sustainable livelihood opportunities, etc.
- Innovative approaches should be more systematically analysed and documented. The lessons learned may than be pro-actively used as a means of contributing to sector policy dialogues at national level. The active participation in such policy dialogue may also lead to adjustments in ADC's approach and ensure the full integration of programmes into the national context (including the development of legal instruments that support programme activities within a given institutional framework).
- Regarding ADC's project strategy: Maintain and reinforce clear focus in the areas of comparative advantage and strengths. Facilitate and coordinate the involvement of complementary (bigger) ESAs that are able to provide the required funding and attend to complementary issues beyond the capacity of ADC - such as wastewater and solid waste management in urban settings.

C 3.3 Lesson Learned

"When combined with the piloting of innovative and enlightened approaches, initiatives that draw on the comparative advantages of partners in niches of high need can lead to high impacts – even with a relatively small external support agency!"

C 4 Effectiveness: Access and Functioning

C 4.1 Findings and Assessment

Significant improvements have been achieved in all projects regarding reliable supply of sufficient safe drinking water. This has been achieved through the building of new, mostly rural schemes and through the rehabilitation[34] and strengthening[35] of existing, mostly urban schemes.

[33] Even where this has already happened, improvements may be still possible.
[34] For example, significant reduction in water losses.
[35] For example, strengthening of service providers

Increased water consumption is held back in some cases, either through relatively low service standards[36] or through tariff barriers that are not always affordable for the poorer sector.

The sustainability of access and functioning depends on a proper management and efficient O&M system. In this regard the projects have progressed differently. The swTws project is clearly the leader in O&M. This project has developed a system that empowers the user communities during decision-making processes but also enables them to implement decisions via support provided through an umbrella organisation. Cost recovery is a challenge that all projects still have to deal with. Some projects have already made progress in awareness raising campaigns for proper use of water and responsible environmental protection (swTws, Mkronjic Grad), while others are in the process of starting similar activities. The project "servicos autonomos" in Cape Verde is an initiative promoting the decentralisation of service provision. This initiative can become an important corner stone for the provision of sustainable services, particularly if it succeeds in developing the right mix of public private partnership.

Except for swTws, only very limited attention has been paid to environmental sanitation. This is partly explained by the fact that environmental sanitation is not an urgently felt need when set against a backdrop of more pressing water supply problems. However in terms of public health improvements, the impact of improved, reliable and safe drinking water supply systems will be very limited without corresponding improvements in hygiene and sanitation.

C 4.2 Conclusions and Recommendations

Considering the duration of project involvement and the means made available, the level of access and functioning achieved is reasonable. It will be further enhanced if the projects are continued and the achievements are consolidated, possibly with the consideration of the recommendations contained in this report. In summary these recommendations concern the following areas:

- Facilitation of supportive regulatory and legal frameworks both for the service providers and for the provision of services (e.g. tariff setting).
- Exploration of alternative supply systems including rainwater harvesting, combination of different supply systems, all aiming at affordable service standards tailored for very different user groups.
- Consolidation of institution and capacity building at all levels (e.g. government agencies, service providers, communities).
- Awareness campaigns aimed at users advocating proper use of water, helping users to understand the value of water, as well as key hygiene and sanitation issues. Increased user involvement, taking into account the existence of very different user groups.
- Development and implementation of effective sanitation measures. Eco-sanitation may be an acceptable alternative in rural areas in the view of its value for production.

C 4.3 Effectiveness

It is too early to fully assess effectiveness at this stage. Whether the O&M systems that are still under development will become sustainable will only be demonstrated after some years of operation. However, the achieved level of functioning and accessibility is already resulting in water supplies that are more effective. The full benefits of reliable water supply (health benefits, economic benefits, social benefits) are only realised when they are complemented with parallel improvements environmental sanitation. A similar assessment can be concluded for the irrigation schemes that have been introduced. Effectiveness can and will be further enhanced if the above statements are acted upon.

[36] Despite considerable improvements to systems, long walking distances for users are still encountered

C 4.4 Lesson Learned

"Access and functioning are interrelated with sustainability. If access and functioning is provided to the maximum (to all and at a high service standard) but at the cost of sustainability, it becomes a risk for all.[37]"

C 5 Water Resources Management

C 5.1 Findings and Assessment

With its river basin development projects, Cape Verde is the only country programme that attends to water resources management comprehensively. All other programmes are not explicitly attending to water resources management although they cover certain aspects - such as limited protection of intake areas, awareness creation in favour of proper use of water etc. Current learning indicates that eventually, water projects that do not attend to water resources management in the respective river basin are confronted with problems (such as conflicts between different interest groups) that affect functioning and sustainability of the projects. Further experience shows that water resources management stands a better chance of being effective when it is coupled with other development aspects in the respective river basin - particularly when developed in conjunction with (agricultural) land management and livelihood opportunities.

C 5.2 Conclusions and Recommendations

Water resources management is certainly an area that has not yet received sufficient attention. However, across the country programmes that were visited, the Cape Verde river basin development is a remarkably innovative initiative in this respect. The pilot projects that have been implemented contain a great deal of valuable learning. Despite the fact that the approach and the projects have not yet been finalized, this report concludes that there is a high potential for replication of the approach within and outside the region. The following recommendations provide some hints for the development of more comprehensive water resources management programmes. On programmes where ADC does not possess sufficient in-house capacities for implementation, other agencies may be encouraged to become involved.

- Exploration of a river basin development approach in a selected pilot area, taking into consideration the following aspects; (1) water and land management, since both resources are very much interlinked in particular in cases of scarcity - the appropriate government departments may be consulted for coordination and advice; (2) comprehensive consideration of all available water resources in the selected area together with the interests of the different consumers - e.g. for drinking, production etc.; (3) effective protection of both water and land resources through appropriate measures including environmental sanitation; (4) support and creation of additional livelihood opportunities for people living in the area.
- Exploration and development of cultivation methods in the extended intake areas that benefit both the farmers and the source protection (creation of win-win situations).
- Enhancement of consideration of rainwater as a readily available water resource, especially for remote and dispersed settlements.
- Aiming at combined supply systems to optimise spring-, ground-, surface-, and rainwater use - especially for systems that require pumping.
- Introduction of dual supply systems (e.g. raw water for general domestic use, protected or treated water for human consumption).

[37] swTws applies a customised cost covering tariff structure. This structure is occasionally a barrier that prevents poorer sections of society from accessing the improved services. Periodically, this user category therefore fetches water for domestic purposes from unprotected springs.

C 5.3 Lesson Learned

"When embedded into a river basin development programme that considers closer consultations and collaboration with user communities and the respective government levels, water resources management contributes substantially towards the sustainability of water supply and sanitation projects."

C 6 Efficiency: Management and Programme Implementation

C 6.1 Findings and Assessment

The efficiency of the country programmes and projects has been evaluated by establishing the pre-requisites for efficient project management, organization structure and programme implementation - then by assessing how far the project performs against these criteria. There are two levels that need to be assessed regarding efficiency - level A looks at how efficiently the project has been facilitated/supported and level B looks at how efficiently the projects are constructed and how the services are provided. In some country programmes, the two questions are intermixed - which means that the supporting agencies are also partly involved with direct implementation. However, in this cross analysis the two levels are discussed independently of each other.

C 6.1.1 Level A

The country programme management structure seems to be too complicated in those countries where a Monitoring Consultant is engaged to oversee the project and to report to Vienna in addition to the presence of the external implementing agent and the Austrian Coordination Officer. This is negatively affecting efficiency and effectiveness, and the effects will be further exacerbated when the (recommended) more programmatic approach is practiced. Strategic and policy issues are clearly the "business" of ADC. Therefore outsourcing of this particular aspect has to be handled very carefully, also in consideration of the required learning loops. These remarks are consciously made in spite of the performance of the Monitoring Consultants, who are doing their jobs very well.

In some projects, the external implementing agent has been too directly involved in project implementation - in some cases without involvement of the local project partner (BiH). This may have contributed to increased efficiency at the beginning, but an opportunity for institution and capacity building has been missed through this approach.

The ratio between time spent and means used for project administration (as compared to project implementation) seems to be reasonable in all country programmes.

In all countries, the existing monitoring and data collection systems are rather weak. Reporting is inconsistent and lacking a common framework and language. This is negatively affecting the project steering in particular.

C 6.1.2 Level B

The management structures at project level vary significantly between the rural and urban projects. In all countries, project management structures are still under development and capacity and institution building is provided accordingly. The management structures in the urban projects are mainly built around a publicly owned agency that has been organised along private sector lines. Their efficiency is presently hampered - mainly by insufficient autonomy, overstaffing, and unclear job descriptions. In the rural projects, a community-based institutional set up is principally aimed for. Regarding improvement of efficiency, the principal challenge still to be met is finding public-private sector partnership blend that optimally divides tasks between the communities and the local government agency. All projects are working on this aspect and recommendations have been made in the respective chapters.

C 6.2 Conclusions and Recommendations

C 6.2.1 Level A

Despite the number of opportunities for improvements that have been identified, it is clear that Level A efficiency is reasonable in all country programmes. This has to be attributed to the high level of commitment of the external project agencies and to their very positive attitude to the local project partners. The latter point has been expressed extensively in all projects. A certain reduction in efficiency may have to be expected if the more programmatic approach recommended by this report is followed in all projects. Recommendations for enhancement of efficiency at this level have been made in the above assessment and in the respective chapters; they can be summarized as follows:

- Aiming at leaner programme management structures; taking into consideration that programme strategic issues are the "business" of ADC and that outsourcing in this regard has to be handled carefully.
- The external implementing agent should not be involved in direct project implementation (despite the quick returns in start-up efficiency) but should always work through a local partner as a matter of principle – in the interest of empowerment and institution and capacity building.
- Monitoring, data collection and reporting systems need to be systematized in a common framework, including the facilitation of the desired learning loops. This is not only to improve efficiency but also to enhance project steering and thereby increase effectiveness.

C 6.2.2 Level B

Since the management structures in all projects are still under development and are not yet consolidated, it may be too early to assess their efficiency. Nonetheless, considering the way they have performed so far, all projects are already operating efficiently. Again, this has to be attributed to highly committed local staff at all levels, particularly at direct partner level. Recommendations for enhancement of efficiency at this level have been made in the above assessment and in the respective chapters, they can be summarized as follows:

- Continuation of institution and capacity building, including the development of a HRD concept (c.f. section C 8)
- Aiming at an optimal mix of public-private partnership, including the division of tasks between the communities and the local government agency.
- Respecting the principle of subsidiarity and empowering the lowest possible institutional level to enhance efficiency through accountability.
- Facilitating an enabling legal and regulatory framework (e.g. regulation of autonomy of supply agencies).

C 6.3 Lesson Learned

"The achievement of long-term objectives should always have priority over maximum efficiency![38]"

C 7 Technology and Implementation Quality

C 7.1 Findings and Assessment

Except for Cape Verde and some parts of swTws Uganda, the natural situation is favourable regarding water resources in all countries. As assessed above, all water sources that have been utilized need additional measures for protection. The technologies selected and applied seem to be appropriate. Regarding rehabilitation of existing large schemes, a systematic approach proves to be a very efficient and effective

[38] Higher initial efficiency may be achieved through direct involvement of external support but the opportunity for empowerment and capacity building will be missed.

way of bringing about significant improvements[39] - even with limited means. Although it has been beyond the scope of the mission to assess design and hydraulic calculations in detail, on the strength of observations made it is reasonable to conclude that designs are mostly kept simple, which means user and O&M friendly. The only projects where reasonable construction quality could be observed were Mkrnojic Grad and Shkodra - in all the other projects there is ample room for improvements. In all projects, there are communities that have not yet been served; since these communities are mostly living in areas that are difficult to supply, technologies may become more sophisticated and cost per capita are expected to increase.

C 7.2 Conclusions and Recommendations

The technologies selected and applied are in general appropriate regarding user and O&M friendliness. The achieved construction quality leaves room for improvement in most cases. A number of recommendations are suggested below to enhance the service life, to lower cost, and to increase sustainability.

- Developing (or fine tuning) a master plan, taking into consideration existing and future capacities in personnel and funding.
- Choice of technologies and equipment should be made with increased attention to O&M requirements e.g. securing efficient supply chains.
- Improvements of design and construction quality through the following measures: (1) enhancement of quality awareness of suppliers (principal service provider, subcontractors) and clients; (2) capacity building at all levels, including planners[40], supervisors and craftsmen/women; (3) upgrading the status of service provider staff, craftsmen/women; (4) exploration of opportunities for the involvement of women and poor through new skills training, influencing choices on technology, design and service levels[41].
- Pay attention to proper finish of constructions and installations (e.g. pump heads, protective trenching of distribution mains, etc.).
- Exploration of simpler rainwater harvesting technology (e.g. introduction of surface ferro-cement drinking water tanks to avoid pump installations, which can readily breakdown or malfunction).
- Exploration and implementation of efficient environmental sanitation measures.
- Realisation of synergies and facilitation of experience and knowledge sharing within ADC, the region and at global level.

C 7.3 Lesson Learned

"When coupled with well engineered responses, the identification and prioritisation of so-called "hot spots" (deficient system elements whose rehabilitation would have the highest effects) can lead to high impact improvements within a short period of time and with optimal use of the means available." (Lesson drawn from the Shkodra project.)

C 8 Human Resources and Institutional Development

C 8.1 Findings and Assessments

Although all the programmes of ADC underline a strong focus on capacity building through human resources development and institutional strengthening measures, so far none of the visited countries has developed a clear strategy that would provide a framework as a basis for institutional and human resources development. Management capacities are still weak and most of the utilities are overstaffed.

[39] For example, significant reduction in water losses
[40] Take into consideration different design criteria for storage tanks (with demand projections for 20 years) and principal supply mains (with demand projections for 50 years).
[41] For example, the production of household rainwater tanks (in ferro-cement) by women.

Training usually takes place at the initial stage of the project when new equipment or installations are introduced, but no follow up in the form of refresher training is organised. Furthermore, after the end of projects generally no funds are available or reserved to continue training during the operation and maintenance phase.

Many programmes are characterised by rather complex organisational structures with many actors and partly unclear roles and responsibilities. Often programmes have been working rather independently without or with only little involvement of the partner institutions.

An interesting institutional approach has been pursued in Guatemala. The concept of institutionally establishing an autonomous private sector-like organised municipal utility can be considered as a new, innovative approach.

Private sector involvement in O&M is marginal in most of the programmes and completely absent in BiH and Albania.

C 8.2 Conclusions and Recommendations:

Human resources management is a comprehensive and integrated approach to managing people at work. It should be holistic, with all activities relating to the management of staff inter-linked and not carried out in isolation. It is the way employees are managed in all aspects of their work and it involves communication, information and personnel planning. Human resources development is an important element of human resources management and includes training, promotion and career development. It should encompass all actors at all levels of the organisation, and enhance its organisational capacity and performance. Training is a key element in human resources development. Training should be seen not only as a measure to improve the skills of employees but also in the context of improving their professional prospects by providing the basis for future promotion.

Considering the fact that human resources management and development measures are crucial for sustained institutional development, increased efficiency and effectiveness of the organisation the programmes of the ADC should aim at developing comprehensive tailor made concepts that include implementation plans right at the beginning of a programme. Initially programme support should focus on training. Based on an assessment of training needs and the investigation of local training opportunities, training approaches will be developed. Economical considerations might suggest a focus on in-service training and training of trainers. Trainings should be reviewed continuously through structured performance monitoring as well as formulated needs of the actors.

In view of these suggestions, it is recommended to develop an overall guideline for country programmes in the preparation of their human resources and institutional development policies and strategies.

Following the principles of good governance, efficient and reliable service delivery can only be achieved if the tasks are shared optimally and transparently between all partners involved. Management should take place at the lowest possible institutional level from the outset of the project, therefore.

Organisational structures of projects and partner institutions (such as water utilities) should be as simple as possible. They should aim at decentralisation of roles and responsibilities and should remain lean and transparent. Programmes should, whenever possible be embedded in existing and functioning structures in order to ensure sustainability after withdrawal of external support.

An optimal division of tasks and responsibilities has to be negotiated between the users, the public sector, the private sector and NGOs, according to prevailing and potential capacities.

Institutional development and HRD on social methods and techniques for conflict management and problem solving on service access and tariff payment (with special attention to pro-poor strategies for cost recovery)

are further areas which Austrian technical assistance could support in order to enhance the prospects for long term sustainability of the outputs achieved to date

C 8.3 Lesson Learned

A comprehensive approach to human resources management and development is a precondition to sustained institutional development. Programme designs need to consider these measures right from the beginning of interventions and important stakeholders should be included in the decision-making process from the outset. They need to be imbedded in simple organisational structures with clear divisions of duties and responsibilities. Private sector involvement needs an enabling environment and does not guarantee success per se.

C 9 Planning

C 9.1 Findings and Assessments

In most of the projects visited, no reliable base for **water resources planning, development and use** exists. In general, some plans regarding the improvement and extension of desired facilities exist – but without regard to their technical or economic feasibility relative to the utility's and their customers' needs and ability to pay for them.

Projects and programmes (including their partner organisations) lack availability and reliability of **information**, particularly regarding basic data such as population served (coverage), number and types of customers and connections and quantities of water produced, i.e. basic management information is not readily available.

C 9.2 Conclusions and Recommendations

In order to establish the minimum requirements of the municipalities for the development, management and administration of the water supply and sanitation systems **master plans** should be developed.

The primary objective of such master plans is to establish a basic framework for the integrated planning and implementation of water rehabilitation, maintenance and extension projects and for rational water resources management.
Master plans should present the status of development, provide an assessment of the water and other related resources and look at the needs (existing and future) for development - and then integrate these needs in accordance with available and potential resources. Master plans should include, inter alia, a systematic assessment of the municipality's water resources as well as recognition and adoption of the concepts and methods that underpin modern water resources management. During implementation of a system subsequent revisions and modifications may then be required, to reflect the changes in water demand, hydrological conditions, socio-economic infrastructure affecting the quality of water and to reflect the introduction of new technologies.

Master plans for municipalities should include the following aspects:

- Present status (physical features, economic conditions, existing water resources development)
- Assessment of water and related resources (climate, stream flows, water quality, ground water, reservoirs, land resources)
- Needs for development (demographic, social and economic scenarios, food and agriculture, domestic and industrial water supply, pollution control)
- Potential projects (minor and major projects)
- Formulation (long-term objectives and development targets)

In order to improve management of the programmes and the implementation organisations including planning, maintenance, financial administration, etc. and to enable **informed decision-making**, the quality and availability of data in projects and their partner organisations must be substantially improved. This should be done through the development of concepts for overall **management information systems** - including methodology, tools and implementation plan based on relevant data that is collected through customer and network surveys and the establishment of a customer and technical management system.

C 10 Operation and Maintenance / Sustainability

It is commonly accepted that sustainable solutions can only be achieved with a holistic understanding of the water and sanitation programmes embedded in their specific socio-cultural and natural environment. Therefore a balanced strategy has to be followed, which considers the following related and interacting fields: i) social, ii) institutional, iii) economic, iv) technological, v) rules & regulations and vi) ecological. These guiding principals for sustainable solutions have been considered in the assessment of the various aspects in above chapters and are considered particularly in the following analysis of operation and maintenance. Effective operation and maintenance is the last but most crucial step in the project cycle to achieve sustainable services.

C 10.1 Findings and Assessment

The level of achieving sustainable O&M systems varies greatly between the different country programmes. Amongst the rural projects, swTws is clearly the leader; between the urban settings, all projects are at about the same level – with improved supply and reactive response services but limited attention to preventive maintenance. In all projects, the biggest challenges are the establishment of an efficient, sustainable institutional framework and the introduction and enforcement of a cost covering tariff structure. swTws demonstrates an institutional framework that is suitable for rural and small town settings - community based management supported by an umbrella organisation. In urban settings, the preferred profile for service providers is a publicly owned company that is organised on private sector principles. The challenge here is the establishment of a legal and regulatory framework that facilitates the required autonomy for the service provider. Tariff setting is often politically biased, but also requires careful attention in terms of the ability of the poor to pay for basic services.

C 10.2 Conclusions and Recommendations

O&M is lagging behind the threshold required to ensure sustainability in all projects but to varying degrees. O&M therefore has to be attended to with some urgency. The recommendations below suggest the principal aspects that require consideration when developing or improving the O&M concepts for the various projects.

- Facilitating and supporting the establishment of enabling rules and regulations and legal framework.
- Introduction of cost covering tariffs: Highly professional input is required to establish cost covering tariffs and even more so to develop and negotiate the process for their introduction in a politicized environment.
- Continuation and reinforcing of capacity building for O&M personnel in terms of: (1) basic refresher and "new equipment" training for caretakers, repair teams and operators, (2) enhancement of client oriented attitude, (3) continuous improvement of O&M concept based on the results of systematic monitoring.
- Securing reliable spare part supply: This implies (1) consideration of efficient supply chain already when selecting the technology and/or equipment; (2) ensuring efficient stock management.
- Development and establishment of a consumer/client satisfaction monitoring system including participatory assessment of the different user groups.
- Reinforcing the consumer awareness campaign regarding proper use of water, respecting water as a precious economic good, protecting the environment.
- Enhancement of user involvement: Empowerment right from the outset of the project, to avoid the necessity of handing over at any point in time. Further explore the potential of water committees

regarding management support (e.g. in urban settings for water fee collection etc.). Their proximity to the users gives them some advantages. They may be provided with training accordingly.

C 10.3 Lesson Learned

"Community-based management systems can become a very efficient and effective means of water supply and sanitation service provision - if they are backed-up by an umbrella organization that is capable of providing the required support" (swTws experience).

D Assessment of the Austrian Development Cooperation and the Assistance to CEECs/NIS

D 1 Sector Policy and Instruments

D 1.1 Sector Policy Paper

D 1.1.1 Findings and Assessments

The ADC sector policy is comprehensively enshrined in a formal document. The essential sector goal is to eliminate poverty in the partner countries. The sector is characterized by the contradiction between use and maintenance as well as by the competitive use for drinking, agriculture, industry and nature. That is why interfaces and synergies with other sectors need to be considered. In the case of humanitarian aid the importance of quick solutions is understood but at the same time and in the view of sustainability it is emphasised that existing regional structures are considered to the maximum extent possible. Austrian sector objectives respect the international and even more so the development objectives of the partner countries. The nature of sustainability of water resources and water supply and sanitation demands that a balanced strategy is applied regarding natural resources, cultural, social economic and technical aspects. Hence, the vision for the future of the sector has to include all levels (community, regions, national). The importance of gender is acknowledged regarding different roles, responsibilities and benefits of women and men. Finally, phasing out of external assistance is considered from the outset of the project.

The cross analysis of the five countries that were assessed reveals some new learning, which is not yet reflected in ADC's sector policy. Some of the examples are as follows: Cape Verde demonstrates that water resources management is only becoming effective if it is linked with land management. Guatemala shows that sustainable solutions can only be achieved if a river basin approach is considered. Uganda faces some problems with unreliable spare part supply for photovoltaic pump systems.

D 1.1.2 Conclusions and Recommendations

The sector policy paper largely represents the state of the art of global learning, but it does not consider sufficiently all particularities and specific learning of the ADC as revealed by the cross-country analysis. Some of the missing strategic issues are the following:

- River basin development - including the link between land and water resources management; the importance of sustainable livelihoods; etc.
- Enhancement of elaboration of O&M issues, including the importance of supportive legal frameworks, cost recovering tariff options, reliable supply chains both for services and spare parts
- Enhancement of a section dealing with poverty, livelihoods and gender, also by looking again at current global learning. Combating poverty plays a central role in today's international development cooperation.
- Enhancement of a section dealing with emergency humanitarian aid regarding consideration of a programmatic approach (which may be introduced in phases), elaboration of measures for peace building and conflict prevention.

D 1.2 Application of Sector Policy

D 1.2.1 Findings and Assessments

Although the sector policy paper deals comprehensively with the sector key issues, it is not easy to read. The appendices provide some limited instruments but they are not systematically compiled and are incomplete regarding coverage of the different steps and issues of the realization process.
Most of the project officers are aware that a sector policy does exist. However, knowledge about its content is limited and only in very few cases is it consciously used. For example, the project officers involved in the assistance to the Balkan countries perceive that the sector policy would only be relevant for what are

perceived as 'Development Cooperation' styled projects. With few exceptions, the project partners are unaware about the existence of the ADC sector policy, and they are even more unaware of its content.

D 1.2.2 Conclusions and Recommendations

The present sector policy paper is a very valuable and important document, but it lacks a mechanism for translation and application into practice. That is why the following measures are recommended:

- Review the presentation format and incorporate professional editing – to include explanatory, attractive illustrations all aiming at the desired target groups (project officers, project partners).
- Development of instruments and tools (covering the entire project cycle) to translate the sector policy into practice. For example, development of instruments for further mainstreaming gender-sensitive approaches.
- Conduct of workshops to familiarise the responsible project officers with the ADC sector policy as well as to introduce and possibly adapt the instruments and tools and instruments to the needs of the users (broadening ownership).
- Pro-active and transparent information of partners about the ADC sector policy - in particular its conditionality and reasoning behind it.

D 2 Coherence with Current Global Learning / State of the Art

D 2.1 Findings and Assessments

The present ADC sector policy is largely at the front of current global learning. This is to be attributed to its very recent issue (June 02) but also to the authors' interest and eagerness to obtain the latest sector developments. Some of ADC's policy aspects, which confirm this assessment are as follows: (1) interfaces and synergies with other sectors in particular in connection with water resources management considering competing interest groups; (2) linkages between project's attention to gender equity issues and poverty reduction, (3) facilitation of effective decentralization to the lowest possible institutional level through the support with umbrella organisations and attention to "good governance"; (4) aiming at sustainable solutions through the Household-Centred Approach; (5) effectively utilizing all available capacities through essential PPP.
Established systematic mechanisms are not visible for periodical updating. Systematic learning from ADC project monitoring (c.f. section D 5.2, "Knowledge Management") is neither established nor coordinated and strategic participation in global networking is not occurring.

D 2.2 Conclusions and Recommendations

While ADC's present sector policy is coherent with current global learning, the existing mechanisms are insufficient to maintain this status. That is why the following recommendations are made:

- Clear and transparent anchoring of the sector policy within ADC's institutional set up.
- Establishment of mechanisms for periodical updating based both on in-house and external learning.
- Establishment of coordinated participation of ADC key stakeholders in global networks, based on a strategic assessment. For example, participation in Streams of Knowledge to gain access to the global resource centre network.

D 3 Policy Dialogue / Donor Coordination

D 3.1 Findings and Assessments

Policy dialogue and donor coordination takes place at international as well as at national level. Considering ADC's capacities and experiences (comparative advantages) the sector policy rightly stresses a national and

even a regional focus. The sector policy further opts for cooperation between the donor communities with the goal to pursue national sector strategies and programmes jointly, to exchange experiences and to increase transparency.

When looking across the five countries assessed, the regional focus is maintained and achievements under the guiding policies are significant - but the degree of policy dialogue and donor coordination varies and is in general rather low. While in Cape Verde, ADC's river basin approach seems to influence the upcoming national policy substantially, this process is lagging behind in other countries. This has to be partly attributed to the limited capacities to actively take part in the national policy dialogue with the required intensity (e.g. Uganda, Bosnia and Herzegovina) and/or to a hindering political context (e.g. Guatemala).
In most countries, limited funding seems to be available for the facilitation of an active policy dialogue and systematic follow up. Donors prefer in general to contribute to concrete project activities.

D 3.2 Conclusions and Recommendations

Based on ADC's comparative advantages and the practiced regional focus in the fields of approaches and strategies, all country projects have relevant and important lessons learned to contribute to the national policy dialogue[42]. This potential is in general under-utilized and national policy developments consequently take place in the wrong direction.[43]. That is why the following recommendations are made.

- Development of a clear strategy and guiding principles regarding the scaling up and dissemination of successfully tested approaches - including active participation in the national sector policy dialogue – this point is also important to integrate ADC interventions into the national context.
- Inclusion of corresponding activities in the country operation plans and provision of the required capacities accordingly.
- Maintaining the focus in the areas of ADC's comparative advantages and strengths. At the same time facilitating and coordinating complementary activities and funding by other donor agencies.
- Exploration of pooling arrangement and basket funding for support activities of common interest such as policy dialogue; institution and capacity building, knowledge management, etc. For example, this point is relevant for services that the umbrella organization is expected to provide in swTws Uganda.

D 4 Institutional Set-up (including Backstopping)

Until today, no formal organisational structure exists that defines the functions of the different actors within ADC. Only recently, IGWA-SIG attempted to draw the "institutional landscape" that describes the different stakeholders, the interfaces between them as well as their functions (see Annexes).

The functions of Sector Representative (Fachreferent) at central as well as at the country level are often out-sourced. This leads to a situation whereby knowledge is located outside the Section. No structured internal knowledge management exists either within the Section or in the countries/programmes.

The position of the country desk is a rather difficult as it remains largely administrative in nature (statement of expenditures, contract management and administration, payments, etc.). This leads to a situation whereby thematically the country desks "whither away" - as stated by one country desk. The situation is responsible for a high degree of rotation of those generally young government employees. Coordination offices often exploit this situation to their advantage.

[42] For example, in Uganda, where support services are provided through an umbrella organisation, etc.
[43] For example, in Uganda, where privatisation of small town water supplies is being promoted as a matter of policy despite the approach being based on questionable assumptions.

The role of consultants in line management positions is also problematic. On the one hand, they are supposed to provide independent advice to the project and on the other hand, they are involved in the implementation. This involvement requires a certain degree of authority that they actually do not have.

Projects are generally monitored by external consultancy firms. These are usually water and sanitation specialists, with a technical focus. For water supply and environmental sanitation, an outsourced sector representation (Fachreferat) exists that is assumed by IGWA-SIG in the frame of a consultancy contract (backstopping mandate). Transversal themes such as gender, poverty and environment are also covered by sector representatives. In most cases, these tasks are also outsourced to external consultants.

D 5 Monitoring and Evaluation, Knowledge Management System

D 5.1 Monitoring and Evaluation

Monitoring and Evaluation (M&E) are the cornerstones of any informed management decision. M&E should be seen in the context of the project framework as it develops over time. It is also important that all the project's decision makers, including those at the community level, should be identified and involved in the system.

M&E of projects and programmes should take place at various levels i.e. at project, country (ADC Coordination Office) and BMaA/ADC (country desk) levels and by different mechanisms.

However, no structured system for the planning, monitoring and evaluation of the projects has been introduced so far. In general, the projects have to submit a report in order to receive the necessary funds. Yet, these reports are often rather uninformative. Whilst in Mozambique, yearly plans of operations have been successfully introduced, in Cape Verde they were rejected. Against this background, a question mark hangs over the authority of ADC Headquarters.

In general, a feeling exists that M&E is left to the individual programmes or even projects, resulting in a situation whereby assessment of efficiency and effectiveness of projects is hardly possible. The only information about progress of the projects comes in the form of status reports produced by the implementing consultancy firms and in the form of frequent backstopping reports. However, these documents do not follow a standardised reporting format nor do they adhere to a uniform reporting cycle.

There are reportedly efforts on the way to introduce project status reports, as introduced by the WB. This initiative should be pursued in order to enable decision-makers at all levels within ADC to increase their efficiency and accountability in project planning and implementation.

D 5.2 Knowledge Management

As monitoring functions are generally outsourced and the country desk officers, being the most permanent positions within ADC, are assuming merely administrative and financial functions, naturally no mechanisms exist to capitalise sector knowledge and experiences. Due to the lack of a uniform reporting and data management system there is also no systematic database of sector information.

In order to make use of the wealth of experiences and knowledge that is continually gained in ADC supported water and environmental sanitation projects worldwide a knowledge management system should be introduced. This system should ensure that ADC knowledge and experience can be capitalised and disseminated as a basis for continuous learning and for the enhancement of the sector performance.

There exist hardly any opportunities within ADC and particularly between ADC and CEEC/NIS for exchange although there would be number of common issues despite of the unique situation in the Balkans. Against this background, a platform should be established with the aim to enable active exchange and mutual learning within the organisation.

Annex 1:

Terms of Reference

Annex 1:	**Terms of Reference**
Annex 2:	Interim Report
Annex 3:	Explanation Pocket Voting/Transect Walk
Annex 4:	Präsentation des Rohberichtes

Terms of Reference:

Evaluation of Austria's Development Cooperation and Assistance to CEECs/NIS in the Water Sector (Water Supply and Sanitation)

Background

- The evaluation division in the Department for Development Cooperation & Assistance to CEECs/NIS (DDC) of the Austrian Ministry for Foreign Affairs has included an evaluation of Austria's commitment and activities in the water sector in its annual work programme for 2002. In terms of volume of funds spent, this sector is one of the most prominent areas of intervention both in Austria's development cooperation as well as assistance to CEECs/NIS, a strategic approach based on concrete sectoral and regional development programmes being employed for priority countries such as Uganda, Mozambique, and Cape Verde. In 2001, expenditures for the core bilateral programme in the water sector amounted to ATS 60 million for development cooperation and to about ATS 40 million for assistance to CEECs/NIS. In addition, there are relevant multisector activities and projects within the co-financing scheme. The importance of the sector in quantitative terms is rising (in line with international trends).
- Based on the explicitly articulated focus of development cooperation on combating poverty, the water sector (water supply and sanitation) accounts for one of the key strategic sectors in international and national terms. Accordingly, there is a wide variety of international standards and strategies such as the "World Water Vision for the 21st Century". The sectoral policy of the Austrian Development Cooperation was laid down in a policy statement in 2001.
- Also, the majority of developing countries is meanwhile giving due consideration to the strategic importance of the water sector for basic services and preventive health care in their national programmes to combat poverty.
- Women traditionally play a key role in the field of water supply (and also sanitation). Any improvement in this area potentially has far-reaching consequences not only on the working situation of women but also on gender relations. Therefore, the evaluation shall direct special attention towards the gender aspect in all areas and probe for potentials and starting points to introduce gender mainstreaming and gender equality.
- There are few fields of activities in development cooperation that represent such a dense interweavement of sectors, cross-cutting issues, and key strategic questions at the centre of the current development debate: e.g. the role of national versus local or public versus private responsibilities and participation (ownership and role of stakeholders), the question of conflicts about access and use, or the debate on global public goods, etc.
- The Austrian aid administration is in a position to offer specific competencies and capacities in this field of activity on account of Austria's special background and experience in water resources management in alpine regions and on account of being able to draw on long-standing, comprehensive project experience by Austrian

implementing agencies. Moreover, the unit for programme development can rely on a well-functioning cooperation with institutionalised, scientific consultancy and assessment facilities or experts for sector-specific programme and project development.
- An overview of the activities of the Austrian Development Cooperation & Assistance to CEECs/NIS in the water sector is given in the Appendix.

Relevance and Purpose of the Evaluation

The present evaluation is concerned with the sectoral policy of "water supply and sanitation" in its programmatic approach, its being put into practice and implementation in the relevant focus regions and fields of activities by means of selected case studies and with special consideration of government decentralisation and regional development as well as the principle of gender equality.

The purpose of the evaluation is to support lesson learning and identification of development factors with momentum for improving programmes and projects, especially with regard to their relevance and sustainability of results; further, to promote a discourse (focused on conflict management) and transfer of knowledge within the overall organisation and vis-à-vis cooperation partners; and finally, to provide the basis for deriving practical applications for programmatic, methodological, and structural issues of project and programme monitoring.

The evaluation shall address parties involved in operative, supportive, and monitoring activities in the sector, as well as those politically responsible. Given the considerable differences in approaches and terminology between "development cooperation" and "assistance to CEECs/NIS" in the sector and given the presently limited scope of the programmatic approach (also within development cooperation), a mutually fruitful discourse and, as for results, common understanding and action is expected.

Focus of the Evaluation

- The main focus of the evaluation is on the definition, application, and effectiveness (as steering tool) of sector-policy instruments, processes, and capacities, based on selected examples for case study, with special consideration of regional development efforts.
- The evaluation is intended to make visible, in terms of sustainability, approaches to, experience with, and potentials for enacting gender equality policies.
- A limitation to five field studies (2 in the area of assistance to CEECs/NIS and 3 in the area of development cooperation) shall be undertaken in consultation with the responsible desks/aid coordination offices according to programmatic criteria, above all taking into consideration activities where the programmatic priorities "decentralisation" and "regional development" are relevant and where the programme/project cycle already allows for deduction of conclusive results. The concrete selection of the five field studies shall take place after the desk study or, respectively, the identification mission.
- For selection of the three planned field studies in the area of development cooperation, the following projects are proposed: Uganda / South-western Towns Water and

Sanitation; Mozambique / PAARSS ; Cape Verde / Servicios autonomicos / Ribereita; Kenya / KWAHO; Guatemala / Xelagua;
In the area of assistance to CEECs/NIS, the following projects shall be evaluated within the framework of a field mission: Bosnia / Mrkonjic Grad and Albania / water supply Shkodra;
Projects within the co-financing scheme (e.g. Tanzania / Singida; Senegal / Caritas) shall be incorporated at least at the stage of the desk study and interviews in Austria.

- The standard evaluation criteria applicable are: assessment of the relevance, effectiveness, efficiency, impact (assessed on the basis of gender-disaggregated random samples), and sustainability of the interventions in question, including the monitoring and consultancy services for the sector.

Key Questions

a) Cross-cutting issues

- Poverty issue / quality of life / relevance: How are the results and effects of the interventions on the living and working conditions of the affected population to be judged? Is the selection of the focus regions and social distribution of stakeholders in line with the poverty focus? How concrete is the alignment between the interventions and national development planning and sectoral policies (or national poverty strategies / PRSP)?
- Access: How do development cooperation interventions change the (traditional) access to water, land, and vegetation as the basis for a livelihood, what obstacles are being overcome, what new obstacles are being created, for what type of users? What is the form of influence exerted on the (legal) regulations of access and disposition (at local, regional, and national level)? In how far is the impact of user charges and tariffs being reflected? How is access being changed by measures of privatisation or commercialisation? How are local or regional conflicts over access being dealt with?
- Impact: How are the (positive/negative) effects and long-term consequences of the interventions to be judged? At least some selective random samples (user survey) shall be used to assess not only the immediate effects of water supply on households and communities, but also the impact on the health and well-being of stakeholders.
- Protection of resources: How is the local or regional environmental situation being taken into consideration? What practical and administrative measures are proving useful in preserving the water quality, in managing local water resources sensitively and sustainably, in reducing waste material and waste water or, respectively, in avoiding wastage and contamination of natural resources?
- Gender: What approaches to gender-sensitive and gender-specific baseline studies and to a gender-disaggregated information system are there? To what extent is the integration, promotion, and equality of women being aimed at? To what extent is the gender-specific distribution of work, roles, and benefits being reflected upon systematically?
- Culture: To what extent are traditional problem-solving strategies being taken into consideration, how is the symbolic and spiritual side of handling natural resources, questions of legitimacy, and traditional authority being reflected? What cultural forms of expression are being used and promoted as instruments for transfer of information and awareness-raising or effecting a change of behaviour?

b) Management and technology

- How efficient is the management of water supply, distribution, and treatment or, respectively, further use/waste water disposal?
- To what extent are the built-up structures and capacities of water supply and sanitation self-sustained or designed to be institutionally and economically self-sustainable?
- Resolution of conflicts: How are the effects of water scarcity, especially the conflicts resulting thereof, being dealt with? What strategies for conflict prevention or resolution have been developed?
- Cost-benefit considerations / efficiency: What is the relation between expenditure and benefit (overall and for individual target groups)? What is the influence of the magnitude of interventions on sustainable results (economy of scale; investment vs. operational costs). In how far can replicability or model character of an intervention contribute to deriving a greater benefit from the resource input?
- How is truth in spending and cost transparency (monetary/non-monetary) being achieved (at household / provider / local community / district level) ?
- Technology: How well-aligned to local preconditions such as experience and expertise, capacities and purchasing power is the technical infrastructure and methodology employed?
- What are the key experiences and synergies at the intersections with other sectors (health, agriculture, small and medium-sized business, education)? Have approaches towards an integrated river basin management proven successful?

c) Development of decentralised capacities and institutions

- Management, planning, and control: What is the role of building appropriate capacities, structures, and institutions at the level of local/regional government administration or self-government by local beneficiaries and stakeholders?
- Governing interests and responsibility: To what extent is a balance being established between private (household) and public responsibilities (central/decentralised) for water supply and sanitation/waste water management? What is the role of private (economic) interest versus satisfaction of basic needs? What synergies are being achieved (e.g. private-public partnership, private sector participation)? What is the consumers' contribution to infrastructure and operation?
- Alignment of national, regional and local responsibilities: How is alignment of and intervention in overall national sectoral policies and decentralisation strategies being reconciled with the regional - both public and civil society - political levels?

d) Structural Issues of implementation and monitoring

- Programme development: How participatory (regarding stakeholders, Austrian and local implementers) is the conduct of programme development and recurrent progress reviews?
- Monitoring: How consistent and focused are the programmatic statements? What is the steering power of these instruments with regard to project development in situ? How relevant or applicable are they for the field of assistance to CEECs/NIS (and the

co-financing scheme)? How do headquarters and decentralised bodies of aid administration perform their control/monitoring functions and in what relationship to external consultancy functions?
- What is the quality offered by the specific backstopping structure of the water-sector consultants group with regard to programme design, monitoring, and (scientific) reflection on implementation processes, and what is the relation of this quality to expenditures? Are there any incompatibilities or role conflicts regarding planning, operative control, and appraisal?
- To what extent are sectoral policy orientations and interventions aligned at all levels with those of other sectors and donors (above all EU)? How is alignment with other departments, especially the department of agriculture, being achieved with a view to ensuring coherence of development policies?

Methodology

The evaluation shall be conducted as participatively and discoursively as possible and appropriately in the sense that beneficiaries, actors involved in operative tasks, and political stakeholders be actively involved in the study at the local level.

Based on a desk study on the existing programmatic framework and documentation on a selection of key projects in the sector (development cooperation, assistance to CEECs/NIS, multisector activities, co-financing scheme), the design of the subsequent evaluation missions, including questionnaires and guidelines for interviews shall be (further) developed and tested by means of an initial field or identification mission in one of the selected partner countries. From this, contracting of the local survey teams and detailed planning of further field studies shall be derived in consent with the evaluation division of the Department for Development Cooperation & Assistance to CEECs/NIS.

After each survey phase of the evaluation, the (interim) results shall be discussed with the major local stakeholders. The findings of the identification mission shall be discussed with headquarters, further proceedings being determined during this process. After termination of the field studies and respective analysis of findings, a draft report shall be presented and discussed with the desk officers and consultants responsible for the programme (central/decentralised structures). The feedback obtained during these consultations shall then be duly incorporated in the final report (without limitation of the independent view of the evaluators).

The following stakeholders shall be involved in the study:

- Population and/or beneficiaries in the areas concerned (random samples)
- Local project management, parnter organisations, experts, relevant NGOs
- Sector-relevant local and national public institutions and government authorities in the partner country
- Austrian project implementers and experts involved
- Major sector-relevant donors (local representatives)
- Bodies of the Austrian Development Cooperation (planning, aid coordination offices, desks, sector desk officers/consultants)

Evaluation Team

The evaluation shall be conducted by a team of external experts with complementary, documented knowledge and skills of the following type: specific technical skills in the sector "water supply and sanitation", skills in management and participatory organisational development, skills in programming, monitoring and evaluation of sector-specific development projects; prospective team members should further have a general knowledge of relevant issues of the present international debate and be able to prove competence in gender issues.

The team shall be supported in the respective priority countries by local experts and survey teams, who shall be instructed and prepared appropriately.

To ensure independence, team members, without fail, must not have any economic relations with the project implementers in question.

An agency or general contractor shall assume the overall responsibility for the conduct of the evaluation and shall sub-contract suitable experts. Respective CVs shall be presented to and consent be obtained from the Austrian Ministry for Foreign Affairs.

Timetable

Phase 1:	Preparation / discussion of ToR		March/April/May
	Finalisation of ToR / budget / approval		June /July
	Procurement (by tender process)		August / Sept.
Phase 2:	Fundamentals / desk study / design	3 x 3WD	October / Nov.
	identification mission and final design	4 x 6WD	
	interim report / alignment	3 x 1WD	
Phase 3:	Field studies 2 - 5	3 x 4 x 6WD	Nov. / Dec.
	(South-Eastern Europe / Central America / Africa)		
	data analysis / writing of draft report	4 x 2WD	
Phase 4:	Discussion of draft report / presentation of	2WD	January 2003
	final report / settlement of accounts	3WD	February

More detailed planning shall be worked out in collaboration with the general contractor.

Reporting:

A format for reporting is attached in the Appendix. Reports shall be written in English (with German executive summary) and shall be submitted as a paper copy plus in electronic form on data diskette.

Acceptance of the reports shall be by the Austrian Ministry for Foreign Affairs, Div. VII/6, after comments by the programme division, aid coordination offices, and country desks.

Structure of Cost Calculation:

1.) Item "professional fees": number of estimated working days (broken down per phase)
International/Austrian experts
Local experts + assistants for surveys

2.) Item "transport / travel expenses": international and local;
Fares and per diem rates [broken down in accordance with the Austrian by-law on travel expenses (Österreichische Reisegebührenverordnung - RGV), voucher-based settlement required];
four missions (South-Eastern Europe 1 mission) + 3 visits of Vienna headquarters

3.) Item "administration":
Communication and office expenses in the field (broken down, voucher-based settlement required)

4.) Item "contingency": 5%
(use of these funds only upon prior approval by Division VII/6 of the Austrian Ministry for Foreign Affairs)

5.) Grand total:

Appendices:

Sectoral policy statement by the Austrian Development Cooperation
List of programmes in implementation
Short descriptions of development projects
Format of evaluation report, evaluation standards in Austrian Development Cooperation
Further documents to be submitted after awarding of contract

Division VII/6 of the Department for Development Cooperation & Assistance to CEECs/NIS
Peter Kuthan
17 July 2002

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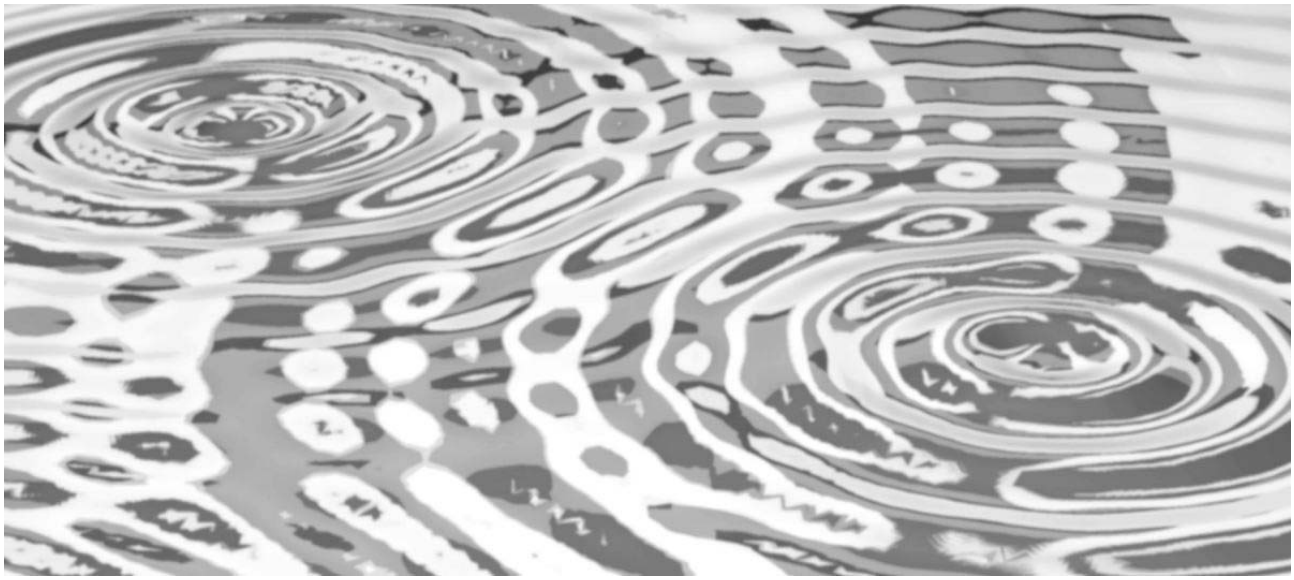
Annex 2:

Interim Report

Annex 1:	Terms of Reference
Annex 2:	**Interim Report**
Annex 3:	Explanation Pocket Voting/Transect Walk
Annex 4:	Präsentation des Rohberichtes

Österreichische
Entwicklungszusammenarbeit

Bundesministerium für auswärtige Angelegenheiten
Sektion VII, Entwicklungszusammenarbeit



Evaluation of the Austrian Water and Environmental Sanitation Sector

Interim Report

skat_consulting
Consultancy Services
for Development

December 2002

1 Introduction

The overall objectives of the Austrian Water and Environmental Sanitation Sector Evaluation are to identify factors for the improvement of projects and programmes and contribute to learning and knowledge sharing. This should consider overall organisation, and particularly the relevance and sustainability of results. The main focus of the evaluation will be on:

- The relevance of water and sanitation sector policy to Austrian Development Cooperation (ADC) policy and strategy, and to state of the art global learning and sector experiences;
- Sector policy and its implementation within respective programme regions and working fields, i.e. efficiency and effectiveness regarding achievement of set objectives;
- Definition, application and effectiveness of sector-policy instruments, processes and capacities, and
- Sustainability of projects with special consideration of decentralisation, regional development and gender aspects.

2. Purpose of the Interim Report

Based on the TOR and Skat Consulting's proposal/scope of work, the purpose of the Interim Report is twofold:

i.) to review and assess the preparation of the evaluation and results of the Identification Mission in Cape Verde, particularly in terms of process and approach, methodology, tools, schedule, logistics and collaboration with the Coordination Office; and

ii.) based on the above, to define the manner in which the evaluation should continue.

The results of the Identification Mission have been compiled in the Summary Report and will be described in detail in the Main Report.
The recommendations of this report will form the basis for discussion during the Vienna consultation and for the organisation of subsequent consultations/missions, questionnaires and guidelines for interviews.

3. Review and Assessment

3.1 Process and Approach

3.1.1 Preparation of the Evaluation and the Identification Mission

The TOR require an extensive 3 x 3 working day desk study, including a two-day consultation by one team member in Vienna . The purpose of the Vienna consultation is to meet BMaA sector representatives, to obtain an overview of the Austrian Water and Environmental Sanitation sector and its programmes and to prepare the Identification Mission to Cape Verde. The results of the Vienna consultation are compiled in a separate visit report.

While the overall sector documentation was provided in a timely and structured manner, this was not the case for the material for the Identification Mission. Much of this was submitted immediately prior to the field mission, and significant amounts of time were spent selecting information from a wealth of material, to the cost of the desk study itself. In addition, because most of the documents were either in German, Portuguese or French, language was an obstacle for the English-speaking team member. .

The entire preparation was performed on an extremely tight time schedule: tentative award of contract October 17, first consultation in Vienna October 30 and 31, mission in Cape Verde November8-14.

In view of these factors, the preparation could not be carried out to the originally planned extent. This situation called for a more pragmatic approach in the execution of the Identification Mission.

3.1.2 Identification Mission: Time Schedule, Logistics and Collaboration with the CV Coordination Office

Six working days were allocated for the consultation in Cape Verde. In view of this tight schedule prior to the mission a task list was provided to the Coordination Office (CO) with the aim of establishing a reliable basis for country sector, programme and project information, thus facilitating the data collection process. However, due to time constraints and lack of staffs' capacity in the programme and the projects (e.g. parallel external mission) this preparatory work was not provided to the mission. Therefore much time had to be spent collecting information and project documentation that was not easily available, and a number of important papers were handed over to the consultants during the last days of the mission.
Field visits and meetings were generally organized by the local team member in a satisfactory way, and the transportation provided by the CO was essential for mobility of the team.
Project visits and stakeholder consultations constituted the most important and fruitful sources of information to the mission. The assessment of social, gender and poverty issues was probably most affected by the specific limitations mentioned previously, since the understanding of these issues requires time-consuming participatory processes. Overall, the Identification Mission was able to collect sufficient information for the cross-country analysis, which will form the basis for meeting with the principal objectives of the evaluation. However, it was confirmed that the time-constrained country assessments could not bring about comprehensive country evaluations. It is important that the COs be informed accordingly.

3.2 Methodology

The TOR of the evaluation call for a participatory approach including all actors involved in the operational tasks, as well as political stakeholders.
It was assumed that based on the desk study of relevant documentation, initial discussions with BMaA, and the Identification Mission in a selected country, the format for the evaluation and the country assessments would be finalised. This would include the development of questionnaires and guidelines for interviews. In addition, it was planned to contract local survey teams to collect relevant data prior to the mission.

With the background described above (questionnaire not filled by CO in advance of the mission, overwhelming unstructured documentation, capacity limitations of programme staff, etc.) the methodology had to be pragmatically and flexibly adjusted. At the outset of the field mission, emphasis was placed on building a relationship with the responsible programme staff. Participation was facilitated through frequent dialogue and consultations, including discussion of preliminary findings. In the course of the evaluation process, the acceptance and readiness for participation reached a satisfactory level. It was possible to interview a reasonable cross-section of the various stakeholders. Hence, key findings could be verified with views from different perspectives.
Regarding the assessment of social, gender and poverty issues, structured exercises were conducted, both at the community and the CO level. In addition, "free village walk" observations were conducted by some team members. The results are not exhaustive but they give some indication of current trends.

4. Conclusions and Recommendations

In summary, valuable insights were gained for the achievement of principal evaluation objectives. The Identification Mission showed at the same time that the ideal situation, which the ToR of the evaluation presumed, cannot realistically be expected in a field situation, though improvements compared to CV should be possible. Additionally, the initial evaluation process rose expectations of CO staff for further substantial and comprehensive inputs for the country programme. However, these comprehensive expectations could not be met by the Identification Mission because of its different focus and time limitations.
In order to optimise the performance of the evaluation, to clarify expectations and to avoid frustrations, adjustments and clarifications are recommended at the following three levels:

- Improving preparation in advance of missions, both by the consultant (requiring prompt receipt of programme documents in support of desk study) and in the programmes;

- Increasing flexibility of evaluation methodology and process to adjust to individual programme situations; and
- Limitating evaluation scope to avoid unfeasible expectations and frustrations at country level.

In the following, recommendations are presented for adjustments at these three levels.

4.1 Mission preparation

Sufficient time should be allocated both at the head quarters and country level for the mission preparation so that the following aspects can be adequately attended to:

- Structured programme documentation including:
    1. Preparing a table of contents which would also contain brief comments regarding importance of documents; and distinguishing between documents dealing with the country programme and those dealing with projects,
    2. Providing an overview of the country programme and past, current and future projects, including a geographical map; and
    3. Preparing separate log-frames (c.f. annex 1) for the country programme as well as for the various projects.
- Preparation at the country level:

Requests for preparations at the country level are listed up in a separate checklist (c.f. annex 2). The local/regional evaluation team (ET) member will arrive four days in advance of the external ET members in order to follow up the preparation work and/or elaborate a more specific tentative mission programme. The employment of local survey teams is not considered necessary in view of the limited time allocated for country level assessments.

4.2 Evaluation Methodology

The evaluation methodology must be composed of essential elements and tools that can be flexibly applied in response to existing situations in the programmes and projects. Some of the principal elements and tools are as follows:

- Launching meeting with the purpose of obtaining an overview of the programme and projects as well as of the stakeholders involved, finalisation of mission programme (including people to be met), confidence-building. An outline of a typical agenda for the launching meeting is shown in annex 3.
- Participatory SWOT analysis with key stakeholders in the programme and in the projects, who are selected to be representative, and included in the evaluation process. This analysis may be conducted separately to the launching meeting but at an early date in the mission.
- "Community day": One, or preferably two, four-hour time blocks have to be allocated for meeting a representative cross-section of the community. During this meeting, social and gender issues will be assessed in a structured manner (assessment tools have been prepared for this exercise). Some team members will conduct "free village walk" observations in parallel with this exercise.
- Interviews will be conducted in a semi-structured manner, tailored to the positions of stakeholders. Minutes of each interview will be kept for consideration during the assessment exercise.
- At least one and half days must be reserved for pre-analysis of the country assessment and preparation of the debriefing.
- A sustainability assessment tool (c.f. annex 4) has been developed for analysis by the ET and for estimation by the project team. This tool will allow for a quick overview and cross analysis of the different country programmes.
- Systematized evaluation processes have been developed for the assessment of the programmes' relevance, effectiveness and efficiency (e.g. relevance: reconstruction of logical framework including

assessment of changes regarding assumptions; or efficiency: assessment of project management and organisation, etc.)

- A time slot of three hours should be allocated for the debriefing. The aim of the debriefing is twofold: i.) to inform on the results of the country evaluation pre-analysis and ii.) to review these results with a competent audience.

4.3 Evaluation limitations

It is not surprising that the CO staff and their partners are expecting substantial inputs for their programmes after having been involved in the evaluation process. However, the limited time frame and defined focus of the evaluation do not allow for a comprehensive country evaluation. The following recommendations are made to avoid unnecessary frustrations:

- CO staff and their partners should be well informed by their headquarters about the evaluation objectives and limitations of inputs for the country programme;
- The need for country evaluations may be assessed by the current sector evaluation and recommendations may be developed accordingly; and
- The learning momentum created at country level by the sector evaluation should be realized as an opportunity for additional learning and improvements of the country programmes. The already recommended joint workshop at the end of the evaluation seems to be an appropriate means to round up this learning process.

Interim Report Annex 1

Evaluation of the Austrian Water and Environmental Sanitation Sector

Log Frame

Narrative Summary	Objectively verifiable Indicators	Means of Verification	Assumptions
Goal: (to contribute)			
Objectives: (to achieve)			
Outputs: (outputs 1 to...) (to produce)			
Activities: (regarding outputs 1 to ...) (to do)			
Inputs (to provide)			

Interim Report Annex 2

Evaluation of the Austrian Water and Sanitation Sector

Checklist for the Preparation of the Country Consultation

Preparatory Works:
The ToR call for a fully participatory approach. Accordingly the Evaluation Team expects the following preparatory tasks:

Country and Sector Information:
Compilation of important Information regarding the socio-cultural, economic and political environment as well as information about the (possibly existing) Sector Policy and Strategy (incl. objectives) and the regulatory framework.

Stakeholder Map:
Development of an overview of the institutional landscape with all stakeholders including their roles and functions (particularly regarding decision-making) during the planning, construction and the operation and maintenance phases.

Programme and Project Profiles und Log Frames:
The profiles and the log frames of all programmes and projects should be updated in English language.

Survey Data:
Compilation of data:
Project specific quantifiable data have to be compiled regarding population figures including growth rates, coverage costs (efficiency) investments, maintenance (sustainability), etc.

For the individual project phases (i.e. separate for planning, implementation operation and maintenance phases) the following questions have to be answered in a structured way:

- Initiator (evolution)
- Decision making processes and decision makers regarding conceptual and institutional framework, choice of technology, organization, O&M and Resources.
- Roles and responsibilities of the actors involved (project stakeholder map)
- Priority or importance of Water supply and environmental sanitation respectively
- Priority or importance of training
- Degree of external support
- Costs, financing concept and flows
- Regulatory framework
- Important events (milestones) and problems
- Reliability of the supply systems: Frequency and duration of breakages and reasons
- Water consumption.

Preparation and Mission Schedule
Prior to the mission a realistic mission schedule should be prepared. The following programme elements have to be considered:

- ❑ Launching and de-briefing meetings
- ❑ SWOT-analysis (half day)
- ❑ Project visits including meetings with key stakeholders (provide also justification of your selection)
- ❑ One to two community encounters (half day in village)

- Meetings / interviews with key stakeholders of different levels
- One and a half day for analysis of findings and preparation of debriefing

Preparatory Work by Local/Regional Team Member
The local evaluation team member will arrive in the project four days prior to the arrival of the international team and official launching of the country evaluation. He will supervise and support the preparation work to be implemented by the Country Office as outlined in this checklist.

SWOT Analysis (Successes, Weaknesses, Opportunities and Threats)**:**
The evaluation team is convinced that considerable knowledge regarding strengths and weaknesses of the projects exist. The evaluation team would like to establish this knowledge in an unbiased way and therefore would like to ask the local project teams to participate in a SWOT analysis of the entire programme and the individual projects. In doing this all-critical aspects such as social, institutional economical technical, economical related to sustainability should be assessed.

Interim Report Annex 3

Evaluation of the Austrian Water and Environmental Sanitation Sector

Agenda for Launching Meeting

1. **Introduction**
   - **Country office staff**
   - **Evaluation team**
   - **Objective and agenda of launching meeting**
2. **Objective of evaluation and expectations by country office staff**
3. **Overview country activities**
   - **Country programme**
   - **Projects**
4. **Stakeholder map**
5. **Mission programme (including the following milestones:)**
   - **SWOT analysis**
   - **Project visits (including one to two community encounters)**
   - **People and/or organizations to be met**
   - **Debriefing meeting**
6. **Logistics**
   - **Transport**
   - **Event. accommodation while traveling**
7. **A.o.B.**

Filled in by:	
Function:	
Country:	
Date:	

Evaluation of the Austrian Water and Environmental Sanitation Sector

Sustainability Assessment Tool

It is commonly accepted that water and sanitation programmes leading to sustainable solutions are reliant on a comprehensive and holistic understanding of the socio-cultural and natural environments in which the programme resides. Sustainable solutions therefore require a balanced development strategy that considers the following related and interacting fields - **social; institutional; economic; technological; rules & regulations; ecological.**

These six guiding fields are presented here as an aide-memoire for the assessment of programme components which have a critical influence on the sustainability of programme outputs. For each of the six main headings, the first column of the table lists the factors that are critical for the achievement of sustainability (based on the ADC sector policy and current sector learning). Against each criterion, the project team should assess the degree of sustainability already achieved and enter the results in the second column. Key achievements should be stated against the provided evaluation criteria. In addition, a percentile value for the degree of sustainability reached should be approximated - with respect to project planning as well as to actual achievements.

Factors determining sustainability (sustainability criteria)	*Assessment of degree of sustainability already achieved*
Social Field Motivation and participation of all stakeholders involved are preconditions to achieve the essential ownership, which in turn facilitates sustainable utilization of the programme's outputs . ❑ Human dignity, quality of life and environmental security at household level should be at the centre of the applied approach ❑ Solutions should be responsive and accountable to needs/demands and tailored to the prevailing social concerns of the users. ❑ Understanding and agreement on the project objectives has to be negotiated by all stakeholders involved. ❑ Decisions (based on informed choices) should be reached through consultations with all stakeholders affected by the decision. ❑ Opportunities should be realised for improved equity and prevention of social tensions. ❑ Solutions should have no negative effects for any members of the community, irrespective of sex, class, race, religion, age or other distinction. Solutions and actions should be as beneficial for women as for men of all socio-economic status and should not negatively affect prevailing gender relations.	**Degree of compliance with criteria in project planning:**.....**%** **Degree of achieving the criteria in project implementation:**.....**%**

Institutional Field In line with basic principles of good governance, efficient and reliable services can only be achieved if the tasks are optimally and transparently shared between all partners involved. ❑ The principal of subsidiarity should be followed, e.g. management at the lowest possible institutional level from the outset of the project, therefore.... ❑ the organisational structure should aim at decentralisation and remain flat, lean and accountable. ❑ Existing functional structures should be utilized as far as possible. ❑ An optimal division of tasks has to be negotiated between users, the public sector, the private sector and NGOs (according to prevailing and potential capacities).	**Degree of compliance with criteria in project planning:**.....**%** **Degree of achieving the criteria in project implementation:**.....**%**
Economic Field Water and waste should be considered as resources. Their management should be holistic, integrating the following considerations; water resources, nutrient flows and waste management processes. ❑ Investment and running costs should be optimally balanced through negotiation with the stakeholders concerned. ❑ Priority may be given to optimise the efficiency of cost recovery for system operation (and possibly system depreciation/renewal), taking into account the ability and willingness to pay (ATP & WTP) of those responsible for running the system in an autonomous fashion. ❑ The economic opportunities of waste recovery (and use) should be harnessed. ❑ Incentives for the provision and consumption of services and facilities should be consistent with the overall goals, objectives and benefits.	**Degree of compliance with criteria in project planning:**.....**%** **Degree of achieving the criteria in project implementation:**.....**%**
Technological Field Technologies should be tailored to match with prevailing social, institutional, economic and environmental concerns and should meet with the prevailing rules and regulations. Solutions should be of high and durable quality. ❑ Prevailing (traditional) as well as innovative technologies should be assessed for their appropriateness in the given context. ❑ Based on this assessment, a set of technical options should be developed that includes a full discussion of economical and institutional implications associated with each option. These options should be presented for selection to the decision makers. ❑ Engineering designs should be simple, user-friendly and easy to maintain. ❑ Materials and build quality should always meet high and durable standards. ❑ In cases where new or unknown technologies are applied, the allocation of risk burden must be responsibly-managed by the implementing agencies (avoidance of experiments on the backs of users). ❑ The numerous and ongoing technology developments/optimisations at global level should be made accessible and examined for their potential application. ❑ Household and community-level solutions will stand a better chance of being used in a sustainable manner.	**Degree of compliance with criteria in project planning:**.....**%** **Degree of achieving the criteria in project implementation:**.....**%**

Field of Rules, Regulations, Knowledge and Skills An enabling legal framework is decisive so that the key ingredients (which are compiled in this chapter) have the desired effect. Additionally, existing gaps in know how, skills and capacities have to be filled with essential training, combined with institution- and capacity building. ❑ Newly assigned tasks have to be balanced with the required professional and legal competence. ❑ The rights of consumers and providers should be balanced with responsibilities to a wider human community and environment. ❑ Existing skills and knowledge should be utilized as far as this is possible. ❑ Continued and tailored capacity and institution building has to be provided according to the stakeholders needs in order to consolidate the required social and institutional changes. ❑ An essential and sustained knowledge management system should be established to support and enhance existing capacities.	**Degree of compliance with criteria in project planning:**.....**%** **Degree of achieving the criteria in project implementation:**.....**%**
Ecological Field An intact ecology forms the basis for sustainability at every level. Stress on the ecology originates from different sources - human activities are invariably a predominant cause for concern. The domain in which environmental sanitation problems are resolved should be kept to the minimum practicable size (household, community, river basin, town, district, city) and wastes should be diluted as little as possible. ❑ Water should be considered in the context of its influence over livelihoods and in all of its competitive uses (drinking, irrigation etc.) ❑ Wastewater should be managed as close as possible to its source. ❑ Exports of wastewater should be minimised to promote efficiency and reduce the spread of pollution. ❑ Water should be minimally used to transport waste. (Eco-sanitation should be applied where appropriate). ❑ Wastewater should be recycled and added to the water budget	**Degree of compliance with criteria in project planning:**.....**%** **Degree of achieving the criteria in project implementation:**.....**%**

Interim Report Annex 5

Evaluation of the Austrian Water and Environmental Sanitation Sector

Agenda for the Debriefing Meeting

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1. Introduction

- Evaluation: Background and Objectives
- Methodology
- Coverage / Limitations
- Reporting Structure

2. Preliminary Summary of Findings

- Mission Programme
- Overall Approach
- Interventions in the National Context
- Project no. 1
- Project no. 2
- Project no. 3

3. Preliminary Conclusions and Recommendations

(regarding some key issues)

- Gender and Poverty
- Decentralization / Management
- Technology
- Other Key Issues

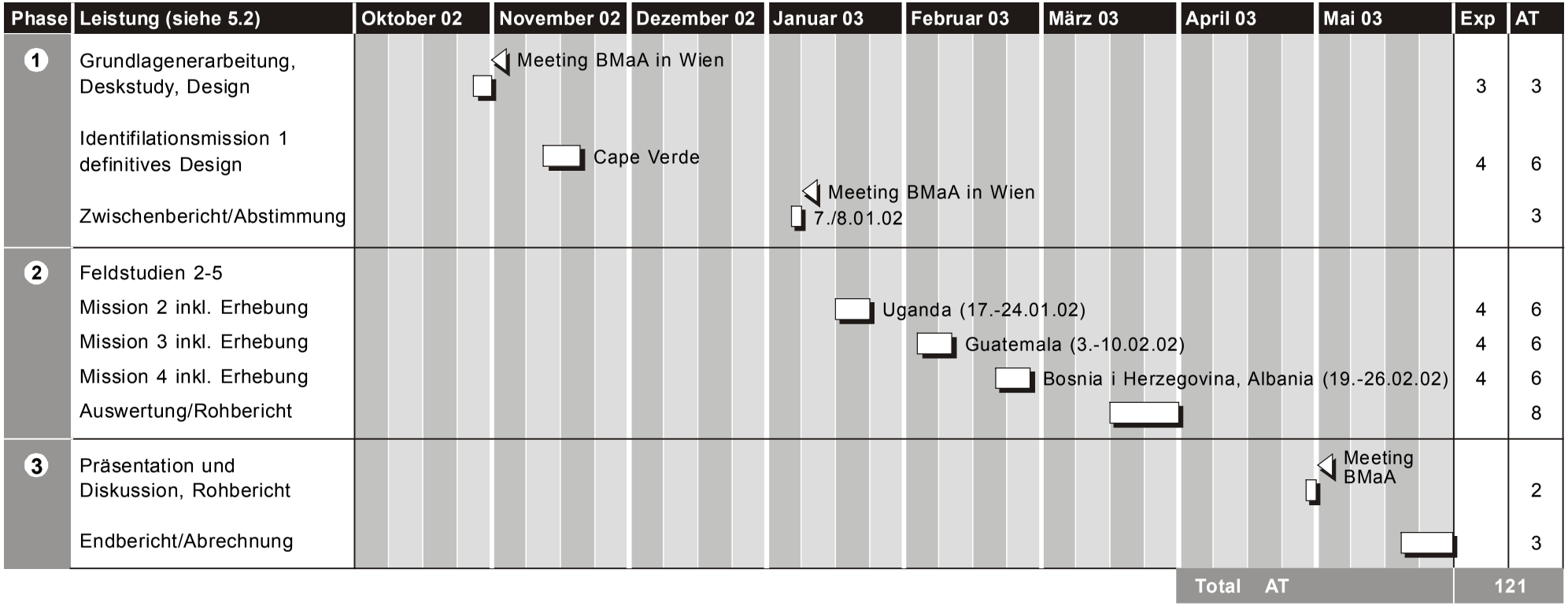
4. Preliminary Overall Assessment

- Relevance
- Effectiveness
- Efficiency

5. Feedback

Evaluierung der österreichischen EZA & OZA im Wasser-Sektor

Revidierter Zeitplan



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Annex 3:

Explanation Pocket Voting/Transect Walk

Annex 1:	Terms of Reference
Annex 2:	Interim Report
Annex 3:	**Explanation Pocket Voting/Transect Walk**
Annex 4:	Präsentation des Rohberichtes

Explanation of Pocket Voting and Transect Walk Exercises

1. Pocket voting

Topics addressed by exercise:
Decision making
Legal ownership
Division of paid/unpaid labour

Who takes part: Project staff and beneficiaries

Purpose:

- to ascertain patterns and changes in behaviour, decision-making, choices and so forth. This is very handy particularly when the subject being assessed is sensitive and people are inhibited about stating their views publicly. Opinions of different groups (users, male and female and project staff, male and female) are recorded by using different coloured voting markers (pieces of paper in this case) for the different groups.

Process:

- Set up and conduct Pocket Voting exercise, allowing for anonymity to avoid influence, to assess participation in decision making.
- Affix envelopes to back side of white board (or other flat surface that can be positioned away from direct view of participants to offer privacy to individual voters) with the following categories as headings:
- women project staff, men project staff, women beneficiaries and men beneficiaries
- Give each participant a set of paper markers corresponding with their sex & function in the programme (project staff/beneficiary). Four different groups = four different colours of paper.
- Ask participants to vote one by one, placing their markers (coloured pieces of paper) into the envelope that corresponds with their answer to the questions.
- After each round of voting on a question, empty the envelope contents onto the pre-prepared matrix, by sex and by project staff/beneficiary on the floor (or other place in full view of all participants) to show the range of answers to participants.
- Record and discuss the outcomes of each question with the group.

Voting Questions:

1. Who was informed about the details of the project?
2. Who was involved in decision making in this project?
3. Who decided abut technology choice (before a Management Committee was set up?)
4. Who owns the project (be specific about parts of the project - infrastructure, land, other inputs - list hem individually)?
   (given more time to conduct this exercise, a whole range of other questions would normally be included)

Post-voting discussion questions:

- What differences can we see in the way the different groups voted?
- What do the results on the matrix tell about the involvement of different stakeholders in the decision making process?
- "How is this the case?" - i.e. What is being done to involve women?
- Address the issue of "legal ownership" here. Who owns what? Get detail from participants.
- How is the decision making process steered/conducted? Are participatory methods like this one used?
- How does communication between the different levels of stakeholders take place? Who communicates with whom?
- At what intervals are meetings held? Regularly or not?
- Who goes to these meetings?
- Is there sharing of functions and decision-making?

- Do more or less women now attend community meetings?
- Do more or less women now speak out at community meetings?

Facilitate the discussion to jointly review the experiences of the people involved and jointly interpret the outcomes of the voting.

2. Transect walk

Purpose:

- to determine to what extent a well-sustained water and sanitation service is present in the community
- to cross-check some of the information provided by key informant interviews and group discussions

Process:

- The team makes systemic observations while walking from the source(s) of the community water system(s) along the main works to selected delivery points. This activitiy is carried out with a group of men and women representing the water and sanitation committee and one each from the poor, rich and, if needed, a medium-income neighborhood.
- During the walk, the study team members observe the quality of installation (both water and sanitation facilities) and discuss their observations with the community members, recording the findings. Households in the vicinity are questioned on the maintenance (presence and regularity), scope and nature of use, and conflicting demands. Assessment can be done by using a checklist on the quality of construction, operations and maintenance and use of household latrines.

Annex 4:

Präsentation des Rohberichtes

Annex 1:	Terms of Reference
Annex 2:	Interim Report
Annex 3:	Explanation Pocket Voting/Transect Walk
Annex 4:	**Präsentation des Rohberichtes**