

# Mozambique: Matola Grain Silo and Terminal

## Ex-post evaluation

OECD sector	21061/Storage	
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BMZ project number	1988 65 107 (Real investment)	
	1988 70 404 (accounting measures)	
	AF 92 103 (training measure)	
Project executing agency	STEMA (formerly UDRA/XIGAIO)	
Consultant	<ul> <li>Hamburgplan, Hamburg (Real investment)</li> <li>Planco Consult, Essen (Personnel)</li> <li>Landwehr &amp; Partner, Hamburg (Person- nel/training)</li> </ul>	
Year of evaluation	2002	
	Project appraisal (plan- ned)	Ex-post evaluation (actu- al)
Start of implementation	3rd quarter 1989	1st quarter 1990
Implementation period	39 months	89 months
Investment costs	18.9 million EUR	22.8 million EUR
Counterpart contribution	0.5 million EUR	0.5 million EUR
Finance, of which FC funds	18.4 million EUR (100% FC)	22.3 million EUR (100% FC)
Other institutions/donors involved	DFID	DFID
Performance rating	2	
Significance/Relevance	1	
Effectiveness	2	
	2	

### Brief description, overall objective and project purpose with indicators

The project comprised the following individual measures:

- Construction of a landing stage (instead of the originally planned repair and extension of the existing landing stage)
- Construction and equipment of a 30,000 t grain silo (instead of a 20,000 t silo) with a discharge facility in Matola (suburb of the capital Maputo)

- Establishment of a rail link and a truck loading facility for inland transport
- Consultancy services
- Assistance in setting up and developing the operating company Silos e Terminal Graneleiro da Matola (STEMA) and operative support (accompanging measure)
- Supplementary training of the STEMA management personnel, including skilled workers as part of a training programme (training measure)

Finance for the landing stage was provided as scheduled by the Department for International Development - DFID (formerly ODA - United Kingdom).

The <u>overall objective</u> was defined as improving continuous grain supply for the population (without specifying indicators). The <u>project purpose</u> was the reliable and low-cost supply of the population of the southern region with imported corn and wheat and holding reserves for emergencies. The following <u>indicators</u> were defined for measuring project purpose achievement:

- Annual grain turnover of the operator STEMA two years after startup of silo and discharge facility: 190,000 t
- Discharge capacity: 4000 t/day

## Project design/Major deviations from original project planning and their main causes

The original design of refurbishing the existing <u>landing stage</u> for oil derivatives and enlarging it for grain discharge was altered on the insistence of the oil companies concerned (BP and the state firm Petromoc). After additional investigations ODA agreed in 1991 to finance the construction of the landing stage. The advantage of the new design is that ships up to 30,000 t can berth, which would only have been possible with the old landing stage at great additional effort. A disadvantage could, however, be the multipurpose use (oil derivatives and grain), since only one ship can berth at a time the oil derivatives are accorded precedence. According to STEMA, there have been no serious bottlenecks in the past.

The project executing agency also decided in 1991, particularly due to the low additional costs and the related economic advantage after the tender results, to run the <u>silo</u> for 30,000 t rather than the planned 20,000 t. This was sensible in hindsight since the large silo has now already reached its capacity limits.

The flanking measure was supplemented by a <u>training measure</u> for the technical specialist and management personnel in 1992, because a labour market analysis found that personnel with the requisite qualification and professional experience would not be available on the local labour market.

#### Key results of impact analysis and performance rating

Measured against the indicators defined in the project appraisal, the project objectives have been largely achieved, so that the level of **effectiveness** can be rated as satisfactory (Rating 2).

Measured against the specifications in the project appraisal, the efficiency of the project with a macroeconomic yield of 10% or 14% and microeconomic cost recovery of 93% (related to full costs; with a calculated interest rate of of 8%) is quite favourable. The high specific investment costs, however, are unsatisfactory, as they would have prohibited an economical operation of the enterprise without the expansion, as well as the cost inefficiency of the training measure. Altogether, though, we assess **efficiency** as sufficient (Rating 3).

In purely arithmetical terms, the wheat deficit determined for the south of the country has been fully covered by STEMA in recent years. The project can therefore rate as significant. STEMA's prompt response to demand for transit capacity under the crisis programme for Zimbabwe also merits positive assessment. The **significance/relevance** of the project is therefore assessed as high (Rating 1).

Weighing up the above key criteria, we accord the the project overall a **satisfactory degree of developmental effectiveness** (Rating 2).

#### General conclusions applicable to all projects

- Founding an <u>independent operating company</u> with a private legal status as already foreseen in the project appraisal was the right decision and made a major contribution to project success.
- Despite the success achieved, the overlaps between the <u>contruction measure and the</u> <u>training measure</u> and the resultant cost inefficiency overall, are not satisfactory. In these kinds of extensive and complex personnel assistance measures the monitoring and the management requirements should be as high as with investment measures.
- The direct commissioning of the same consultancy firm for the training measures as for the needs study was detrimental to cost efficiency and the quality of these measures. The company that prepared the consultancy scheme had difficulties demarcating the training measure from the flanking measure. This could have been avoided with a public call to tender requiring this demarcation as a central part of the technical offer.

Key

Developmentally successful: Ratings 1 to 3Rating 1Very high or high degree of developmental effectivenessRating 2Satisfactory degree of developmental effectivenessRating 3Overall sufficient degree of developmental effectiveness

Developmental failures: Ratings 4 to 6

Rating 4 Overall slightly insufficient degree of developmental effectiveness

Rating 5 Clearly insufficient degree of developmental effectiveness

Rating 6 The project is a total failure

Criteria for evaluating project success

The evaluation of a project's developmental effectiveness and its assignment in ex-post evaluation to one of the various levels of success described in more detail below addresses the following fundamental questions:

- Have the project objectives been reached to a sufficient degree (aspect of project effectiveness)?
- Does the project generate sufficient significant developmental impacts (project relevance and significance measured by the achievement of the predefined overall developmental objective and its political, institutional, socio-economic, socio-cultural ecological impacts)?
- Was/Is **funding/expenditure appropriate** for achieving the objectives and how can the project's microeconomic and macroeconomic impact be measured (aspect of **efficiency** of project design)?
- Where undesired (side) effects have occurred, are these acceptable?

Instead of treating **sustainability**, a key aspect in project evaluation, as a separate category, we look at it as a cross-sectional element of all four fundamental questions on project success. A project is sustainable if the project executing agency and/or the target group can continue to use the project facilities set up for an economically viable period of time in all or to carry on with the project activities on their own to beneficial effect after financial, organizational and/or technical assistance has ended.