

# Ex Post-Evaluation Brief Cameroon: Douala Port Rehabilitation Works



| Sector   | Ship transport (CRS: 21040)   |                             |
|--|-------------------------------|-----------------------------|
| Programme/Client                                     | BMZ No. 200065417             |                             |
| Programme executing agency                           | Port Autonome de Douala (PAD) |                             |
| Year of sample/ex post evaluation report: 2012*/2012 |                               |                             |
|  | Appraisal (planned)           | Ex post-evaluation (actual) |
| Investment costs<br>(total)                          | EUR 34.0 million              | EUR 37.4 million            |
| Counterpart contribu-<br>tion (company)              | EUR 10.6 million              | EUR 14.0 million            |
| Funding, of which<br>budget funds (BMZ)              | EUR 18.3 million              | EUR 18.3 million            |

\* random sample

**Project description:** The project comprised the rehabilitation of approx. 2,300 m of quay walls, of adjacent areas covering 16.5 ha and the application of rust-preventative **cathodic** protection to approx. 1,500 m of steel sheet piling. Additional interventions included lifting and removing wrecks from the harbour, the rehabilitation of sand traps and the construction of sanitary amenities. Overall project costs amounted to approx. EUR 37.4 million. As part of a parallel financing initiative, *Agence Française de Développement* (AfD), the major co-financier, provided a loan of approx EUR 18.3 million toward programme costs. The German contribution to overall funding comprised the cathodic protection component and part-funding the rehabilitation of quays 3-7, using concrete block construction techniques.

**Objective:** The overarching <u>developmental objective</u> (impact) of this FC project was to contribute to the costeffective processing of Cameroonian exports. <u>The programme objective</u> (outcome) was sustainable and efficient cargo handling at the port of Douala. The immediate target group for this project were the shipping and stevedore companies which use the port. The improvements were also expected to be of indirect benefit to Cameroonian exporters and buyers of imported products.

### Overall rating: 3

By rehabilitating facilities at the port, the project ensured the continuing availability of a service crucial to Cameroonian export activities. However, during the course of implementation, significant delays arose and substantial extra costs were incurred. Inadequate maintenance poses a threat to sustainability.



### **EVALUATION SUMMARY**

**Overall rating:** The project has been ranked as being developmentally effective, but with reservations concerning its efficiency. Sustainability risks are far from insubstantial. **Rating: 3** 

**Relevance:** At the time of appraisal in 2002, Douala was by far the most important port in Cameroon. It has continued to expand its dominance, to the extent of almost all the country's exports (99 %) being handled through Douala in 2011. Moreover, Douala is an important transit port for the landlocked countries of Chad and the Central African Republic (CAR). For both countries, it therefore represents the most important access route to international markets.

In retrospect, rehabilitation works were also required to ensure that the 13 ships' berths concerned (from a total of 19) as well as the service quay were all usable. This was the right the approach to maximise the volume of goods processed through the port - and thereby avoiding a potential constraint on exports – is justified with hindsight. The underlying intervention logic the high importance of functional quay facilities at Douala port for Cameroon's export flows and thus also to the country's economic development - can be corroborated. At the time of project appraisal, the transport sector was a priority area in development cooperation between Cameroon and Germany. Although this is no longer the case today, this sector remains a high priority for the Government of Cameroon, which intends to strengthen the country's ports as regional export hubs. Other donors, most notably the World Bank, are continuing to support the transportation corridor between Chad and CAR to Douala. Coordination took place with other donors, especially with AfD as co-financier. In essence, the programme's relevance is assessed as good. Sub-rating: 2

**Effectiveness:** The programme objective – sustainably efficient cargo handling at Douala port - is considdered achieved. Since handover during final inspection in 2009, the quay walls and the open yard areas have been continuously available to port users. Growth of up to 3.5 % per year in the volume of cargo handled, waiting time and turnaround time for ships arriving in port were defined as indicators at appraisal: respective values should not exceed those reported in 2002 (waiting time: 15.1 hours; turnaround time: 3.5 days). At the time of ex-post evaluation, indicators were largely met. According to port authority data for 2011, average ship waiting time was 15.7 hours and average turnaround time was 3.6 days, just slightly above the 2002 figures. In turn, the 4.0 % p.a. growth in cargo handled exceeded the value assumed in the indicator.

Apart from growth in cargo volume handled, there is another factor to consider: the navigation channels leading to Douala port are subject to tidal fluctuations, which have an impact on ship waiting times. Since vessel draughts are deepening with growing ship size (between 2002 and 2011, average gross tonnage per vessel in Douala increased by 29.4 %), longer waiting times for entry to the channel are also to be expected. Closely related to this, between 2002 and 2011 the average cargo volume handled per ship arriving in Douala port rose by 57 %, from 4,643 t in 2002 to 7,299 t in 2011. Over the same period, average productivity per ship's berth rose by 56 %. This also explains why average turnaround times remained almost un-

changed between 2002 and 2011 and are only of limited use as indicator. All in all, the projects' effectiveness is assessed as good. Sub-rating: 2

**Efficiency:** We consider the approach taken - rehabilitating quay walls and yard areas at the port of Douala for the benefit of cost-effective processing for Cameroonian exports - an efficient choice compared to the potential alternatives (e.g. building new quay facilities or using overland transport). With the internal rate of return on investments estimated between 21-31 %, allocative efficiency is also considered as sufficiently met.

The project's production efficiency, however, must be deemed unsatisfactory – due to extended delays and extra costs incurred. Implementation took 78 months, as against the 34 months estimated at project appraisal. The construction phase did not start until 2004, after a two years' delay. Total programme costs for the came to approx. EUR 37.4 million, against a target of EUR 34.1 million. These extra costs and delays were mainly the result of a major construction company becoming insolvent, which required a re-tendering exercise. Delays in planning and cost increases also played a role. Taken together, the project's efficiency is assessed as satisfactory. Sub-rating: 3.

**Overarching developmental impact:** The project's overarching developmental objective (impact) was to contribute to the cost-effective processing of Cameroonian exports. The indicator set was a, growth in port handling (excluding mineral oil products) above 2 % p.a. over the ten years following programme appraisal. At the time of evaluation, this indicator had been met: between 2002 and 2011, the average rate of growth in port handling (measured in metric tonnes, excluding mineral oil products) stood at 4% p.a.

Hence the indicator set for cargo handling growth was met, even though the programme's major works were not completed until the end of 2007. Over the period from 2007 to 2011, container handling grew by 7.5 % per year (detailed data for earlier years not available). In contrast, the volume of conventional goods handled over the same period (primarily *bulk goods*, excluding mineral oil products) only grew by an average of 2.5 % per year. Currently, the containerisation rate for the port of Douala stands at 51 %; experience suggests a further increase of this proportion.

Consequently, container freight was the growth rate's main driver; however, containers are not handled at the berths rehabilitated as part of this project. Despite this, the objective indicator for this area was also exceeded - by 0.5 percentage points, at least over the period for which data is available, i.e. from 2007 to 2011. It is thus reasonable to assume that at least four of the rehabilitated quays would have become unusable, had those measures not been taken. If that had been the case, growth in port handling would have been significantly lower. Despite this reservation, we rate the project's relevance as good. Sub-Rating: 2.

**Sustainability:** The primary threat to the sustainability of the intervention and its effects is the lack of maintenance and repairs. At the time of evaluation, the *Port Autonome de Douala* (PAD) had still not compiled a needs-based, budgeted maintenance plan, as was required under the

implementation agreement. A maintenance and repair handbook is reportedly in progress, but no date has yet been set for its completion.

At present, PAD only carries out emergency repairs, and no preventative maintenance is undertaken. Paving has subsided in the yard areas next to quays 3-11; depressions there have grown to considerable size and depth. The mission pointed out to PAD the urgent need for repairs in order to avoid more serious damage and to prevent the yards from ultimately becoming unusable. The budget scheduled by PAD for such work in 2012 - like the overall budget for maintenance and repair - is considered far too small. Based on the organigram and statements from PAD management, there is no shortage of technical staff. On a more positive note, an inspection of the harbour did not identify any notable damage to the quay walls.

Over the medium to long term, the dominance of Douala's port in Cameroon will be challenged by the construction of two deep-sea ports (Kribi and Limbé) which are currently underway. However, due to the lengthy lead times involved and the specialised nature of these ports, this may well not have a negative impact - at least in the medium term - on the sustainability of this programme's results. Due to the risks described above, the sustainability of this project has been assessed as <u>still</u> "satisfactory". Sub-Rating: 3.

## Notes on the methods used to evaluate project success (project rating)

Projects (and programmes) are evaluated on a six-point scale, the criteria being <u>relevance</u>, <u>effectiveness</u>, <u>efficiency</u> and <u>overarching developmental impact</u>. The ratings are also used to arrive at a <u>final</u> <u>assessment</u> of a project's overall developmental efficacy. The scale is as follows:

- 1 Very good result that clearly exceeds expectations
- 2 Good result, fully in line with expectations and without any significant shortcomings
- 3 Satisfactory result project falls short of expectations but the positive results dominate
- 4 Unsatisfactory result significantly below expectations, with negative results dominating despite discernible positive results
- 5 Clearly inadequate result despite some positive partial results, the negative results clearly dominate
- 6 The project has no impact or the situation has actually deteriorated

Ratings 1-3 denote a positive or successful assessment while ratings 4-6 denote a not positive or unsuccessful assessment

#### <u>Sustainability</u> is evaluated according to the following four-point scale:

Sustainability level 1 (very good sustainability) The developmental efficacy of the project (positive to date) is very likely to continue undiminished or even increase.

Sustainability level 2 (good sustainability): The developmental efficacy of the project (positive to date) is very likely to decline only minimally but remain positive overall. (This is what can normally be expected).

Sustainability level 3 (satisfactory sustainability): The developmental efficacy of the project (positive to date) is very likely to decline significantly but remain positive overall. This rating is also assigned if the sustainability of a project is considered inadequate up to the time of the ex post evaluation but is very likely to evolve positively so that the project will ultimately achieve positive developmental efficacy.

Sustainability level 4 (inadequate sustainability): The developmental efficacy of the project is inadequate up to the time of the ex post evaluation and is very unlikely to improve. This rating is also assigned if the sustainability that has been positively evaluated to date is very likely to deteriorate severely and no longer meet the level 3 criteria.

The <u>overall rating</u> on the six-point scale is compiled from a weighting of all five individual criteria as appropriate to the project in question. Ratings 1-3 of the overall rating denote a "successful" project while ratings 4-6 denote an "unsuccessful" project. It should be noted that a project can generally be considered developmentally "successful" only if the achievement of the project objective ("effectiveness"), the impact on the overall objective ("overarching developmental impact") and the sustainability are rated at least "satisfactory" (rating 3).