SECTOR ORIENTATION REPORT

EAST AFRICA AND INDIAN OCEAN

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A programme of the ACP Group and the European Commission for the promotion of investment

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FOREWORD

In February 2004, *Economisti Associati* (Italy) submitted a comprehensive report to PRIMS/CDE identifying the key growth sectors and sub-sectors which will form the basis of Pro€Invest's plan of action in the East Africa and Indian Ocean regions over 2004-2008.

The following document, edited by PRIMS/CDE, is restricted to the main text of *Economisti Associati*'s report for the purpose of a wider distribution and publication on Pro€Invest's website.

The document expresses the views of the consultants and does not necessarily represent the views of PRIMS/CDE.

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EXCHANGE RATES USED ($/€)

Year 2003: € 1 = US$ 1.13116
Year 2002: € 1 = US$ 0.945574
Year 2001: € 1 = US$ 0.895630
Year 2000: € 1 = US$ 0.923613

EXECUTIVE SUMMARY

1. BACKGROUND AND OBJECTIVES

This Sector Orientation Report was prepared within the framework of the Pro€Invest program. The main objective was to provide a strategic management and information tool to the Pro€Invest Implementation Service (PRIMS) for the identification and planning of future actions in the Sector Support area.

This report covers a broad spectrum of activities in agriculture, industry and services and includes the selection, ranking and detailed analysis of 10 target sectors. The analysis encompasses 13 countries across the East Africa and Indian Ocean (EAIO) region, as illustrated in the figure below.

East Africa & Indian Ocean

- **Comoros**
- **Djibouti**
- **Eritrea**
- **Ethiopia**
- **Kenya**
- **Madagascar**
- **Mauritius**
- **Rwanda**
- **Seychelles**
- **Somalia**
- **Sudan**
- **Tanzania**
- **Uganda**

This report was prepared within the scope of EC private sector support initiatives in ACP countries and makes references to the EC development policy in EAIO countries and more specifically to EC Cooperation Agreements. The report also refers to policy agenda themes in EAIO countries and regional organizations or initiatives (COMESA, IOC, EAC, IGAD, ECA, NEPAD).

2. METHODOLOGY

This report was prepared on the basis of a four-step methodology.

Step 1. The first step involved the ***scanning*** of a certain number of sectors, based on desk work. This involved *inter alia*:

- the review of economic and sector studies produced by national and international organizations;
- the analysis of production and trade statistics; and
- the review of main policy documents (such as EU Cooperation Agreements, NEPAD policy papers, etc.).

This part of the analysis was oriented by three main guiding principles, namely:

- sector definition was operationally oriented, with the aim of identifying meaningful "lines of business", following a production chain or cluster logic;
- in order to be retained for the analysis, a sector had to be of relevance at the regional level, i.e. had to be of some importance in at least two or three EAIO countries;
- the analysis was not confined to traditional, "productive" sectors but was extended to service activities (with particular emphasis on more innovative activities) and to sectors offering opportunities for various forms of Public Private Partnership (PPP).

Step 2. The second step involved the ***assessment*** of the sectors scanned and their ***ranking*** based on a set of criteria incorporating information at both sector and country levels, namely:

- <u>sector assessment criteria</u>, reflecting the strengths and weaknesses of each sector in each country analyzed;
- <u>country assessment criteria</u>, applied as a sort of "filter" to the sector ranking, to reflect the overall attractiveness of each sector at the country and regional level.

Of the 17 sectors scanned during Step 1, 10 were retained for further analysis (the "target" sectors). The results of the sector assessment exercise are provided in the table below.

Target Sectors	Other Sectors Scanned
• Public Utilities • Transport Infrastructure and Services • Tourism • Information & Communication Technology • Floriculture • Fishing & Aquaculture • High Value Agriculture • Garments & Textiles • Medium Scale Mining • Leather & Leather Goods	• Traditional Tropical Products • Vegetables • Mechanical Engineering and Metal Working • Dairy Products • Consumer Goods for the Domestic Market (other than dairy) • Packaging & Printing • Consulting and Technical services

Step 3. The third step consisted of a ***detailed analysis*** of the "target" sectors, largely based on interviews in EU and EAIO with operators and other relevant players (banks, business associations, etc.) and complemented with sector specialists' advice. During fieldwork in the EAIO over 180 interviews were conducted in six countries (Ethiopia, Kenya, Madagascar, Mauritius, Tanzania and Uganda) plus some work in South Africa. During fieldwork in the EU over 40 interviews were conducted in eight countries (Belgium, Luxembourg, the Netherlands, Germany, Italy, France, United Kingdom and Sweden). The detailed analysis of target sectors covered:

- main trends in domestic and international demand;
- market structure and distribution channels;
- operating environment and policy framework;
- nature of investment opportunities.

Step 4. Finally, the main findings of this report were presented at a Regional Consultation Meeting, attended by representatives of major regional entities and intermediary organizations from EAIO countries. The Meeting was held in Dar es Salaam in October 2003 and resulted in a general consensus on the recommended sector orientations.

3. SUMMARY RESULTS

The key results for the 10 “target” sectors are summarized in the table below. For each sector the table provides a summary presentation of the key features and rationale for selection as well as an indication of the main investment opportunities identified.

Sector	Key Features and Rationale for Selection	Main Investment Opportunities
Public Utilities	Public utilities (especially power) are a crucially important sector, whose undeveloped state is a severe constraint to development in EAIO. Government authorities are increasingly open to forms of PPP (concessions, management contracts, etc) and EU operators could play a significant role.	• establishment of independent power generation plants • management and rehabilitation of existing power generation plants & distribution networks • management and rehabilitation of water & sewage systems in major urban centers
Transport Infrastructure and Services	Transport is a crucially important sector in the EAIO region and improvements in the current situation are essential to support economic growth. As in the case of public utilities, there are significant opportunities for PPP and an increasing number of EU operators appear interested in tapping this potential.	• management and rehabilitation of railways & maritime ports • airport management and provision of handling services • construction & management of toll roads in selected areas • establishment of inland dry ports in selected locations
Tourism	Tourism is the largest foreign earner in the EAIO region (€ 2.3 billion). There is an untapped potential in several countries and a positive trend in demand but also some problems (image, infrastructure) that need to be addressed. EU direct presence is significant, also in connection with very important EU tourist flows.	• construction and management of high quality hotels/tourist villages in selected locations • establishment or modernization of upscale lodges and tented camps • establishment of safari, eco-tourism or adventure tour operations
Information and Communication Technology	ICT is an emerging sector, with good growth opportunities in certain EAIO countries. EU presence is still limited but there is a potential for strengthening relations and commercial ties.	• establishment of call enters and other IT-enabled operations • establishment of multi purpose tele-centers
Floriculture	Floriculture is a recent success story in EAIO (exports at around € 250 million), with further potential for growth in certain countries. The EU is a privileged partner and European direct presence in the region is already significant.	• expansion of acreage under cultivation • upgrading & diversification of product range and distribution channels • establishment of small manufacturing operations for agricultural inputs and implements.
Fishing and Aquaculture	The sector is a major foreign exchange earner in the EAIO region (exports at around € 700 million). The potential for growth is significant but this is coupled with restructuring needs in certain segments. The EU is a privileged trading partner and European operators are already present in the region.	• launch of new aquaculture operations (prawns) • expansion of fish processing capacity • establishment of small manufacturing and service activities ancillary to fishery
High Value Agriculture	A composite sector (spices, essential oils, organic products, cashew nuts) accounting for significant foreign exchange earnings in several EAIO countries (some € 450 – 500 million). EU countries are a major destination market and EU operators could be involved in further expansion of activities.	• upgrading of cashew nut processing capacity • expansion of acreage for organic products and vanilla • upgrading of technology in essential oils

Garments and Textiles	Garments and textiles are the second largest exporter in the EAIO region (some € 1.5 billion). In some countries the sector is currently facing major challenges, with consequent need for restructuring. EU countries are a major outlet and can also play a role in supporting restructuring.	• vertical integration and/or product range diversification & upgrading (Mauritius) • establishment or expansion of labor intensive clothing operations aimed at the AGOA market (other countries) • modernization of textiles & garments plants in connection with privatization
Leather& Leather Goods	The leather industry is a significant foreign exchange earner for certain countries (total exports around € 180 million). Growth is partly constrained by inadequate technology and problems with quality but interest in EU business circles is on the rise.	• rehabilitation and modernization of existing tanneries • establishment of green field small sized tanneries • establishment of labor intensive shoemaking and leather garments operations aimed at the AGOA market
Medium Scale Mining	A composite sector, including ornamental stones and gold mining. Current levels of activity are still limited but there is a potential for further growth,and this is reflected in growing interest among EU operators.	• establishment of new quarrying operations for niche ornamental stones • establishment of new processing plants for slabs and tiles for export and/or domestic markets • establishment of small gold processing operations

MAIN TEXT - OVERVIEW

1. INTRODUCTION

This Sector Orientation Report was prepared within the framework of Pro€Invest, a program of the Group of ACP States and the European Commission (EC) for the promotion of investment and technology transfer. Financed by the European Development Fund (EDF), the Pro€Invest program is managed by the Pro€Invest Implementation Service (PRIMS), established within the Center for the Development of Enterprise (CDE).

As indicated in the Terms of Reference (TOR), the main objective of this report is to provide a strategic management and information tool to PRIMS for the identification and planning of future Pro€Invest actions.This involved the analysis of a broad spectrum of activities in agriculture, industry and services across 13 countries across the East Africa and Indian Ocean (EAIO) region, with the ensuing identification of 10 “target” sectors for Pro€Invest activities.

As all other components of the Pro€Invest program, this report was prepared taking into account the broader context of the EC development policy in ACP countries and, more specifically, of EC cooperation agreements. In this context, special attention was paid to the opportunities offered by the Economic Partnership Agreements (EPA) to be negotiated with EAIO countries and whose objective is to strengthen economic relations with the EU, deepen regional integration, and increase market access for EU companies. In a similar vein, whenever relevant, the report takes into account the impact of sector specific agreements between EU and EAIO countries, such as the new generation of fishing agreements.

This report also takes account of the main themes in the policy agenda of EAIO countries and regional organizations or initiatives, such as COMESA, IOC, EAC, IGAD, ECA and NEPAD. In particular, the high priority accorded by NEPAD to build and improve infrastructure networks in energy, water, transportation and telecommunications, is duly reflected in the analysis.

The report is structured as follows:

- the remainder of this **Overview** summarizes the methodology and overall approach (Section 2), and presents the main results of the target sector identification exercise (Section 3);
- the detailed results of sector analyses are presented in a series of **Technical Summaries** covering the 10 “target” sectors.

This report is the result of extensive interactions with PRIMS and other relevant counterparts, including EC services, major regional bodies and EAIO intermediary organizations. This report incorporates the comments and suggestions formulated by these entities on various occasions.

2. METHODOLOGY

2.1 Methodology

The methodology was initially discussed with PRIMS during a Briefing Workshop held in January 2003 and then refined at a Coordination Workshop held in February 2003. As a result of these meetings, a full fledged methodology was presented in the Inception Report for Phase 1 submitted on March 5, 2003. The methodology includes four main steps which are summarized below.

Step 1. The first step consisted of the ***scanning*** of a certain number of sectors, based on desk work. This involved *inter alia*:

- the review of economic and sector studies produced by national and international organizations;
- the analysis of production and trade statistics; and
- the review of main policy documents (such as EU Cooperation Agreements, NEPAD policy papers, etc.).

This part of the analysis involved the scanning of 17 sectors.

Step 2. The second step involved the ***assessment*** of the sectors scanned and their ***ranking*** based on a set of criteria incorporating information at both sector and country levels, namely:

- sector assessment criteria, reflecting the strengths and weaknesses of each sector in each country analyzed;
- country assessment criteria, applied as a sort of "filter" to the sector ranking, to reflect the overall attractiveness of each sector at the country and regional level.

As a result of this exercise, 10 of the 17 sectors scanned during Step 1 were retained for further analysis (the "target sectors").

Step 3. The third step consisted of a ***detailed analysis*** of the target sectors, largely based on interviews in EU and EAIO with operators and other relevant players (banks, business associations, etc.) and complemented with sector specialists' advice. The analysis covered:

- main trends in domestic and international demand;
- market structure and distribution channels;
- operating environment and policy framework;
- nature of investment opportunities.

Step 4. Finally, the main findings were presented at a Regional Consultation Meeting, attended by regional bodies and intermediary organizations from EAIO countries. The Meeting was held in Dar es Salaam in October 2003 and participants included major regional organizations (COMESA, EAC, IOC, ECA) and over 20 intermediary organizations from 12 East African and Indian Ocean countries. As a result of this Meeting, a general consensus emerged on the sector orientations resulting from the analysis.

2.2 Approach in Sector Definition and Selection

The sectors analyzed in this report were defined and selected based on several guiding principles, namely:

- sectors retained for the analysis had to be ***relevant at the regional level*** and not just in one or two EAIO countries. The requirement of regional relevance is an obvious implication of the fact that the Pro€Invest program is intended to provide sector support at the regional level and not in individual countries;

- the sector selection process was guided by an ***imaginative approach*** and looked beyond the traditional "productive" sectors. The need to adopt an imaginative approach in sector selection was clearly spelled out by Europe Aid representatives during the Briefing Workshop in January 2003. This is also in line with the Cotonou Agreement, which explicitly stated that "non traditional" sectors, such as ICT and transport, should receive particular attention. This led to the analysis of opportunities offered both by the service sector (namely, information technology and related activities) and by various forms of Public Private Partnership (PPP) in infrastructure and public utilities;
- given the nature of Pro€Invest, the sectors identified had to offer some ***investment and/or partnership opportunities for EU operators***. In turn, this could result from an already significant EU presence (in terms of trade flows and/or investment) and/or from a realistic assessment of sector potential. Needless to say, the opportunities offered to EU businesses must go hand in hand with the ***needs and opportunities of EAIO countries***, as expressed by operators and relevant institutions;
- finally, the sectors retained for the analysis had to offer ***concrete opportunities for the implementation of Pro€Invest initiatives***. This means, *inter alia*, that sectors had to be "defined" in a way that would allow to reach the critical mass (in terms of participating entities) required for the organization of certain events.

2.3 Operating Modalities and Sources of Information

This report was prepared based on a variety of sources. Of particular importance is the information collected during ***field work*** carried out both in EAIO countries and in the EU. In particular:

- fieldwork in the EAIO region covered six countries (Ethiopia, Kenya, Madagascar, Mauritius, Tanzania and Uganda) and involved a total of over 180 interviews with enterprises active in various sectors, intermediary organizations at the sector and general level, and other relevant counterparts (commercial banks, donors & development agencies, consultants, etc.). Some additional field work was conducted in South Africa, in connection with the participation in the African Investment Forum held in Johannesburg in April 2003;
- fieldwork in the EU covered eight countries (Belgium, Luxembourg, the Netherlands, Germany, Italy, France, United Kingdom and Sweden) and involved a total of over 40 interviews with companies, business associations, financial institutions as well as meetings with relevant EC officials.

Elements derived from fieldwork were complemented with information derived from a variety of ***secondary sources***, ranging from country profiles to sector studies to web sites of business associations or individual companies.

3. KEY RESULTS

3.1 Target Sectors

The 10 "target" sectors identified as primary potential beneficiaries of support under the Pro€Invest program include:

- public utilities, including power generation and distribution as well as water supply & sewage;
- transport infrastructure and services, comprising road transport, railways, and maritime ports & airports;
- tourism, which covers accommodation and related activities in all market segments (resort, safari, eco-tourism, etc);
- information and communication technologies, including both IT and IT-enabled service activities (call centers, remote bookkeeping, etc.);
- floriculture, which includes cut flowers and ornamental plants;
- fishing and aquaculture, including freshwater, coastal and high seas fishing as well as aquaculture operations;
- high value agricultural products, a "composite" sector including essential oils, spices, organic agriculture and cashew nuts;
- garments and textiles;
- leather and leather products, including the whole *filière*, from hides & skins to finished leather products;
- medium scale mining, which includes gold mining and ornamental stones.

A detailed analysis of each of the above target sectors is provided in the Technical Summaries that constitute the core of this report. A summary presentation of the key findings is provided in Table 1 below.

Table 1 Target Sectors - Key Results

Rank	Sector	Key Features and Rationale for Selection
1	***Public Utilities***	Public utilities (especially power) are a crucially important sector, whose undeveloped state is a severe constraint to development in EAIO. Government authorities are increasingly open to forms of PPP (concessions, managements contracts, etc) and EU operators could play a significant role.
2	***Transport Infrastructure and Services***	Transport is another crucially important sector in the EAIO region and improvements in the current situation are essential to support economic growth. As in the case of public utilities, there are significant opportunities for PPP and an increasing number of EU operators appear interested in tapping this potential.
3	***Tourism***	Tourism is the largest foreign earner in the EAIO region (€ 2.3 billion). There is an untapped potential in several countries and a positive trend in demand but also some problems (image, infrastructure) that need to be addressed. The EU presence is already significant, also in connection with very important EU tourist flows.
4	***Information and Communication Technology***	ICT is an emerging sector, with good growth opportunities in certain EAIO countries. EU presence is still limited but there is a potential for strengthening relations and commercial ties.
5	***Floriculture***	Floriculture is a recent success story in EAIO (exports at around € 250 million), with further potential for growth in certain countries. The EU is a privileged partner and European direct presence in the region is already significant.
6	***Fishing and Aquaculture***	The sector is a major foreign exchange earner in the EAIO region (exports at around € 700 million). The potential for growth is significant but this is coupled with restructuring needs in certain segments. The EU is a privileged trading partner and European operators are already present in the region.
7	***High Value Agriculture***	A composite sector (spices, essential oils, organic products, cashew nuts) accounting for significant foreign exchange earnings in several EAIO countries (total exports are around € 450 – 500 million). EU countries are a major destination market and EU operators could be involved in further expansion of activities.

8	***Garments and Textiles***	Garments and textiles are the second largest exporter in the EAIO region (some € 1.5 billion). In some countries the sector is currently facing major challenges, with subsequent need for restructuring. EU countries are a major outlet and can also play a role in supporting restructuring.
9	***Leather& Leather Goods***	The leather industry is a significant foreign exchange earner for certain countries (total exports € 180 million). Growth is partly constrained by inadequate technology and problems with quality but interest in EU business circles is on the rise.
10	***Medium Scale Mining***	A composite sector, including ornamental stones and gold mining. Current levels of activity are still limited but there is a potential for further growth, also reflected in growing interest among EU operators.

3.2 Other Sectors Scanned

As mentioned above, during the initial phase of the analysis (Step 1), other sectors were scanned. These sectors include:

- traditional tropical products;
- vegetables;
- mechanical engineering and metal working;
- dairy products;
- consumer goods for the domestic market;
- packaging & printing;
- consulting and technical services.

In the case of traditional tropical products and vegetables, some organic products (coffee, cotton, vegetables, etc.) were included in the high value agriculture “composite” sector. Other sectors either are still at an early stage of development (packaging and printing, mechanical engineering) or offer comparatively limited opportunities to EU operators (dairy and consumer products), to justify the organization of large scale partnership events under the Pro€Invest program. Finally, in the case of consulting services, some activities with a high technical content and ancillary to other lines of business (e.g. laboratory services) were included in the analysis of some “target” sectors, following a production chain logic.

The above mentioned lines of business could benefit from Pro€Invest support through its demand driven facilities, such as: private public dialogue workshops, capacity building activities, business development services, and inbound/outbound partnership missions.

MAIN TEXT - TECHNICAL SUMMARIES

TECHNICAL SUMMARY #1

PUBLIC UTILITIES

1. SECTOR DEFINITION

This Technical Summary includes two main types of public utilities, power generation & distribution and water supply & sewage. The attention is focused on opportunities related to investments in new initiatives as well as to management contracts of publicly owned schemes. In terms of the ISIC nomenclature (Rev. 3), activities included in this profile fall into two groups, namely: “401 - Production, collection and distribution of electricity” and “410 - Collection, purification and distribution of water”.

2. SECTOR PROFILE

2.1 Overview

The development of an effective system of public utilities is a major challenge to foster economic and social development in Sub-Saharan Africa and the EAIO region is certainly not an exception. In EAIO countries ***power consumption*** still relies heavily on non commercial sources, namely wood. While this inevitably involves serious consequences in terms on environmental impact, in many countries access to energy remains severely constrained, with very low per capita consumption (e.g. some 25 Kwh in Ethiopia and 120 Kwh in Kenya, compared with over 3,500 Kwh in South Africa). The situation is also severe in ***water supply***. In some EAIO small countries (Mauritius, Comoros, Seychelles and Djibouti) the water distribution system is well developed and capable of reaching nearly the totality of the population but in countries such as Kenya, Uganda and Madagascar only about 50% of the population is estimated to have access to safe water. This percentage declines dramatically to a mere 24% in the case of Ethiopia.

2.2 Power – Market Structure and Recent Developments

The EAIO region has a huge potential in power generation (namely, hydropower) but only a minor fraction of this is currently exploited. Total generation in the region is estimated at some 3.8 GW, which amounts to only 4-5% of total energy generation in Africa. On the other hand, demand for commercial energy has been growing fast over the last decade, with rates sometimes in excess of 10% per year. Over time the “structural” imbalance between supply and demand of commercial energy has become more severe, leading to frequent power interruptions. Indeed, irregular power supply is one of the most frequently cited constraints to regular economic activity, being mentioned by local and foreign investors alike. For instance, the economic losses due to power interruptions (the so called “cost of unmet demand”) recorded in Kenya during the 2000 drought crisis were estimated at more than US$ 600 million (i.e. some 5% of GDP) during a period of only nine months. Recently, power shedding in Ethiopia was reported to have generated losses in industrial production in the order of 40% of normal levels.

The problem has obviously attracted the attention of government authorities and donors and a number of expansion projects have been envisaged in various EAIO countries. Still, public resources remain limited and over time substantial emphasis has been placed on the participation of private operators through various forms of Public Private Partnership (PPP). This has involved primarily: (i) the establishment of privately owned green field power stations operated by the so called “independent power producers” (IPP), and (ii) the award of contracts (management contracts, lease-operate contracts, or concession agreements) for the operation of existing generation plants and/or transmission & distribution networks.

Table 1 Power Sector – Key Elements

Country	Power Consumption Per Capita (Kwh/year)	Installed Capacity (MW)	Composition of Capacity
Ethiopia	24	0.476	85% hydropower
Sudan	71	0.580	50% hydro, 50% thermal
Kenya	122	0.933	30% geothermal, 70% diesel and hydro
Uganda	60	0.280	100% hydropower
Tanzania	77	0.620	60% hydro, 40% thermal
Madagascar	49	0.285	65% hydro, 35% thermal
Other countries	92	0.583	mainly thermal (except Rwanda)
Total	**65**	**3.757**	

Source: World Bank and US Department of Energy

The first major example of ***IPP initiatives*** is found in Tanzania with the *Songas* project, a large scale initiative involving the construction of a gas processing plant, the construction of a pipeline, and the conversion from oil to gas of a 110 MW power station near Dar es Salaam. Owned by a group of foreign and regional investors, *Songas* also obtained extensive financial support from international financial institutions (IFI), including the World Bank and EIB. Other examples of IPP initiatives in power generation in the region include:

- Kenya’s *Tsavo Power Company*, which is operating a 74 MW thermal plant inaugurated in 2002;
- the two “stop gap” power generation plants installed in Kenya during the 2000 drought crisis and still in operation in Mombasa and Nairobi;
- the cogeneration from sugar by-products, which has been contributing significantly to power supply in Mauritius since the mid 1980s.

As for ***contractual forms of PPP***, important deals have been finalized in:

- Tanzania, where the South African company *Net Group Solutions* took over the management of *TANESCO* in 2002;
- Uganda, where *Eskom* (also from South Africa) has been retained to operate (i) two hydro power stations under a 20-year concession contract, and (ii) the power distribution network in the Kampala region, with an estimated investment in the order of US$ 100 million;
- Rwanda, where in 2003 the management of the state-owned multi-utility company *Electrogaz* was entrusted to a German consulting engineering company.

Private (especially foreign) participation in a crucial sector such as power is obviously a politically sensitive issue and in some cases initiatives in power generation or management contracts have prompted criticism from various quarters. This is the case of Tanzania, where a long dispute over pricing opposed Government authorities and the *Independent Power Tanzania Limited* (IPTL), as well as of Uganda, where some large scale power projects promoted by private investors have attracted considerable criticism on environmental grounds. Still, the need for increased energy supply is so acute that the interest in private participation remains high in many countries.

2.3 Water Supply and Sewage – Market Structure and Recent Developments

In the case of water supply the situation presents similarities with the power sector, although the severity of the problem varies significantly across the region (more acute in dry countries such as Kenya, much less so in water rich Madagascar). The sector is partly benefiting from the renewed emphasis placed by IFI and the donor community on poverty alleviation and improvement of social conditions, and several internationally funded initiatives are ongoing or envisaged. Still the amount of investment funds available falls short of needs and this, together with the utterly inefficient management of existing networks (with losses sometimes in the order of 50%), and this motivates significant interest in the launch of PPP initiatives.

Table 2 Water and Sewage – Key Elements

Country	Population with Access to Water (%)	Renewable Freshwater Resources (cubic Km)	Situation with Sewage
Ethiopia	24	110.00	Less than 10% of population with access to sewage
Sudan	75	35.00	Less than 10% of population with access to sewage
Kenya	57	20.20	Some 35% of urban population with access to sewage
Uganda	52	39.00	Some 10% of urban population with access to sewage
Tanzania	68	80.00	Less than 10% of population with access to sewage
Madagascar	47	337.00	Some 15-20% of urban population with access to sewage
Other Countries	52	18.60	Situation varies from nearly total coverage (Mauritius) to nearly no coverage (Somalia)
Average/Total	***64***	***641.80***	

Source: World Bank and Economic Commission for Africa

Political attitude towards PPP in water supply is fairly differentiated across EAIO countries. In Tanzania a contract was awarded for the management of the *Dar es Salaam Water and Sewage Authority* (DAWASA) and a similar step was made (although only on a short term basis) in Uganda for the Kampala water system. On the other hand, a fairly heated debate on the subject has been ongoing for sometime in Kenya, where a combination of broad political considerations (water being widely perceived a strategically important resource) and of vested interests (water supply systems are managed by municipalities, which derive a large fraction of their revenues from this activity) has so far held back any significant development.

In general terms, privatizations or the launch of PPP initiatives in water supply & sewage appear comparatively more complex than in the power industry. This is due primarily to the thorny political issue of how to reconcile the management of the commercially viable parts of the network (typical, the capital cities and the other main urban centers) with that of networks in smaller centers and rural areas, which offer very limited opportunities for private operators.

2.4 EU Presence

The presence of EU players in EAIO's public utilities is substantial. In the ***power industry***, *CDC Globeleq*, the recently established subsidiary of Britain's *CDC* specializing in the energy sector, has been increasingly active in the region, acquiring significant stakes in important initiatives. In particular, *CDC Globeleq* is a leading investor in the *Tsavo Power Company*, the first large scale IPP in Kenya, and acquired a controlling stake in the *Songas* project in Tanzania. Other EU operators active in the region include:

- Finland's *Wärtsila*, participating as industrial partner in *Tsavo Power Company* and also reported to have interest in some projects in Ethiopia;
- Spain's *Union Fenosa*, that is operating a thermal plant in Kenya and expressed interest for the management of two hydropower plants in Uganda;
- France's *Hydelec*, an independent power producer participating in the first privately sponsored power project in Madagascar, involving the establishment of a 10 MW thermal station near Antananarivo;
- Germany's *Lahmeyer*, that was awarded the management contract for Rwanda's *Electrogaz*.

In the case of ***water & sewage***, the British-German joint venture formed by *Biwater* and *Gauff* was awarded a 10-year lease contract for *DAWASA* in Tanzania, after beating the competition of *Vivendi* and *Saur*, both from France. Before participating in the *DAWASA* bid, *Vivendi* was for sometime involved in the management of the public utility company in the Comoros, while *Ondeo* (formerly, *Lyonnaise des Eaux*) was recently awarded the management contract for the water supply system in Kampala. The scope of such a contract is fairly limited but could be revised in the future, in connection with an expansion project currently being implemented by Germany's *KfW* and which foresees some kind of private participation in management.

3. INVESTMENT POTENTIAL

3.1 Growth Potential and Constraints

In the EAIO region the ***power sector*** offers good opportunities for investment. Indeed, fundamental factors, such as the growing trend in demand and the availability of largely untapped natural resources, combine with an increasingly more liberal attitude towards the involvement of private operators, providing an effective "opportunity window" to investors. On the negative side, one has to consider: the persistence of certain weaknesses in the legal framework (with the lack of a comprehensive legislation on concession schemes and uncertainties regarding regulatory procedures), the scarcity of local partners with adequate technical and financial capabilities, and the persistent perception of EAIO as a high risk region by many international operators. Regarding the ***water & sewage sector***, social considerations are likely to continue to play a comparatively greater role, thereby leaving a major role to publicly owned and operated schemes and to donor-financed projects. Still, some opportunities for contractual forms of PPP are expected to emerge in cases where the size of the market (e.g. major urban centers) and/or the severity of the problem at hand (e.g. large technical losses and/or very low cost recovery ratios) would allow or require the intervention of private operators.

A summary presentation of the sector's strengths, weaknesses, opportunities and threats is provided in Table 3 below.

Table 3 SWOT Analysis

Strengths	Weaknesses
• Fast growing demand (especially for power) • Availability of vast under-exploited resources (hydro & thermal generation) • Reasonable openness towards private foreign investors (but less so in water & sewage)	• Weaknesses in the legal & regulatory framework • Limited pool of suitable local partners
Opportunities	**Threats**
• High priority for national governments and regional cooperation bodies/initiatives (e.g. NEPAD) • Increasing interest from IFI and institutional investors	• EAIO region perceived as a "high risk" area (political risk, regulatory risk)

3.2 Investment Opportunities

Based on the above analysis, investment opportunities for private operators appear to concentrate in three main areas, namely:

- ***green field independent power generation plants***. Large scale hydropower projects are currently envisaged in some EAIO countries (namely, Uganda and Ethiopia). These are highly capital intensive projects (with investment costs in the order of US$ 2 million per MG installed), whose financing is likely to require some combination of private money as equity and long term debt financing from IFI and/or bilateral donors (the latter, typically assisted by some form of sovereign guarantee). Comparatively more affordable are the thermal and geothermal power plants, typically involving investment costs in the order of US$ 1 million/MG. The size of thermal plants currently envisaged in EAIO ranges between 20 and 60 MG, although in certain cases smaller plants with a capacity of 3 to 5 MG also appear to be economically viable (*Gisenyi Electricity* in Rwanda);
- ***privatization or management of existing power generation & distribution structures***. Opportunities for privatization or long term lease/management contracts are expected to arise in Kenya and, in a more distant future, in Madagascar and Ethiopia. In the case of Kenya the option of allowing private capital to take control of the two main publicly-owned companies (*KenGen*, active in power generation, and *Kenya Power and Lighting Company*, responsible for transmission and distribution) has indeed been debated for sometime. Continuing problems with the management of these companies (such as the re-emergence of unanticipated black-outs in November 2003, that severely affected Nairobi) and the inability to mobilize the funds required to complete some ongoing projects could accelerate the process;
- ***management of selected water supply & sewage systems***. Industry sources suggest that only water supply schemes covering a population of at least 50 – 100,000 have a reasonable chance to attract private operators. In other cases, or when social considerations would prevent more complex forms of PPP, opportunities for private operators could still emerge in the provision of selected services, such as metering, billing and network maintenance.

4. PROPOSED PRO€INVEST ACTIVITIES

4.1 Introduction

The public utilities sector offers an interesting opportunity for Pro€Invest to play a fairly innovative role. To begin with, the utilities sector (and in particular power generation) is one of the few lines of business where significant amounts of "real" foreign investment (and not just for softer forms of partnership) could indeed materialize. Certainly, the EU actors potentially involved are first and foremost large utilities companies, a rather untraditional target group for promotional activities in ACP countries. But one should not overlook the fact that initiatives promoted by large players usually involve the participation of smaller companies (subcontractors, specialized manufacturers, consulting engineering firms, etc.). In this respect, the experience of partnership initiatives in the power sector sponsored in the past by the ALINVEST program clearly indicate the possibility of elicit the interest of SME operators. Secondly, Pro€Invest could provide a useful contribution to the current debate over PPP in the region. There is little doubt that discussions over private participation in public utilities has often displayed "ideological" traits on both sides. At the same time, it is equally undisputable that the huge gulf between needs and shrinking governments' and (donors') budgets calls for some type of private intervention. Against such a background, Pro€Invest could promote and/or support initiatives aimed at analyzing the complex policy and operational issues related to PPP in public utilities, bringing a more balanced, "European" view to the table.

In such a context, the proposed Pro€Invest activities in the utilities sector include:

- the organization of a ***regional sector partnership meeting***, which could be usefully combined with a similar initiative in the transport sector (see Technical Summary #2);
- the organization of ***policy dialogue workshops*** in order to facilitate the emergence of a conducive policy environment for investors.

A detailed presentation of the proposed initiatives is provided in the tables included in Sections 4.2 Sector Support and 4.3 Institutional Support.

4.2 Sector Support

Type of Pro€Invest activities	**Regional Sector Partnership Meeting**
Product/service lines considered	Power generation and distribution, water and sewage (in large cities)
ACP and EU countries potentially involved	In the EAIO region **Kenya**, **Uganda**, **Tanzania, Ethiopia** and **Madagascar** are the countries from which a more active participation is expected. However, an effort should be made to elicit participation also from other countries, given the widespread need for improvements in public utilities across the region. Regarding EU countries, active participation is expected from the **United Kingdom**, **France**, **Germany**, **Spain**, **Sweden** and **Finland**, from which the main foreign operators active in the EAIO region and the main suppliers of power and water supply-related equipment originate. In addition, the meeting should involve participants from other countries which have already shown an interest in EAIO's public utilities, such as **South Africa** (whose power companies are increasingly targeting investment opportunities in other Sub-Saharan countries) and **India**, whose large industrial groups (e.g. *Tata*) are also looking for investment opportunities overseas.
Profile and estimated number of the ACP and EU operators likely to participate	The regional sector meeting should involve: • EU and South African power companies and public utilities operators (*Vivendi*, *RWE*, *EDF*, *Eskom*, *Rand Water*, etc.); • EU suppliers of power & water supply plants and equipment (*ABB*, *Wärtsilä*,

	Cummins, etc.), which are sometimes willing to co-invest in large projects; • international financial institutions (e.g. *IFC*, *African Development Bank*, *EIB*, etc.); • EU development finance institution more active in infrastructure investments (*FMO*, *CDC*, *DEG*, *KfW*, etc.) and EU commercial banks with experience or presence in the EAIO region; • EU export credit agencies (*Hermes*, *COFACE*, *ECGD*, *SACE*); • EU subcontractors, specialized manufacturers, and consulting engineers; • EAIO public utilities companies/authorities (*Kenya Electricity Generating Company Limited*; *Uganda Electricity Board*; *DAWASA*; Ethiopia's *Water Supply and Sewerage Authority*, etc.); • EAIO ministries/regulatory bodies active in public utilities; • EAIO medium and large investors and industrial groups (*Aga Khan Group*, *Madhvani*, *Sameer*, *MIDROC*, etc.). Altogether, it is possible to anticipate the participation of at least 150 participants, of which some 100 from EU countries and 50 from EAIO and third countries.

4.3 Institutional Support

Type of Pro€Invest activities	**Public Private Dialogue – National Workshops on the Establishment of a Conducive Policy Framework**
Countries concerned	Kenya, Uganda, Tanzania, Ethiopia and Madagascar
Issues to be addressed	While the attitude of EAIO government authorities towards private involvement in public utilities is already broadly favorable, the organization of national Pro€Invest-sponsored policy dialogue workshops would certainly contribute to consolidating consensus and tackling some important issues. Relevant issues identified during the study include: • advantages and disadvantages of the so called "unbundling" (i.e. separation of power transmission and power distribution); • mechanisms for rate regulation in power generation; • optimal duration and desirable main features of "model" power purchasing agreements; • mechanisms for efficient cross subsidization among economically viable and unviable parts of the network (especially in water distribution); • incentives schemes to attract private operators in small schemes (small hydropower projects and rural electricity distribution programs).
Stakeholders to be involved	Stakeholders should include: delegates of the relevant ministries and regulatory bodies (Kenya's *Ministry of Energy*, the *Utility Reform Unit* of Uganda's *Ministry of Finance*, Uganda's *Electricity Regulatory Authority*, etc.); representatives of local and foreign public utilities companies (e.g. *TANESCO*, Uganda's *National Water & Sewerage Corporation*, *Eskom*, *EDF*, etc.); representatives of financial institutions (e.g. *IFC*, *African Development Bank*, *EIB*, *CDC*, *KfW*, etc.); consulting firms and professionals from the power and water industry; and representatives from international and regional organizations and initiatives (e.g. COMESA, NEPAD).

APPENDIX A – BASIC STATISTICS

Table A.1 Electric Power Consumption in EAIO Countries - 2000

Country	Per Capita Consumption (kWh/year)	Total Consumption (Billion kWh)
Comoros	32	0.018
Djibouti	264	0.167
Eritrea	48	0.195
Ethiopia	24	1.562
Kenya	122	3.671
Madagascar	49	0.763
Mauritius	1,007	1.195
Rwanda	21	0.160
Seychelles	1,834	0.149
Somalia	26	0.232
Sudan	71	2.197
Tanzania	77	2.598
Uganda	60	1.323
Total	**65**	**14.230**

Sources: World Bank and US Department of Energy

Table A.2 Electric Power Capacity and Generation in EAIO Countries - 2000

Country	Installed Capacity			Net Generation		
	Total (Million kW)	Hydro (% of total)	Thermal (% of total)	Total (Billion kWh)	Hydro (% of total)	Thermal (% of total)
Comoros	0.005	20.0	80.0	0.019	89.5	10.5
Djibouti	0.085	0.0	100.0	0.180	0.0	100.0
Eritrea	n/a	n/a	n/a	0.210	0.0	100.0
Ethiopia	0.476	83.6	16.4	1.680	97.0	1.8
Kenya	0.934	72.2	22.9	3.721	35.3	53.8
Madagascar	0.285	36.8	63.2	0.820	63.4	36.6
Mauritius	0.365	16.2	83.8	1.285	8.9	91.1
Rwanda	0.031	87.1	12.9	0.113	97.3	2.7
Seychelles	0.028	0.0	100.0	0.160	0.0	100.0
Somalia	0.070	0.0	100.0	0.250	0.0	100.0
Sudan	0.578	52.4	47.6	2.362	49.6	50.4
Tanzania	0.620	60.8	39.2	2.743	81.8	18.2
Uganda	0.280	98.6	1.4	1.599	99.1	0.9
Total	**3.757**	**59.1**	**39.7**	**15.142**	**57.5**	**39.7**

Source: US Department of Energy

Table A.3 Water Supply in EAIO Countries - 2000

Country	Population with Access to Water (%)	Renewable Freshwater Resources (cubic Km/year)	Annual Withdrawal Per Capita (cubic meters)
Comoros	96	1.00	14
Djibouti	100	0.30	11
Eritrea	46	2.80	n.a.
Ethiopia	24	110.00	50
Kenya	57	20.20	87
Madagascar	47	337.00	1,694
Mauritius	100	2.20	305
Rwanda	41	6.30	134
Seychelles	n.a.	n.a.	n.a.
Somalia	n.a.	6.00	115
Sudan	75	35.00	669
Tanzania	68	80.00	40
Uganda	52	39.00	20
Average/Total	***64***	***641.80***	

Source: World Bank and Economic Commission for Africa

APPENDIX B - FORMS OF PUBLIC PRIVATE PARTNERSHIP IN PUBLIC UTILITIES

B.1 Introduction

Public private partnership (PPP) in public utilities typically takes two main forms, namely: (i) the establishment of privately owned green field operations on the basis of some form of Build-Own-Operate (BOO) schemes, and (ii) the award of contracts for the operation of existing public utilities structures. BOO schemes are particularly frequent in the power sector (much less so in water & sewage), where private operators involved in the establishment of new power stations are typically referred to as "independent power producers" (IPP). Contractual forms of PPP are found both in the power industry and in water supply and sewage. The salient features of these two forms of PPP are described in some detail in the following two sections.

B.2 Independent Power Producers

IPP are privately sponsored initiatives active in the generation of power. Power is then sold to power transmission & distribution companies on the basis of the so called Power Purchase Agreements (PPA). In EAIO countries IPP are typically promoted by foreign investors, sometimes with the participation of local or regional investors and IFI. In certain cases, the industrial companies responsible for the construction of power plants (the "suppliers") are also represented in the capital of IPP. For instance, the ownership structure of *Tsavo Power Company*, Kenya's largest IPP, includes:

- *Wärtsila*, a large producer of turbines and other power generation equipment, which was responsible for the construction of the plant;
- *CDC Globeleq*, the subsidiary of Britain's *CDC* specializing in the power sector;
- *Cinergy Global Power*, a US energy company;
- *Industrial Promotion Services*, the industrial investments' arm of the *Aga Khan Group*; and
- the *International Finance Corporation* (which also extended debt financing).

In certain cases, export credit and/or investment insurance institutions may be involved in IPP operations, to cover the typical risks faced by foreign suppliers/investors in developing countries (e.g. war, expropriation, etc.) as well as the specific risks faced by IPP, such as the risk of unfair changes in the regulatory environment (the "regulatory risk") and the risk of non payment by the transmission & distribution companies (the "non payment risk"). For instance, both Kenya's *OrPower 4 Inc.* (controlled by the US-based company *Ormat*) and Madagascar's *Hydelec* (owned by a French company) entered in agreements with *MIGA*, which is providing insurance coverage against the regulatory risk and the non payment risk.

Rights and duties of IPP vis-à-vis the distribution companies are spelled out in the PPA, which specify *inter alia*, the generation capacity to be kept in operation, the quantity of power to be supplied, and the selling price. In EAIO countries, due to the lack or weakness of independent regulatory bodies responsible for the supervision of all players in the power industry, PPA are often negotiated in an *ad hoc* fashion, leaving room for opportunistic behavior and/or for disputes in case significant modifications occur in the *ex ante* conditions. An example of these problems is the long dispute over pricing matters between the Tanzanian authorities and *IPPL* (a Malaysian-owned IPP company), which in the end had to be settled through international arbitration.

B.3 Contractual Forms of PPP

Contractual forms of PPP include four main types of agreements, namely:

- ***Service contracts***: in this case only part of the functions performed by the public utility entity are subcontracted to private operators. The subcontracting may involve core or non core activities, such as billing, metering, maintenance of local distribution networks, maintenance of pumping stations, etc. Service contracts can be a cost effective way to tackle specific problems (e.g. reduction of technical losses attributable to poor maintenance, improvements in billing and in credit recovery ratios) but do not alter fundamentally the public nature of the operation;
- ***Management contracts***: these involve the contracting out of full managerial responsibility for the whole public utility, not just some functions. The remuneration paid to private operators (the "contractors") often includes a success fee element, related to improvements in quantity and/or quality of service. The public utility company retains the ownership of assets as well as the responsibility for maintenance and capital expenditure and continues to receive the proceeds from the operation;
- ***Lease-operate contracts***: in these cases the private operators are not only responsible for the overall management but they pay a fee for the use of assets and are rewarded with the revenues generated by operations. In addition, private operators are responsible for the good maintenance of assets, with the ensuing need to finance some "recurrent" capital expenditures. The public entity retains ownership of assets and responsibility for major capital expenditures (i.e. expansion projects), which are financed through the budget;
- ***Concessions***: this is the most comprehensive form of PPP, as private operators are fully responsible not only for the management and maintenance of existing structures but also for the implementation and financing of new investments, as specified in the concession agreement. Remuneration of concessionaires is again based on revenues collected from operations and the public sector retains only the ownership of assets, which are to be transferred back by the concessionaire upon expiry of the concession contract.

The duration of PPP contracts is variable, ranging from few months or a couple of years in the case of relatively simple service contracts, to some 5 to 10 years in the case of management contracts, to 20 – 25 years in the case of lease-operate or concession agreements. Due to the generally weak conditions of public utilities, in EAIO countries there is a clearly discernible trend towards the use of more complex forms of PPP, that entrust more power and responsibilities to private operators. Examples include the management contracts awarded in the cases of *TANESCO* and *DAWASA* in Tanzania, and the lease-operate and concessions agreements regarding power hydro stations and power transmission & distribution in Uganda, awarded to South Africa's *Eskom*.

TECHNICAL SUMMARY #2

TRANSPORT INFRASTRUCTURE AND SERVICES

1. SECTOR DEFINITION

This Technical Summary covers transport infrastructure and services, with special attention to road transport, railways, maritime ports, and air transport. As in the case of public utilities, the attention is focused on both new investment initiatives and on opportunities related to the concession, lease or management of publicly owned infrastructure. In terms of the ISIC nomenclature (Rev.3), activities included in this profile fall in four divisions, namely: “60 - Land transport”, “61 - Water transport”, “62 - Air transport”, and “63 - Supporting and auxiliary transport activities” (except class 6304, included in the Technical Summary #3 on tourism).

2. SECTOR PROFILE

2.1 Overview

The importance of the transport sector can hardly be overestimated in EAIO countries. The region includes some landlocked countries (Uganda, Ethiopia, Rwanda) as well as some island states (Mauritius, Comoros, Seychelles, Madagascar) and the existence of a well functioning transport sector is obviously essential in these cases. In addition, a large part of the region’s natural resources (in agriculture and mining) are located in internal areas and, again, a well functioning transport system is of crucial importance to support export flows. Finally, an effective air transport system is necessary to sustain both international tourism flows and exports of perishable goods, that account for a large share of EAIO’s foreign exchange earnings.

Table 1 Key Figures - 2001

Countries	Road Transport	Railways	Maritime Ports	Air Transport
	Share of Paved Roads	Freight (million tons/km)	Total Throughput (‘000 tons)	Departures (‘000)
Ethiopia	13.3%	n.a.	-	28.1
Kenya	12.1%	1,111	9,000	24.7
Madagascar	11.6%	-	2,450	21.2
Mauritius	96.0%	-	4,200	12.8
Sudan	36.3%	1,654	4,800	7.6
Tanzania	4.2%	1,185	3,700	4.5
Uganda	6.7%	200	-	n.a.
Total/Average	**12.2%**	**4,150**	**24,150**	**98.9**

Source: World Bank and PMAESA

2.2 Road Transport – Market Structure and Recent Developments

In the EAIO region the road network is still severely undeveloped. With the exception of Mauritius, Comoros and Seychelles (where paved roads represent 75-95% of the total network), in most countries gravel roads are still the norm. In Uganda, Tanzania and Rwanda paved roads account for less than 10% of total roads, while they are between 10% and 15% in Kenya, Ethiopia and Madagascar. At the regional level some essential road links are in extremely poor conditions or missing altogether. The coastal road connecting Dar es Salaam to Kenya is in good conditions only up to Bagamoyo and barely passable in the remaining part. Even more important, there is no real link connecting Ethiopia with the port of Mombasa, therefore aggravating Ethiopia's dependence upon the port of Djibouti.

Investment needs to remedy to the current difficult situation are huge. For instance, in ***Kenya*** a large scale survey carried out in 2002 revealed the existence of a capital expenditure backlog of nearly US$ 1.2 billion, equivalent to some 25-30 years of investment at current levels (some US$ 45 million per year). The study also estimated annual expenses to maintain the existing road network in good conditions at about US$ 110 million, which is some 30% more than what has been spent on maintenance over the last few years. Even more severe is the situation in ***Madagascar***. At independence the country had some 50,000 km of roads. Because of poor maintenance and under investment, between 300 and 1,000 km have been lost every year and at present the national road network is estimated at some 33,000 km. Conditions of existing roads are often lamentable and areas on the western and southern coasts are not reachable by truck even during the dry season.

Road infrastructure is typically the preserve of government and donor-financed interventions. Still, the imbalance between the huge needs and shrinking governments' (and donors') budgets have induced EAIO authorities to consider the possibility of implementing forms of public private partnership (PPP). In particular, the introduction of privately managed toll roads is currently being considered in different EAIO countries, with reference to the main corridors and some by-pass roads. While most initiatives are still in the early stages of definition, the existence of some interest among private investors is witnessed by the receipt of unsolicited proposals for the management of the proposed Mombasa – Nairobi toll road, formulated by a couple of private consortia in 2001.

2.3 Railways - Market Structure and Recent Developments

The EAIO rail system, consisting of some 13,000 km, includes three main components, namely: (i) the railways in the EAC countries, partially interconnected; (ii) the *Chemin de Fer Djibouto-Ethiopien* (CFDE), connecting Addis Ababa with the Red Sea, and (iii) the *Chemins de Fer de Madagascar* (CFM).

In ***EAC countries*** the situation is fairly differentiated. Over the last few years the *Tanzania Railways Corporation* (TRC) has been improving its performance, reaching a total of 1.5 million tons transported in 2002. *TRC* was slated for privatization some time ago and, although with some delay, the process for the selection of a concession operator is indeed currently under way, with six bidders short-listed in late 2003. The situation is quite different in Kenya and Uganda, where the rail link connecting Mombasa with Uganda has been steadily losing traffic to road transport. Because of outdated equipment, difficult operating conditions and management weaknesses, in 2002 the *Kenya Railways Corporation* (KRC) was able to handle only 2.2 million tons, compared with a rated freight carrying capacity of more than 6 million tons. At present, the rail system is estimated to handle not more than one quarter of the total traffic between Uganda and Mombasa, compared with 95% in early 1970s. The poor operating performance is reflected in financial accounts, and over time *KRC* has accumulated debts totaling some US$ 250 million. The decision to privatize *KRC* was first announced by Kenyan authorities in 1997 but for several years this was not followed by concrete action. The move towards privatization, supported by the Ugandan government, gained momentum in 2002 and the launch of a tender for the selection of a concession operator for *KRC* is currently expected for 2004.

In ***Ethiopia*** the *Chemin de Fer Djibouto - Ethiopien* (CFDE) has been suffering for many years from under-investment and inadequate maintenance. As a result, rail transport was not able to benefit from the diversion of traffic from Assab to Djibouti caused by the conflict with Eritrea. In 2000/2001 *CFDE* was able to transport only 5% of Ethiopia's freight traffic with Djibouti and such a percentage is thought to have declined further since then. The general overhaul of the line has been the subject of repeated discussions with donors and international financial institutions, but so far this has led to little results, with only some emergency repairs being carried out from time to time. The possibility of involving private operators through a management contract or a concession agreement is currently being assessed.

Privatization of railways is well underway in ***Madagascar***. The management of the northern section of the *CFM* network (including the Antananarivo - Toamasina rail link) was entrusted to a private operator in 2002, through a 20-year concession agreement. The deal involves a major rehabilitation program (some € 37.5 million to be invested over 10 years), largely financed by the World Bank and the EIB. Following this initial move, during the summer 2003 Malagasy authorities launched the tender for the selection of a concessionaire for the southern section of the *CFM* network, connecting Fianarantsoa to the port of Manakara (whose management is also part of the proposed concession).

2.4 Air Transport - Market Structure and Recent Developments

In the EAIO region air transport plays a crucially important role. The export of floriculture products from EAC countries (worth nearly € 250 million/year) is entirely done by air. Even more importantly, air transport is essential to sustain tourist flows to the region, with over 2.6 million international visitors in 2001, and to channel these flows from main hubs to selected tourism destinations (Nosybé in Madagascar, outer islands in the Seychelles, etc.).

Regarding ***airports***, Nairobi's *Jomo Kenyatta International Airport* is the main hub in the region, with some 2.5 - 3 million passengers per year. Certain facilities are obsolete and at peak times passenger terminals suffer from congestion. Even more importantly, due to weaknesses in the air control and navigation equipment, Nairobi airport has been given a category II rating by the US Federal Aviation Authority, which means that there cannot be direct flights from the US. A major investment program, aimed at addressing existing constraints and largely financed by the World Bank, was launched in November 2003 and the situation is expected to improve in a couple of years. Conditions are comparatively better in the two other leading airports in the region, Addis Ababa's *Bole Airport* and Mauritius' *Sir Seewoosagur Ramgoolam International Airport*, whose traffic levels are around or approaching the 1 million passengers/year benchmark. Other EAIO airports of significance include those of main capital cities (Khartoum, Entebbe, Dar es Salaam and Antananarivo), Zanzibar and Mombasa (both important destinations for charter flights) and the *Kilimanjaro International Airport* in Arusha. The situation regarding handling services is widely differentiated across the region, with cases of fully privatized airports (Kilimanjaro) and others where services are still provided in a monopoly situation by national carriers (Addis Ababa).

In the ***airlines industry*** the EAIO region can boast two well reputed, medium-sized air companies, *Kenya Airways* and *Ethiopian Airways*, which are operating fairly modern fleets on relatively extended route networks in Europe, Asia and Africa. Other operators of significance include *Air Mauritius, Air Tanzania Corporation* (now 49% owned by *South African Airways*), *Air*

Madagascar as well as the Réunion-based *Air Austral*. The general move towards liberalization and privatization in air transport, although still in progress, has already generated some positive results, with an improvement in performance (after years of significant losses *Air Madagascar* is expected to post a profit for the year 2003) and, especially, with the emergence of some new players. The latter include carriers active at in the domestic and regional markets (e.g. Tanzania's *PrecisionAir*) as well as air companies involved in the charter flights business (such as *East African Safari Air*, which in November 2003 started servicing the Nairobi – London route deserted by main UK operators).

2.5 Maritime Transport - Market Structure and Recent Developments

The EAIO region can count on half a dozen of medium sized ports. With some 10.5 million tons handled in 2001, Mombasa is in the leading position, followed by four ports with a throughput of 4 to 5 million tons (Dar es Salaam, Djibouti, Port-Louis and Port Sudan). Other ports of some significance are Toamasina (2.5 million tons) and Massawa (1.2 million). The port of Assab, once the main seaport for Ethiopia, practically ceased to operate after the Eritrean – Ethiopian war, with traffic declining from 2.5 million tons in 1997 to less than 100,000 tons in 2001.

Operating conditions and performance are fairly differentiated across the region. Owned and operated by the *Kenya Ports Authority* (KPA), the port of ***Mombasa*** is suffering from congestion and inadequate infrastructure. The situation is particularly serious for containers, as the handling capacity of the existing terminal has already been exceeded (300,000 TEU handled in 2002 compared with a rated capacity of some 250,000), with a negative impact on vessels' turnaround times. *KPA*'s financial situation is fairly healthy, but this is due more to the near monopoly situation it enjoys than to efficient management. Proposals for a concession agreement have been put forward repeatedly, but no concrete action has been undertaken so far.

In ***Dar es Salaam*** the situation has been improving over the last few years, with an increase in traffic volumes, especially in containerized traffic. The new trend is symbolized by the decision to entrust the management of the container terminal to a private operator, a consortium comprising some Philippine companies and a Tanzanian financial investor, under a 10-year lease contract. The port of ***Djibouti*** has greatly benefited from the conflict between Ethiopia and Eritrea, with the ensuing diversion of Ethiopian traffic from Assab, and capacity utilization increased substantially. A further boost was provided by recent political developments in the Middle East, as Djibouti has become a favorite logistical base for US military operations in the area. Since June 2002 the port is managed by the *Dubai Ports Authority* and a major expansion program, involving the establishment of a free trade zone and worth an estimated US$ 400 million, is ongoing.

In the Indian Ocean sub region, ***Port Louis*** has acquired a solid position as a trans-shipment port, largely taking advantage of its free zone status. Traffic reached 4.5 million tons in 2001, with some 166,000 TEU handled. The situation is much less favorable in Madagascar, where the port of ***Toamasina*** is widely regarded as one of the least efficient in the region, with a productivity of little more than 6 containers per hour. The port, run by an unregulated public agency, suffers from excessive staffing (2,700 full time employees plus stevedores working on a daily basis) and its fees are extremely high, comparable to those applied at Réunion (where, however, labor costs are much higher than in Madagascar).

2.6 EU Presence

The presence of EU players in the transport sector is not as large as in public utilities, but it is certainly on the rise. In the case of ***rail transport***, the concession for Madagascar's *CFM* was awarded to *Madarail*, a company majority owned by the large French group *Bolloré* and with a minority stake owned by *Comazar*, a company registered in South Africa but with strong links with Belgium. *Comazar* is also participating in the tender for the concession of *TRC*. In the past France's *SNCF* showed interest for *TRC* and according to some sources, the company might be interested in the future concession for *CFDE*. No European operator is currently involved in EAIO ***maritime ports***, but industry sources have repeatedly suggested an interest from the *Bolloré* group in the management of Toamasina.

In ***air transport***, *KLM* is the strategic partner of *Kenya Airways*, while *Lufthansa Consulting* was awarded a 2-year contract for the restructuring of *Air Madagascar*. Regarding ***airport services***, the *British Airport Authority* has been managing Mauritius's airport since 1999 under a 5-year management contract, *Aéroports de Paris* has a stake in *Aéroports de Madagascar*, and *Schiphol Airport* is involved in the management of the *Kilimanjaro International Airport* under a 25-year concession agreement. Also, the Swiss company *Swissport* is the majority owner of *DAHACO*, the company providing airport handling services at the Dar es Salaam and Kilimanjaro airports.

3. INVESTMENT POTENTIAL

3.1 Growth Potential and Constraints

In the near and medium term, the EAIO's transport sector appears to offer good opportunities for private investment. The rapidly increasing demand for transport services (typically expanding at faster rates than GDP) and the substantial cost savings achievable in a number of sectors even with modest improvements in transport infrastructure and services are important, positive factors. Government authorities are also increasingly open to forms of PPP in transport, although pockets of resistance, motivated more by vested interests than by political considerations, are still present in some countries.

On the negative side, the same constraints already identified in the case of public utilities appear to be at work, namely:

- the presence of weaknesses in the legal framework for PPP, such as the lack of well developed legislation for concessions in road and rail transport;
- the scarcity of private local partners with adequate technical and financial capabilities (with the exception of the airlines industry); and
- the persistent perception of EAIO as a high risk region.

Another important, sector specific factor to be taken into account relates to the need to ensure close coordination among the various projects at the national and regional levels. Indeed, failure to adequately prioritize and coordinate actions, could easily lead to "head to head", destructive competition among various infrastructures and modes of transport, impacting negatively on returns and, in the longer term, on the ability to attract further investments into the sector.

A summary presentation of the sector's strengths, weaknesses, opportunities and threats is provided in Table 2 below.

Table 2 SWOT Analysis

Strengths	Weaknesses
• Rapidly expanding demand for transport services • Possibility of achieving significant cost savings • Reasonable openness towards private foreign investors (with some reservations in certain countries & sectors)	• Weaknesses in the legal and regulatory framework for PPP • Limited pool of suitable local partners (with the exception of the airlines industry)
Opportunities	**Threats**
• High priority for national governments and cooperation bodies/initiatives (e.g. NEPAD) • Moderate but increasing interest by IFI and international operators	• EAIO region perceived as a "high risk" area (political risk, regulatory risk) • Risk of "head to head" inter modal competition

3.2 Investment Opportunities

Based on the above analysis, investment opportunities in the transport sector appear to concentrate in four main areas, namely:

- the management of ***railways*** and ***maritime ports*** under concession agreements;
- the management of ***airports*** and/or the provision of selected ***air transport-related services***;
- the construction and operation of ***toll roads***;
- the establishment of road transport-related structures, such as ***inland dry ports***.

Railways and Maritime Ports. In the case of railways, the trend towards private sector involvement appears clear and, barring major policy reversals, it is reasonable to expect that the bulk of EAIO's railways will be managed by private operators within three to five years. The number of concessions open to private operators is obviously limited, but the significant size of these initiatives is likely to involve many companies in addition to the concessionaires (specialized subcontractors and suppliers of equipment). Also, the need to mobilize financing for significant reconstruction works could open opportunities for commercial banks and other financ ial institutions. In the case of maritime ports the pattern towards private involvement is less marked, but some opportunities are indeed likely to emerge, especially in Kenya and in Madagascar. As witnessed by the tender for the southern *CFM* network in Madagascar (see above), in certain cases opportunities could emerge for an integrated management of rail and ports services.

Airports and Airport Services. In the airport management business, 300,000 passengers per year are regarded as the minimum volume required to achieve commercial sustainability and therefore to attract the interest of private operators. Some ten EAIO airports have a comparable traffic volume, but not all of them are likely to be put up for tender, primarily due to the resistance of existing operators. More opportunities could emerge in the provision of selected airport services and in the establishment of dedicated facilities, such as cargo centers and refrigerated rooms for perishable goods.

Toll Road Operations. In order to be commercially viable, toll roads operations must count on adequate volumes of traffic. At present, such a condition appears fully satisfied only in the case of the Mombasa – Nairobi - Uganda route, whose traffic levels (over 3,000 vehicles/day) and traffic composition (about 80% heavy vehicles) appear capable of generating sufficient revenue to attract private operators. Toll road operations may also be feasible in the case of some tourist routes in Kenya (e.g. to Mount Kenya, Amboseli, Masai-Mara) and in the case of the proposed Kigamboni crossing, intended to connect the northern and southern parts of Dar es Salaam. Other routes for which private investors are being considered are the Tabora – Kigoma and the Dodoma – Tabora – Nzega routes in Tanzania and the Nakuru – Nairobi link in Kenya. However, in these cases traffic levels appear too low for standard concessions and forms of "shadow tolling" (i.e. where the concessionaire is paid a fee by the government based on traffic volumes) could be more appropriate.

Inland Dry Ports. Even assuming a future improvement in rail services, in the EAIO region a large fraction of goods will continue to travel by truck. This creates a demand for trans-shipment services, which can be best served at dedicated terminals. The construction of inland terminals would ease congestion (which has now become a serious problem in areas surrounding major EAIO urban centers), reduce delays in the clearing and forwarding of goods, and improve the inspection and verification of imports. Initiatives currently under development or envisaged include an inland dry terminal in Uganda (on the Kampala – Jinja road), some terminals in the area of Addis Ababa, and one in Moyale, at the border between Kenya and Ethiopia.

4. PROPOSED PRO€INVEST ACTIVITIES

4.1 Introduction

In the transport sector the Pro€Invest program has an excellent opportunity to play an important catalytic role, similar to the one anticipated in the case of public utilities. Indeed, Pro€Invest partnership promotion initiatives could spearhead a renewed interest from EU operators in a strategically important sector, while policy dialogue initiatives could make a useful contribution to the debate on privatization. The proposed initiatives are illustrated in the following two sections.

4.2 Sector Support

Type of Pro€Invest activities	**Regional Sector Partnership Meeting**
Product/service lines considered	Rail transport, port management, airport management and services and, to a lesser extent, road transport
ACP and EU countries potentially involved	In the <u>EAIO region</u> all countries should be involved in the meeting, although the bulk of participants are expected to come from **Kenya**, **Uganda**, **Tanzania, Ethiopia** and **Madagascar**. These are the countries where forms of PPP in transport have already seen the light and/or those where the need for private participation in infrastructure projects is more acute. Regarding <u>EU countries</u>, participants are expected to come from all Member States, although a comparatively greater participation can be expected from **UK**, **France, Belgium**, **Germany** and **Italy** whose transport operators and construction companies are more active in the international scene**.** Participation of companies from <u>third countries</u>, namely **South Africa** and some **Asian countries** (EAU, Singapore, etc.) should also be considered, given the important role played by their operators in certain segments (South Africa: rail transport and air transport; Asia countries: port management).
Profile and estimated number of the ACP and EU operators likely to participate	The regional sector meeting should involve : • EU general transport operators and forwarding companies (e.g. *Bolloré*, *Khune & Nagel*, etc.); • EU rail companies and related structures (e.g. *SNCF*, *Italferr*); • EU airlines and airport operators (e.g. *ADP*, *BAA*, *ADR*, etc.); • EU toll road operators (e.g. *Autostrade*) and large contractors (e.g. *Bouygues Construction*, *Astaldi*, *Salini*, etc.) with experience in the EAIO region;

	• EU manufacturers active in sectors potentially interested by PPP initiatives (port handling equipment, rolling stock, air traffic control equipment, etc.); • South African and Asian transport operators (e.g. *Singapore Ports Authority*); • EAIO public entities currently responsible for the management of transport infrastructure (e.g. the *Kenya Ports Authority*); • EAIO ministries and/or regulatory bodies active in the transport sector; • EAIO medium and large investors and industrial groups (*Aga Khan Group*, *Madhvani*, *Sameer*, *MIDROC*, etc.). Altogether, it is possible to anticipate the participation of at least 150 participants, of which some 80 from EU countries, 50 from EAIO, and 20 from third countries.

4.3 Institutional Support

Type of Pro€Invest activities	**Public Private Dialogue – National Workshops on the Establishment of a Conducive Policy Framework**
Countries concerned	Kenya, Uganda, Tanzania, Ethiopia and Madagascar
Issues to be addressed	While the attitude of EAIO government authorities towards private involvement in transport infrastructure and services is already broadly favorable, the organization of national Pro€Invest-sponsored policy dialogue workshops would greatly contribute to the consolidation of political consensus and addressing important issues. Relevant issues identified include: • development of legislation on PPP in road transport (also with reference to "shadow tolling"); • mechanisms for the regulation of services provided by privatized railways; • coordination of initiatives undertaken in various countries & sub sectors, to prevent the emergence of duplications and of excessive inter modal competition; • development of mechanisms for the regulation & coordination of services provided by separate operators in maritime ports; • promotion of the inland dry port concept and definition of main operational and regulatory parameters.
Stakeholders to be involved	Stakeholders should include: delegates of the relevant ministries and regulatory bodies (e.g. *Tanzania Harbours Authority*); representatives of local and foreign transport companies (e.g. *Uganda Railways Corporation*, *Comazar*, etc.); representatives of financial institutions (e.g. *IFC*, *EIB*, *FMO*, etc.); consulting firms and professionals from the various segments of the transport industry; and representatives from international and regional organizations and initiatives (e.g. COMESA, NEPAD).

APPENDIX A – BASIC STATISTICS

Table A.1 Road Transport in EAIO Countries – Mid–Late 1990s

Country	Paved Roads (% of total road km)	Normalized Road Index*
Comoros	76.5	n.a.
Djibouti	12.6	n.a.
Eritrea	21.8	n.a.
Ethiopia	13.3	55
Kenya	12.1	115
Madagascar	11.6	n.a.
Mauritius	96.0	110
Rwanda	8.3	n.a.
Seychelles	84.5	n.a.
Somalia	11.8	n.a.
Sudan	36.3	n.a.
Tanzania	4.2	69
Uganda	6.7	n.a.

* A value of less than 100 indicates a less than normal density of roads, taking into account the level of development of a certain country

Source: World Bank

Table A.2 Rail Network and Freight Traffic in Some EAIO Countries - 2000

Countries	Rail Network (km)	Freight Traffic (million tons/km)
Ethiopia	681	n.a.
Kenya	2,740	1,111
Madagascar	893	n.a.
Sudan	4,595	1,654
Tanzania (TRC only)	2,722	1,185
Uganda	1,250	200
Total	**12,881**	**4,150**

Source: World Bank

Table A.3 Trends in Traffic in Main EAIO Ports – 1998 – 2001

Main Ports	1998		2001	
	Total Throughput ('000 tons)	Total TEU ('000 units)	Total Throughput ('000 tons)	Total TEU ('000 units)
Mombasa	8,529	248	10,496	291
Dar es Salaam	3,752	50	4,392	90
Djibouti	3,000*	133	4,429	142
Mauritius	3,953	138	4,522	166
Tamatave	1,937	47	2,452	68
Port Sudan	4,439	70	4,838	121
Massawa	1,239	13	1,196	24
Total	**26,849**	**699**	**32,325**	**902**

* Estimate

Source: PMAESA - Port Management Association of Eastern and Southern Africa

TECHNICAL SUMMARY #3

TOURISM

1. SECTOR DEFINITION

This Technical Summary covers all tourism activities, encompassing accommodation, catering and ancillary activities (car rental, travel agencies, guides, etc.). From a commercial point of view, in the EAIO region the sector currently includes two main markets, namely: resort tourism ("sea, sun and sand") and safari tourism. Additional market segments of lesser (but growing) importance include: (i) eco-tourism, (ii) sports-related tourism, (iii) cultural tourism, and (iv) conference tourism. In terms of the ISIC nomenclature (Rev. 3), activities included in this profile fall in division "55 - Hotels and restaurants" and in class "6304 - Activities of travel agencies and tour operators; tourist assistance activities not elsewhere classified".

2. SECTOR PROFILE

2.1 Overview

In the EAIO region tourism is the leading foreign exchange earner and one of the main sources of income and employment. Based on World Tourism Organization (WTO) data, in 2001 tourism and related activities brought total receipts worth some € 2.3 billion (US$ 2.1 billion). When indirect ("multiplier") effects are taken into account, the total economic impact is assessed at about € 6.6 billion. Total employment is estimated at some 750,000.

International tourism receipts are highest in ***Tanzania***, where in 2001 they reached the more than respectable figure of US$ 725 million, accounting for some 40% of foreign exchange earnings and for about 5% of GDP. In the case of ***Kenya***, for a long time a favorite destination of international travelers, tourism accounts for about 3% of GDP and for 10% of foreign exchange earnings (US$ 308 million), with a total employment of around 200,000. In ***Mauritius*** tourism is one of the "four pillars" of the economy, accounting for nearly 11% of GDP and for 20% of foreign exchange earnings, with a total employment of some 40,000. Tourism is also a key sector in the ***Seychelles***, where it accounts for 19% of the GDP and for 23% of foreign exchange earnings. At the opposite end of the spectrum, tourism activities are still relatively undeveloped in ***Ethiopia*** (only US$ 73 million and 7% of foreign exchange earnings), and this despite the significant potential for both eco-tourism and cultural tourism.

Table 1 Key Figures – 2001

Countries	Tourist Arrivals (in '000)	International Receipts (in US$ million)	Hotel Capacity (number of rooms)	Labor Force (in '000)
Kenya	841	308	10,000	213
Mauritius	660	625	8,640	39
Tanzania	501	725	10,025	292
Uganda	205	163	2,500	131
Madagascar	170	114	8,435	76
Ethiopia	148	73	6,499	10
Seychelles	129	113	2,497	8
Total	**2,654**	**2,121**	**48,596**	**769**

Sources: WTO, IMF and own estimates based on national sources

2.2 Market Structure and Recent Developments

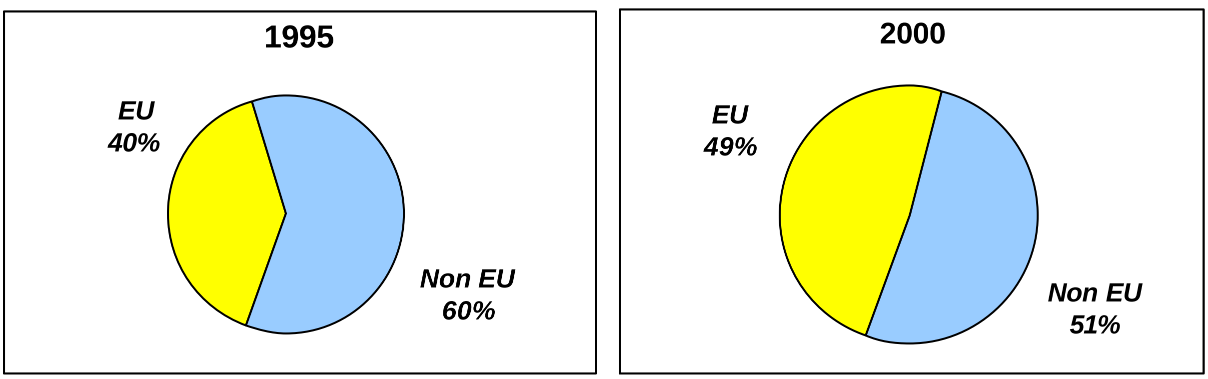
In the EAIO region the number of ***accommodation facilities*** is (grossly) estimated at around 800-1,000, with some 50,000 hotel rooms. When restaurants, travel agents, tour operators, rental car operations and other ancillary operations are taken into account, the total number of enterprises active in the tourism sector in EAIO is likely to be well above 5,000. Large hotel chains (*Sheraton*, *Hilton*, *Holiday Inn*, *Accor*) are present throughout the region, together with some regional and "quasi" regional hotel chains (*Beachcomber* – Mauritius, *Serena Hotels* – Kenya, *Sun International* - South Africa). A significant fraction of hotels are in the four and five star categories, with some examples of absolute excellence. Indeed, of the 13 African hotels included among the "Leading Hotels in the World", 7 are located in the EAIO region (two in Kenya, four in Mauritius and one in the Seychelles).

Over the last decade, the number of ***tourist arrivals*** in EAIO has shown a growing trend, although with some negative moments. In relative terms Madagascar was the best performer, with a 127% growth between 1995 and 2001 (i.e. before the 2002 political crisis), followed by Tanzania (+76%) and Mauritius (+56%). Kenya, the main tourist destination in the region suffered a setback, with a decline of some 6%. Kenya's negative performance has to do with a general deterioration in the country's image, also in connection with the occurrence of episodes of terrorism. During 2003 Kenya's resort and safari tourism segments greatly suffered from overcapacity, with certain hotels along the coast recording occupancy rates as low as 25-30% and rooms sometimes sold at rock bottom prices.

2.3 EU Presence

Traditionally, EU countries account for the largest share of tourist arrivals in EAIO. The incidence of EU tourists is greater in the Seychelles (79% of total arrivals), Madagascar (70%), Mauritius (67%) and Kenya (57%) and somewhat lower in Tanzania, Ethiopia and Uganda. The importance of the EU market has somewhat increased over time, also due to the fact that European tourists are more resilient to adverse developments in the security situation.

Figure 1 Composition of International Tourist Arrivals - 1995 - 2000



EU operators already have a significant role in accommodation, less so in other activities. It is estimated that 80% of hotels on the Kenyan coast and 65% of those in Nairobi and national parks have a foreign participation (although not always from the EU). EU operators are particularly strong in Malindi (various nationalities), in lodges & tented camps (mainly British investors), and in Zanzibar (several Italian tour operators). A further increase in EU presence in the region appears linked to the development of untraditional segments (see below).

3. INVESTMENT POTENTIAL

3.1 Growth Potential and Constraints

With some 2.7 million arrivals, EAIO accounts for only 15% of total tourism arrivals in Sub-Saharan Africa and for less than 0.4% of total tourism arrivals worldwide. Total flows to EAIO are less than 15% of total of tourist arrivals in the Caribbean (with 20 million stay over visitors) and less than the number of arrivals recorded in a single country such as Morocco (more than 4 million). Given the long term growth trend in the travel and tourism sector worldwide, EAIO countries can realistically expect to increase their current share of the market. Most operators indicate that future growth would concentrate in ***new markets segments***. In particular, eco tourism is perceived as having a high potential and some 15% of total tourist arrivals in Tanzania's mainland already fall in this category. Other segments offering interesting opportunities include: (i) sports-related activities (such as snorkeling, diving, deep sea fishing, etc.), which have a good potential in island states but also in other countries (e.g. white water rafting in Uganda), and (ii) cultural tourism, deemed to have a high potential in Ethiopia (also in connection with some initiatives to rehabilitate major historical sites). Finally, further economic growth could be generated through the "intensification" of the tourism experience, by strengthening the linkages with other economic activities. In this respect, the potential for improvement is significant, as witnessed by the case of Mauritius, where it is currently calculated that about 50% of tourists do not ever leave their hotel or resort, thereby reducing tourism's wider impact on economic activities (such as the purchase of locally manufactured handicrafts).

While the potential market is certainly more than significant, substantial progress will require a combination of measures. The main constraints to future development include:

- ***severe image problems***. For some years western media have been are full of negative reports about Africa in general and some East African countries in particular (Ethiopia-Eritrea conflict, tense situation in Northern and Eastern Uganda, terrorists attacks in Kenya, etc.) and this had a very negative impact on tourism flows. In the case of Kenya, the problem was aggravated during 2003, with the issuance of negative travel advisories and subsequent cancellation or reduction of both scheduled and charter flights. Some research sponsored by the *Kenya Association of Tour Operators* shows that these events caused a loss of some € 23 million in just the two weeks after the cancellation of *British Airways* flights to Nairobi in Spring 2003;
- ***lack of a comprehensive development strategy***. Despite its importance, the tourism sector has often been neglected by government authorities and in several EAIO countries operators lament the lack of a comprehensive development strategy. The poor state of infrastructure and the restrictive policy in air transport (see below) are important constraints but operators also mention other aspects heavily impacting on operating costs (e.g. the high VAT rates charged on accommodation) or on tourists' perceptions (e.g. the restrictive visa policy still adopted by certain countries);
- ***inadequate infrastructure***. Tourism is far more dependent on infrastructure than are most economic activities and persistent problems in this area are inevitably affecting prospects for further growth. This requires coordinated interventions in various areas, from airport terminals to roads and water supply. At the same time, infrastructure projects must be respectful of environmental constraints, in order not to spoil the "natural" assets that constitute the region's prime attraction;
- ***high cost of air transport***. Although subject to seasonal variations, the cost of air fares is often exorbitant, severely limiting the pool of middle income tourists who are able to afford a holiday in the region. Prices quoted by major European airlines for EAIO destinations are sometimes 20% to 40% higher than those applicable to other competing distant destinations, such as Santo Domingo, Jamaica or Thailand. Here again local authorities have their share of responsibility

for limiting the number of landing slots available to international carriers in order to protect domestic airlines, although other factors (such as the high cost of fuel in some airports) also have an impact;

- ***human resources***. The availability of qualified human resources varies significantly across the region. Certain countries (namely, Mauritius and to some extent Kenya) have already achieved good (if not excellent) results while in others countries the level of training requires significant improvements.

A summary presentation of the sector's strengths, weaknesses, opportunities and threats is provided in Table 2 below.

Table 2 SWOT Analysis

Strengths	Weaknesses
• Excellent natural potential • Good human resources in certain countries • Well established EU presence and commercial links	• Poor state of infrastructure • High cost & scarcity of air transport • Lack of comprehensive development vision in certain countries
Opportunities	**Threats**
• Favorable long term demand trend • Development of new market segments (eco-tourism, cultural tourism, etc.)	• Increasing security concerns in western countries • Competition from other exotic tourist destinations

3.2 Investment Opportunities

Investment opportunities and, more in general, opportunities for expanding the current level of activity include:

- the establishment of ***high quality hotels/tourist villages***. Despite the current difficulties experienced by "sea, sun and sand" operations in certain countries, opportunities for investment in tourist resorts (hotels and villages) are still present, at least in the medium term. Investment costs for these operations are fairly high, usually in the order of € 30-50,000 per bed. At the current (fairly low) profit margins, the break even for these operations requires a 40% occupancy rate while the payback period is at least 8 years;
- the establishment of ***lodges and tented camps***. Opportunities appear to exist in Tanzania's "Southern Circuit" and, on a more limited scale, in Uganda (where, however, there are security problems in certain northern parks) and in Ethiopia (in the medium term). An upscale 10 to 20-bed lodge can cost up to US$ 1 million, including the purchase of vehicles and other necessary equipments. Profitability is somewhat higher than in resort operations, with margins estimated at around 15-20% and pay back periods of 5 to 7 years;
- the establishment of ***safari, eco-tourism or adventure tour operators***. These are small scale operations, that can appeal to individual investors or to small sized, foreign tour operators already specializing in EAIO destinations. Investment, covering all essential items such as vehicles, general equipment, establishment of an operational office and training materials, are typically in the € 200 - 300,000 range, although some simple operations can be started with as little as € 25 – 30,000. Profitability is fairly high, with margins in the order of 20-25%.

4. PROPOSED PRO€INVEST ACTIVITIES

4.1 Introduction

The tourism sector offers a wide range of opportunities for Pro€Invest initiatives. This is due not only to the sector's intrinsic importance but also to the presence of a network of sector business associations and professional groupings that appear capable of making good use of the program. Indeed, fieldwork in the region clearly demonstrated that "intermediary organizations" in the tourism sector are among the most active and display a marked interest (often backed by real operational capabilities) in participating in Pro€Invest.

The proposed Pro€Invest initiatives include:

- the organization of a ***regional sector partnership meeting***;
- the organization of ***sub-regional partnership meetings*** and the organization of ***partnership missions*** aimed at specific market segments;
- the organization of ***policy dialogue initiatives*** in EAC countries aimed at enhancing overall operating conditions;
- the provision of ***capacity building support*** for the establishment of umbrella organizations representing the interest of tourism private operators at the regional/sub-regional level.

A detailed presentation of the proposed initiatives is provided in the tables included in Sections 4.2 Sector Support and 4.3 Institutional Support.

4.2 Sector Support Initiatives

Type of Pro€Invest activity	**Regional Sector Partnership Meeting**
Product/service lines considered	All market segments and activities
ACP and EU countries potentially involved	Among EAIO countries, **Kenya**, **Uganda**, **Tanzania**, **Ethiopia** and **Madagascar** are the countries that would benefit the most from participation in the event. For Kenya and, to a lesser extent, for Uganda and Tanzania, the meeting would provide an excellent opportunity to improve their image on the international scene. In the case of Ethiopia and Madagascar, the meeting would primarily allow an appropriate presentation of their still largely untapped potential. Other countries with a currently stronger position in the tourism sector, such as **Mauritius** and the **Seychelles**, could also participate, also adding an element of potential South-South cooperation to the meeting. In the case of EU countries, participation should include primarily **United Kingdom**, **France**, **Germany**, **Italy, Spain** and the **Netherlands**. These are the countries from which the bulk of tourism flows originate and also the countries whose operators already have a significant presence in the region. Other countries holding a strong economic interest in EAIO, such as **South Africa** and **India**, should also be involved, further enhancing the potential for South – South cooperation initiatives.
Profile and estimated number of the ACP and EU operators likely to participate	The sector partnership meeting should involve: • large players in the hotel business (e.g. *Groupe Accor*, *Beachcomber*, the Aga Khan's *Tourist Promotion Service*); • national tourism promotion boards, associations and organizations (such as the *Uganda Tourism Board* or the *Maison du Tourisme de Madagascar*); • national business associations on a sector or sub-sector basis (e.g. *Kenya Association of Tours Operators*, *Uganda Tourism Association*, *Tourism Confederation of Tanzania*, *Groupement des Opératuers du Toursime de*

	Madagascar, etc.); • international tour operators (*Abercrombie & Kent, Ventana, Franco Rosso, Kuoni*, etc.); • specialist operators active in emerging market segments (eco-tourism operators, adventure tourism operators, etc.); • operators active in transportation and other tourism-related activities (airlines, car rental companies); • financial institutions, including commercial banks, DFI and investment funds; • real estate developers, with special attention to operators/investors coming from within the region (e.g. Mauritius) and other ACP countries (namely, South Africa); • suppliers of goods, equipment and services for tourism-related activities. Taking into account: (i) the great importance of the sector in EAIO region, (ii) the representativeness and good operational capabilities of certain sector associations, (iii) tourism's strong linkages with other sectors, and (iv) the already significant EU presence, the mobilization of at least 300 participants appears feasible, with some 100 participants from EU countries and 200 from the EAIO region and other countries.

Type of Pro€Invest activities	**Sub-Sector Partnership Meetings**
Product/service lines considered	All segments, but especially tour operators
ACP and EU countries potentially involved	The Pro€Invest-initiated Regional Sector Partnership Meeting is not expected to take place until 2005 and could be usefully preceded by the organization of sub-sector partnership meetings. Particularly aimed at tour operators, these events could be organized at the sub regional level, namely: one in **EAC countries** (Kenya, Uganda and Tanzania) and one for the **Indian Ocean countries** (Madagascar, Mauritius, Seychelles and Comoros). Regarding EU countries, participants are expected to come from the same countries indicated for the Regional Sector Partnership Meeting.
Profile and estimated number of the ACP and EU operators likely to participate	Each event would involve around: • 30-40 EAIO companies to be selected among members of tourism sector associations (such as the *Kenya Association of Tour Operators* and the *Groupement des Opérateurs du Tourisme de Madagascar*); • 20 EU tour operators mobilized by national tour operators associations and/or in cooperation with the *European Tour Operators Association*.

Type of Pro€Invest activities	**Sub-sector Partnership Missions (inbound or outbound)**
Product/service lines considered	Emerging market segments, such as eco-tourism, sports related activities and cultural tourism
ACP and EU countries potentially involved	Tourism operators from all the **EAIO countries** could benefit from the participation in highly focused promotional missions, targeted at specific market segments and possibly organized in connection with major sector events (such as the tourism trade fairs in London, Berlin and Milan). <u>Examples</u> of these initiatives include: • partnership mission for cultural tourism in Ethiopia (in particular, in connection with a recently launched World Bank project supporting interventions in the Axum and Gondar areas); • partnership mission for cultural and eco-tourism in Madagascar and, possibly, in other Indian Ocean locations (which could also see the participation – on the EU side – of operators from Réunion).

	EU counterparts are likely to be found primarily in the **United Kingdom**, **France** and **Germany**, countries which combine significant tourist flows with a growing attention to ecological or cultural motivations, but interested counterparts could also be found in other countries (e.g. Italy's *Touring Club Italiano*).
Profile and estimated number of the ACP and EU operators likely to participate	Partnership missions could be promoted by EAIO's specialized sub sector associations, such as the *Ecotourism Society of Kenya*. The membership of these associations is rapidly growing and members appear sufficiently motivated to ensure an adequate participation in the events (10 -15 participants). In the case of inbound missions, the endorsement of some wildlife conservation societies could also be sought. In the case of Ethiopia, there is no specialized association in cultural tourism, but the *Tourism Commission*, the *Hotel Association* and the most active generalist private sector organizations (such as the *Addis Ababa Chamber of Commerce*) appear capable of mobilizing the necessary number of participants.

4.3 Institutional Support Initiatives

Type of Pro€Invest activities	**Public Private Dialogue – National Workshops on the Formulation of a Comprehensive Sector Development Strategy**
Countries concerned	Kenya, Uganda, Tanzania, Ethiopia, Madagascar
Issues to be addressed	Issues to be covered by the workshops include all the constraints currently lamented by tourism operators, namely: • the heavy VAT rates charged on hotel accommodations; • the lack of comprehensive standards and classification criteria for hotels; • the need to fight unfair competition from unlicensed operators (e.g. the phenomenon of "street safari packages" in Kenya); • the restrictive visa policy still implemented in certain countries (especially Ethiopia and Madagascar); • the limited effectiveness of public tourism promotion boards; • the need to incorporate the tourism sector's needs when setting investment priorities in transport (namely, roads); • the need to revise current air transport policy, namely regarding charter flights and the allocation of landing rights.
Stakeholders to be involved	Stakeholders to be involved include: representatives of relevant ministries, national tourism promotion boards (*Kenya Tourist Board*, *Ethiopia Tourism Commission*, Madagascar's *Maison du Tourisme*, *Uganda Tourist Board)*, general sector associations (e.g. *Tourism Confederation of Tanzania*, *Groupement des Opératuers du Toursime de Madagascar*, *Uganda Tourist Association*), and specialized associations representing specific branches of the tourism industry (*Eco-tourism Society of Kenya*, Ethiopia's *Hotel Association*).

Type of Pro€Invest activities	**Capacity Building (establishment of regional/sub-regional umbrella sector associations)**
Countries concerned	EAC and Indian Ocean countries
Issues to be addressed	The establishment of regional or sub-regional umbrella associations would ensure that major issues are tackled at the appropriate level and with a greater critical mass. The idea of establishing an umbrella association is frequently mentioned in EAC countries, also in connection with the renewed trend towards sub regional cooperation. In a similar vein, the establishment of an *Association du Tourisme de l'Océan Indien* was proposed some time ago, and could see the participation of a dozen key players in the sub region.
Stakeholders to be involved	National tourism sector associations or confederations, with possible participation of more active branch associations.

APPENDIX A – BASIC STATISTICS

Table A.1 International Tourist Arrivals in Selected EAIO countries – 1995 – 2000 (number)

Countries	1995		2000	
	EU	Non-EU	EU	Non-EU
Kenya	371,170	602,430	563,046	473,582
Mauritius	228,771	193,872	415,993	240,460
Seychelles	84,762	35,954	132,079	369,590
Tanzania	73,038	222,273	107,248	52,823
Madagascar	51,496	23,123	95,747	34,299
Uganda	29,552	130,337	27,513	163,763
Ethiopia	23,107	80,229	24,707	111,247
Total	**861,896**	**1,288,218**	**1,366,333**	**1,445,764**

Source: World Tourism Organization

Table A.2 Trend in International Tourist Arrivals in EAIO Countries – 1990 - 2001

Countries	International Tourist Arrivals ('000)				Growth Rate (%)		Average Annual Growth (%)
	1995	1999	2000	2001*	1999/ 2000	2000/ 2001	1995/ 2000
Comoros	23	24	24	..	*-2.4*		*0.9*
Djibouti	21	..	..	..			
Eritrea	315	57	70	113	*24.1*	*60.6*	*-25.9*
Ethiopia	103	92	136	..	*48*		*5.6*
Kenya	896	862	899	841	*4.3*	*-6.5*	*0.1*
Madagascar	75	138	160	170	*15.8*	*6.3*	*16.5*
Mauritius	422	578	656	660	*13.6*	*0.5*	*9.2*
Rwanda	..	..	..	..			
Seychelles	121	125	130	129	*4.1*	*-0.7*	*1.5*
Sudan	63	39	38	50	*-2.7*	*32.9*	*-9.8*
Tanzania	285	564	459	501	*-18.6*	*9.2*	*10*
Uganda	160	187	191	205	*2.3*	*7.1*	*3.6*
Total	**2,484**	**2,666**	**2,763**	**2,669**			

* Provisional
Source: World Tourism Organization

Table A.3 Trend in International Tourist Receipts in EAIO Countries – 1995 - 2000

Countries	International Tourism Receipts (US$ million)				Growth Rate (%)		Average Annual Growth (%)
	1995	1999	2000	2001*	1999/ 2000	2000/ 2001	1995/ 2000
Comoros	21	19	15	..	*-21.1*		*-6.5*
Djibouti	4	..	..	..			
Eritrea	58	28	36	74	*28.6*	*105.6*	*-9.1*
Ethiopia	26	16	68	..	*325*		*21.2*
Kenya	486	304	276	308	*-9.2*	*11.6*	*-10.7*
Madagascar	58	100	119	..	*19*		*15.5*
Mauritius	430	545	542	625	*-0.6*	*15.3*	*4.7*
Rwanda	2	17	24	..	*41.2*		*64.4*
Seychelles	98	112	115	113	*2.9*	*-1.7*	*3.3*
Sudan	19	22	30	56	*36.4*	*86.7*	*9.6*
Tanzania	259	733	739	725	*0.8*	*-1.9*	*23.3*
Uganda	78	149	..	..			
Total	**1,539**	**2,045**	**1,964**	**1,901**			

* Provisional
Source: World Tourism Organization

TECHNICAL SUMMARY #4
INFORMATION AND COMMUNICATION TECHNOLOGY

1. SECTOR DEFINITION

The information and communication technology (ICT) sector is almost by definition a composite industry, comprising a range of different activities. The main activities covered in this Technical Summary include: (i) the provision of basic connectivity services (the so called internet service providers or ISP); (ii) the development of software (including web designing and e-commerce applications); (iii) IT-related consulting activities, and (iv) the operation of call centers and IT-enabled activities, such as data entry, bookkeeping, etc. In terms of the ISIC nomenclature (Rev. 3), activities included in this profile fall in two groups, namely: “72 - Computer and related activities” and, to some extent, “74 - Other business activities”.

2. SECTOR PROFILE

2.1 Overview

Internet diffusion is still limited in EAIO: indeed, in 2001 the total number of users in the region was estimated at some 976,000, i.e. less than twice the amount recorded for a small country such as Estonia (560,00). However, the situation is changing fast. With the establishment of the first ISP in Somalia in 2003, the whole EAIO region is now covered with local internet services. Even more importantly, the volume of outgoing traffic is growing rapidly, as indicated by the major leap from 25 Mbps in 2001 to 83 Mbps in 2002. Figures on turnover for IT and IT-related activities in the region are not available. Estimates based on information collected during field work put the total at around € 200 – 300 million, of which perhaps 50% related to basic services provided by ISP and cyber cafés.

Table 1 Key Figures – 2001/2002

Countries	Dial-up subscribers (number - 2002)	International Bandwidth (outgoing Kbps - 2002)	Internet Users (number - 2001)
Ethiopia	6,500	8,200	25,000
Kenya	35,000	28,000	500,000
Madagascar	10,000	2,750	35,000
Mauritius	35,000	4,096	158,000
Tanzania	30,000	12,000	100,000
Uganda	10,000	9,250	60,000
Other countries	18,791	18,790	97,800
EAIO	**145,291**	**83,086**	**975,800**

Sources: ITU and SANGONeT

2.2 Market Structure and Recent Developments

The structure of EAIO’s information technology sector is hard to gauge, due to its newness and composite character. What is certainly indisputable is the leading position presently occupied by ***Mauritius***, where more than 150 IT companies are currently in operation. These include both subsidiaries of foreign companies (mainly from India) and locally owned entities. Local companies are often small-sized but they also include some subsidiaries of large groups (e.g. *Toolkit*, part of the *CIEL Group*, and *CJIT*, part of the *Currimjee Jeewanjee Group*). Services provided cover a variety of IT-related activities, ranging from software development to web graphics & multimedia to consulting services. In Mauritius the rapid expansion of IT-related activities (witnessed *inter alia* by a 25% annual growth in imports of IT equipment) is strongly supported by government authorities, with a package of attractive incentives and significant investments (see below).

Madagascar is another country where the IT industry has recorded a significant growth. At present, there are some 50 companies in operation in the country, with a total workforce of some 4,000. Some 20 companies are located in the *zone franche* and usually have a foreign partner, while the remaining companies are largely locally-owned. Services provided include software development, web designing and internet site development, and data entry.

In ***EAC countries*** the number of internet service providers has grown rapidly, with about a dozen ISP currently in operation in Uganda and Tanzania and some 25 in Kenya (but no less than 80 have been registered). High value added activities are still in their initial stages of development, with a limited number of companies of some significance (*MIPS Inc*, *Insight Kenya*, etc.), but the range of services provided is expanding rapidly (remote bookkeeping services to overseas clients, web designers, IT-related consulting, etc.). Signs of vitality can be detected also in ***Rwanda***, where some 15 IT companies are currently in operation (and recently established a sector association, the *Association des Opérateurs Economiques du Secteur Informatique et Communication - AOESIC*).

The development of IT-related activities in ***Ethiopia*** is deterred by the undeveloped state of the telecom sector. The monopolistic position enjoyed by *Ethiopian Telecommunication Corporation* in all telecom-related services and other restrictive measures (such as an unclear policy over the provisioning of value-added services such as web design, site hosting or cyber cafés) has so far severely constrained internet diffusion in the country. Finally, in the case of ***Sudan***, the basic telecom infrastructure is fairly advanced. At present there are 6 ISP in operation and an emerging cluster of IT consulting firms (e.g. *NARIS Consulting Group*).

2.3 EU Presence

EU presence in EAIO's nascent information technology industry is still limited. In Mauritius, EU companies (including large corporations, such as *British Telecom* and *Hachette*) are among the clients of local IT companies but only few cases of European direct investments are reported (e.g. *Berger Levrault* and *Pressimage* from France, *D&H Computers* from the UK). On the contrary, Indian companies (especially from the Bangalore area) are very active players in the island, followed by US companies. EU presence in Madagascar includes some French companies (*Ingenosya*, *FTHM Conseils*, etc.) but also academic institutions (such as the *Université de Nice*) that have established partnership agreements with IT companies located in the free zone.

3. INVESTMENT POTENTIAL

3.1 Growth Potential and Constraints

Growth prospects for IT activities in the EAIO region result from the interplay of several factors, affecting both demand and supply. These include: (i) trends in international demand, (ii) availability of IT infrastructure, (iii) availability of human resources, (iv) trends in local demand, and (v) government policy.

Trends in International Demand. There is no doubt that demand for IT and IT-related services will grow exponentially and will become more decentralized worldwide. Demand for labor intensive activities such as data entry and remote accounting is driven by both governments' requirements for digitization of administrative documents and by a clear pattern towards outsourcing of non essential functions in business activities. Until not long ago, off shore data entry services were concentrated in relatively few locations (the Caribbean, some low cost East European countries, such a Romania or Estonia) but the constant quest for cost reductions is creating opportunities also for other countries. The call center business (which itself covers various activities, from telemarketing to reservations for hotel chains and airlines) is booming, with well over one million people working in call centers in the US and about half that many in the EU. Here again the pressure to reduce costs is very strong and some industry sources estimate that in the next few years there could be as many as 40,000 offshore call center agent position in Africa and the Middle East.

IT Infrastructure. In the EAIO region limitations in IT infrastructure are still severe, with cost and speed of connection representing a major obstacle in certain countries. In Madagascar, bandwidth is totally absent and companies active in data entry are still obliged to make large shipments of data via courier services. In Uganda, the majority of internet traffic is presently routed internationally, mostly via the US and Europe over independent satellite links owned and operated separately by ISP. This local traffic is using up precious international bandwidth and web sites hosted locally are painfully slow in loading due to the fact that the traffic has to go out over international links and then back into the country again to get from one ISP to another. In the area of IT infrastructure Mauritius is in a privileged position, thanks to the recent inauguration of the SAFE undersea optic fiber cable system, connecting South Africa to the Far East through Mauritius and Réunion. East African countries "by passed" by to SAFE recently launched the proposal of an under sea cable along the East African coast from Durban to Djibouti. The project (whose cost is tentatively estimated at some US$ 250 – 300 million) was endorsed by government authorities and major telecom operators in the region at the September 2003 East African Business Summit, but sources of financing are still in the process of being identified.

Human Resources. Regarding human resources the EAIO region presents a varied situation. To begin with, countries like Mauritius and the Seychelles enjoy the advantage of a bilingual labor force, which in itself does constitute an important asset. In general, in EAIO countries there is abundance of fairly educated workers for simpler jobs, such as data entry and call centers, whereas personnel with good technical background is relatively scarce. This has led to a rapid increase in wages for skilled workers, which remain much lower than in EU countries but are no longer particularly competitive vis-à-vis India.

Local Demand. Local demand is still limited, thereby making it difficult for IT companies to reach the critical mass required to move into more advanced activities. Internet diffusion and use is severely limited by the combination of low purchasing power and high internet costs. In certain EAIO countries the average cost for a local dialup internet account for 20 hours a month is extremely high (Uganda: US$109; Kenya: US$123) when compared with western countries (US$ 22 per month in the United States and € 40 in the European Union). As for software development and IT-related services, government demand is constrained by budgetary problems while only a limited number of private enterprises have reached the level of sophistication that requires custom made programs.

Government Policy. In several EAIO countries government authorities have issued blueprint documents calling for the fast development of IT and IT-related activities, such as Kenya's "National ICT Policy". While the process of policy formulation significantly improved over the last few years, the real challenge lies in effective implementation, for which support is being mobilized by regional organizations and the donor community (see Box 1). In this context, Mauritius stands out as the exception. Indeed, as part of the so called "Cyber Island Project", Mauritian authorities have introduced a series of measures to liberalize the sector and are in the process of establishing an "IT free zone", the Ebene Cyber City. Slated for completion in April 2004, Ebene Cyber City will have close contacts with the University of Mauritius and is expected to initially employ about 5,000 people. The project is supported by a US$ 100 million credit line from the government of India (extended at concessional terms) and is being developed in cooperation with Indian ICT companies. The Mauritian government is supplementing such investment in physical infrastructures with a comprehensive package of incentives to attract foreign firms, including (i) a tax holiday until 2008 for pioneering high skills IT operators, (ii) generous accelerated depreciation allowances, and (iii) a 50% relief on personal income tax for foreign IT specialists.

Box 1 - Wider Initiatives to Support ICT Development

In recent times, the development of ICT has become a top priority for several regional and sub-regional organizations encompassing EAIO countries. The main initiatives include:

- the establishment of the NEPAD ICT Task Team, better known as the "e-Africa Commission", which includes government representatives, delegates from regional bodies (e.g. IGAD, SADC) and specialized institutions (e.g. Africa Telecommunication Union);
- the creation, within the framework of COMESA, of the Association of Regulators of Information and Communications of Eastern and Southern Africa (ARICEA), which is expected to become a crucially important forum for the discussion of key issues in ICT regulation.

In addition, within the framework of the Africa Information Society Initiative (AISI), the Economic Commission for Africa (ECA) is providing assistance to several governments in the formulation and implementation of ICT development strategies.

In the donor community several initiatives have been launched by bilateral programs. These include the USAID-financed Leland Initiative, the Acacia program (supported by Canada) as well as the initiatives implemented by the International Institute for Communication and Development (IICD) with Dutch, British and Swiss funding. At the EU level, the Center for the Development of the Enterprise (CDE) recently carried out a first ICT diagnostic study in West African countries and is planning to extend this initiative to the EAIO region in 2004.

A summary presentation of the sector's strengths, weaknesses, opportunities and threats is provided in Table 2 below.

Table 2 SWOT Analysis

Strengths	Weaknesses
• Bilingual labor force (Mauritius and Seychelles) • Inexpensive skilled labor for simpler jobs	• Limited IT infrastructure and weak government policy (except Mauritius) • Limited local demand • Limited availability and high cost of skilled human resources
Opportunities	**Threats**
• Favorable trend in international demand for remote IT and IT-enabled services	• Strong international competition

3.2 Investment Opportunities

Based on the above analysis, investment opportunities in the information technology sector appear to concentrate in two main areas, namely:

- the establishment of ***call enters*** and ***other IT-enabled operations***. Aimed at serving overseas clients, these are fairly labor intensive operations, offering good returns. Based on some projects developed in Uganda, investment costs for small and medium-sized call centers (25 to 100 seats) are estimated in the € 100 – 250,000 range, while the payback period is about 2 years;
- the establishment of ***multi purpose tele-centers***. Throughout Sub-Saharan Africa tele-centers have become a major instrument to promote internet diffusion, especially in small centers and rural areas. Initially established on a pilot basis with public (or donor) funds, tele centers are now attracting the interest of some small operators, and could be operated either stand alone or as part of multi-branch chains. Typical start up costs are estimated at between € 25,000 and 100,000, depending on the complexity of the equipment and the range of services provided.

Other investment opportunities relate to ***large scale IT projects***, developed on an *ad hoc* basis by major investors. An example of these projects is the "disaster relief center" to be established in Mauritius by *Infosys Technologies*, a leading Indian IT company based in Bangalore, with 1,500 employees worldwide and listed at the NASDAQ.

4. PROPOSED PRO€INVEST ACTIVITIES

4.1 Introduction

Despite its newness, information technology is a sector offering interesting opportunities for the Pro€Invest program. Indeed, the very nature of the industry not only requires a multiplication of international contacts but also induces companies to go beyond the traditional seller - buyer relationship, through the forging of partnership agreements of various nature (licensing, co-development, etc.). In addition, the high level of education typically attained by IT operators makes it easier for them to understand the logic of the Pro€Invest program and to organize activities in the proper way. Finally, as the sector is still in its early stages of development, there is a noticeable need to (i) encourage public private dialogue on a number of subjects and (ii) support the establishment and the development of sector specific business associations.

Based on these considerations, proposed Pro€Invest sector and institutional support initiatives include:

- the organization of a ***regional sector partnership meeting***;
- the organization of ***policy dialogue*** initiatives aimed at addressing sector wide issues;
- the provision of ***capacity building*** support to assist the nascent sector business associations.

A detailed presentation of the proposed initiatives is provided in the tables included in Sections 4.2 Sector Support and 4.3 Institutional Support.

4.2 Sector Support

Type of Pro€Invest activities	**Regional Sector Partnership Meeting**
Product/service lines considered	All IT-related products and services
ACP and EU countries potentially involved	The initiative should cover the whole EAIO region, although a comparatively more active participation is expected to come from **Mauritius**, **Madagascar** and **Kenya**. Regarding EU countries, participants are expected to come primarily from **France** and the **United Kingdom**, due to the comparatively stronger presence in the region, with some additional participation coming from **Scandinavian countries** (present in the region through some telecom companies). In order to foster forms of South-South cooperation, an important component would be represented by participants from third countries, namely **South Africa** (present in EAIO both with telecom companies and ISP providers) and **India** (whose IT companies already have a significant presence in Mauritius).
Profile and estimated number of the ACP and EU operators likely to participate	The regional sector meeting should be open to all categories of actors involved in the development of the IT sector, namely: • regional and national ISP (*AfricaOnline*, *MediaPost*, *Wanadoo*, *SwiftKenya*, *SudaTel*, etc.); • fixed and mobile telecom operators active in the region (*MTN*, *ETC*, *KenCell*, etc.); • suppliers of IT and telecom equipment (e.g. *Alcatel*, *Siemens*, *H-P*, etc.); • companies active in the telemarketing, call centers companies, and other remote IT-enabled services; • software development companies; • web designing companies & internet developers; • IT-training centers and technology institutes (e.g. Tanzania's *COSTECH* or *Soft Tech Training*); • relevant regulatory bodies (e.g. *Communications Commission of Kenya*). The IT sector is highly fragmented and comprises many small companies and, in order to reach the required minimum number of participants (some 300 companies), the active participation of some key sector organizations, such as Mauritius' *National Computer Board* or Kenya's *TESPOK*, will be required. A useful role could also be played by *AITEC - Africa*, a London-based organization with great experience in the organization of various events (fairs, conferences, workshops) in the ICT sector throughout Eastern and Southern Africa. Proposed locations for the meeting are Port-Louis or Nairobi.

4.3 Institutional Support

Type of Pro€Invest activities	**Public Private Dialogue – National Workshops on the Establishment of a Conducive Policy Framework**
Countries concerned	EAC countries, Rwanda, Ethiopia, Madagascar and Sudan
Issues to be addressed	The development of the ICT industry is highly dependent upon the establishment of an appropriate policy framework. In turn, this requires a combination of liberalization and supportive measures. The organization of Pro€Invest national workshops could help in addressing important issues, such as: • liberalization in basic telecom services (namely, in Ethiopia); • regulation and licensing criteria; • promotion of ICT in rural areas; • development of e-government; • provision of basic and advanced training services.
Stakeholders to be involved	Stakeholders to be invited to the workshops include: • relevant ministries and telecom regulatory bodies (e.g. *Tanzania Communications Commission*, *Uganda Communications Commission*, etc.); • national sector associations (e.g. Kenya's *TESPOK*, *Ethiopian Information Technology Professional Association*, etc.); • regional entities and associations (such as ECA's *Information Technology Center for Africa* and NEPAD's *e-Africa Commission*); • Donor supported institutions and programs (e.g. *Acacia program*, *Leland Initiative*, *International Institute for Communication and Development*, etc.).

Type of Pro€Invest activities	**Capacity Building – Establishment/Strengthening of Sector Associations**
Countries concerned	Madagascar, Rwanda and EAC countries
Issues to be addressed	The IT sector is still in its early stages of development and in most EAIO countries cannot count on the support of well structured sector organizations and/or promotional bodies. Some professional groupings were recently established (such as Madagascar's *GOTICOM* or Rwanda's *AOESIC*), but their operational capabilities appear still limited, especially in the crucially important areas of: (i) lobbying vis-à-vis relevant government entities, and (ii) the development of professional codes of conducts. In these cases, the provision of capacity building support appears warranted.
Stakeholders to be involved	Existing and emerging groupings of IT companies and professionals, IT regulatory and promotional bodies (when existing). An important role in the formulation and organization of capacity building activities could be played by *AfrISPA*, the African umbrella organization of ISP associations, whose membership includes several EAIO entities.

APPENDIX A – BASIC STATISTICS

Table A.1 Trend in Internet Users in EAIO Countries - 1999 - 2001

Countries	1999	2000	2001
Comoros	800	1,500	2,500
Djibouti	750	1,400	3,300
Eritrea	900	5,000	6,000
Ethiopia	8,000	10,000	25,000
Kenya	35,000	200,000	500,000
Madagascar	25,000	30,000	35,000
Mauritius	55,000	87,000	158,000
Rwanda	5,000	5,000	20,000
Seychelles	5,000	6,000	9,000
Somalia	200	500	1,000
Sudan	5,000	30,000	56,000
Tanzania	25,000	40,000	100,000
Uganda	25,000	40,000	60,000
Total	**190,650**	**456,400**	**975,800**

Source: ITU

Table A.2 Internet Diffusion in EAIO Countries - 2002

Countries	Dial-up Subscribers	International Bandwidth (outgoing Kbps)
Comoros	491	64
Djibouti	850	2,048
Eritrea	2,500	512
Ethiopia	6,500	8,200
Kenya	35,000	28,000
Madagascar	10,000	2,750
Mauritius	35,000	4,096
Rwanda	2,700	1,300
Seychelles	3,000	4,098
Somalia	250	768
Sudan	9,000	10,000
Tanzania	30,000	12,000
Uganda	10,000	9,250
Total	**145,291**	**83,086**

Source: SANGONeT

Table A.3 Average Wage for IT Employees in Certain Countries – Early 2000s (US$)

Position	Madagascar	France	India
Data Entry Clerk	39-160	890-1,100	30-180
Programmer/ Software Engineer	200-555	1,500-4,800	250-500
Graphic Designer	66-266	1,200-3,500	110-180

Source: DTIS Study

TECHNICAL SUMMARY #5

FLORICULTURE

1. SECTOR DEFINITION

Floriculture includes the growing of flowers, potted plants and other greenery. Cut flowers are by far the main line of business and include roses, carnations and a wide variety of other flowers. In turn, roses come in dozens of varieties (e.g. First Red, Frisco, Noblesse, Lambada, Red Calypso, etc.) which are usually grouped in different main product groups according to their distinctive features (e.g. long vs. short stem, large-bud roses vs. sweethearts). In terms of ISIC classification (Rev. 3) floriculture is included (together with other activities) in the class “0112 - Growing of vegetables, horticulture specialties and products”.

2. SECTOR PROFILE

2.1 Overview

Floriculture is one of the main success stories in the EAIO region. Total exports from the region are estimated to have reached some € 260 million in 2002 (€ 243 million in 2001), a value comparable to that of certain “traditional” export crops. In ***Kenya*** floriculture has become the third most important source of foreign exchange earnings, after tea and tourism, with a labor force of some 50,000, mainly young female workers. The overall importance attained by floriculture in Kenya is symbolized by the fact that the main producers figure prominently among the sponsors of major sports and social events (as well as of leading football teams). Floriculture has attained a respectable size also in ***Uganda*** and ***Tanzania***, with each country posting export sales in the order of € 15 - 20 million, while it is still in the initial stages of development in ***Ethiopia***, with exports around € 1 million. In these countries the labor force is cumulatively estimated at some 7,500.

Table 1 Key Figures - 2001

Country	Companies	Hectares under cultivation	Labor Force	Total Exports (€ million)
Kenya	140	2,180	50,000	208
Uganda	20	120	4,000	18
Tanzania	12	85	2,500	16
Ethiopia	5	25	1,000	1
Total	**177**	**2,410**	**57,500**	**243**

Sources: COLEACP, LEI and own estimates based on various sources

2.2 Market Structure

The origins of floriculture in EAIO date to the mid-late 1970s, when the first operations were established in Kenya to take advantage of local favorable conditions in a context of fast growing international demand. The main products include roses (which account for some 50-60% of exports) and carnations (accounting for another 20%). Over time ornamental plants have progressively gained in importance, and currently account for some 10% of the region’s total floricultural exports.

At present there are nearly 180 flower growers in operation in the region, with about 2,400 hectares under cultivation. ***Kenya*** is by far the leading producer, with some 2,200 hectares cultivated by an estimated 140 growers. However, production is highly concentrated and some 25-30 industrial-style operations account for about two thirds of total exports. In ***Tanzania*** there are 12 operations, with 80 hectares under cultivation in the Arusha - Kilimanjaro area. In ***Uganda*** floriculture started in the early 1990s and at present there are some twenty farms in operation, with 120 hectares under cultivation in the Kampala-Entebbe area. In ***Ethiopia*** floriculture also started in the early 1990s, with the launch of a small three hectares greenhouse. A few other farms became operational in the early 2000s and some expansion initiatives are currently ongoing.

Floriculture is one of the most complex parts of agriculture: vigilance against pests and diseases must be constant and the exact scheduling of various phases is imperative. In addition, the product is highly perishable and the logistics chain must function smoothly. The market for cut flowers is very dynamic, with changes on both the demand and the supply sides resulting from changes in consumers' tastes, product innovation (with the continuous introduction of new varieties), and the emergence of new producers. This requires a constant effort to keep in touch with latest developments as well as the need to control costs in order to retain adequate margins.

EAIO's competitive advantage in floriculture lies primarily in the excellent soil and climatic conditions and in the extremely low labor costs (€ 1-2/day compared with € 160 in the Netherlands). On the other hand, EAIO growers face higher marketing and transportation costs (all exports are by air, at a cost of € 1.8-2/kg) and somewhat higher overheads and investment costs (imported items, expatriate managerial personnel, etc.). As shown in Table 2 below, the combination of these factors results in a significant cost advantage over European producers, in the order of € 30 per hectare/year.

Table 2 Key Cost Comparisons - 2003

Cost Item	Netherlands	Kenya	Uganda
Labor costs per days	€ 160	€ 2	€ 1-2
Share of labor costs	29%	20%	13%
Share energy costs	22%	2%	1%
Share of marketing and transportation costs	7%	35%	42%
Operating costs per square meter (roses)	€ 62	€ 32	€ 30

Sources: LEI and field interviews

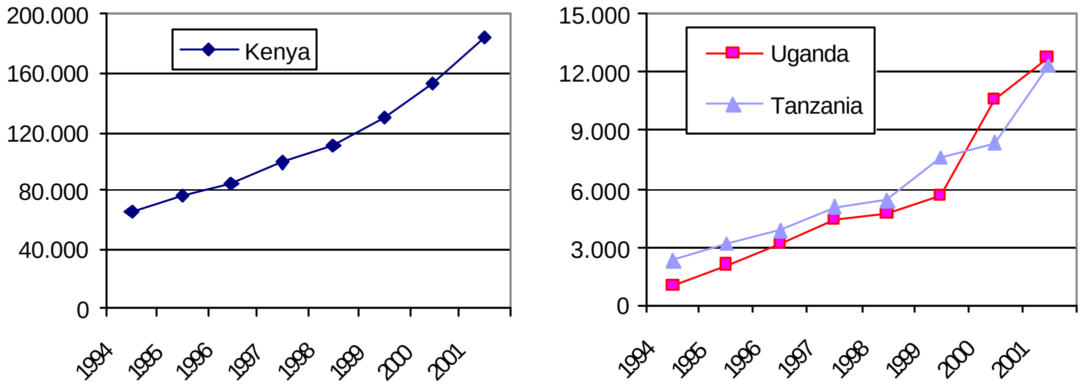
EAIO floriculture is overwhelmingly export oriented and transactions are channeled through: (i) the large flower markets in the Netherlands (*Aalsmeer* and *Bloemen Veiling Holland*) where products are sold at clock auctions, and (ii) direct sales to large flower wholesalers and, in certain cases, retail chains. Sales at the auctions account for an estimated 60% of total regional exports and are handled by specialized Dutch trading agents with a permanent presence in the region. The share of direct sales has been constantly increasing over time, especially in the case of largest Kenyan growers (e.g. *Oserian*, *Homegrown*), who have attained a high quality level (e.g. the production of wrapped bunches ready for display in supermarkets and shops). In certain cases, these growers have established their own trading companies to serve the European market.

2.3 Recent Developments

EAIO's floriculture experienced a dramatic growth over the last decade, with ***Kenya*** playing by far the dominant role. Over the 1994 – 2001 period exports of cut flowers from Kenya to the EU almost tripled, passing from € 66 million to € 184 million. In 1999 Kenya became the largest supplier to the EU, overtaking both Colombia and Israel. At present, Kenya is estimated to account from some 20-25% of total EU cut flowers imports.

Uganda also displayed a very positive performance, especially in relative terms. In 1994 cut flowers sales accounted for little more than € 1 million of export earnings. By 2000 exports had reached € 10 million to further progress to some € 13 million in 2001, with an annual growth of 32% over the 1994-2001 period. In recent years Uganda has overtaken ***Tanzania***, whose exports during the same period have grown by "only" 21% per year, and has established itself as the second largest producer in the region.

Figure 1 Exports of Cut Flowers to EU
(€ '000)



Source: COLEACP

The dramatic growth recorded has not been without drawbacks. In the case of Kenya, the progressive expansion of the area under cultivation appears to has put a excessive burden on scarce water resources, especially in the Lake Naivasha area. The intensive use of pesticides has also raised criticisms, because of its impact on the environment as well as on workers' health. Finally, although wages in the floriculture sector are usually above the statutory minimum (and sometimes better than in other industries), working conditions in flower farms are fairly hard and this has attracted the attention of various national and international NGO. To answer the above concerns, sector associations (namely, the *Kenya Flower Council*) have developed Codes of Practice (COP) covering both environmental and labor-related issues. However, the extent to which individual growers actually adhere to the COP is at times source of debate.

2.4 EU Presence

The EU is by far the dominant trade partner of EAIO's flower growers, with only a tiny share of output being sold to other countries. The majority of EAIO exports go to the Netherlands where cut flowers and plants are sold at the auction markets and then shipped to other EU countries as well as to many other destinations throughout the world. Exports to Germany and, especially, to the United Kingdom have significantly increased in recent times, largely as result of the growing trend towards direct sales.

Floriculture is probably the sector where the presence of EU operators in production is strongest. Indeed, the majority of large operators in Kenya, Uganda and Tanzania is either controlled or at least participated by EU investors. These include individual investors and small companies (as in the case of Uganda's *Wagagai*, controlled by Dutch interests) as well as large corporations (such as: *Syngenta*, controlling Kenya's *Pollen* - one of the leading producers of seeds and plants; the *Bolloré Group*, which together with *DEG* controls *Red Land Roses* - one of Kenya's most technologically advanced cut flowers producers; and the *Shire Group*, controlling Kenya's *Finlays*).

3. INVESTMENT POTENTIAL

3.1 Growth Potential and Constraints

World demand for floriculture products is estimated at around € 8 billion, of which some 50% for flowers. Roses are the main product group, reaching a total of € 2.2 billion traded in year 2000. The total EU market is around € 6 million, of which about € 1.2 million supplied by non EU countries.

Demand for floriculture products is still growing (+3% per annum for roses) and overall prospects for the EAIO region appear good. The positive outlook is confirmed by the rapid increase in acreage under cultivation recorded over the last two-three years in Kenya. Competition from Latin American countries, which have achieved excellent quality levels, remains severe but so far EAIO growers have shown their ability to compete successfully. The situation in Zimbabwe (another leading exporter of roses) is having an ambivalent impact on EAIO growers. On the one hand, with the closing of many commercial farms the level of output is declining, making room for increased EAIO supplies. On the other hand, before leaving Zimbabwe commercial farmers have a tendency to dump their output at no matter what price, in order to increase their cash inflow.

While further growth in quantities exported appears a realistic possibility, an increase in revenues may also come from the adoption of different commercial strategies. As mentioned above, some EAIO flower growers have already bypassed the Dutch auctions and established direct contacts with wholesalers and supermarket chains. The price differential between the two channels is variously estimated between 15% and 30% in favor of direct sales. At present, some 50% of Kenyan flowers and nearly the totality of Ugandan and Tanzanian output are still channeled through the auctions, leaving significant room for a more balanced allocation between auctions and direct sales.

In the longer term, one of the main constraints faced by EAIO growers is their limited access to new varieties, which are typically reserved for European growers by the breeders (who are themselves growers or anyhow connected with European growers). Usually justified on the basis of technical considerations (the new varieties would not be appropriate for the EAIO climate) such a limitation is regarded as part of a strategy to confine EAIO producers in the lower – medium range of the market. Another obstacle to growth relates to the high cost of capital goods and recurrent inputs (greenhouses, plastic for greenhouses, drip irrigation systems, protective clothing, etc.), which are largely imported and often burdened with significant duties. Finally, further development will depend crucially on the availability of air transport at reasonable costs. In EAC countries the situation is fairly good and expected to remain the same in the foreseeable future, but high transportation costs are a major hindrance in Ethiopia, where the volume of exportable products has not yet reached the critical mass required to attract dedicated charter operators.

A summary presentation of the sector's strengths, weaknesses, opportunities and threats is provided in Table 3 below.

Table 3 SWOT Analysis

Strengths	Weaknesses
• Excellent natural conditions • Low labor costs (but expensive expatriate managers) • Well established position in the European market	• High transport & marketing costs • Expensive imported capital goods and recurrent inputs
Opportunities	**Threats**
• Favorable trend in international demand • Price premium for direct sales	• Growing concerns regarding environmental and social issues • Product innovation totally dependent on European breeders

3.2 Investment Opportunities

Based on the above analysis, investment opportunities and, more in general, opportunities for expanding the current level of activity, include:

- further ***expansion in the acreage under cultivation***. Opportunities for extensive growth exist in EAC countries but especially in Ethiopia, where local climatic and soil conditions are regarded as particularly favorable. Investment costs for floriculture operations vary significantly, depending on the specific local conditions and the type of equipment used (e.g. metal vs. plastic greenhouses), being in the range of € 200 – 500,000 per hectare. According to industry sources, a typical green field investment project is in the € 2 million range, with an estimated pay back period of some 4 years;
- ***diversification of distribution channels***. The pros and cons of direct sales vs. sales through the Dutch auctions must be carefully balanced and definitely not all EAIO growers are in the position to access directly the market. Still, in the medium term the room of maneuver to increase the share of direct sales appears significant;
- ***upgrading and diversification of the product range***. While newest varieties are likely to remain out of reach for EAIO's growers for the foreseeable future, interesting opportunities exist in special market niches, typically involving the cultivation of plants. An example is provided by urban ornamental plants (hanging baskets, carpeting plants, etc.) for which demand is reported to be growing at 10% per year in Europe.

Additional investment opportunities may emerge in the local production of ***agricultural inputs and implements***. At present only few manufacturers of these goods are in operation in the region but the existence of a significant import substitution market provides an incentive for expanding activities (for example, during fieldwork we met with a Kenya-based producer of shading nets and drip irrigation implements who is expected to start production of PVC pipes for irrigation).

4. PROPOSED PRO€INVEST ACTIVITIES

4.1 Introduction

Because of its significant size, well articulated structure, and strong ties with EU operators the floriculture sector offers significant opportunities for Pro€Invest-supported activities. Proposed sector and institutional support initiatives include:

- the organization of a ***sub-sector partnership meeting***;
- the organization of inbound and/or outbound ***partnership missions*** both in floriculture and in related manufacturing activities; and
- the launch of ***capacity building*** initiatives to support sector business associations.

A detailed presentation of the proposed initiatives is provided in the tables included in Sections 4.2 Sector Support and 4.3 Institutional Support.

4.2 Sector Support

Type of Pro€Invest activities	**Sub-Sector Partnership Meeting**
Product/service lines considered	All floriculture activities (growers, traders, breeders, etc.)
ACP and EU countries potentially involved	In the case of <u>EAIO countries</u>, the meeting could see the participation of companies from **Kenya**, **Uganda**, **Tanzania** and **Ethiopia** and could be organized in collaboration with national sector associations, with the *Kenya Flower Council* likely to act as leading organizer (possibly with support from the *Fresh Produce Exporters' Association of Kenya*, whose membership also includes flower growers) and the collaborating organizers to be found among the *Uganda Flower Exporters Association,* the *Ethiopian Horticulture Producers Exporters Association* and the *Tanzania Floriculture Association.* <u>EU participants</u> are likely to come primarily from **the Netherlands** but also from **Italy**, the **UK** and **Germany**.
Profile and estimated number of the ACP and EU operators likely to participate	EAIO participants would include primarily flower growers mobilized through national sector associations. These associations have fairly strong ties with their members and appear definitely capable of mobilizing the 30 – 40 participants (out of some 180 growers throughout the region) required to justify the initiative. EU participants would include growers considering the launch of new ventures, traders, as well as large retail buyers (e.g. supermarket chains) potentially interested in establishing long term trade relationships. *COLEACP* and Dutch sector associations, auctions and trade promotion entities (such as the *Flower Council of Holland,* the *Dutch Wholesalers Association for Flowerbulbs and Nursery Stock*, the *Association of Dutch Flower Auctions* and the *International Flower Bulb Centre*) would be important channels for promoting the initiative in EU business circles.

Type of Pro€Invest activities	**Sector Partnership Missions (outbound and inbound)**
Product/service lines considered	Floriculture producers and traders
ACP and EU countries potentially involved	The organization of the sector meeting could be usefully complemented by partnership missions. Growers in **Kenya**, **Tanzania** and **Uganda** are already fairly well traveled but they would still benefit from the organization of an <u>outbound mission</u> allowing for the establishment of additional contacts, to foster long term trade relationships and technology transfers.

	The importance of partnership missions is greater in the case of **Ethiopia**, where the sector is still in the early stages of development and where an inbound mission would give EU operators the opportunity for a first hand assessment of the local growth potential. A recent (late spring 2003) mission to Ethiopia of Dutch floriculture operators is a clear signal that there is interest in the relevant EU business circles.
Profile and estimated number of the ACP and EU operators likely to participate	Same profile as in the case of the proposed Sub-Sector Meeting, with the outbound mission from EAC countries probably counting on 15 to 20 participants and the inbound mission to Ethiopia possibly involving 10 to 15 EU operators.

Type of Pro€Invest activities	**Sector Partnership Mission (inbound)**
Product/service lines considered	Capital goods and inputs for floriculture
ACP and EU countries potentially involved	In the case of **EAC countries** the volume of annual purchases generated by the floriculture industry appears to justify the establishment of local production initiatives, at least in the case of certain products (plastic pipes for irrigation, protective nets, etc.). In turn, the existence of such a "ready-to-serve" market may attract the interest of companies from the **Netherlands**, **Italy**, **Germany** and **France**.
Profile and estimated number of the ACP and EU operators likely to participate	The proposed inbound mission should be organized in coincidence with some national or regional trade fair taking place in EAIO. EU participants are likely to be primarily small scale specialized producers of agricultural implements while EAIO counterparts are likely to be wholesalers already dealing with agricultural inputs & implements and/or manufacturers active in lines of business presenting some technological or commercial similarity (e.g. use of extrusion techniques). Lists of potential EU participants could be drawn up based on information provided by EAIO growers' associations, that are in the position to identify EU companies currently selling in lines of business that offer a good potential for import substitution.

4.3 Institutional Support

Type of Pro€Invest activities	**Capacity Building**
Countries concerned	Uganda, Kenya, Tanzania and Ethiopia
Issues to be addressed	In **EAC countries** sector organizations are relatively well developed and in some cases have proved capable of promoting and implementing important initiatives, such as the establishment of structures dedicated to the handling of logistical arrangements for the export of flowers via air (Uganda's *Fresh Handlings*). Still, the associations' effectiveness in negotiating better conditions with government authorities in certain cases appears limited and a number of important issues remain unresolved (severely delayed VAT reimbursements in Kenya and Uganda, exceedingly long time required to register new chemicals in Kenya, etc.). In this respect, capacity building initiatives aimed at developing their capabilities in the area of policy dialogue and at enhancing their lobbying capabilities could be useful. In the case of **Ethiopia**, where the sector association (*Ethiopian Horticulture Producers and Exporters Association*) was only recently established, more bread and butter capacity building support could be in order, possibly together with the launch of initiatives of the *Fresh Handlings*-type aimed at improving the logistics of exports.

Stakeholders to be involved	National flower growers associations in Tanzania, Kenya, Uganda and Ethiopia (e.g. the *Kenya Flower Council*, the *Tanzania Floriculture Association* and the *Uganda Flower Exporters Association*).

APPENDIX A – BASIC STATISTICS

Table A.1 Floriculture Exports - 2001
(€ million)

Countries	Total Exports	Exports to the Netherlands	Share of Exports to the Netherlands
Kenya	208	121	58%
Uganda	18	17	95%
Tanzania	16	10	62%
Ethiopia	1	0.2	2%
Total	**243**	**148**	**61%**

Source: Pathfast

Table A.2 Trends in Exports of Flower Cuttings to the EU – 1994 - 2001
(€ '000)

Countries	Year							
	1994	1995	1996	1997	1998	1999	2000	2001
Kenya	65,889	75,686	84,203	99,056	110,771	130,137	153,014	184,280
Uganda	1,017	2,134	3,212	4,402	4,791	5,605	10,625	12,758
Tanzania	2,285	3,220	3,845	5,125	5,443	7,627	8,393	12,311

Source: COLEACP

TECHNICAL SUMMARY #6

FISHING AND AQUACULTURE

1. SECTOR DEFINITION

This Technical Summary covers fishing and aquaculture as well as related processing activities (filleting, canning, etc.). Taking into account the features of this sector in EAIO countries, the analysis concentrates on three different lines of business, namely: freshwater fishing (Nile Perch and Tilapia), coastal fishing and aquaculture (primarily, prawns and shrimps), and deep sea fishing (mostly tuna). In terms of the ISIC (Rev. 3) nomenclature, most of the activities covered in this profile fall in division “05 - Fishing, operation of fish hatcheries and fish farms, service activities incidental to fishing”, while processing activities are included in class “1512 - Processing and preserving of fish products”.

2. SECTOR PROFILE

2.1 Overview

Fishing and aquaculture is one of the largest foreign exchange earners in the EAIO region, with total exports estimated at around € 750 million, of which € 690 million to the EU countries. The ***Seychelles*** are the leading producing country, with exports sales (mostly tuna) of over € 220 million in 2002 and an incidence of fishing and related activities at some 20% of GDP. ***Madagascar*** is the second largest exporter, with export sales in excess of € 150 million in 2002 (mostly prawns), closely followed by ***Tanzania***, with some € 140 million (both freshwater and coastal fish products). ***Mauritius*** and ***Uganda*** post exports in the order of some € 70 million each, while ***Kenya*** is around € 40 million. Fishing is a labor intensive activity, with an estimated half a million people earning their income from fishing in the Lake Victoria region alone. Formal employment in fish processing and exporting companies can be grossly estimated at some 50,000.

Table 1 Key Elements - 2002

Country	Companies	Exports to EU (€ million)	Main Activities
Kenya	12	30	Freshwater fishing (tilapia and perch)
Madagascar	20	154	Coastal fishing and aquaculture (prawns & shrimps)
Mauritius	1	71	Canned tuna
Seychelles	3	224	Canned tuna
Tanzania	10	138	Mainly freshwater fishing but also some costal fishing (prawns)
Uganda	10	70	Freshwater fishing (tilapia and perch)
Total	**56**	**687**	

Sources: EUROSTAT and own estimates

2.2 Market Structure and Recent Developments

Freshwater Fishing. Freshwater fishing is mainly done in the Lake Victoria, the world's largest source of freshwater fish. At a smaller scale, fishing activities are also present in other major bodies of water in the Great Lakes region (Lake Turkana, Lake Tanganyika) and in Ethiopia. While small scale fishing has been ongoing for centuries on the shores of Lake Victoria, the emergence of "commercial" fishing and fish processing is a recent phenomenon. It was only in the early 1980s that catches of Tilapia and Nile Perch (introduced in the waters of Lake Victoria in colonial times) reached respectable levels. The fishing and fish processing industry is characterized by a pyramidal structure: fishing proper is handled by thousands of small boats, the consolidation of catches is done by some hundreds of intermediaries, while fish processing and exporting is controlled by a small number of industrial companies. At present there are an estimated 30 fish processors and exporters active in the Lake Victoria region. The main player is the Kenya-based *Alpha Group*, a diversified company also active in coastal fishing (see below) that is currently operating five processing plants in the EAC countries and handling an estimated 120 – 130,000 tons/year.

During the last decade demand for EAIO freshwater fish has been growing fast and over exploitation of existing resources has become a serious problem, as witnessed by the reduction in the average size of the catch. Attempts to establish an efficient management system of existing resources have so far produced limited results, with some bitter disputes between the three EAC countries over fishing rights. The ban of Kenyan fishermen from Ugandan and Tanzania waters has led to the closure and/or relocation of some processing units formerly located in the Kisumu area, as well as to some cases of tense confrontation (with Kenyan fishermen sometimes being arrested for illegally crossing the "border" into Ugandan waters).

Coastal Fishing. Coastal fishing mainly consists of shrimp and prawns originating from Madagascar and, to a smaller extent, Tanzania. At present, there are some 20 companies involved in fishing and fish farming in Madagascar, where the sector is largely dominated by the *SOCOTA* group and by Japanese and French companies. In Tanzania and Kenya the main player appears to be the *Alpha Group*, which is operating along with some smaller operators. Exports of shrimps and prawns are usually made via refrigerated containers. The quality of Indian Ocean products is good (with a larger average size, the so called "imperial prawns") and this is reflected in fairly high unit prices. Indeed, during 2002 exports from Madagascar to France increased by some 15% in value terms, despite a 7% decline in volumes. Still, competition is becoming fierce, and low cost producers from the Caribbean and Latin America (Guyana, Ecuador) are currently gaining ground in the international market.

High Sea Fishing. Tuna is the by far the dominant product in this sub-sector, followed at great distance by swordfish, marlin and sailfish. Tuna fishing is the preserve of industrial fleets owned and operated by major consuming countries. Under existing fishing agreements, some 60 vessels are allowed in the Seychelles waters, the main fishing ground. Of these, 45 vessels are from the EU countries. Small, locally owned fishing operations concentrate in swordfish and marlin. Tuna processing capacity is largely concentrated in three countries, namely:

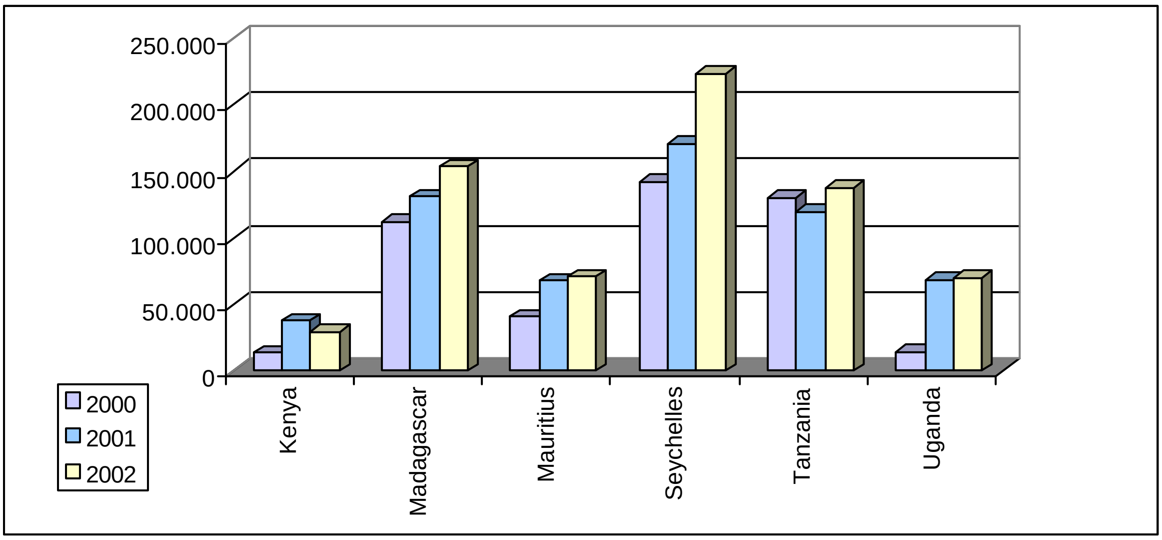
- the Seychelles, where activities are carried out by three companies (*Indian Ocean Tuna*, a joint venture between the government and the *Heinz* group, and the locally owned *Oceana Fisheries* and *Sea Harvest*);
- Mauritius, where one processing firm (*Princes Tuna*) is operating primarily with imported fish, and
- Madagascar, where one company is currently in operations (*Pêche et Froid de l'Océan Indien*).

2.3 EU Presence

EU countries are by far the main market for EAIO's fishery sector, accounting for an estimated 90% of total fish exports from the region. EAIO's share of the EU market has been increasing over time and in 2002 imports from the region accounted for 6.7% of total EU imports. The incidence of imports from EAIO for specific products varies, ranging from 6% of EU imports in the case of prawns & shrimps, to 7-8% for freshwater fish, to 14% for tuna. Export flows to the EU were severely affected by a series of import bans in the late 1990s, which forced some EAIO countries to hastily redirect their exports towards other markets. Since then the situation has shown signs of significant recovery and, with the exception of Kenya, export flows are now back to normal levels. The recent trend in exports to the EU is shown in Figure 1 below.

EU operators are active in all the segments. In the tuna sub sector, the bulk of vessels operating in the Seychelles Exclusive Economic Zone belong to French and Spanish operators. British and Irish interests are present in tuna processing, through a majority participation in Mauritius' *Princes Tuna*. In freshwater fishing some Dutch and Belgian operators are active in processing and exporting in the Lake Victoria area. Finally, French companies (*Gel Pêche*, *Freshpack*, plus *COPAL*, based in Réunion) have a strong presence in coastal fishing and aquaculture in Madagascar, through equity participations and/or long term distribution agreements.

Figure 1 Fish Exports to EU from Selected EAIO Countries – 2000 – 2002
(€ million)



Source: EUROSTAT

3. INVESTMENT POTENTIAL

3.1 Growth Potential and Constraints

According to FAO forecasts, world demand for fish products is expected to continue to grow in the medium and long term. In particular, consumption in EU countries (the main market for EAIO) is expected to grow over the new 30 years by 0.5 – 1 percentage point per year. Even more importantly, the EU market is showing increasing interest in the products originating from EAIO, whose market share could increase faster than the total market.

While the favorable trend in demand clearly suggests the existence of a significant potential for further growth, supply side considerations must also be taken into account. The first element to be considered is the progressive depletion of natural resources, which requires a renewed emphasis on fish farming. Other factors include the need to ensure adequate sanitary and quality controls and the need to control operating costs in fishing and fish processing operations. In particular:

- the Lake Victoria stock is now largely depleted and the only possibility to sustain current levels of production and, possibly, to expand activities lies in fish farming. The technology for Tilapia farming is already available but this activity is not very attractive as Tilapia fetches only relatively low prices in the market. The real challenge is Nile Perch farming, about which however very little is known. Trial tests are ongoing since 2001 in Uganda with USAID support, but more time will be necessary to start commercial farming and its profitability remains to be ascertained;
- coastal fishing is also suffering from declining natural resources: no more licenses are being issued by Malagasy authorities and catches along Tanzanian shores have been declining for sometime. In Madagascar several aquaculture operations have already been launched and others are expected to materialize in the near future (see below). Overall conditions for aquaculture are certainly favorable but fish farming involves significant investment costs, which will inevitably impact on profitability and competitiveness;
- regarding sanitary and quality controls, the EAIO fishing sector suffered significantly from EU import bans in the late 1990s, which affected exports from both the Lake Victoria and Madagascar. Since then the situation has improved but the problem requires constant monitoring;
- in the Seychelles tuna processing operations are afflicted by high labor costs and scarcity of manpower. So far the problem has been handled by enhancing mechanization (*Indian Ocean Tuna*'s plant in Victoria is said to be the most efficient plant in the world) and replacing local workers with imported labor from low income countries (Philippines, Madagascar), but the long term sustainability of such a situation remains to be ascertained. Operating costs appear to be on the rise also in coastal fishing operations in Tanzania and Madagascar and this is likely to require a consolidation of smaller existing structures in order to enhance scale economies.

Another element to be taken into consideration is the European Commission's recent orientation to expand the scope of fishing agreements with ACP countries. This would modify the traditional approach based primarily on fishing quotas, and would involve the inclusion of an "investment component", particularly aimed at supporting the development of a processing industry in ACP countries. Once implemented, this new approach could offer additional opportunities to local and foreign operators active in the various lines of business (fishing fleets, suppliers of equipment, logistic operators, etc.).

A summary presentation of the sector's strengths, weaknesses, opportunities and threats is provided in Table 2 below.

Table 2 SWOT Analysis

Strengths	Weaknesses
• Good conditions for aquaculture (prawns) • Well established position in European markets	• Depletion of natural resources (freshwater and coastal fishing) • Increasing operating costs in certain segments
Opportunities	**Threats**
• Favorable trend in overall international demand • New EU approach regarding fishing agreements	• Growing competition from Latin America

3.2 Investment opportunities

Based on the above analysis, investments opportunities appear to concentrate in two main areas, namely: (i) aquaculture operations, and (ii) the expansion of fish processing capacity. In particular:

- ***aquaculture operations***. Regarding prawns, a few aquaculture operations have been launched or are envisaged in Madagascar while others are reportedly under consideration along the Tanzanian and Kenyan coast. Investment costs are significant (US$ 75 million for a 4,400 tons/year operation; US$ 28 million for a 1,800 tons/year project) and so far initiatives have been promoted only by large groups such as *SOCOTA*, usually with financial support from international financial institutions (*IFC*). In the case of freshwater fishing, as mentioned above the feasibility of Nile Perch farming is still to be ascertained;
- ***processing plants***. Investment costs vary significantly according to specific nature of operations, ranging from US$ 1-1.2 million in the case of small scale prawns or fish filleting plants to US$ 5-7 million in the case of the large fish processing plants such as those currently operating in the Lake Victoria area. Profitability is obviously dependent upon several variables, but payback periods are usually thought to be in the 5 to 7 years range.

In addition to the above, some further investment opportunities may emerge in the case of ***small-scale manufacturing*** of recurrent inputs used by fishermen and fish processors (nets, packaging materials, etc.) as well as in ***service activities*** ancillary to fishing, such as the establishment of chemical laboratories or technical services connected with the implementation of relevant quality standards.

4. PROPOSED PRO€INVEST ACTIVITIES

4.1 Introduction

The EAIO fishing and aquaculture sector offers some interesting opportunities for the Pro€Invest program. The relatively limited number of "industrial" companies in operation constitutes a limiting factor but this is largely offset by the significant European presence and by the new approach proposed by the European Commission regarding fishing agreements. In this context, the proposed Pro€Invest initiatives include:

- the organization of one or two ***sub-sector partnership meeting(s)***, covering the main product lines;
- the launch of ***policy dialogue initiatives***, namely to tackle the issues of over fishing and quality controls; and
- the provision of ***capacity building support*** for the establishment of regional sector associations and the promotion of fish farming.

A detailed presentation of the proposed initiatives is provided in the following tables in Sections 4.2 Sector Support and 4.3 Institutional Support.

4.2 Sector Support

Type of Pro€Invest activities	**Sub-Sector Partnership Meeting(s)**
Product/service lines considered	Primarily freshwater fishing and coastal fishing, especially in connection with fish farming and fish processing activities
ACP and EU countries potentially involved	Given the structure of the fishing industry in the EAIO region, it appears preferable to proceed with the organization of two separate sub sector meetings, one for freshwater fishing for the Lake Victoria area and one for sea fishing in the Indian Ocean. Regarding EAIO countries, participants are expected to come primarily from the three **EAC countries** and **Madagascar**, with some additional participation from **Mauritius** and the **Seychelles**. The possibility of extending participation to **Eritrea**, where some fish processing initiatives are reportedly under study should not be ruled out. Regarding EU countries, participating companies are expected to come primarily from **France** (including some companies based in the **Réunion**), **Spain**, **United Kingdom** and **Italy**.
Profile and estimated number of the ACP and EU operators likely to participate	The number of EAIO companies active in the sector is relatively limited (altogether, an estimated 50 players of a certain size, of which some 30 in EAC countries and 20 in the Indian Ocean sub region) and the organization of the event(s) would require careful planning and active promotional work. The involvement of more active sector associations, such as Madagascar's *GAPCM* and the *Uganda Fish Processors and Exporters Association* (UFPEA), is an important condition to achieve the desired success. EU participants would include fishing companies, wholesalers and large retail chains potentially interested in establishing contacts with suppliers in the EAIO region. These actors would be identified in collaboration with relevant business associations at the EU level (*Federation of European Aquaculture Producers*) or national level (e.g. Spain's *Conxemar*).

4.3 Institutional Support

Type of Pro€Invest activities	**Public Private Dialogue – National/Regional Policy Workshops**
Countries concerned	Kenya, Uganda, Tanzania and Madagascar
Issues to be addressed and stakeholders to be involved	The organization of Pro€Invest sponsored policy workshops at the national and/or regional level could help addressing important issues. Specific areas of possible intervention identified include: • the coordination of fishing activities in Lake Victoria, through the organization of an initiative at the EAC level; • the introduction of fishing surveillance systems in coastal fishing, with the organization of policy workshops on sustainable fishing.
Stakeholders to be involved	Stakeholders to be involved in the policy dialogue initiatives include: • representatives of national sector associations as well as of leading companies active in relevant lines of business; • representatives of national ministries and agencies responsible for fishing and fish processing activities;

	• representatives of technical certification and inspection bodies, involved in quality control & sanitary activities; • representatives of environmental protection bodies and of donor-supported projects involved in the promotion of sustainable fishing.

Type of Pro€Invest activities	**Capacity Building – Establishment of Sector Associations and Promotion of Aquaculture**
Countries concerned	Kenya, Uganda, Tanzania and Madagascar
Issues to be addressed and stakeholders to be involved	In parallel with the policy dialogue initiatives, Pro€Invest could also provide capacity building support in three main areas: • the establishment of a regional umbrella organization for EAC fishing and fish processing companies. The establishment of such an organization has been advocated for sometime and its usefulness was reiterated by national sector associations met during field work; • the enhancement of quality awareness and, especially, the need to respect relevant sanitary standards; • the promotion of prawns aquaculture. Such an initiative could be implemented by extending support to the international conference on aquaculture organized every two years by *GAPCM* in Madagascar. Under its current configuration the conference is largely technically-oriented and it would certainly benefit from the inclusion of a Pro€Invest sponsored component more focused on the policy and economic aspects of aquaculture.
Stakeholders to be involved	In addition to *GAPCM*, the national fish processors associations in Tanzania, Kenya, Uganda (e.g. the *Kenya Fish Processors and Exporters Association*, the *Uganda Fish Processors and Exporters Association*).

APPENDIX A – BASIC STATISTICS

Table A.1 Fish Exports from Selected EAIO Countries to the EU
(€ million)

Country	2000	2001	2002
Kenya	14	38	30
Madagascar	113	131	154
Mauritius	41	68	71
Seychelles	142	172	224
Tanzania	131	121	138
Uganda	15	68	70
Total	**456**	**598**	**687**

Source: EUROSTAT

Table A.2 Incidence of EAIO Fish Exports in EU Market
(€ million and percentages)

Country	2000	2001	2002
Total Imports from EAIO Countries	**456**	**598**	**687**
Total Imports from Non-EU Countries	**9,589**	**10,395**	**10,278**
EAIO Share of Non-EU Imports	**4.7%**	**5.7%**	**6.7%**

Source: EUROSTAT

TECHNICAL SUMMARY #7
HIGH VALUE AGRICULTURE

1. SECTOR DEFINITION

This Technical Summary deals with a composite sector, comprising four different product groups, namely: (i) organic agricultural products, (ii) essential oils and plant extracts, (iii) spices, and (iv) cashew nuts. While essential oils and spices have some “technological” linkages (certain essential oils being the result of the distillation of spices), organic agriculture and cashew nuts are completely separate lines of business. In terms of the ISIC (Rev. 3) nomenclature primary activities included in this profile fall in group “011 - Growing of crops, market gardening, horticulture”, while processing activities are included in class “1513 - Processing and preserving of fruits and vegetables”.

2. SECTOR PROFILE

2.1 Overview

The economic importance of the high value agricultural (HVA) products covered in this profile in the EAIO region cannot be measured precisely, due to data limitations (organic products are not reported separately in trade statistics). Based on various sources, all in all essential oils, spices, cashew nuts and organic products may represent some € 450 – 500 million worth of regional exports.

HVA products play a very important role in ***Madagascar***, where essential oils and spices account for some 30% of total exports, and in the ***Comoros***, where exports of spices (vanilla and cloves) and essential oils account for the bulk of foreign exchange earnings. HVA products are also important in ***Tanzania***, a traditional exporter of cashew nuts and cloves (and more recently of organic cocoa), and in ***Uganda***, where exports of vanilla have been increasing for some years, together with sales of organic cocoa and cotton.

Table 1 Key Elements - 2002

Lines of Business	Total Exports (€ million)	Main Producing Countries	Comments
Essential Oils	15-20	Madagascar, Comoros	Madagascar is the world leading producer of cloves and ylang-ylang oils
Spices (vanilla and clove)	350-370	Madagascar, Tanzania (Zanzibar), Comoros, Uganda	Madagascar is the world leading producer for both vanilla and cloves
Organic Agriculture	n.a.	Uganda, Kenya, Tanzania, Madagascar	Main organic products include: cocoa, cotton, coffee, fruits and vegetables
Cashew Nuts	40	Tanzania, Kenya	Tanzania is among the world’s fourth largest producer

Source: own estimates based on trade statistics and industry sources

2.2 Market Structure and Recent Developments

Essential Oils. Essential oils have been extracted from some 3,000 plants and some 300 are of commercial relevance, being used in a variety of commercial processes. Each product is characterized by own demand drivers, cost conditions, and specific trading modalities, with a limited degree of substitutability. This explains the difference in prices of various products, which range from € 60/kg for geraniums to € 12,000 for roses. Worldwide, essential oils is a highly concentrated industry, dominated by international companies such as *International Flavors and Fragrances* (IFF), *Givaudan-Roure*, *Firminich*, *Quest*, *Dragoco* and *Takasago*.

In the EAIO region the product range includes oils derived from ylang-ylang, vetiver, vanilla, cloves, geranium, chamomile and other plants. Total production (and exports) of essential oils in EAIO countries is in the range of € 15 - 20 million. Madagascar is the main exporter, with some € 10 million, followed by the Comoros (some € 3-4 million). Some production of essential oils is also carried out in Kenya and, reportedly, in Ethiopia but in these countries volumes are limited. Production and export are handled by a limited number of processors (around 20 in Madagascar), with raw materials coming from both plantations and small farmers.

Spices. In the EAIO region the spices sector mainly relates to vanilla and cloves. Other products (e.g. pepper) are of limited relevance. Madagascar is the world's leading producer of both vanilla and cloves. Vanilla is also produced in the Comoros and (increasingly) in Uganda while cloves are produced in Tanzania and, again, in the Comoros. Both vanilla and cloves are smallholder crops, grown by thousands of peasants who take care of the picking. The harvest is sold to processors/exporters and then re-sold to international clients. The number of processors/exports is fairly limited: in Madagascar vanilla is handled by some 20 companies (each handling between 30 and 300 tons of dried vanilla). In Uganda only half a dozen companies are currently in operation.

The total market for ***vanilla*** is estimated at some US$ 200 million. Over the last decade the market has shown increasing signs of instability. While demand (largely concentrated in North America) is growing at a stable pace, supply is heavily influenced by weather (and other) conditions in a relatively limited number of countries of origins, basically, Madagascar and Indonesia. In turn, imbalances between supply and demand have had a significant impact on prices. The prices of vanilla pods, which has historically oscillated between US$ 55 and US$ 75/kg, in the mid 1990s declined dramatically to a mere US$ 20/kg, largely as a result of liberalization of the export market in Madagascar. In recent years, as a result of unfavorable weather conditions, the Malagasy production has shown a declining trend (only 1,200 tons in 2002 compared with 1,400 – 1,600 in previous years), only partially compensated by an increase in output in other countries. As a result, at the end of 2002 the international price of vanilla shot up to an unprecedented US$ 180/kg, with further increases in 2003.

The world market for ***cloves*** is estimated at some US$ 200 million per year. Market trends are influenced by developments in the main consuming country, Indonesia, where cloves are used primarily by the cigarette industry. For instance, in 2002 the Indonesian authorities imposed a ban on imports of cloves to support prices in the domestic market and this impacted negatively on trade flows. A large share of EAIO exports are channeled through Singapore traders, who in turn have access to the final market.

Organic Agriculture. Organic agriculture is a "holistic production management system which promotes and enhances agro-system health, including biodiversity, biological cycles, and soil biological activity" (*Codex Alimentarius*). Organic production systems are based on specific standards of production which aim at achieving socially, ecologically and economically sustainable conditions. Synthetic fertilizer, insecticides and pesticides as well as genetic modification are not allowed in organic agriculture.

In the EAIO region organic agriculture is a new sector and development has been taking place primarily over the last 10 years, sometimes in connection with donor-supported initiatives (e.g. SIDA's Export Promotion of Organic Products from Africa program). In Uganda organic agriculture started in the early 1990s and currently covers several products: coffee, cocoa, sesame and cotton. Uganda was the first African country to obtain certification of organic Arabica coffee for exports to both EU and US markets. Organic coffee exports are expected to increase in connection with a large project currently implemented by *Neumann Kaffee,* which will cover both organic and standard coffee. Organic cotton is also of importance in Uganda and the country is reported to produce some 10% of the total world organic cotton output (estimated at 8,000 – 10,000 tons). Part of the output is used locally by an integrated textiles and garment operation (*Phoenix Logistics*) run by a Japanese investor.

In Tanzania and Kenya there are some 20 – 30 operators exporting organic products. The product range includes vegetables (beans, peas and salad), macadamia nuts, edible oil, tea, cotton, coffee and cocoa. In Ethiopia several initiatives have been launched for the certification of organic coffee. It is estimated that some 50-60% of Ethiopian coffee is already grown in organic conditions (i.e. without having any contact with fertilizers and pesticides) but only a fraction of output is currently organic certified. The *Coffee and Tea Development Authority* is currently implementing several programs that should progressively extend to a significant fraction of the estimated three millions coffee farmers. In Madagascar conditions for organic agriculture are also regarded as favorable but so far the export of fresh organic produce has been hampered by the difficult logistics and by seasonal factors. At present exports are confined to fruit juices and pulps. Finally, in Mauritius, attempts to develop organic agriculture are currently ongoing in the Rodrigues island.

Cashew Nuts. Cashew nuts are a traditional cash crop in EAIO. Tanzania is the leading producer, with an annual output normally in excess of 100,000 tons of raw nuts, followed by Kenya, with some 10 – 15,000 tons. In Tanzania cashew nuts are cultivated primarily along the coast and in southern regions, by some 280,000 smallholders with a total surface of some 400,000 hectares. In addition, some commercial plantations are located in the Lindi and Mtwara regions. In Kenya the area under cultivation is around 30,000 hectares, mostly in coastal areas.

The development of the cashew nuts processing industry started in 1965, when the first modern plant was built in Tanzania. In subsequent years, significant amounts were invested by the Tanzanian government to expand processing capacity, but results remained largely below expectations, due to ineffective management by parastatals and irrational pricing policy. In recent years, the production of raw nuts recovered significantly but 95% of the output is still exported unprocessed. Tanzanian exports go largely to India, the world's leading producer, where nuts are processed and then sold in the international market. At present, some 50 private companies are operating in the cashew nuts sector in Tanzania, but only three are involved in processing, the rest being traders active in the export of raw nuts. The majority of the some 12 processing plants are still state owned and operate at a fraction of their rated capacity. The situation is similar in Kenya, where a large modern factory was closed at the end of the 1990s and currently only one semi mechanized plant is reported to be in operation.

2.3 EU Presence

Trade of HVA products with EU countries is fairly intense. In the case of essential oils EU countries are by far the main importer, with France alone accounting for nearly 85% of Malagasy exports. As for vanilla, France and Germany are, respectively, the second and third largest buyers of EAIO products, beyond the US. In the case of organic products, the bulk of EAIO's exports are heading for EU countries, namely the United Kingdom and Germany.

Direct presence of EU operators in the region is largely concentrated in essential oils and spices, where there is a significant French presence in the Indian Ocean. A large scale operation was launched in the mid 1990s in Madagascar by *Biolandes* (850 hectares, of which one third for ylang ylang, plus distillation facilities). This investment reinforced French presence in Madagascar, which already included the long established *Arco Océan Indien* (part of the *Charabot* group). More limited is the EU presence in organic agriculture. Apart from the above mentioned case of *Neumann Kaffee* in Uganda, there is a more or less direct presence of some UK traders (Kenya and Uganda) and of some Italian individual investors in Ethiopia. In the cashew nuts sector, a large part of the processing plants installed in Tanzania are of Italian origin and at a certain point the idea of an Italian participation in management was aired, but the project never materialized.

3. INVESTMENT POTENTIAL

3.1 Growth Potential and Constraints

Essential Oils. The world market for essential oils is estimated at around US$ 1.1 billion. Total demand has remained broadly stable for some years, as a result of two opposite trends, namely: the competition brought by much cheaper synthetic products and the changing consumer preferences in industrialized countries in favor of natural products. EAIO producers currently account for only a fraction of the total market and the potential for further growth is certainly present. However, any expansion in output should be paralleled by improvements in qualitative terms, with the modernization of certain "cottage-type" production facilities and, even more importantly, the thorough implementation of quality standards.

Spices. EAIO countries already play a very important role in this sector, but opportunities for further growth are not exhausted, especially in the case of vanilla. Indeed, the last decade has seen the emergence of Uganda as an increasingly important producer of vanilla. Before 1996 quantities produced were very limited (around 5 tons/year), with export earnings of only US$ 200-300,000/year. Starting in 1997 the area under cultivation considerably expanded and new processors/exporters entered the market. At present, in Uganda vanilla beans are produced by some 10,000 smallholders and in 2002 output nearly reached the 100 tons benchmark, with a value of some US$ 7 million. Vanilla produced in Uganda is of good quality and part of the output is reportedly exported to Madagascar where traders with an established market position are able to resell it at higher prices.

Organic Agriculture. World demand for organic products is increasing fast, driven by a significant change in consumers' tastes in favor of healthy and natural products. In some markets growth rates are reported to be in the order of 20% per annum. According to certain sources, in the early 2000s the world market for organic food and beverages reached the respectable figure of some US$ 21 billion (retail value). While the figure is already impressive, it should be noted that organic sales still represent a minor fraction of total sales for food & beverages, clearly suggesting the existence of a huge potential market. Due to favorable natural conditions, EAIO countries are in principle well placed to take advantage of this favorable trend. However, many local producers still lack the necessary experience to approach international markets and, especially, have hard times in complying with the (rather cumbersome) certification requirements imposed by importing countries.

Cashew Nuts. Cashew nuts have gained great acceptance over the years, becoming one of the most popular snacks. World demand has been increasing steadily and the total market is currently estimated at some US$ 2 billion (retail prices). So far EAIO countries (as well as other Sub-Saharan countries, such as Mozambique) have benefited very little from this favorable trend and the market is largely dominated by India (itself an importer of African raw nuts), Brazil and Vietnam. Agricultural conditions in region are fairly favorable but real development can be achieved only by increasing the share of processed exports. In turn, this would require the emergence of a more conducive policy framework (an export tax is still levied on sales of processed nuts) as well as the modernization of processing capacity.

Table 2 SWOT Analysis

Strengths	Weaknesses
• Excellent natural conditions (all products) • Well established position in international markets (essential oils and spices) • Low production costs (including conversion costs for organic farming)	• Inadequate production structures (cashew nuts and partly essential oils) • Weak institutional support, namely in the area of quality certification (organic products and, partly, essential oils)
Opportunities	**Threats**
• Favorable trends in international demand (e.g. consumer preferences for natural products) • Certain products sold at a premium (organic agriculture)	• High price volatility (spices) • Availability of synthetic substitutes (essential oils) • Strong competition (cashew nuts)

3.3 Investment Opportunities

In HVA products investment opportunities appear to concentrate in the following main areas:

- ***upgrading of cashew nuts processing capacity***. This could involve either the rehabilitation of the existing plants currently owned by the state or the launch of privately sponsored green field initiatives. Investment costs for the establishment of a fairly simple, semi automatic processing plant are estimated at around US$ 1.5 million, of which some US$ 1 million for machinery and buildings and US$ 500,000 for working capital (due to the seasonal nature of the business, processors have to stock significant quantities). Under normal conditions the payback period for such an investment is around 4-5 years, with a net profit margin of 15 – 20%;
- ***expansion of acreage under cultivation for vanilla***. The rapid growth recorded in recent years in Uganda suggests the existence of market opportunities for high quality products. However, any expansion in acreage must be accompanied by an adequate strengthening of relevant support services, including extension services for small holders and certification bodies;
- ***expansion of acreage under cultivation for organic products***. With the exception of Uganda the share of organic land is still limited in EAIO countries (some 5,000 hectares in Tanzania, about 1,200 in Madagascar, and a mere 500 in Kenya). Conversion costs are fairly limited, as in many areas small scale agriculture can be regarded as organic "by default" (due to the inability to procure fertilizers) but adoption of proper techniques requires a significant strengthening of

agricultural extension services. In addition, certification costs (in the order of € 500) are scarcely affordable by small holders and the keeping of records associated with certification involves an additional burden. In this connection, valuable assistance is being provided by some donor-financed initiatives (e.g. the certification of Ethiopian coffee, implemented with support from *ITC* and *GTZ*);

- ***upgrading of technology in essential oils***. Small scale distilleries still account for a significant share of current output. While some of these structures are well equipped, others would need to upgrade and modernize their facilities. Investments costs are rather limited, in the order of € 50 – 100,000 per unit, and appear amply justified by the higher margins that can be earned by selling higher quality products.

4. PROPOSED PRO€INVEST ACTIVITIES

4.1 Introduction

High value agriculture is an interesting area of intervention for Pro€Invest. Indeed, the generally favorable prospects for future growth, coupled with the existence of significant commercial relationships with EU countries, suggest the launch of several initiatives, covering the whole spectrum of Pro€Invest's instruments. In particular, the possible initiatives identified during the study include:

- the organization of a ***sub-sector partnership meeting*** for organic agriculture;
- the organization of ***partnership missions*** for organic agriculture, essential oils and cashew nuts;
- the provision of ***capacity building support***, primarily in the area of quality certification and counseling to small scale producers;
- the launch of ***policy dialogue initiatives*** to sustain the development of the cashew nut industry.

A detailed presentation of the proposed initiatives is provided in the tables included in Sections 4.2 Sector Support and 4.3 Institutional Support.

4.2 Sector Support

Type of Pro€Invest activities	**Sub-sector Partnership Meeting**
Product/service lines considered	Organic products
ACP and EU countries potentially involved	In the EAIO region, **Uganda**, **Kenya**, **Tanzania** and **Madagascar** and possibly **Ethiopia** are the countries potentially more interested in the event, with some additional participants also coming from **Mauritius**. Regarding the EU side, participation would certainly include the largest consuming countries (**Germany**, **France**, **United Kingdom**, and **Italy**) but also smaller countries such as **Austria**, **Denmark** and **Switzerland**, where consumption patterns attach a significant premium to organic products (i.e. organic sales account for 2% of more of total sales of food and beverages) and where attention to the themes of socially sustainable development is comparatively greater.
Profile and estimated number of the ACP and EU operators likely to participate	The meeting should be aimed at bridging the informational gap between small EAIO producers and large EU importers. From the EAIO side, participants would include 15 – 20 small and medium producers and processors, identified with the assistance of relevant business associations (such as Kenya's *FPEAK* or Madagascar's *PRONABIO*). Regarding EU participants, the initiative could involve the main traders currently involved in the import of organic products, large buyers of organic products (such

	as manufacturers of certain products – chocolate, coffee – and supermarket chains, which sometime have been reluctant in getting involved in EAIO due to uncertainty regarding stability of supply) as well as the main NGO involved in fair trade activities. A selection of entities include: *Congelow Produce* (supplier to Sainsburys), *Tideford Foods* and *Queenswood Natural Foods* (UK), *Doens Food Ingredient* (the Netherlands), *Swiss Coop* (Switzerland), *Hipp Werk Georg Hipp GmbH* and *ISIS Organic* (Germany), *Commercio equo e solidale* (Italy).

Type of Pro€Invest activities	**Sector Partnership Mission(s) (outbound)**
Product/service lines considered	Organic products (vegetables, fruits), spices, essential oils
ACP and EU countries potentially involved	The organization of the sub-sector partnership meeting for bio products could be usefully paralleled by the organization of one or more outbound partnership missions to the EU, involving producers of organic products as well as companies active in the spices and essential oils sub-sectors. These missions could be scheduled in order to combine meetings with EU prospective partners with the participation in major trade fairs such as *BioFach*, *Organex* or the *Ethnic Food Show* in Paris. EAIO and EU participating countries are going to be the same as those identified for the sub sector meeting
Profile and estimated number of the ACP and EU operators likely to participate	Same as those identified for the sub sector meeting, possibly with comparatively greater emphasis on fair trade organizations as EU host organizations.

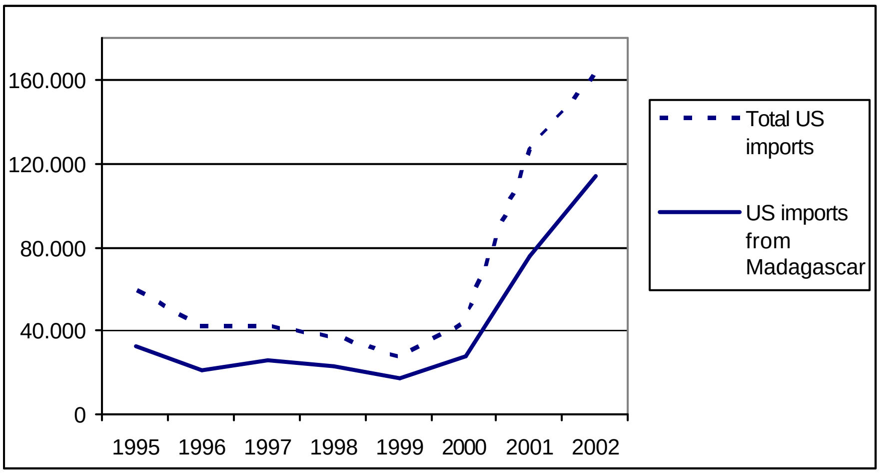
4.3 Institutional Support

Type of Pro€Invest activities	**Public Private Dialogue – Workshop on Cashew Nuts Industry**
Countries concerned	Tanzania and Kenya (possibly to be extended to Mozambique)
Issues to be addressed	EAIO countries' potential in cashew nuts has remained so far largely unrealized, largely because of inadequate government policies. A Pro€Invest-sponsored policy dialogue workshop could provide an appropriate forum to debate the main problems afflicting the industry, namely: • the poor functioning and excessive cost of parastatal bodies; • the need to attract private capital through the privatization of state owned processing plants; • the elimination of taxes at the national and/or local levels that effectively discourage a shift towards more value added activities (kernels vs. raw nuts).
Stakeholders to be involved	The *Cashew Nut Association of Tanzania* is certainly a key player to be considered but, due to its recent formation may require the support from a stronger generalist organization, such as the *Confederation of Tanzania Industries*. In case participation in the event would be extended to Mozambique (another leading producer), the local cashew nut association (*AICAJU*) could play an important role, also in view of its long experience in policy dialogue with government authorities and donors.

Type of Pro€Invest activities	**Capacity Building - Certification and Quality Awareness**
Countries concerned	Madagascar, Uganda, Tanzania, Kenya and Ethiopia
Issues to be addressed	The gradual dissemination and acceptance of a "certification culture" is of paramount importance to sustain growth in high value agriculture. Capacity building activities are required to strengthen the operational capabilities of relevant intermediary organizations in the following areas: • promotion of quality awareness at the different stages of the value chain (from small holders to intermediaries to processors/exporters); • provision of direct assistance to agricultural producers or processors in order to better comply with relevant certification requirements at affordable prices; • development of codes of conduct to enhance the quality profile of EAIO producers (cases of abuses and frauds were reported for certain products, with negative impact on all producers from a certain country or region).
Stakeholders to be involved	Prime beneficiaries would be the associations of producers in relevant lines of business, such as Uganda's *Hortexa* and the *Eastern African Fine Coffees Association*. Participation in capacity building activities could be usefully extended to sector specific technical centers. An example is provided by the *Centre Technique Horticole de Tamatave*, in Madagascar, that is already providing excellent support in technical matters and that could progressively expand its role to more investment-oriented activities.

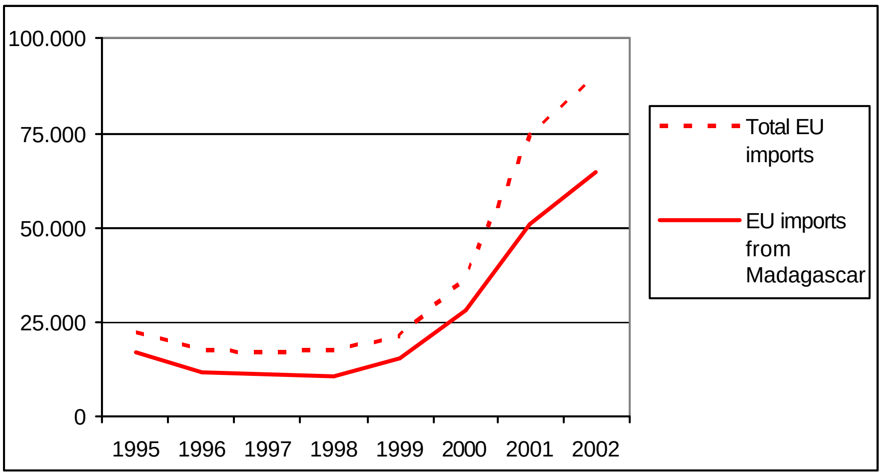
APPENDIX A – BASIC STATISTICS

Figure A.1 Trend in US Vanilla Imports - Value
(US$ '000)



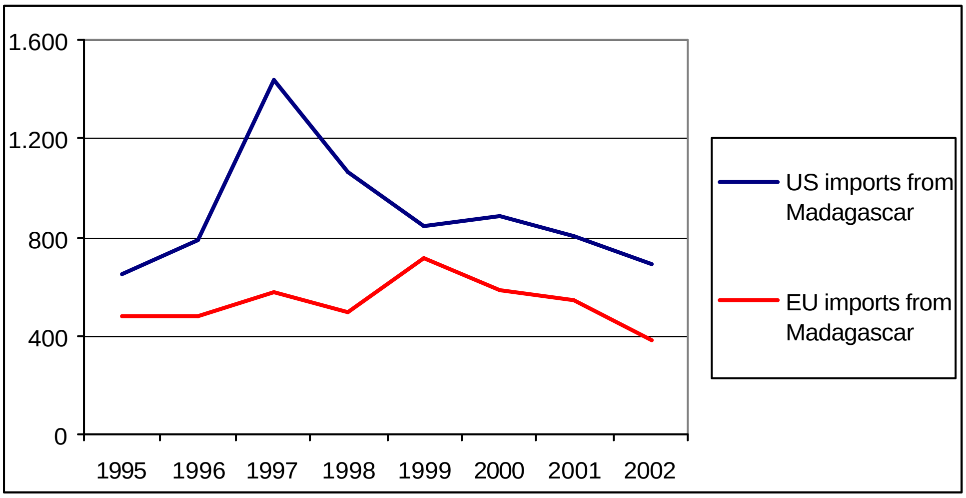
Source: US trade statistics

Figure A.2 Trend in EU Vanilla Imports - Value
(€ '000)



Source: EUROSTAT

Figure A.3 Trend in US and EU Vanilla Imports from Madagascar – Quantity (metric tons)



Sources: US trade statistics and EUROSTAT

Table A.1 Organic Agriculture in Selected Countries - 2001

Countries	Organic Farms	Organic Land (hectares)	Share of Total Agricultural Area
Kenya	n.a.	494	0.002%
Madagascar	300	1,230	0.005%
Tanzania	991	5,155	0.01%
Uganda	28,200	122,000	1.39%
Total	**29,491**	**128,879**	**0.22**

Source: SOEL

Table A.2 World Market for Organic Food & Beverages

Markets	Retail Sales 2003 (US$ million)	Percentage of total food sales (estimates)	Expected Annual Growth rate 2003-2005 (%)
Germany	2,800-3,100	1.7-2.2	5-10%
U.K.	1,550-1,750	1.5-2.0	10-15%
Italy	1,250-1,400	1.0-1.5	5-15%
France	1,200-1,300	1.0-1.5	5-10%
Switzerland	725-775	3.2-3.7	5-15%
Netherlands	425-475	1.0-1.5	5-10%
Sweden	350-400	1.5-2.0	10-15%
Denmark	325-375	2.2-2.7	0-5%
Austria	325-375	2.0-2.5	5-10%
Belgium	200-250	1.0-1.5	5-10%
Ireland	40-50	<0.5	10-20%
Other Europe*	750-850	n.a.	n.a.
Total Europe	10,000-11,000	n.a.	n.a.
U.S.A.	11,000-13,000	2.0-2.5	15-20%
Canada	850-1,000	1.5-2.0	10-20%
Japan	350-450	<0.5	n.a.
Oceania	75-100	<0.5	n.a.
Total	**23,000-25,000**		

* Finland, Greece, Portugal, Spain, Norway, Poland, Hungary, Czech Republic, Estonia, Latvia, Lithuania
Source: ITC

TECHNICAL SUMMARY #8
TEXTILES AND GARMENTS

1. SECTOR DEFINITION

This Technical Summary covers the production of fabric and other textile products as well as the manufacture of garments. In turn, the garments sub-sector includes four main product groups, namely: T-shirts, trousers, pullovers, and shirts. In terms of the ISIC nomenclature (Rev. 3), activities included in this profile fall into three groups, namely: “171 - Spinning, weaving and finishing of textiles”, “173 - Manufacture of knitted and crocheted fabrics and articles”, and “181 - Manufacture of wearing apparel, except fur apparel”.

2. SECTOR PROFILE

2.1 Overview

In the EAIO region the textiles and garments industry is the second largest foreign exchange earner after tourism, with total exports worth some € 1,500 million. Characterized by high labor intensity, in 2001 the industry had a total employment of about 328,000. The sector is of crucial importance in ***Mauritius***, where it accounts for 60% of exports and for around 11% of GDP. Before the 2002 political crisis, the industry was extremely important also in ***Madagascar***, where it employed some 125,000 workers, contributed for 45% to exports of goods, and accounted for about 10-11% of GDP. In ***EAC countries*** and ***Ethiopia*** the textiles and garments industry is comparatively less important (typically employing between 10,000 and 40,000), although the level of activity has been recently on the rise.

EAIO’s textiles and garments industry is overwhelmingly export oriented and its development owes much to the privileged access to western markets granted under the Lomé Convention and preferential trade agreements, such as the Multi Fiber Agreement (MFA), the Agreement on Textiles and Clothing (ATC), and the more recent African Growth and Opportunity Act (AGOA), launched in year 2000. On the other hand, domestic markets absorb only a fraction of output, due to the low local purchasing power but also because of the stiff competition from imports. Indeed, as a result of the liberal trade regimes adopted by most EAIO countries over the last decade, local markets have been swamped with low-cost imports from Asia and second-hand clothes mainly imported from the EU and US.

Table 1 Key Figures - 2001

Countries	Companies	Labor Force	Exports to EU (€ million)	Exports to US (US$ million)
Mauritius	400	83,000	666	238
Madagascar	150	125,000	286	179
Kenya	160	40,000	12	64
Uganda	20	10,000	8	-
Tanzania	100	40,000	15	-
Ethiopia	60	30,000	-	1
Total	**830**	**328,000**	**987**	**482**

Sources: EUROSTAT, US Department of Commerce and own estimates based various statistics

2.2 Market Structure and Recent Developments

In ***Mauritius*** the textiles and garments sector started to develop in the early 1980s, with the installation of subsidiaries of large clothing manufacturers from Hong Kong. At that time Hong Kong producers were facing a tightening of export quotas under the MFA and were in search of alternative locations to continue supplying the EU and US markets. With its stable political situation, cheap labor force, and privileged access to the EU market under the Lomé Convention, Mauritius offered the right conditions. After the arrival of Asian producers, the sector also attracted significant investments from local wealthy families (the so called “sugar barons”), diversifying away from traditional activities, as well as some investments from other countries (Taiwan, France). Mauritius’ s textiles and garments industry recorded a spectacular growth during the 1980s and early 1990s, becoming one of the main pillars of the economy. Difficulties started to emerge in the second half of the 1990s, in connection with a significant increase in labor costs and the opening up of alternative locations (Vietnam, Sri Lanka). Problems exacerbated in the early 2000s, leading to the relocation of some production activities in other low labor costs countries (namely Madagascar, see below) as well as to the outright the closure of some companies. At present there are around 350 clothing manufacturers and 50 textiles mills in operation in Mauritius. Despite the relatively large number of companies in operation, the industry is highly concentrated, with the top three/four companies accounting for between 50% and 75% of total exports in each of the main product lines. Locally-owned companies account for an estimated 60% of total investment in the industry and include some leading enterprises such as *Floreal Knitwear* (part of the *CIEL Group*) and *Bonair*.

In ***Madagascar*** the development of the clothing industry is a recent phenomenon, largely related to the relocation of some Mauritian companies looking for low labor costs. By the end of 2001 the sector included some 150 clothing manufacturers, usually located in the Export Processing Zone (EPZ), with a total employment of some 125,000. The political crisis of 2002 brought activities to an almost complete halt, with the closure of the majority of enterprises. At the time of field work for this report (late Spring 2003), the total workforce in the clothing industry had dwindled to an estimated 35,000, with the hope of reaching some 50-60,000 by the end of 2003 (“*Si tout marche bien, on va récupérer 50% du niveau d’avant la crise*”).

In ***EAC countries*** the sector includes around 280 companies involved in clothing and/or in textiles. So far, only Kenya appears to have taken advantage of the opportunities offered by AGOA and indeed exports of garments to the US market have significantly expanded over the last few years (from a level of US$ 30 – 45 million during 1997 – 2000 period to US$ 64 million in 2001 and US$ 126 million in 2002). In Tanzania and Uganda the level of activity is still limited, with export flows in the order of € 10 – 15 million per year, although some new investment initiatives were recently implemented. In ***Ethiopia*** there are some 30 enterprises in operation, including some large, vertically integrated plants. A few companies were privatized in the late 1990s and early 2000s, but some of the larger plants are still government-owned.

2.3 EU Presence

The EU is a very important market for EAIO garment manufacturers. In the late 1990s and early 2000s annual exports from Mauritius to the EU were in the € 600 – 680 million range, with sales to the four leading EU importers (France, Germany, Italy and UK) in the order of € 400 - 450 million per year. After the launch of AGOA in year 2000, exports flows to the US market have significantly increased, but European countries remain the main client. A similar situation is found in ***Madagascar***, where the pre 2002 crisis exports were directed for about two thirds to the EU market. In the case of other EAIO countries, the scanty (and sometimes inconsistent) data on the directions of trade indicate more limited exchanges with the EU and a growing importance of the US market.

EU presence in production is comparatively more limited. In 2001 EU interests (predictably, French) controlled some of the *entreprises franches* in Madagascar. However, these companies suffered significantly during the 2002 crisis and even now that the situation has normalized it is not yet clear if they will all go back to work. The EU presence in Mauritius includes some French, German and UK participated joint ventures, but some disinvestment was reported in the recent past. In other EAIO countries the presence of EU interests is limited, with only a handful of initiatives undertaken by individual investors.

3. INVESTMENT POTENTIAL

3.1 Growth Potential and Constraints

The textiles and clothing sector is an extremely competitive industry, where the availability of cheap labor, the achievement of high levels of productivity, and the ability to adjust swiftly to terms dictated by international clients (with the punctual fulfillment of large orders) are crucially important success factors. In addition, trade flows are heavily influenced by the existence of preferential trade regimes. As detailed below, these factors have a differentiated impact on EAIO countries.

Mauritius. Mauritius, by far the leading producer in the region, is currently facing severe challenges. Indeed:

- with monthly wages at US$ 180 – 220, Mauritian labor costs are no longer competitive with those found in other locations (Vietnam, but also certain parts of Eastern Europe). As a matter of fact, Mauritian garments and textiles factories are even facing difficulties in recruiting local labor, with the subsequent need to import workers from Bangladesh and other Asian countries;
- the privileged trade regime under which Mauritian producers have been prospering are in the process of being modified, with the phasing out of the ATC (due to take effect at the beginning of 2005) and the elimination of certain favorable provisions in AGOA (due to take effect at the beginning of 2004). This will inevitably expose the Mauritian garments sector to increased competition in the export market.

Still, over the last two decades Mauritian companies have accumulated an excellent expertise and this results in high labor productivity, good levels of technical efficiency (with short reaction time to incoming orders: “our main competitive advantage is that we are very quick with repeat orders”), and good reliability in fulfilling orders. Under these conditions, the strategy currently envisaged includes, on the one hand, to increase vertical integration into the production of fabric (in order to comply with stricter AGOA provisions) and, on the other hand, to gradually increase value added, diversifying away from mass products towards niche product lines.

Other EAIO Countries. The growth potential and prospects in other EAIO countries may be summarized as follows:

- in ***Madagascar*** the low monthly wages (US$ 55 – 65) and acceptable productivity levels (14-15 pieces/day per worker) result in fairly low unit labor costs, making it possible to compete successfully with Asian countries. Still, Madagascar’s image as a production center for clothing was significantly tarnished by the events of 2002 (with many companies missing the agreed delivery dates and other being forced to rely on expensive *ad hoc* charter flights to take out products for delivery in the US and EU markets) and it will take some time before this damage is fully repaired;

- in ***Kenya*** labor costs (US$ 60 – 65/month) and productivity levels (12 – 15 pieces/day per worker) are marginally less attractive than in Madagascar but still compare favorably with other locations in Sub-Saharan Africa or Asia. Overall, the country appears capable of competing successfully in international markets, as witnessed by the recent positive trend in exports, with the tripling of sales between 1999 and 2002. Such a positive performance is largely related to the installation of some "footloose" Asian investors interested in exploiting Kenya's preferential access to the US market under AGOA. Whether this could translate into a more stable presence it is impossible to predict;
- in ***Ethiopia*** attempts to exploit the opportunities offered by the export market (namely, under AGOA) have recently started, but the ability to rapidly adjust to the tough market conditions (such as the capability of handling the large orders typically placed by US importers) remains to be proven. The textiles industry is expected to benefit from a restructuring program financed by Italian bilateral funds which came on stream in October 2003 and this could provide Ethiopian producers with an important competitive edge when AGOA provisions mandating the use of locally manufactured fabric (the so called "third country fabric" clause) will come into effect in the next few years).

A summary presentation of the sector's strengths, weaknesses, opportunities and threats is provided in Table 2 below.

Table 2 SWOT Analysis

Strengths	Weaknesses
• Low labor costs (except Mauritius) • Good levels of productivity • Existence of an entrepreneurial & managerial class with excellent skills and international experience (Mauritius)	• Limited local markets • Complex logistics to serve distant markets
Opportunities	**Threats**
• AGOA trade regime (only partially for Mauritius) • Niche product lines and markets (e.g. organic cotton)	• Tough competition from Asian producers • Phasing out of the ATC trade regime

3.2 Investment Opportunities

Based on the above analysis, investment opportunities are also differentiated by country. In particular:

- in Mauritius investment opportunities are mainly related to actions aimed at consolidating existing positions. These involve an increased ***vertical integration*** between garments and textiles (to comply with AGOA's "third country fabric" provisions) and/or a product range ***diversification & upgrading***, by adding a higher design content to the current production;
- in Madagascar and Kenya (and, possibly, Uganda and Tanzania) opportunities exist in the establishment or expansion of ***labor intensive operations*** primarily aimed at the US market under AGOA. Projects implemented in recent years or currently under consideration range from the establishment of green field operations (for instance, the Sri Lankan-owned *BAM* in Madagascar, employing some 500 and with investment costs around US$ 1 million) to the expansion of existing operations (Kenya's *Alltex*, a joint venture between Qatar investors and

the Aga Khan's *Industrial Promotion Services*, expanding its labor force by some 1,000 with investment costs in the order of US$ 3 million; Madagascar's *Cottonline*, a large scale operation involving US, Malagasy and Sri Lankan interests together with the *IFC*, and with investments in the order of US$ 10 million);
- in Ethiopia investments opportunities appear largely related to the success of the ongoing ***revamping*** of existing textiles & garments plants and to their possible subsequent privatization.

4. PROPOSED PRO€INVEST ACTIVITIES

4.1 Introduction

Because of its sheer size, the textiles and garments industry represents an important area of intervention for the Pro€Invest program. The relatively limited presence of EU companies in the region (most European clothing manufacturers have de-localized their production activities to East European and Mediterranean countries) is certainly a limiting factor, but this is largely compensated by the opportunity of supporting forms of South – South cooperation within the EAIO region. Furthermore, the transitional phase currently faced by the sector in Mauritius offers opportunities for Pro€Invest to facilitate technology transfer and, more in general, an exchange of experience between local and EU operators.

In this framework, the proposed Pro€Invest initiatives include:
- the organization of ***sector partnership missions***, both to the EU and within the region;
- the provision of ***capacity building support***, aimed at strengthening the operational capabilities of sector associations and promotional bodies.

A detailed presentation of the proposed initiatives is provided in the tables included in Sections 4.2 Sector Support and 4.3 Institutional Support.

4.2 Sector Support Initiatives

Type of Pro€Invest activities	**Sector Partnership Mission (inbound or outbound)**
Product/service lines considered	Garments
ACP and EU countries potentially involved	Many Mauritian entrepreneurs active in the clothing sector are already well traveled and have significant international experience. Still, the ongoing restructuring process, largely aimed at adding value to existing products, would require a multiplication and deepening of contacts with potential partners. An inbound or outbound partnership mission involving companies for **Mauritius** and from EU countries (namely, **France** and **Italy**) could be provide an excellent opportunity to expand and strengthen existing commercial relations susceptible of evolving into full fledged partnership relations. The partnership mission could be organized in connection with some specialized trade fair (such as the *Ready to Show* event in Milan, specifically targeted at facilitating contacts with non EU producers).
Profile and estimated number of the ACP and EU operators likely to participate	Given the large size of the clothing sector in Mauritius, no problems are expected in mobilizing some 20 local companies (the *Mauritius International Apparel & Textile Exhibition* – a sort of touring trade fair organized in the past in several European locations in the past was able to muster the participation of 35 plus companies). Participants could be selected in collaboration with entities representing the interests of EPZ companies, namely the *Mauritius Export Processing Zone Association* (MEPZA), the *Export Processing Zone Development*

	Authority (EPZDA) and the *Mauritius Industrial Development Authority* (MIDA). EU participants could be selected in collaboration with relevant sector associations or promotion bodies at the EU level (*EURATEX*) or national level (e.g. *Associazione Tessile Italiana*, *Institut Français Textile-Habillement*).

Type of Pro€Invest activities	**Sector Partnership Mission (within the EAIO)**
Product/service lines considered	Textiles and garments
ACP and EU countries potentially involved	Several Mauritian clothing manufacturers have already gone through the process of organizing the relocation of their production activities abroad. The experience in Madagascar was not fully positive (and in some cases a real disaster), but the logic of taking advantage of low labor costs in other countries within the region is compelling and the de-localization process is bound to continue. A Pro€Invest partnership mission involving companies from **Mauritius**, **Madagascar**, **Kenya** and **Ethiopia**, could be a useful instrument to facilitate the emergence of partnerships within the region.
Profile and estimated number of the ACP and EU operators likely to participate	The mission could involve some 10-15 companies from Mauritius (identified by the same bodies mentioned above), visiting a similar number of enterprises in Kenya, Madagascar and Ethiopia.

4.3 Institutional Support Initiatives

Type of Pro€Invest activities	**Capacity Building – Industrial Restructuring**
Countries concerned	Mauritius and, to a more limited degree, Madagascar
Issues to be addressed	Mauritius' textiles and garments industry is facing a phase of significant transformation and business associations & promotional bodies must be equipped to accompany and facilitate this process. Capacity building activities aimed at transferring (and adapting) the lessons learned in other countries that faced similar problems in the past could be useful. In particular, capacity building activities could focus on aspects such as: (i) how to facilitate the "clustering" of SME, in order to enhance value added and increase flexibility in production; (ii) the role of "technical centers" in supporting small enterprises in their attempt to enter higher value added market segments; (iii) the establishment of intelligence centers (often referred to as "market observatories") capable of real time monitoring of market trends, with the provision of relevant feedbacks to enterprises; (iv) the promotion of local fashion designers and the establishment of appropriate linkages with main fashion centers.
Stakeholders to be involved	During fieldwork for this report, interest in receiving support to tackle with some of the above mentioned issues was shown by *MEPZA* and *EPZDA*, two entities particularly close to the textiles & garments industry. Given the importance of the sector in Mauritius, Pro€Invest capacity building activities could also attract the interest of more generalist organizations, such as the *Mauritius Employers' Federation*, the *Mauritius Chamber of Commerce and Industry* and the *Small and Medium Industry Development Organization*. On the EU side, it is possible to envisage the involvement of specialized institutions and centers with direct experience in accompanying structural transformation in the textiles & garments sector, such as *IFTH* in France or *CITER - Centro di Informazioni Tessile dell'Emilia Romagna* in Italy.

ANNEX A – BASIC STATISTICS

Table A.1 Textiles and Clothing Exports to EU – 1997 - 2001
(€ '000)

Countries	Year				
	1997	**1998**	**1999**	**2000**	**2001**
Mauritius	608,841	601,801	631,095	681,394	666,000
Madagascar	177,539	203,593	233,191	273,999	286,000
Sudan	46,986	31,450	20,252	24,124	25,000
Tanzania	28,990	22,215	14,125	14,692	15,000
Kenya	15,621	12,145	10,529	11,843	12,000
Uganda	11,836	7,014	5,709	7,967	8,000
Total	**889,813**	**878,218**	**914,901**	**1,014,019**	**1.012,000**

Source: EUROSTAT and own estimates (for 2001)

Table A.2 Textiles and Clothing Exports to the US – 1997 - 2002
(US$ '000)

Countries	Year					
	1997	**1998**	**1999**	**2000**	**2001**	**2002**
Mauritius	184,433	222,812	232,142	244,863	238,345	254,653
Madagascar	15,322	20,688	45,707	109,907	178,750	89,998
Kenya	31,703	30,898	39,487	44,089	64,623	126,488
Ethiopia	137	28	4	28	731	1,324
Tanzania	7,077	6,252	2,653	242	487	371
Uganda	0	11	0	4	13	1
EAIO	**238,672**	**280,689**	**319,993**	**399,133**	**482,949**	**472,835**

Source: US Department of Commerce

Table A.3 Unit Labor Cost in Standardized Garment Production - Men's Casual Shirts

	Madagascar	**Kenya**	**Ghana**	**Mozambique**	**South Africa**	**India**	**EPZ China**
Task level efficiency*	14-15	12-15	12	10-11	15	16	18-22
Monthly wage (in US$)	55-65	60-65	30-45	40-50	255	70-75	150
Index of unit labor cost	0.023	0.026	0.022	0.029	0.050	0.027	0.040

* Average number of shirts produced by a machine operator in a workday

Source: World Bank, *Incentives and Obstacles to Growth: Lessons from Manufacturing Cases Studies in Madagascar*

TECHNICAL SUMMARY #9
LEATHER AND LEATHER GOODS

1. SECTOR DEFINITION

For the purpose of our analysis, the leather and leather goods industry covers raw materials (cattle hides and sheep & goat skins), first processing (tanneries) as well as the production of finished goods (mainly footwear, but also other items), following a *filière* logic. Operations based on fish and crocodile skins, although of some interest in certain countries, are not covered. In terms of the ISIC nomenclature, activities included in this profile fall in two categories, namely: “191 - Tanning and dressing of leather; manufacture of luggage, handbags, etc.” and “192 - Footwear”.

2. SECTOR PROFILE

2.1 Overview

The importance of the leather industry varies greatly across the EAIO region: the sector is very important in the Horn sub region, of moderate importance in other continental countries, virtually non existent in the Indian Ocean. Total exports are estimated at around € 180 million, of which around 60% for leather, 25-30% for raw hides and skins and the rest for footwear and leather products. Total employment in tanneries and other processing activities is estimated at some 32,000.

Ethiopia is in the leading position, with total exports worth some US$ 70 million and a workforce of 14,500. The country has a long established tradition in leather, dating back to the early XX century, and the sector (namely, the tanning industry) benefited from significant investment during the Derg period. At present, the leather and leather goods sector is Ethiopia’s second largest foreign exchange earner after coffee and its contribution to GDP can be roughly estimated at 2%. ***Uganda*** is the second largest exporter, with some US$ 60 million, but this figure also includes raw materials coming from neighboring countries as well as re-exports of hides processed in Kenya. ***Kenya*** is the third largest exporter, with some € 30 million, of which about 50% is represented by shoes sold in neighboring countries.

Table 1 Key Figures - 2001

Countries	Companies			Labor Force	Exports (€ million)
	Tanneries	Shoemakers	Leather Goods		
Eritrea	5	81	5	5,350	-
Ethiopia	20	260	38	14,500	70
Kenya	8	62	360	6,400	29
Sudan	17	22	4	3,050	17
Tanzania	5	243	123	750	8
Uganda	6	175	69	1,950	60
Total	***61***	***843***	***599***	***32,000***	***184***

Sources: ESALIA and industry sources

2.2 Market Structure and Recent Developments

Hides and Skins. Despite the large livestock population (over 300 million heads, of which 130 million cattle), the volume of hides and skins produced in the EAIO region is comparatively limited. As only a fraction of animals go through proper slaughterhouses, production is very fragmented and the output is often of limited quality, with the bulk of regionally produced hides and skins falling in III and IV grade categories. Fragmented supplies also provide significant market power to intermediaries, who in certain countries (namely, Uganda and Tanzania) have been able to dictate their terms to local users.

Tanneries. Throughout the region there are some 60 tanneries, with a workforce of some 10,000. Ethiopia and Sudan are in the leading positions, with, respectively, 20 and 17 units, followed by Kenya with 8. Due to a combination of factors (see below), not all the EAIO tanneries are currently in operation. In Ethiopia and Sudan the development of the tanning industry has been somehow supported by government measures preventing the export of raw skins. In Sudan the export ban was lifted in recent years while it is still largely in effect in Ethiopia. From the technical point of view, the situation is mixed. In Ethiopia the majority of tanneries is fairly well equipped (although sometimes with fairly simple technology originating from former socialist countries) and the technical level of management is broadly adequate. Also, about one third of Ethiopian plants have waste water treatment facilities. The situation is similar in Eritrea, where part of the tanneries currently in operations were established or revamped during the 1990s. In Sudan several tanneries were hastily established, mainly by traders without an adequate industrial background, during the raw skins export ban period: usually they are not well equipped and the development of a solid technological basis is still in process. In Kenya, the technology is largely outdated (the once leading company *Bulleys Tanneries* was established back in 1949 and partially modernized in the early 1980s) and this inevitably translates into a lack of competitiveness. Indeed, in Kenya only 15% of output is leather at the finished stage, while 60% is wet blue and 25% crust leather. In Uganda, Tanzania and Sudan capacity utilization is severely constrained by demand and supply factors. On the one hand, intermediaries often prefer to export raw skins, therefore further reducing an already limited supply of raw materials. On the other hand, local producers of footwear and other leather goods are unable to compete successfully with imported goods (see below), and their demand for leather is limited. In Ethiopia capacity utilization is definitely higher (during field work *Ethiopia Tannery* reported an 80% utilization rate on annual basis) as producers can count on a captive market for hides & skins and on relatively well established export markets.

Footwear. In the EAIO region the footwear industry comprises some 50 industrial units plus an estimated 800 handicraft operations, with a total workforce of some 15,000. With the exception of some large foreign-owned units (namely, *Bata Shoes* in Uganda and Kenya) and some Ethiopian companies, productivity is low and the quality of finished goods largely inadequate. The progressive liberalization of trade flows experienced by most EAIO countries has exposed the local footwear industry to tough competition from Asia and from imports of second hand shoes. In Tanzania second hand imported shoes may sell for as little as US$ 1-1.5 per kilogram (roughly three pairs), compared with a minimum of US$ 4 charged for locally manufactured synthetic leather shoes (at least US$ 8 for natural leather shoes). Exports of footwear and other finished goods are primarily directed to the regional market (some € 15 million, primarily originating from Kenya) while trade flows with the EU are extremely limited (some US$ 500,000 worth of shoes exported from Ethiopia to the United Kingdom).

Leather Goods. The leather goods sector is highly fragmented, with only a handful of "industrial" units and around 600 handicraft operations, with a total employment of some 7,000. Products include leather and suede garments (jackets, trousers, etc.), bags and luggage, and various accessories. With exception of few Ethiopian companies, products typically have a limited design content and therefore are almost exclusively sold in domestic markets.

2.3 EU Presence

In the EAIO's leather industry trade with the EU has been expanding in recent years and currently accounts for around 40% of total exports (i.e. an estimated € 70-75 million). Remaining exports go to Asian countries, mainly India and China, or are traded within the EAIO region. Exports to the EU mainly include raw materials and leather at different stages of finishing, originate from Ethiopia (some € 50 million) and Sudan (some € 15 million), and are directed primarily towards Italy.

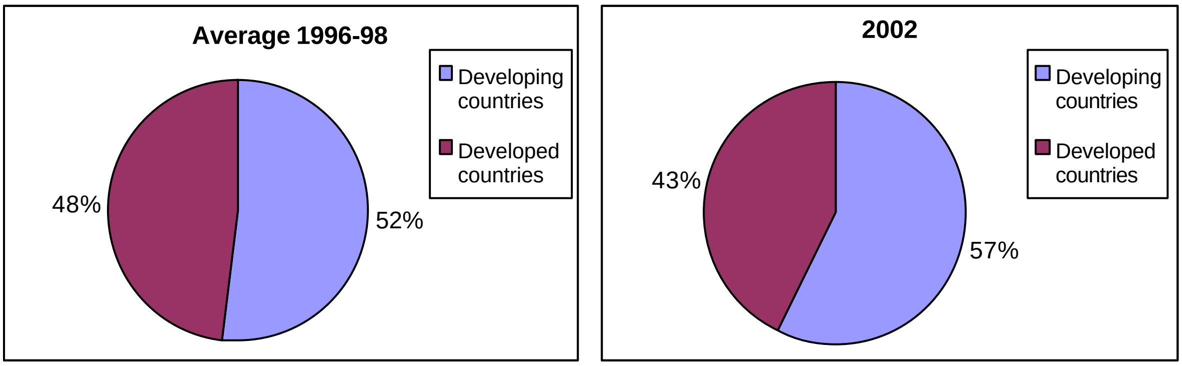
Foreign presence in production is significant, both in the tanning industry and in large scale shoemaking, but the main investors are from Arab countries (e.g. *ELICO* in Ethiopia, which is part of the Saudi-controlled group *MIDROC*) or from the Asian overseas business community (the *Aga Khan Group*, owning three tanneries in Kenya and Uganda). European companies are also present, although more through "partnership agreements", involving long term purchase and technical assistance, than through equity participations. EU actors are mainly from the United Kingdom and Italy. British companies active in the region include *Pittards*, a leading manufacturer of leather and leather goods with stable relations in Ethiopia, and *East Hides Group*, a London-based leather trader & manufacturer active worldwide and operating two warehouses in Uganda and Tanzania. Italian companies include some 10 – 15 leather traders and tanneries (*Conceria Guarino*, *Pluripell*, *Mirò International*, etc.) operating in Ethiopia, Sudan and, to a smaller extent, in Uganda. These are typically small or medium scale companies (turnover around € 10-15 million), sometimes handling commercial and technical assistance activities through local offices or representatives. Also, an Italian company (*SAIE*) is the majority owner of *Bini Shoe Factory* in Eritrea.

3. INVESTMENT POTENTIAL

3.1 Growth Potential and Constraints

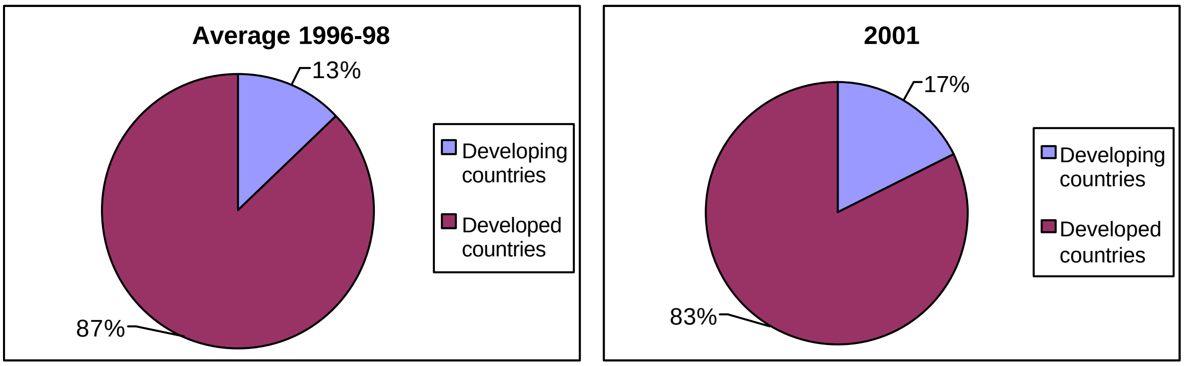
The EAIO's leather and leather goods industry displays good fundamentals. Indeed, the large animal population provides an excellent basis for the development of a lively leather industry while the low labor costs prevailing throughout the region offer good opportunities for the more labor intensive components of the *filière*, shoemaking and leather garments manufacturing. These two "supply side" factors combine with positive trends in demand: indeed, not only the international demand for leather and leather goods has been on an increasing trend for the last two decades but developing countries have significantly increased their share in production (from an average 52% in the 1996-98 period to an estimated 57% in 2002) and in export volumes (from 13% to 17%). Finally, one should also consider the impact of growing environmental concerns in western countries, which translates in a tendency towards the delocalization of early stages of production in the tanning industry.

Figure 1 Trends in the Production of Hides and Skins – 1996/98 - 2002



Source: FAO

Figure 2 Trends in Exports of Hides and Skins – 1996/98 - 2001



Source: FAO

While fundamentals appear broadly positive, so far the full reaping of potential benefits has been hampered by several factors. These include:

- the poor husbandry practices and the low level of technology available in slaughterhouses, which has an obvious negative impact on the quality of raw materials. This problem combines with the limited compliance with relevant sanitary regulations, whose respect is an absolute precondition to access EU markets (as indicated by a representative of an Italian business association interviewed during field work: "all business problems can be solved .. but sanitary rules must be respected");
- the inadequacy of existing production structures and/or of technical skills in manufacturing operations displayed in certain countries. While in the Horn sub region conditions are rather favorable, in other EAIO countries the technology is largely outdated, with an obvious negative impact on product quality;
- the limited size of domestic markets for finished products, due to the limited purchasing power of the population (in EAIO the per capita consumption of shoes is around one pair per year - 0.5/year in Tanzania – compared with an average of some 1.5 pairs/year in India and 4.3 in EU) and the increasing challenge posed by imports from Asia;

- the geographical and (even more importantly) psychological distance from the main consumption markets, which limits the opportunities for large scale sub contracting operations. Over the last decade western, and especially, European shoemakers have indeed transferred a large share of their production activities in low labor cost countries, but so far only Eastern Europe and Mediterranean countries have benefited from such a trend towards de-localization.

A summary presentation of the sector's strengths, weaknesses, opportunities and threats is provided in Table 2 below.

Table 2 SWOT Analysis

Strengths	Weaknesses
• Large resource base (livestock population) • Low labor costs (important for shoemaking and leather garments manufacturing)	• Fragmented supply of hides and skins • Problems with quality of raw materials and compliance with sanitary conditions • Outdated production structure & limited technical skills (except in the Horn region) • Limited size of domestic markets
Opportunities	**Threats**
• Favorable trend in international demand • Trend towards delocalization in western countries (but EAIO perceived as distant)	• Strong competition from Asian producers

3.2 Investment Opportunities

Investment opportunities appear to concentrate primarily in the tanning industry, where demand for leather at various stages of finishing is expected to continue to grow. In particular, investment opportunities appear to exist in two areas:

- the ***rehabilitation and modernization of existing tanneries***, sometimes in connection with privatization programs. In these cases, investment programs may range from the general overhaul of outdated structures to the installation of finishing capacity, in order to enhance the value of existing products (from wet blue to crust and to finished leather). Investment costs obviously depend upon the specific features of each plant, and in certain cases they can be substantial. In the early 1990s the rehabilitation of *Africa Tanneries* in Tanzania involved an investment of some US$ 1.5 million. In the case of a Sudanese tannery whose rehabilitation was recently tentatively considered by an Italian company, investment costs are estimated at in excess of € 5 million;
- the establishment of ***green field tanneries for the production of wet blue***. Taking into account the fragmented nature of the market for raw materials and the difficult logistical situation in most EAIO countries, the appropriate size for these initiatives is likely to be in the order of 20 tons/day, basically the equivalent of one truckload per day. In the case of plants processing hides, investment costs for machinery, building and infrastructure can be estimated at around € 1.5 million. For plants processing sheep or goat skins, costs are considerably lower, with not more than € 500,000 necessary to obtain a fairly raw product. If installed in areas with a reasonable supply of raw materials and decent access to the final market, these relatively small units appear to offer interesting levels of profitability. Calculations related to a recently built plant in Southern Africa suggest a pay back period of about 3-4 years.

In ***footwear and leather goods*** potential investments are related primarily to opportunities offered by AGOA and, in the longer term, to the expansion of domestic consumption. Unlike the garments sector, the EAIO's leather industry has so far only marginally benefited from the privileged access to the US market provided by AGOA but some initiatives are currently underway. This is the case of some leather garments producers in Ethiopia (*Zege Leather Products*, *Eth-Sung Bin*), which have announced actions specifically targeted at the US market. Some AGOA-related initiatives in leather garments, promoted by Asian producers from India and Bangladesh, are also reported to be in the making in Kenya. On the other hand, initiatives related to the establishment of long term subcontracting agreements with European shoemakers are still rare, due to the complex logistics.

4. PROPOSED PRO€INVEST ACTIVITIES

4.1 Introduction

To a large extent the partially unrealized development potential of the leather and leather goods sector in EAIO can be regarded as a case of "market failure" due to inadequate circulation of information and transfer of skills. From an EU perspective, the problem is exacerbated by the fragmented nature of the European industry, consisting of a large number of small enterprises (in Italy alone there are some 2,000 tanneries) that are intrinsically hesitant in venturing in distant markets. In this context, the Pro€Invest program could play a significant role in improving the situation and the recent organization of a first sub-sector meeting in collaboration with *ESALIA* (Nairobi, July 2003) is a first important step in this direction.

In this context, proposed Pro€Invest initiatives include:

- the organization of inbound and outbound ***partnership missions*** in the leather sub sector;
- the launch of initiatives aimed at facilitating the transfer of technology, through the use of the ***twinning facility*** and/or the provision of ***direct assistance at the company level***;
- the organization of ***capacity building initiatives*** and ***policy dialogue workshops*** aimed at addressing sector-wide problems.

A detailed presentation of the proposed initiatives is provided in the tables included in Sections 4.2 Sector Support and 4.3 Institutional Support.

4.2 Sector Support

Type of Pro€Invest activities	**Sub-Sector Partnership Missions (inbound or outbound)**
Product/service lines considered	Leather sub-sector
ACP and EU countries potentially involved	Highly focused partnership mission would offer an excellent opportunity to follow up contacts established during the recent sub-sector meeting (*Leather Invest-Tech 2003* organized by *ESALIA*). These missions could be organized for specific countries (**Ethiopia** and **Sudan**) and/or for groups of countries (the **EAC sub-region**). In line with the relative importance of the leather industry across EU Member States, **Italian** tanneries and leather traders are likely to be the most interested counterparts for these initiatives, followed by their **Spanish** colleagues.
Profile and estimated number of the ACP and EU operators likely to participate	Participants could be selected primarily among the participants in the recent Leather Invest-Tech meeting held in Nairobi. Indications collected during field work in the Horn region suggest that the minimum number of participants (10 – 15 enterprises) could be rather easily mobilized, with the cooperation of *ESALIA* and of the *Ethiopian Tanners Association*.

Type of Pro€Invest activities	**Company Twinning and/or Company Direct Assistance**
Product/service lines considered	Leather
ACP and EU countries potentially involved	In the EAIO region, **Ethiopia**, **Eritrea** and **Sudan** appear to be the countries were local producers are more aware of the need to upgrade their international competitiveness through enhanced technology transfers. On the EU side, **Italian** and **Spanish** companies are again likely to be the most interested EU counterparts.
Profile and estimated number of the ACP and EU operators likely to participate	EAIO potential participants include both private companies and state-owned companies slated for privatization in Ethiopia and Eritrea (for which some special initiatives could be envisaged). Among EU participants, Italian companies already present in the region through trade representatives and agents are likely to be the most interested counterparts although the participation of some newcomer is also possible. Altogether, the launch of about 5 initiatives over a period of 2-3 years appears feasible.

4.3 Institutional Support

Type of Pro€Invest activities	**Public Private Dialogue – Regional Cooperation**
Countries concerned	EAC countries, Ethiopia, Eritrea and Sudan
Issues to be addressed	Trade flows within the region are still limited, with only Kenya playing a certain role as supplier of finished goods. During fieldwork for this report several counterparts expressed interest in enhanced forms of regional cooperation. The organization of a regional workshop on trade issues and other policy aspects (harmonization of regulations on technical standards, etc.) could facilitate South-South trade as well as the emergence of partnership agreements.
Stakeholders to be involved	The workshop could be organized by *ESALIA*, with the active participation of national sector associations (namely, the *Ethiopian Tanners Association* and Sudan's *Leather Chamber*). Other stakeholders participating in the exercise would include representatives of relevant ministries and administrations.

Type of Pro€Invest activities	**Capacity Building – Quality Awareness and Environmental Aspects**
Countries concerned	Ethiopia, Eritrea, Kenya and Sudan
Issues to be addressed	Specific areas of interest identified during fieldwork for this report include: • the enhancement of quality awareness through the various stages of the value chain, including the need to respect relevant sanitary standards; • the review of options available in waste water treatment and the subsequent development of best practices adapted the region.
Stakeholders to be involved	Once again, the organization of such initiatives should see the active role of *ESALIA*, assisted by the main national sector associations (*Ethiopian Tanners Association*, Sudan's *Leather Chamber*, *Eritrean Leather and Allied Industries Association*, etc.). Other stakeholders would include representatives of relevant ministries and administrations, and delegates from environmental and research organizations (such as the Ethiopian *Leather & Leather Products Technology Institute*).

APPENDIX A – BASIC STATISTICS

Table A.1 Livestock Population in EAIO Countries - 2002
(heads)

Countries	Cattle	Goats	Sheeps	Total
Comoros	52,000	115,000	21,000	**188,000**
Djibouti	270,000	512,000	475,000	**1,257,000**
Eritrea	2,200,000	1,700,000	1,575,000	**5,475,000**
Ethiopia	35,500,000	9,622,088	11,438,200	**56,560,288**
Kenya	13,500,000	9,000,000	8,000,000	**30,500,000**
Madagascar	11,000,000	1,350,000	790,000	**13,140,000**
Mauritius	28,000	93,000	11,500	**132,500**
Rwanda	815,000	760,000	260,000	**1,835,000**
Seychelles	1,400	5,150	0	**6,550**
Somalia	5,300,000	12,700,000	13,100,000	**31,100,000**
Sudan	38,325,000	40,000,000	47,043,000	**125,368,000**
Tanzania	17,700,000	11,650,000	3,550,000	**32,900,000**
Uganda	5,900,000	6,600,000	1,200,000	**13,700,000**
Total	**130,591,400**	**94,107,238**	**87,463,700**	**312,162,338**

Source: FAO

Table A.2 Hides and Skins Production in EAIO Countries - 2002
(tons of fresh skins)

Countries	Cattle Hides	Goatskins	Sheepskins	Total
Comoros	184	88	17	289
Djibouti	660	470	410	1,829
Eritrea	3,234	680	570	4,484
Ethiopia	57,750	13,500	14,940	86,190
Kenya	39,354	10,150	4,800	54,304
Madagascar	20,880	932	480	22,292
Mauritius	375	75	13	463
Rwanda	2,775	1,000	182	3,957
Seychelles	3	4	0	7
Somalia	11,000	5,800	7,250	24,050
Sudan	56,280	22,750	22,500	101,530
Tanzania	44,100	6,000	2,550	52,650
Uganda	13,545	4,950	924	19,419
Total	**250,140**	**66,399**	**54,636**	**371,175**

Source: FAO

Table A.3 World Trends in Production of Hides & Skins – 1996/98 - 2002
('000 tons)

	1996-98 Average	2002
Bovine Hides & Skins		
Developing countries	2,833.6	3,233.3
Developed countries	2,812.4	2,580.6
Sheep Skins		
Developing countries	200.4	223.0
Developed countries	192.7	184.8
Goat Skins		
Developing countries	214.0	247.4
Developed countries	12.5	11.6
Total		
Developing countries	**3,248.0**	**3,703.7**
Developed countries	**3,017.6**	**2,777.0**

Source: FAO

Table A.4 World Trends in Exports of Hides & Skins - 1996/98 – 2001
('000 tons)

	1996-98 Average	2001
Bovine Hides & Skins		
Developing countries	236.7	360.8
Developed countries	1,946.0	1,929.2
Sheep Skins		
Developing countries	48.2	64.7
Developed countries	122.1	171.3
Goat Skins		
Developing countries	16.6	20.5
Developed countries	4.0	4.4
Total		
Developing countries	**301.5**	**446.0**
Developed countries	**2,072.1**	**2,104.9**

Source: FAO

TECHNICAL SUMMARY #10

MEDIUM SCALE MINING

1. SECTOR DEFINITION

The sector covered in this Technical Summary includes two main lines of business, namely: quarrying and processing of ornamental stones (marble, granite, etc.) and gold mining. Whenever relevant, reference is also made to processing activities. The focus is on medium scale operations, with exclusion of both artisanal activities and large scale operations such as those run by large multinationals (*Ashanti, Kasese Cobalt*). In terms of the ISIC nomenclature (Rev. 3), gold mining falls in class “1320 - Mining of non ferrous metal ores”, while ornamental stones are included in classes “1410 - Quarrying of stone, sand and clay” and “2696 - Cutting, shaping and finishing of stone”.

2. SECTOR PROFILE

2.1 Overview

EAIO’s total gold output (and exports) is estimated at some US$ 300 million, but most of it comes for large scale operations in Tanzania and Sudan. In the case of ornamental stones, total turnover is grossly estimated at some US$ 200 million, of which some 10-15% is exported. In most of EAIO countries mining and quarrying (which includes also a number of activities not covered in this profile) accounts for less than 1% of GDP. The exceptions are Uganda (some 6% of GDP, due to the presence of *Kasese Cobalt* and some large gold operations) and Tanzania (around 3%, again due to some large scale gold mining operations).

Table 1 Key Figures

Countries	Ornamental Stones			Gold
	Quarries	Companies	Production (in cubic meter/year)	Exports (US$ million)
Eritrea	3-4	3	2,000	-
Ethiopia	8-10	6-7	15,000	35
Kenya	3-4	2-3	3,000-3,500	10
Madagascar	5-6	5-6	5,000	-
Sudan	6-7	6-7	8,000	70-80
Tanzania	1	1-2	400-600	120
Uganda	1	1	n.a.	60
Total	**27-33**	**24-29**	**33,400-35,600**	**295-305**

Sources: IMF and estimates based on industry sources

2.2 Market Structure and Recent Developments

Ornamental Stones. In EAIO countries the ornamental stones sector is still limited in size. According to industry sources (no proper statistics are available) at present there are some 30 – 35 quarries in operation, run by about 25 – 30 companies. The processing of marble and granite is done by some 10 operations, which are sometimes integrated with quarrying operations. ***Ethiopia*** is the main producing country, with an estimated output of some 15,000 cubic meters/year, followed by ***Sudan*** (8,000 cubic meters) and ***Madagascar*** (some 5,000 cubic meters). In each of these countries some 5 to 10 quarries are currently in operation, run by half a dozen companies. Output is predominantly sold in the local market and only in Madagascar exports reach a significant level, around 30% of total output. The technological level is uneven, with some plants using outdated technology operating next to recently established and reasonably well equipped companies. Some of the most recent initiatives were actively supported by CDE.

Gold Mining. Gold mining is an important source of export earnings in ***Tanzania*** (some US$ 120 million) and ***Sudan*** (some US$ 70-80 million). ***Uganda*** is also exporting significant amounts (US$ 60 million), but this is largely the result of the smuggling of gold originating from Congo. ***Ethiopia***'s exports are around US$ 35 million and ***Kenya***'s around US$ 10 million. EAIO's gold mining sector has been expanding fast over the last decade. The lion's share in terms of new initiatives goes to Tanzania, where it is estimated that some US$ 1 billion has been invested in exploration and mine development. The bulk of these investments were made by large multinationals, such as *Geita Gold* (owned by *Ashanti* and by *Anglo-Gold*), *Golden Pride* and *Barrick*. At the opposite end of the spectrum, handicraft operations are frequent in Eritrea and, especially, in Madagascar, with an estimated 100,000 artisan miners in activity.

2.3 EU Presence

In ***ornamental stones***, EAIO trade flows with the EU are still limited, although there are signs of improvement. In recent years, exports to European countries have been around 1,500 – 2,500 cubic meters per year, with Madagascar and Sudan being the main suppliers. EU presence in the region includes some 10 – 15 companies, mainly small and medium sized operators from Italy and Spain. In most cases this presence relates to commercial agreements but there are also some examples of joint ventures in operation or under finalization. Current and potential initiatives include three projects promoted by Italian companies in Madagascar (*Demetra Group* – blue granite, *Rock Planet* – fossil wood, and *Antolini* – blue granite), a joint venture with Italian participation in Tanzania (*Block & Rock* – travertine), and the participation of a Belgian company in a project in Sudan (*Carrieres de Sprimont* - marble).

Gold mining is typically the preserve of large companies originating from resource-based countries, such as South Africa, Canada and Australia. At present, European presence in the EAIO region includes British interests active in Tanzania (e.g. *Anglo-Gold*) and the participation of France's *Cogema* in the *Ariab Mining Company* in Sudan.

3. INVESTMENT POTENTIAL

3.1 Growth Potential and Constraints

EAIO's growth potential in medium scale mining is related to four main factors, namely: the availability of significant natural resources, the positive trend in demand (both international and local), the existence of a fairly favorable legal framework, and the low cost of unskilled labor. In particular:

- the situation with ***natural resources*** is particularly favorable in the case of gold, with a number of still unexploited fields in Tanzania, Sudan, Ethiopia and Eritrea. In the case of ornamental stones there are occurrences of granite, marble and travertine nearly in all countries. However, only part of these resources can be classified as "export grade" and in some cases extraction and related costs are significantly higher than those recorded in other competing locations (up to US$ 350 – 400 per cubic meter in Tanzania, compared with US$ 160 – 180 in South Africa);

- regarding ***international demand***, the market for gold is structurally exposed to significant fluctuations determined by a variety of factors, but the long trend remains positive. In the case of ornamental stones, world demand is expected to continue to grow at good rates, possibly around 6-7% per year. In the EU, a major producing area for finished products, processors are facing problems with the supply of local raw materials and as a result they are increasingly turning their attention towards supplies from developing countries. For ornamental stones, the positive trend in international demand combines with increased ***local consumption***. This is particularly the case of countries such as Kenya and Sudan, where an increasing use of ornamental stones in new constructions is a clearly noticeable pattern;
- over the last few years the ***legal framework*** for mining has been updated and improved in several EAIO countries, providing for an effective framework for private operators. This is particularly the case of Tanzania, whose mining legislation is regarded by some observers as one of the best in world;
- ***labor costs*** are an important factor in processing activities and in several EAIO countries (namely, Ethiopia and Tanzania), the cost of unskilled labor is still competitive with alternative resource rich locations.

As for constraints, the main problem relates to the ***high logistical costs***, primarily due to the poor state of infrastructure. For example, transportation costs for granite blocks from certain areas in Tanzania's interior are in the order of US$ 400 – 500 per cubic meter, which is higher than production costs. Sea freight costs are also high, at some US$ 250 – 350 per cubic meter from Dar es Salaam to South European ports. Containerization could reduce this amount by some 20-30%, but it is scarcely feasible as long as export volumes remain limited. Another serious problem has to do with the generalized ***lack of skilled personnel*** and the ***limited presence of technical support services*** (laboratories, exploration, etc.). In this respect, only Kenya and Tanzania can count on a sufficient supply. Finally, while demand trends are positive, ***international competition*** is also on the rise, especially in the case of ornamental stones, where several countries in Asia and Latin America are increasingly able to offer excellent products at competitive prices.

A summary presentation of the sector's strengths, weaknesses, opportunities and threats is provided in Table 2 below.

Table 2 SWOT Analysis

Strengths	Weaknesses
• Good resource base for gold and selected ornamental stones • Favorable legal framework • Low cost of unskilled labor	• High logistical costs • Limited availability of supporting technical services & skilled staff
Opportunities	**Threats**
• Favorable trend in international demand • Favorable trend in domestic/regional demand (especially in Sudan and Kenya)	• Growing international competition (ornamental stones)

3.2 Investment Opportunities

Most investment opportunities concentrate in the ornamental stones sub sector. These include:

- launch of new ***quarrying operations*** for niche, high value products (e.g. granites with a wholesale value in Europe of around € 1000-1500 per cubic meter). In these initiatives investment costs mainly relate to the purchase of earth moving machines (excavators, front loaders, etc.), with a properly equipped quarry requiring an initial investment in the order of € 600 – 700,000 (significantly less, in case second hand equipment is used, as it is sometimes the case). To this one should add the exploration costs, which could be as high as € 80 - 100,000 (geological survey, drilling campaign and opening of test faces);
- establishment of ***processing plants for slabs*** for export and/or domestic market. Investment costs for a full cutting and processing line for granite are around € 500,000, plus another 30% for construction costs and infrastructure. Investment costs are lower in the case of marble, at least regarding the cutting line;
- establishment of ***tiles processing units***, primarily targeted at the domestic market in large countries (Sudan, Kenya). Investment costs for these units are also in the € 500,000 range, although the use of second hand equipment (the secondary market for processing machines is becoming more established) could significantly reduce this figure.

Regarding gold mining there appear to be opportunities for the establishment of ***medium scale operations*** in Tanzania and, possibly, Ethiopia, where small deposits have been found. According to industry sources, the investment required for a processing plant with a capacity of 30 – 50 tons of rocks per days can be estimated at around US$ 2 million, of which 70% for machinery and the rest for infrastructure, training and working capital. The net margin for such an operation could be in the order of 15-20% after tax, with a payback period of 7-8 years. Other opportunities appear to exist in the establishment of gold ***processing operations*** for the production of jewelry in low labor cost countries. Some preliminary interest for similar initiatives recently emerged in Italian business circles, primarily with reference to Tanzania.

4. PROPOSED PRO€INVEST ACTIVITIES

4.1 Introduction

Medium scale mining, and especially the ornamental stones sub sector, is particularly suited for Pro€Invest activities. Indeed, the EU industry is mainly comprised of small to medium scale operators, who often combine the clear perception that new opportunities must be explored with a still limited exposure to the reality of EAIO countries. In such a context, Pro€Invest partnership promotion initiatives could greatly help in bridging the existing gap in terms of information and familiarity. In addition, Pro€Invest activities can usefully build upon the extensive work carried out in the past by CDE, which extended assistance to individual projects as well as for the establishment of the sector association *Afristone*. A presentation of the proposed initiatives is provided in the section below.

4.2 Sector Support

Type of Pro€Invest activities	**Sub-Sector Partnership Meeting**
Product/service lines considered	Ornamental Stones
ACP and EU countries potentially involved	The sub sector partnership meeting could provide an extremely useful forum for a systematic presentation of the opportunities offered by EAIO countries while at same time providing a testing ground for EU counterparts. In the EAIO region, partic ipants are expected to come primarily from **Sudan**, **Ethiopia**, **Madagascar**, **Kenya** and **Tanzania**, with some additional participation from **Eritrea** (marble) and the **Seychelles** (granite). Regarding EU countries, interested companies could be found primarily in **Italy** and **Spain**, with some additional participation from **Belgium** and **Greece**.
Profile and estimated number of the ACP and EU operators likely to participate	Participants could include around 15-20 EAIO companies and a similar number of EU companies. In the case of EAIO companies, the selection could be made with support from *Afristone* and from some "generalist" business associations. Regarding EU companies, participants should include marble & granite processors and traders as well as manufacturers of equipment and tools for stone processing, identified with support from relevant business associations (e.g. Italy's *Marmomacchine*).

Type of Pro€Invest activities	**Sub-Sector Partnership Mission (inbound)**
Product/service lines considered	Gold processing
ACP and EU countries potentially involved	In certain EAIO countries low labor costs combine with a good level of workmanship in jewelry production. This is particularly the case of **Ethiopia** and **Eritrea**, although some opportunities appear to exist also in **Tanzania**. The organization of an inbound sub sector partnership mission could provide an opportunity for the establishment of partnership agreements with EU companies. Among EU operators, **Italian** jewelry makers appear to be the most interested (some scouting is already ongoing in Tanzania), followed by their **Spanish** and **French** colleagues.
Profile and estimated number of the ACP and EU operators likely to participate	Participants could include some 15-20 EU companies, visiting a similar number of EAIO operations. On the EU side the initiative for the mission could be taken by specialized sector associations such as Italy's *Federorafi*, possibly in collaboration with territorial associations in areas where the jewelry business is particularly well developed (*Assindustria Vicenza* and *Assindustria Arezzo*). In the case of EAIO countries, in the absence of sector specific organization, assistance could be provided by the most active "generalist" business associations and chambers of commerce.

APPENDIX A – BASIC STATISTICS

Table A.1 Ornamental Stones - Main Producing Countries - 2002

Countries	Production (cubic meter/year)	Share of Exports and Main Destination
Ethiopia	15,000	10 % to Middle East
Sudan	8,000	15 % to EU (Belgium)
Madagascar	5,000	30 % to EU (Italy)
Kenya	3,000-3,500	-
Eritrea	2,000	-
Tanzania	400-600	-
Seychelles	300	-
Total	**33,700-35,900**	

Source: industry sources

Table A.2 Ornamental Stones - Geological Potential and Operators - 2002

Countries	Geological Potential	Quarries	Companies
Ethiopia	Marble, Granite Limestone, Stones	8-10	6–7
Eritrea	Marble, Granite	3–4	3
Kenya	Marble, Granite	3–4	2–3
Madagascar	Marble, Granite Limestone, Stones	5–6	5–6
Seychelles	Granite	1	1
Sudan	Marble, Granite Limestone, Stones	6–7	6–7
Tanzania	Marble, Granite	1	1-2
Uganda	Marble, Granite	1	1
Total		**28-34**	**25-30**

Source: industry sources

MAIN ACRONYMS AND ABBREVIATIONS

ACP	Africa, Caribbean and Pacific
AGOA	African Growth and Opportunity Act
ATA	Agreement on Textiles and Apparel
CB	Capacity Building
CDC	Commonwealth Development Corporation
CDE	Center for the Development of Enterprise
CFM	Chemins de Fer de Madagascar
COLEACP	Europe-Africa-Caribbean-Pacific Liaison Committee
COMESA	Common Market for Eastern and Southern Africa
COP	Code of Practice
DG	Directorate-General
DFI	Development financial institutions
DFID	Department for International Development
EABC	East Africa Business Council
EAC	East African Community
EADB	East African Development Bank
EAIO	East Africa and Indian Ocean region
ECA	Economic Commission for Africa
EIB	European Investment Bank
EPOPA	Export Promotion of Organic Products from Africa
EPZ	Export Processing Zone
EPZDA	Export Processing Zones Development Authority
ESALIA	East and South Africa Leather Industry Association
ETC	Ethiopian Telecommunication Corporation
EU	European Union
FDI	Foreign Direct Investment
FAO	Food and Agricultural Organisation
GAPCM	Groupement des Aquacultures et Pêcheurs de Crevettes de Madagascar
GDP	Gross Domestic Product
GOTICOM	Groupement des Opérateurs en Technologie de l'Information et de la Communication (Madagascar)
GW	Gigawatts
ICT	Information and Communication Technology
I&ICA	Investment and Inter-enterprise Cooperation Agreements
IFC	International Financial Corporation
IFI	International Financial Institution
IGAD	Intergovernmental Authority on Development
IMF	International Monetary Fund
IO	Intermediary Organization
IOC	Indian Ocean Commission
IPC	Investment Promotion Centre (Kenya's IPA)
IPP	Independent Power Producers
ISIC	International Standard Industrial Classification of All Industrial Activities
ISP	Internet Service Provider
IT	Information Technology
ITC	International Trade Centre
ITU	International Telecommunication Union
Kbps	Kilobyte per second
Kwh	Kilowatt-hour
LDC	Less Developed Countries
LVFO	Lake Victoria Fisheries Organization
Mbps	Megabyte per second
MEPZA	Mauritius Export Processing Zone Association
MIGA	Multilateral Investment Guarantee Agency
MW	Megawatts
NEPAD	The New Partnership for Africa's Development
NGO	Non-Governmental Organisation
OECD	Organization for Economic Co-operation and Development
PPD	Public Private Dialogue

PPP	Public Private Partnership
PRIMS	Pro€Invest Implementation Service
PSP	Private Sector Participation
R&D	Research & Development
SME	Small and Medium-sized Enterprise
SWOT	Strengths, Weaknesses, Opportunities, Threats
TOR	Terms of Reference
TPO	Trade Promotion Agency
TRC	Tanzania Railways Corporation
UIA	Uganda Investment Authority (Uganda's IPA)
UK	United Kingdom
UNDP	United Nations Development Program
UNIDO	United Nations Industrial Development Organization
US	United States of America
USAID	US Agency for International Development
VAT	Value Added Tax
WTO	World Trade Organization
WTTC	World Travel and Tourism Council

SYMBOLS

-	Nihil
..	Not available
n.a.	Not applicable