

Ex Post-Evaluation Brief

INDONESIA: Passenger Ferry 24



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| Sector | 21040/ Maritime transport | |
| Project/Client | Passenger Ferry 24, BMZ No. 2003 66 070* | |
| Programme executing agency | Ministry of Transportation (MoT) Operator: PT PELNI | |
| Year of sample/ex post evaluation report: 2012/2013 | | |
| | Appraisal (planned) | Ex post-evaluation (actual) |
| Investment costs (total) | EUR 75.0 million | EUR 74.93 million |
| Own contribution | -- | -- |
| Funding, of which budget funds (BMZ) | EUR 75.0 million EUR 39.0 million | EUR 74.93 million EUR 39.00 million |

* random sample 2012

Short description: Purchase and commissioning of the passenger ferry “Gunung Dempo” (1,583 permitted seats), which – in line with a new usage concept –can accommodate 98 containers at the same time. The project aims to provide environmentally friendly transport options, especially for poorer segments of the population and freight between the economically more developed main island of Java and the eastern islands (Sulawesi, the Moluccas) all the way to Papua.

Objectives: The **overall objective** was to establish and expand the population’s access to work, markets, education and social services, and to promote the exchange of goods between the eastern islands and the main island of Java. This should contribute to improved living conditions for the population. No KfW indicators were defined for this.

The **project objective** was the economic and sustainable operation of the ferry, to be measured by the period of use per year, the capacity utilisation and the contribution to the operator’s (PT PELNI) financial performance.

The **target group** in terms of passenger transport were, in particular, the poorer strata of the population, who cannot afford air transport as alternative option; with regard to freight transport, the entire population in the catchment area.

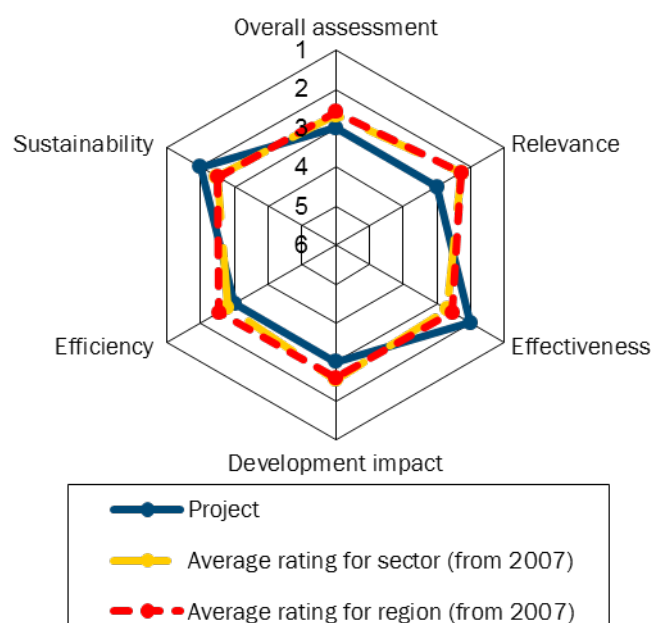
Overall rating: 3

Sustainable operation of the ferry in economical and financial terms likely; however clear indications of the permitted number of passengers being exceeded significantly at times. Considering low utilisation of the entire PT PELNI ferry fleet, relevance of the *Gunung Dempo* is merely average. Taking into account reduced state budget allocations to the operator; the project is subject to interest of around 3% p.a.

Points to note:

The need for additional safety precautions due to (temporarily) high passenger volume was emphasised during the mission. At the same time, PT PELNI safety standards are rated as relatively high in the Indonesian context.

Rating by DAC criteria



EVALUATION SUMMARY

Overall rating

PT PELNI is the publicly owned operator of a ferry fleet officially commissioned to connect the economically disadvantaged islands. In doing so, it relies on so-called public service obligations (PSOs) from the state budget. According to data presented by PT PELNI show that the ferry's operation is likely to be both economically and financially sustainable. The ship's utilisation meets the benchmarks defined at appraisal in terms of both passenger and container transport. Nonetheless, overall utilisation of PT PELNI's ferry fleet has declined substantially over time, but stabilised in the last few years. This has impacted the evaluation of the ferry 24. The ferry was typically not used to expand the connection of remote islands, but rather was a less expensive replacement investment. The project is rated as sufficient overall.

Rating: 3

Relevance

Ensuring reliable and low-cost passenger and freight transport between the economically dominant main island of Java and the outer islands is especially important in a country like Indonesia with more than 17,500 islands. On the one hand, greater mobility of lower-income segments of the population (mostly from the islands farther to the east) improves their access to economic infrastructure and markets as well as to social services. On the other hand, better transport connections support regionally balanced economic development as well as the country's political stability. Reducing regional and social disparities benefits the eastern provinces (e.g. the Moluccas and Papua) in particular, where poverty incidence far exceeds the national average of 13%. The intervention logic of contributing to this by virtue of reliable and affordable ferry links continues to hold from today's perspective. This is consistent with the German Development Cooperation's priorities of the as well as with the development priorities continuously emphasised by the Indonesian government in the framework of important national political and strategy documents.

Contrary to optimistic assessments at appraisal, PT PELNI's ferry fleet overall utilisation has been declining since 2000. This raises the question of whether – alternatively – passenger transport services could have been rendered – at least in part – without additional investments, e.g. through internal restructuring. Until the *Gunung Dempo's* commissioning, passenger transport and, in part, freight transport between Java and the eastern islands was (at least partially) provided using the *Dorolonda* (BMZ No. 1998 66 369), which was also supported by the German Financial Cooperation (FC).

Sub-Rating: 3

Effectiveness

Achievement of the project goal - connecting the peripheral islands to the east through the economic and sustainable operation of the project ferry – Is measured using the following indicators:

(1) At least 300 days of use per year

Status: Since commissioning at the end of 2008, the *Gunung Dempo* has consistently and considerably exceeded the expected 300 days. The figure rose from 322 (2009) to 335 (2010) and 351 (2011). This means no working days were lost at all in 2011, since the scheduled annual maintenance is 14 days.

(2) Average capacity utilisation of at least 80% after the third year of operation

Status: with around 415,000 passenger days in 2011 reached, passenger utilisation is showing a fairly stable trend since 2009. This equals average utilisation of approximately 75%, measured by the permitted capacity of 1,583 passengers. The utilisation of passenger capacity is near the target figure of 80%, which is estimated as very ambitious given that it will arguably be hard to reach without temporarily tolerating the ferry's excess load. With regard to the high degree of utilisation, there are also major indications of, at times, the number of permitted passengers being temporarily exceeded at the expense of passenger safety – even beyond the excess of 30% deemed tolerable at project appraisal. To what extent KfW has addressed this aspect so far is not seen in the documents at hand. At the same time, PT PELNI has not yet experienced any major incident in its some 25-year existence; its standard of safety by far exceeds that of most private shipping companies in Indonesia. The utilisation of freight capacities had risen to 87% by 2011, putting it well above the target figure of 80%.

(3) Contribution to PT PELNI's financial and economic performance

Gunung Dempo, with its high level of capacity utilisation, has generated an operating surplus since 2010: it reached roughly EUR 700,000 in 2011 (after deducting imputed provisions for repairs and reinvestments worth the equivalent of around EUR 3 million, excluding capital costs). This surplus allows PT PELNI to subsidise loss-making transport services in other parts of the network. The figures presented to the mission indicate a surplus for 2012 similar in size to that of 2011. From the operator's perspective, the combination of passenger and container transport offers profitable business opportunities, which positively impact on the company's ability to offer reliable, low-cost transport services for passengers. The economically successful operation as a "two-in-one" concept (passengers and containers) has encouraged the operator to contemplate an expanded "three-in-one" concept (passengers, containers, vehicles and potentially even cattle) for select routes.

No *customer survey* of *Gunung Dempo* passengers has been conducted. The customer satisfaction survey conducted by PT PELNI in 2011 for the company's entire fleet, however, shows that nearly two thirds of those polled listed the low fares as the main factor in their choice of transport means. As the *Gunung Dempo* connects the main island of Java with the economically less advantaged islands to the east, it is plausible that the ferry's low passenger transport fares play a particularly important role. This is also supported by the observation

that a majority of passengers transport baggage volumes (mainly rice and other foodstuffs) that would be very expensive to transport in an airplane.

Sub-Rating: 2

Efficiency

An evaluation of efficiency is difficult based on available the information. From a microeconomic perspective, the *Gunung Dempo* operations yield an annual revenue surplus of EUR 0.7 million from an investment volume of around EUR 75 million (not considering financing costs and after deducting imputed provisions for repairs and reinvestments of approximately EUR 3 million).

During the course of the project, aspects of economic efficiency were not addressed, and respective calculations were not carried out at appraisal. An *ex post* calculation would only be possible upon extensive data collection; it would furthermore have to be based on numerous assumptions – considering the entire fleet of PT PELNI. The Indonesian government has estimated the savings in terms of the aforementioned PSOs from the state budget at around EUR 4 million annually. The current rate of return of 3% p.a. (not including higher maintenance costs in the future) is deemed acceptable for public passenger transport projects.

In retrospect, it is difficult to establish whether less costly purchase options would have existed within the chosen design parameter (e.g. by means of international tender instead of one limited to Germany). Neither was this issue addressed at project appraisal. A pure comparison of investment costs is not sufficient, since aspects of quality, safety and long-term operating costs would have to be included in an analysis. In the case of the *Gunung Dempo*, PT PELNI benefits from the structural similarity with other ships in its fleet built by the same German manufacturer. This has a favourable effect on long-term operating expenses (e.g. spare parts); among other things, it also lowers expenses required for training periodically changing ship crews.

At this point in time, it is not plausible that passenger transport services offered by the *Gunung Dempo* could be provided by private operators without a significant fare increase and with a similar degree of reliability. Fare increases would most likely substantially restrict poorer households' access to such type of ferry transport. At the same time, more than ten local airlines (offering their services under greatly varying conditions) also represent increasing competition for the *Gunung Dempo*. For the low-income segments of the population, most of whose opportunity costs with regard to travel time are low; the *Gunung Dempo's* economy fares are still unbeatably low. This is even more pronounced in the case of passengers transporting more than 20 kg of baggage. According to observations during the mission, this would apply for a good 50% of all passengers. Under such conditions, air transport does not really present a competitive option thus far. This assessment is supported by the popularity of the economy class, in particular: on the eastern route, it is sometimes overbooked – with little demand for the first class. This suggests the ferry's significance as a means of transport es-

pecially for poorer population groups. Higher-income population segments prefer to travel by plane for reasons of time and comfort.

In total, efficiency is regarded as sufficient – also considering current indications of the considerable excess load of *Gunung Dempo* from time to time (see section "Effectiveness"). On the one hand, this rating takes into account the developmental importance of ferry transport links to the eastern islands; this positive assessment, on the other hand is impaired by the continuous need for subsidies and the entire fleet reduced degree of utilisation.

Sub-Rating: 3

Impact

The ship performs an important economic and social function in Indonesia for many low-income households, as it ensures affordable and reliable mobility on Indonesia's east-west axis stretching some 3,500 nautical miles. The *Gunung Dempo* reinforces social and economic ties between the neighbouring islands, which plausibly has a favourable influence on their social and economic development. In the long run, this will contribute to lowering regional imbalances - this being one of the Indonesian government's key political goals. Although precise measuring or quantification is not possible, this effect is deemed very significant nonetheless. This is expected to apply at least as long as inter-insular air transport is generally seen as a far less favourable alternative for poorer segments of the population, due to higher costs and luggage restrictions. As the *Gunung Dempo* connects the main island of Java with the poorer islands to the east, its low fares and the option of bringing large volumes of baggage obviously play an especially important role for passengers.

Beyond purely economic and social effects, the project also serves the Indonesian government's political objective of strengthening the country's national cohesion. The latter in turn is an important factor in reaching the ambitious national economic and social development objectives.

In the absence of any indications concerning violation of operating regulations regarding the removal of waste, waste oil and other environmentally harmful substances, it is plausible that ferry's operations the is more environmentally friendly than the alternative of air transport.

However, it cannot be assumed that the transport services performed by the *Gunung Dempo* would not have been rendered without project support. The *Gunung Dempo* recently expanded fleet capacities used thus far and even replaced some vessels, which are now available for other routes. However, project-related transport capacities freed up for other ships are only moderately utilised which impairs on the project's impact rating.

Sub-Rating: 3

Sustainability

With regard to management capacities, including the ability to ensure adequate technical operation of the *Gunung Dempo*, PT PELNI is regarded as a qualified operator. This is also indicated by the fact that the company has experienced no major accidents over 25 years. PT PELNI certainly aims to reduce and control costs and, at the same time, to increase its income. Important elements are strict adherence to technical maintenance schedules, the reduction of surplus staff, enhanced marketing efforts, the outsourcing of suitable tasks to third parties, and hiring qualified personnel, including further training of employees.

Whilst passenger fares – set by the government - are currently very low, the operation of the *Gunung Dempo* shows an operating surplus of roughly EUR 0.7 million in 2011. This originated from container transport, where PT PELNI has an advantage over private container ship operators: when calling at a port, PELNI vessels are fast-tracked through customs due to them transporting passengers. Contrary to private container ships, this puts the company in a position to ensure rapid, timely transport. There are no signs of the Indonesian government abolishing this competitive advantage of PT PELNI, the more so as this would increase the company's operational losses, which would then have to be financed through PSOs to be paid by the Indonesian government.

The ship's technical design is in line with the aforementioned "two-in-one" concept (i.e. combined passenger / container transport). The operator's business considerations of expanding the vessel design on select routes to include the transport of vehicles ("three-in-one" concept) show PT PELNI's desire to tap new potential sources of income and to reduce its financial dependence on the MoT.

Apart from the temporary excess of passenger capacities on some routes, no significant risks to the sustainable operation of the *Gunung Dempo* have been identified. The sustainability risks are therefore deemed rather "low". It is not possible to tell if and to what extent fundamental framework conditions for ferry operation may change - e.g. PT PELNI's mandate for setting freight tariffs. Although air transport is putting up a growing degree of competition, the fares are likely to remain unattractive for lower-income segments of the population.

The *Gunung Dempo* has become a profit centre as a result of its good operating management, comparatively low operating expenses and the "two-in-one" concept. The current surpluses enable PT PELNI to subsidise other loss-making routes and reduce its dependence on transfer payments from the public budget. The surpluses currently being generated, however, are attributed to the fact that the *Gunung Dempo* still did not require any major repairs four years after the start of operation. Operating expenses are likely to rise as the ship ages.

PT PELNI's longer-term prospects are unclear. Among other things, there is little, if any, flow of information between the Indonesian government and PT PELNI on MoT's medium-term plans, with particular regard to the operator's exact mandate and investments in the company's ship fleet. Regardless of this, however, it is not likely for the Indonesian government to

take decisions that would jeopardise the sustainable operation of the project ship. The transport services performed by the *Gunung Dempo* are too important for the country's economic and political development. Considering the aspects mentioned, the sustainability of the ship's operation is still deemed good.

Sub-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:

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| 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

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. 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).