

**Mauritania: Fishery Monitoring and Surveillance I and II**

**Ex-post evaluation report**

<b>OECD sector</b>	31310/ 31310	
<b>BMZ project ID</b>	1) 1990 65 756 2) 1995 67 116	
<b>Project-executing agency</b>	Délégation à la Surveillance des Pêches et au Contrôle en Mer (DSPCM)	
<b>Consultant</b>	Ingenieurbüro Nehls, Hamburg	
<b>Year of ex-post evaluation</b>	<b>2008</b>	
	<b>Project appraisal (planned)</b>	<b>Ex-post evaluation (actual)</b>
<b>Start of implementation</b>	1) 1 <sup>st</sup> quarter 1991 2) 3 <sup>rd</sup> quarter 1996	1 <sup>st</sup> quarter 1991 3 <sup>rd</sup> quarter 1996
<b>Period of implementation</b>	1) 60 months; 2) 48 months	66 months; 73 months
<b>Investment costs</b>	1) EUR 7.1 million 2) EUR 9.7 million	EUR 5.7 million EUR 13.3 million
<b>Counterpart contribution</b>	1) EUR 2.9 million 2) EUR 0 million	EUR 1.4 million EUR 0.8 million
<b>Financing, of which FC funds</b>	1) EUR 4.1 million 2) EUR 9.7 million	EUR 4.3 million EUR 12.5 million
<b>Other institutions/donors involved</b>	GTZ	GTZ
<b>Performance (overall rating)</b>	1) and 2) 2	
<b>• Significance/relevance</b>	1) and 2) 1	
<b>• Effectiveness</b>	1) and 2) 2	
<b>• Efficiency</b>	1) and 2) 2	
<b>• Overarching developmental impact</b>	1) and 2) 2	
<b>• Sustainability</b>	1) and 2) 3	

**Brief description, overall objective and project objectives with indicators**

Phase I concerned the acquisition of the surveillance ship "N'Madi" and phase II the construction of the new surveillance ship "Arguin". Total costs for phase I amounted to approx. EUR 5.7 million, of which EUR 4.14 million were financed by means of an FC grant. Total costs for phase II amounted to EUR 13.3 million, including an FC grant of EUR 12.5 million. Overall objective of the project was to contribute to the conservation of fish resources within the Mauritanian economic zone. The sustainable exploitation of these resources was added to the overall objective in phase II. Project objectives were: Phase I "Observation and enforcement of fishery laws and their implementing provisions"; phase II "The surveillance ship contributes significantly to the surveillance authority's effective monitoring of the territorial waters". For both

phases, indicators for attaining the project objective were the amount of the surveillance ships' days at sea (250 per year), the number of inspections carried out by them (3 resp. 2 per day) and the number of registered and punished violations of fishing regulations or territorial rights (not quantified for phase I; 90 % of violations were punished in phase II). Both project phases were implemented in cooperation with the GTZ. Since 2003 the project is followed up in the context of the cooperation project "Fishery Monitoring and Surveillance III" which focuses on the introduction of a satellite-based monitoring system.

### **Project design / major deviations from the original project planning and their main causes**

In phase I the used surveillance ship "N'Madi" was purchased second-hand and additional equipment, maintenance as well as operating material provided for a period of 5 ½ years. Apart from support for the surveillance authority, phase II included the upkeep of the "N'Madi"'s functionality and the construction of the new fishery surveillance ship "Arguin", replacing the "N'Madi" after it was taken out of service in 2000, and was mainly implemented as planned. After a public tender limited to Germany, the contract for the construction of the "Arguin" was placed with the wharf FASSMER-Werft and corresponding consulting services with the engineering office Ingenieurbüro Nehls in October 1998. In phase I costs were EUR 1.4 million lower than projected due to reductions in operating costs. Main reasons for the cost increase in phase II (EUR 3.6 million) were maintenance measures for the prolonged service of the "N'Madi" and extra equipment for the "Arguin". The surveillance authority DSPCM reports to the ministry of fishery and has limited administrative and financial autonomy. Among its tasks are: Fishery surveillance at sea and in ports as well as during loading or reloading of ships lying in a roadstead, fishing statistics, monitoring pollution at sea and sea rescues in emergencies.

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

As a result of the two project phases, Mauritania had a functioning surveillance ship ideally suited to the requirements of surveillance and monitoring activities at high sea in Mauritanian waters from early 1991 up until July 1996 (phase I) and until the "N'Madi"'s end of service and the "Arguin"'s entry into service in July 2000 (phase II). The target values projected in the project appraisal with regard to the surveillance ships' operating and utilization intensity were fulfilled to a great extent (phase I) or even surpassed (phase II). Since 2006/2007 there has been a slight deterioration, but this must be considered an exception which is due to the difficulties related to the introduction of the new satellite-based system. Altogether, the investment combined with TC (Technical Cooperation) and FC (Financial Cooperation) capacity building measures met the objectives to a great extent.

Average operating costs (without depreciation) for both surveillance ships are considerably less than the income from fines and fishery surveillance charges. Total costs for the surveillance system are estimated to be currently less than 1 % of the total value of annual catch, so that it may reasonably be stated that the economic advantages of effective fishing monitoring exceed its costs by far. As a consequence, the use of the surveillance ship is economically viable for the Mauritanian state. However, there have been occasional disruptions in the timely and appropriate provision of operation and maintenance budget funds.

By means of the two surveillance ships, TC and FC usefully complemented the support for the project-executing agency and contributed significantly to the establishment of the civil Mauritanian fishing monitoring and surveillance system, whose further promotion and optimization is the objective of the current third project phase as well as of the fourth one, which is in preparation. Fishing monitoring and surveillance has formed an integral part of the Mauritanian fishery policy since the beginning of phase I and still plays a key role in this context. Also from today's perspective, the project must be attributed a very high developmental priority. An effective fishery monitoring and surveillance system is indispensable for the sustainable exploitation of Mauritanian fishing resources, and decisively contributes to keeping up the fishing industry's great macroeconomic importance in the long-term, with its implications for employment, overall economic growth, generating export revenues and national income. With approx. 40,000 direct and indirect jobs (or roughly 40 % of total employment in the "modern"

industry sector), fishery is extremely important for the country. Given their close interconnection with the TC activities, the projects' measures had considerable systemic effects in the institutional sector, and contributed to capacity development, therefore promoting the sustainability of this crucial economic sector. The example of Mauritania serves as a role model for the successful establishment of a fishing monitoring and surveillance system in the sub-region today. The project aims at the sustainable exploitation of fishing resources and thus the conservation of biodiversity. There has been no indication so far that the surveillance ships pose particular environmental risks.

Given the progress and the operating experience so far, we do not see any serious threat for the technical sustainability of the surveillance ships' service. The system of providing funds for the operation of the DSPCM has proved to be unreliable, even if this did not severely affect the service in the past. In view of the apparent advantages of an effective fishing monitoring and surveillance, we assume that the Mauritanian state will continue to ensure sufficient funding and therefore consider the project's sustainability as guaranteed.

We evaluate the two phases of the project Fishery Monitoring and Surveillance as follows:

Significance/relevance (sub-rating: 1): By means of the two surveillance ships, TC and FC usefully complemented the support for the project-executing agency and contributed significantly to the establishment of the civil Mauritanian fishing monitoring and surveillance system, whose further promotion and optimization is the objective of the current third project phase as well as of the fourth one, which is in preparation. At the same time, this was an important contribution to solving a key problem of the sector. Fishing monitoring and surveillance has formed an integral part of the Mauritanian fishery policy since the beginning of phase I and still plays a key role in this context. For the above-mentioned reasons and despite a comparative decrease in the surveillance ships' importance in the context of the new satellite-based system (SSN), the project should be attributed a very high developmental priority and therefore significance/relevance (sub-rating 1) also today.

Effectiveness (sub-rating: 2): The target values projected in the project appraisal with regard to the surveillance ships' operating and utilization intensity were fulfilled to a great extent (phase I) or even surpassed (phase II). Since 2006/2007 there has been a slight deterioration, which we consider an exception due to the difficulties related to the introduction of the new satellite-based system. Considering the specific Mauritanian circumstances, the effectiveness of the implemented measures – investment combined with capacity building measures by TC and FC – is good because the project objectives have been met to a great extent. For this reason we rate the project's effectiveness for both phases as satisfactory (sub-rating 2).

Efficiency (sub-rating: 2): The technical design of the FC measures and of the supplied surveillance ships in particular was adequate and appropriate to the given requirements. Both the specific investment costs and the current operating costs for the surveillance ships were also adequate and did not exceed normal levels. For phase I we deemed it cheaper to buy the "N'Madi" instead of chartering, which in retrospect proved to be the right decision. Consulting services amounted to 4 % (phase I) and 8 % (phase II) of total costs, which is rather low compared with the achieved impact, the tangible reduction of implementation- and operation-related risks and the significant basic and advanced training results. Looking back, there does not seem to have been any more potential to save costs. Implementation flexibility enabled us to ensure continued provision of the service in spite of the delays in phase II. We therefore assess the efficiency of both phases as satisfactory (sub-rating 2).

Overarching developmental impact (sub-rating: 2): An effective fishery monitoring and surveillance system is indispensable for the sustainable exploitation of Mauritanian fishing resources, and decisively contributes to keeping up the fishing industry's great macroeconomic importance in the long-term, with its implications for employment, overall economic growth, generating export revenues and national income. Fishing monitoring and surveillance is a core element of fishery policy and strategy, and its paramount importance has again been proved in the current Mauritanian sector strategy. Given their close interconnection with the TC activities, the projects' measures had considerable systemic effects in the institutional sector, and contributed to capacity development in this crucial economic sector. The example of Mauritania

serves as a role model for the successful establishment of a fishing monitoring and surveillance system in the sub-region today. The projects played a major role in this success, and they also contributed significantly to achieving the overall objective of sustainable exploitation of the fishing resources. The projects' overarching developmental impact can therefore be rated as satisfactory (sub-rating 2) for both phases.

Sustainability (sub-rating: 3): In the context of the project the surveillance ships' operating staff and other personnel of the DSPCM received extensive training, particularly with regard to operation, maintenance and repair. Given the progress and the operating experience so far, we do not see any serious threat for the technical sustainability of the surveillance ships' service. However, it was a problem that although the major economic advantages of fishing monitoring were clearly visible, the allocation of budget funds to cover operating costs was not very reliable, neither with regard to the amount nor the time of the payments. It is true that the DSPCM has always managed to maintain the service at an adequate level over the past years, but such a system is prone to disruptions and its efficiency is curtailed. However, in view of the apparent advantages of effective fishing monitoring and surveillance, we assume that the Mauritanian state will continue to ensure an appropriate operation of the DSPCM by providing sufficient funding. For the above-mentioned reasons we classify the sustainability of both project phases as sufficient (sub-rating 3).

Taking into account the criteria relevance, effectiveness, efficiency, overarching developmental efficacy and sustainability, we attribute an overall satisfying developmental impact to the two project phases (sub-rating 2).

### General conclusions and recommendations

In spite of its basically great attractiveness, fishing monitoring and surveillance may not be given the necessary political priority. The German-Mauritanian cooperation in fishing monitoring can be regarded as exemplary for the sustainable systemic effects of external support with regard to capacity development. Important aspects in this process are the following: 1. Closely interlinked personnel, institutional and investment measures (TC-FC cooperation). 2. Flexible implementation designs including the financing of operating costs. 3. Long-term commitment of the German side and of other stakeholders.

It is useful if the project-executing agency can generate its own income, determined by an adequate scale and dependent on its performance, which it can then use to ensure its proper operation and to make necessary investments, provided it is subject to appropriate public supervision. Given the fishing monitoring system's great potential for income in Mauritania, it appears feasible to bring up this topic in the political dialogue with the Mauritanian government. Measures in the context of German Development Cooperation (DC) alone are not suited to achieve this; they can only point out approaches and possible solutions from a sector policy perspective.

### Notes on the methods used to evaluate project success

#### Assessment criteria

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

Developmentally successful: ratings 1 to 3	
Rating 1	Very good result that clearly exceeds expectations
Rating 2	Good result, fully in line with expectations and without any significant shortcomings
Rating 3	Satisfactory result – project falls short of expectations but the positive results dominate

Developmental failures: Ratings 4 to 6	
Rating 4	Unsatisfactory result – significantly below expectations, with negative results dominating despite discernible positive results
Rating 5	Clearly inadequate result - despite some positive partial results, the negative results clearly dominate
Rating 6	The project has no impact or the situation has actually deteriorated

Sustainability is evaluated according to the following four-point scale:

Rating 1	Very good sustainability	The developmental efficacy of the project (positive to date) is very likely to continue undiminished or even increase.
Rating 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.)
Rating 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.
Rating 4	Inadequate sustainability	The developmental efficacy of the project is inadequate up to the time of the ex post evaluation and an improvement that would be strong enough to allow the achievement of positive developmental efficacy is very unlikely to occur.  This rating is also assigned if the developmental efficacy that has been positively evaluated to date is very likely to deteriorate severely and no longer meet the level 3 criteria.

### Criteria for the evaluation of project success

The evaluation of the developmental effectiveness of a project and its classification during the ex-post evaluation into one of the various levels of success described in more detail above focus on the following fundamental questions:

Relevance	Was the development measure applied in accordance with the concept (developmental priority, impact mechanism, coherence, coordination)?
Effectiveness	Is the extent of the achievement of the project objective to date by the development measures – also in accordance with current criteria and state of knowledge – appropriate?
Efficiency	To what extent was the input, measured in terms of the impact achieved, generally justified?
Overarching developmental impacts	What outcomes were observed at the time of the ex post evaluation in the political, institutional, socio-economic, socio-cultural and ecological field? What side-effects, which had no direct relation to the achievement of the project objective, can be observed?

Sustainability	To what extent can the positive and negative changes and impacts by the development measure be assessed as durable?
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