Ex post evaluation – Indonesia

Sector: 1133000 Vocational education
Programme/Project: (A) Seafarer training (2000 65 896)*
(B) Personnel support / Training component (2002 265 / 1930 02 656)
Implementing agency: Semarang Growth Center (until 2011), now PoliMarin

Ex post evaluation report: 2017

		Project A (Planned)	Project A (Actual)	Project B (Planned)	Project B (Actual)
Investment costs (total)	EUR million	21.67	22.08	0.82	1.55
Counterpart contribution	EUR million	1.43	1.86	0.00	0.00
Financing	EUR million	0.00	0.00	0.00	0.00
of which budget funds (BMZ)	EUR million	20.24	20.22	0.82	1.55

*) Project in 2015 random sample

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Summary: Expansion of the Semarang Growth Center (SGC) into a central training centre for 7 private maritime academies in order to offer cost and equipment-intensive courses at an international level in accordance with the standards of the "International Maritime Organisation" (IMO - STCW 95). This was to be carried out by procuring technical equipment, expanding existing buildings and facilities, and training management and teaching staff as part of a training component. The SGC was nationalised in 2011 and now operates under the name PoliMarin.

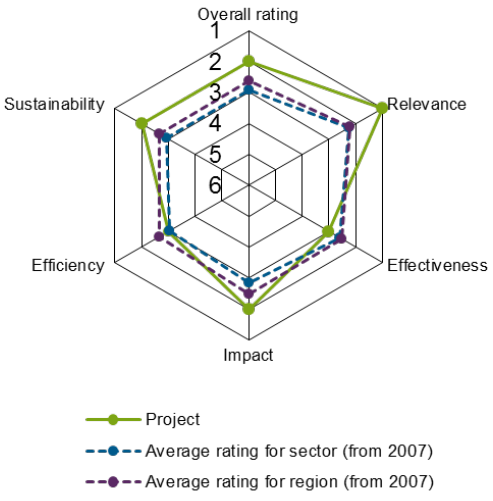
Development objectives: The development objective ("impact") was to contribute to securing employment opportunities for Indonesian seafarers. At project objective level ("outcome"), the qualification standards of the International Maritime Organization (IMO) should be met and Indonesian seafarers should be qualified for national and international competition.

Target group: Trainees: graduates from PoliMarin, students of private partner academies, students at the Maritime Faculty of the State University of Surabaya, as well as seafarers from shipping companies.

Overall rating: Rating 2

Rationale: The majority of facilities are in operation and meet the expectations placed on them. The target group has been expanded significantly, and now includes not only students from private partner academies, as originally planned, but also an in-house student population, students from the University of Surabaya and seafarers sent by shipping companies. The strengthening of only private training providers as originally planned, which train 60% of the students in tertiary education in Indonesia, is therefore no longer of such importance. The above-mentioned participants were awarded a total of 8,853 certificates in various disciplines between 2013 to 2015 in accordance with internationally recognised standards (IMO). There is a need for further professionalisation among the executing agency, particularly in the fields of management, information systems and organisation.

Highlights: A generally positive economic environment, the high political importance of vocational training, a generally well-managed training institution as well as qualified teaching staff created excellent conditions for the success of the investment.



Rating according to DAC criteria

Overall rating: 2

The project made a visible contribution to securing employment opportunities for Indonesian seafarers. Each year, more than 3,000 IMO-compliant certificates in accordance with STCW standards are awarded to students and active seafarers. Equipment and facilities are being used and meet the expectations placed on them, with few exceptions. The project executing agency is able to carry out the majority of tasks assigned to it in a professional and timely manner, although there are shortfalls with regard to a modern management.

General conditions and classification of the project

The intensification of global trade has resulted in a sharp rise in the volume of maritime transport. The United Nations estimates that 80% of global trade and 60% of German foreign trade is handled via the world's oceans at present. Between 2002 and 2012, shipping traffic is likely to have almost doubled. The Strait of Malacca, between Indonesia and Malaysia, is one of the most heavily used waterways in the world, and sees around 220 large vessels every day. Between 20% and 25% of all global trade transported by ship passes through this strait. Due to the high volume of shipping traffic ensuring imports, exports and the supply of energy in Asian countries, particularly China, shipping traffic in and around Indonesia is of great strategic importance.

The standards for the training of seafarers are laid down in the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STWC). The STWC are a UN Convention, which was established in 1978 by the International Maritime Organisation (IMO, based in London). The aim is to create internationally comparable standards for the training of seafarers in order to ensure maritime safety with increasing traffic volumes. The version currently valid is the STCW 95, amended in 1995 and supplemented in 2010 by what are known as the "Manila Amendments", which takes account of the increased safety and environmental requirements.

At present, around 450,000 ship officers and engineers as well as 700,000 sailors are on board international ships. With a share of around 3% (officers/engineers) and approximately 6% (sailors) respectively, Indonesia is amongst the 10 largest seafaring nations. Due to rising costs and the decreasing attractiveness of the profession in developed countries, the demand for seafarers, particularly from emerging countries (the Philippines, India, China, Indonesia, Turkey), is growing strongly.

Relevance

Indonesia is the world's largest island state with over 18,000 islands, of which around 6,000 are inhabited. Geographically, the country lies at the centre of important trade routes between China, Australia and Europe. Estimates put the economic potential of the Indonesian maritime sector (shipping, shipbuilding, ports, fisheries and tourism) at approximately USD 800 billion, while the sector currently contributes only around 20% of the national GNP, which totals USD 862 billion (as of 2015).

President Joko Widodo, elected to office in 2014, has declared the strengthening of maritime security and the expansion of the Indonesian Navy as the top national priority. Massive investment into Indonesian shipping and port infrastructure is set to promote exchange between the various Indonesian provinces and turn the country into a maritime hub between China, India, Australia and Europe.

The Government's Masterplan (MP3EI, 2011-25) and the Third National Medium-Term Development Plan (RPJMN, 2015-19) view the improvement of technical and organisational skills and the expansion of science and technology as the key to achieving further growth in prosperity and to eliminating poverty by 2025 (poverty rate in 1999: 24%; 2015: 11%; Source: World Bank).

The country has approximately 260,000 IMO-certified seafarers, of whom around 80,000 are aboard international ships. Indonesian estimates put the demand for qualified seafarers in the coming years at approximately 7,000 ship officers and engineers per year, however only 3,500 graduates are recorded each year (PA: 2,100 graduates) (1,500 from state schools and 2,000 from private schools). At the same time,

the STCW Manila Amendments (see above) require additional training and qualifications without which seafarers lose their maritime warrant. The Indonesian government has set 31 December 2016 as the deadline for the necessary retraining courses.

The project was consistent with national priorities and with those of the Federal Ministry for Economic Co-operation and Development and addressed a significant development bottleneck (vocational training) in the area of sustainable economic development. There is no systematic donor coordination in the sector, although the measures of the two main donors in the maritime sector (Germany and Japan) have been closely coordinated.

From today's perspective, the impact logic underlying the project – contributing to securing employment opportunities for Indonesian seafarers by investing in training infrastructure – remains valid and highly relevant.

Relevance rating: 1

Effectiveness

The project objective was the expansion of the Semarang Growth Center (SGC) into a central training centre for an initial seven private maritime academies in order to offer cost and equipment-intensive courses at an international level in accordance with IMO standards (STCW 95). The following were defined as project objectives: (1) Compliance with IMO training standards; (2) Implementation of appropriate and sustainable training measures by the SGC and partner academies.

The attainment of the objectives defined during the project appraisal (PA) can be summarised as follows:

Indicator	Status/ Target value PA	Ex post evaluation
(1) The "Directorate General of Sea Communication" acknowledges the compliance of the SGC training and partner academies with STCW 95.	Certification of up to 14 courses. (PA: 0)	11 courses have been IMO-certified; the certification of further courses has been requested, but is still pending. Indicator partially fulfilled.
(2) 90% of students pass their courses successfully	90% (status and target)	Since the start of the course programme, around 95% of students have passed their exams. Indicator fulfilled.
(3) Utilisation of teaching facilities (particularly simulators)	75% (new indicator)	Almost all simulators (with the exception of "Anchor Handling") are in use and are operated properly; exact usage figures were not available. Indicator fulfilled (see below).

Training component

In view of the complexity and novelty of the facilities, a training component was to enable the executing agency to cope with the new tasks. The following indicators can be used ex post in this regard:

Indicator	Ex post evaluation
(1) The project-executing agency is qualified to coordinate and organise the courses for partner academies.	Since 2006, 11 certified courses have been offered and confirmed by partner academies. Since 2012, training has been provided for in-house students as well as students on undergraduate courses at Sepuluh Nopember Institute of Technology (ITS) Surabaya. The indicator is fulfilled.
(2) Operational and financial organisation and control meet modern requirements and generate information relevant for management decisions	The business and financial information systems have been modernised. However, the provision of relevant information is inadequate. Basic data on course and student numbers, their financial contributions and costs were not available. The indicator is not fulfilled.
(3) Sufficient personnel continuity amongst teaching staff	With regard to the instructors qualified, around 70% are still employed at the SGC / PoliMarin. The indicator is fulfilled.

The majority of facilities are in operation (with the exception of the “Anchor Handling Simulator”) and meet the expectations placed on them. Accurate statements about capacity utilisation are not possible because reliable and accurate information was not available in this regard. However, due to the increase in demand over the years through the establishment of a private student base, the qualification of ITS Surabaya undergraduate students and for courses for professional seafarers, satisfactory capacity utilisation is very likely given.

Although it was not explicitly stated in the project objectives, it was nevertheless part of the aim at the time of thePA to strengthen the private training sector with the maritime training segment at the SGC. Since the transformation of the SGC into the public institution PoliMarin in 2012, the situation has changed in that PoliMarin now takes on and trains around 100 students itself each year, i.e. it is no longer solely dependent on cooperation with private academies. PoliMarin continues to provide all training services for these academies, however, there is now competition with regard to teaching facilities between internal demand (i.e. in-house students at PoliMarin) and external demand (private academies or shipping companies as well as undergraduate studies at ITS Surabaya). At the same time, the development of private academies has been promoted in order to enable them to offer higher-level certificates and qualifications on their own. The aforementioned expansion of the participant group is likely to have had a positive effect on overall utilisation.

Despite various requests over the years, it was not possible to increase the number of certified courses according to STCW 95 standards to the planned number of 14. This is mainly due to three factors: i) institutional frictions and competition between the ministries responsible for the certification of courses: the Ministry of Transport and the Ministry of Research, Technology and Higher Education, to which the SGC / PoliMarin belong; ii) the lack of sufficiently qualified teaching staff; and iii) formal requirements that were not met by the SGC / PoliMarin. The latter includes, for example, increased safety standards for the Advanced Fire Fighting course, which do not permit certification in the existing areas.

The lack of qualified teaching staff relates primarily to serious discrepancies between the salaries offered for teaching and those offered at sea (particularly in the case of instructors for the “Anchor Handling Simulator”) as well as to the high academic requirements placed on teachers under the Ministry of Education. This requires a “linear” academic career path and a qualification at least one level above the taught degree. These requirements make it difficult to recruit suitable personnel and force the SGC / PoliMarin to

rely on temporary employment contracts. The limited availability of qualified teachers is also the main constraint for the further certification of courses.

Like many Indonesian institutions, PoliMarin faces the challenge of providing relevant organisational, operational and financial information in a timely manner. This represents a fundamental and deeper problem that could not be solved by personnel support. The reason for this appears to be the generally poor application relevance of such data for control purposes, as many decisions are made “from above” or via personal networks and without a rational analytical basis.

Taking into account the aforementioned limitations, the objectives for the main and training components were largely achieved, and we consider the effectiveness to be satisfactory.

Effectiveness rating: 3

Efficiency

The implementation began delayed, in March 2002 (PA Oct. 2001), and was completed in June 2012 (PA Feb. 2007). The delay was mainly due to overlapping institutional responsibilities at the start of the project, as well as to the institutional status of the SGC, which was unclear for some years (between 2009 and 2011). Following clarification, further equipment was procured as part of a second phase. Otherwise, the implementation proceeded according to plan and in line with the agreements.

In Indonesia, over 60% of students in higher education attend private institutions. There are 11 public institutions and 93 private academies in the area of nautical studies. Public institutions are generally much better equipped in terms of teaching staff, equipment and financial resources. As a result of the high equipment costs (mainly simulators), only 20 institutions in the country are able to offer maritime training courses which comply with IMO standards, including all public institutions. This prompted KfW to work towards having the SGC become subordinate to the Ministry of Higher Education during the period of implementation; this ultimately took place in 2011 and the SGC now operates under the name “PoliMarin”. On the one hand, this has resulted in the hoped-for improvements in terms of teaching staff, equipment and financial resources at the executing agency. On the other hand, the initial focus on the seven private partner academies no longer exists. This means that greater flexibility – along with generally lower planning security – is required among the private academies, particularly in relation to the occupancy rate of the simulator courses at PoliMarin.

In principle, the choice to locate the SGC / PoliMarin in Semarang is questionable, and is explained historically by its close proximity to the administrative site of the governing body for private universities of Indonesia. Unfortunately, however, the topography in the mountains of Semarang means that virtually no expansion is possible, or is only possible at very high cost. The development of additional and topographically more favourable properties is therefore important for further development, and this is already at the planning stage. At the final inspection (FI), investment costs were judged to be appropriate despite the topographically complex situation. The project also benefited from technical advancements and falling prices, which allowed additional equipment to be procured. We therefore consider the production efficiency (input-output ratio) to be satisfactory.

The allocation efficiency (input-impact ratio) is considered to be satisfactory thanks to the evidence of the high utilisation of the facilities (with few exceptions), the high level of demand, the low drop-out rate and the very good employment opportunities following training.

Efficiency rating: 3

Impact

The developmentl objective, “contributing to securing employment opportunities for Indonesian seafarers”, was fully met.

Indicator	Status/ Target value PA	Ex post evaluation
(1) 80% of students from the SGC / from the academies are in employment 6 months after graduating.	. / .	More than 97% of all graduates find employment within 6 months of completing their training, approximately 20% of these with international shipping companies. The indicator is fulfilled.

Following the changeover from the SGC to the PoliMarin Institution in 2011 and its subordination to the Ministry of Higher Education (see above), a special training programme was established. This began in 2012 with around 40 students in the fields of nautical studies, ship-building and port management, and was subsequently expanded to the full capacity of 100 students per training year. The teaching of the now "in-house" students runs in parallel to the established training offer for the seven partner academies, for the "Double Degree Bachelor Programme" offered by the universities of Wismar and Surabaya, as well as for private shipping companies (predominantly refresher courses). These internal and external students were awarded a total of 8,853 IMO-compliant certificates in various disciplines between 2013 and 2015. Unfortunately, no exact data is available for the respective years, nor in relation to the origin of the students and the individual courses, but due to the strong demand and the inclusion of further programmes, it can be assumed that the number of annual graduates has steadily increased.

In spite of the high academic and personal requirements, up to 700 candidates apply for the 100 places which are available each year. Around 10% of these places are filled with students whose families fall into the lower income groups and who are completely exempted from course fees. In addition, they receive what is known as a "Bidikmisi" grant to cover the costs of accommodation and other costs related to the training. A further 10% of students pay reduced course fees (4 classes in total) depending on their income status.

The "Best Student Programme" was launched in 2008 in order to identify talented and motivated students still undergoing training for a year of work experience at an international shipping company. The programme began with four participants, who completed their year of work experience at the shipping company Nord (Hamburg), and was extended to a total of 30 students by 2012: this should also serve as a potential pool for future teaching staff. However, the programme had to be discontinued until further notice due to the difficult economic situation of many Western shipping companies, given the fact that freight rates for shipping are at an all-time low, as many companies would rather cut down on staff numbers than recruit. The programme has only been suspended, however, and is set to be revived again as soon as freight rates increase.

In 2011, an international cooperation was launched between the nationally renowned university in Surabaya (ITS Surabaya) and the university in Wismar, offering of an international "Double Degree" (Uni Wismar and Surabaya) course in "Marine Engineering". Each semester, 50 students are offered places out of over 600 applicants. The lectures, supported by 4 instructors from Wismar, are all held at the ITS in Surabaya, while practical training takes place in the PoliMarin labs. The approach is pioneering due to its international orientation.

Overall, it can be assumed that the courses offered at PoliMarin Semarang make a positive contribution in a special segment of the economy which is particularly important for Indonesia. The courses enjoy a high level of demand due to the above-average income potential and, thanks to the internationally recognised standards, benefit from at least equal interest on the part of international shipping companies, which are increasingly recruiting their staff at sea from an international platform – not least for cost reasons. A structural and initially unintended effect is expected to result in the medium-term from the above-mentioned "Double Degree Bachelor" course of study.

Impact rating: 2

Sustainability

Despite the long-term need for external funding, it can be assumed that the institution will be operated sustainably without further donor support.

The management is qualified, committed and, above all, well networked. Decision-making powers are limited, but they lie with PoliMarin senior management with regard to the day-to-day business. In principle, the demand from industry and from applicants for the qualification profiles offered is also likely to be well above the training offer in Indonesia in the long-term, as the economic segment is likely to continue to develop positively and the training on an international level offers above-average prospects. The greatest challenges for sustainability are therefore the availability of sufficient financial resources for servicing, maintenance, regular software updates and simulator modifications, as well as the adequate availability of qualified personnel.

The most important source of funding for PoliMarin are the annual allocations from the budget of the Ministry of Research, Technology and Higher Education (known as the DIPA allocation). PoliMarin's income is offset against the allocations, with the result that the incentive for increasing its own revenues remains limited. Since the SGC transitioned to become PoliMarin, the annual allocations have increased from IDR 6 billion (2012) to IDR 12 billion (2015) and IDR 15 billion in 2016. These funds are used to cover the running costs (personnel, operating costs, maintenance). In addition, a total of IDR 97 billion (around EUR 6.5 million) was raised from the budget in 2015 to finance upcoming upgrades to the bridge simulator. For 2016 there is the prospect of a further IRD 22 billion, which is necessary for modernisation. These allocations are made on request and are approved on an individual basis. Due to the high political importance of vocational training and, more recently, of the maritime sector – with significantly higher budget allocations as well as a politically very well-networked PoliMarin management team – it can be assumed that while the executing agency will remain dependent on the annual budget allocations and necessary special funds in the medium term, these will be provided in the required volume. The modified institutional subordination of the SGC – also supported by KfW (see above) – is to be understood as a necessary condition in this context and should therefore be considered positive, as otherwise the allocations referred to above would not have taken place to the same extent.

The new PoliMarin Institution, which was created in 2011, was subordinated to the Ministry of Research, Technology and Higher Education. Although all universities of applied science fall within the remit of the Ministry, this is a structural novelty as all other state maritime training institutions are governed by the Ministry of Transport. How this structural inconsistency will work out in the long-term remains to be seen: the competition situation should result in a positive impact, while the regulatory dependency (e.g. certification of courses) on the Ministry of Transport might also lead to disadvantages.

The permanent teaching staff was expanded in 2011 by just two instructors, for a current total of 35 instructors, and is set to increase to 60 instructors in the coming years. However, due to the high entry barriers (see section on "Effectiveness"), the recruitment of additional staff is very difficult, and according to PoliMarin management this represents the biggest challenge faced by the institution. Vacancies and additional demand for teachers are therefore filled by temporary teaching staff, whose recruitment and organisation requires a great deal of effort and whose scarce availability represents the main bottleneck for the certification of further courses. The RPL ("recognition of prior learning") programme, which was also developed for the "Technical and Vocational Education/Training" (TVET) sector, could represent a way out in this regard, as it builds on practical experience rather than academic qualifications and should facilitate the access of more qualified practitioners to teaching. Unfortunately, the RPL programme has not yet been utilised, and there is uncertainty as to whether RPL accreditation is sufficient for the international recognition of the certificates.

In summary, there is a good starting point for sustainable operation thanks to the generally skilled management, good networking with key stakeholders (private academies, ITS Surabaya, private shipping companies and central government) and the high priority placed on the maritime sector in Indonesia.

Sustainability rating: 2

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

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

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

Rating levels 1-3 denote a positive assessment or successful project while rating levels 4-6 denote a negative assessment.

Sustainability 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 **overall rating** on the six-point scale is compiled from a weighting of all five individual criteria as appropriate to the project in question. Rating levels 1-3 of the overall rating denote a "successful" project while rating levels 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" (level 3).

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