# KFW

## Ex post evaluation – Philippines

#### **>>>**

#### Sector: Basic health services (12220)

**Project:** Emergency aid measure for Typhoon Haiyan (BMZ No. 2001 65 944)\* **Implementing agency:** Philippine Department of Health (Bureau of International Health Cooperation)

#### Ex post evaluation report: 2018

		Project (Planned)	Project (Actual)
Investment costs (total)	EUR million	3.068	3.029
Counterpart contribution	EUR million	0.00	0.00
Funding	EUR million	3.068	3.029
of which BMZ budget funds EUR million		3.068	3.029
*) Random sample 2018			



**Summary:** The project is an emergency aid measure for the regions of the Philippines affected by Typhoon Haiyan in November 2013. FC financed medicines, medical consumables, vehicles and medium-sized medical equipment to improve the supply situation in the hospitals and health clinics of the affected regions. In total, 325 health facilities in 8 of the 9 regions affected benefited from the in-kind contributions. The implementing agency was the Bureau of International Health Cooperation, a subunit of the Philippine Department of Health, which is responsible for coordinating international aid in the health sector. Approximately 80% of the project funds were used for deliveries of medicines and consumer goods; 20% were used for medical equipment and vehicles.

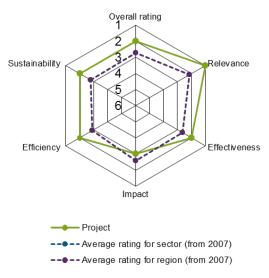
**Objectives:** The objective of the FC measure (outcome level) was to contribute to the restoration and increased use of healthcare services in the regions affected by the typhoon via the deliveries of medicines and equipment at short notice. This was intended to contribute to stabilising the health situation in the areas affected by the typhoon (impact level).

**Target group:** The target group comprised the residents, especially the poor inhabitants, of the regions affected by Typhoon Haiyan (Visayas, Bicol, northern Mindanao and Palawan).

#### **Overall rating: 2**

**Rationale:** The project was distinctive for its high relevance as a result of its strongly needs-based scope, large number of locations supported and suitable choice of implementation methods. Since speed of implementation plays a vital role in an emergency aid project, delays negatively affected the evaluation of target achievement. For an emergency aid project with a high proportion of consumer goods, the project was relatively sustainable because a large proportion of the medicines were reimbursed by the national health insurance, and these funds could then be reused to operate and maintain the health facilities.

**Highlights:** In contrast to the centrally collected aid deliveries of other donors, the FC-financed goods were sent directly by the suppliers to the health facilities. This delivery method was deemed to be highly useful by the Department of Health, as storage capacities were very tight after the typhoon and this avoided additional transport costs for the local governments. The Department of Health is now attempting to adopt this delivery method in new health projects with other partners.





### Rating according to DAC criteria

### **Overall rating: 2**

#### Ratings:

Relevance	1
Effectiveness	2
Efficiency	2
Impact	3
Sustainability	2

#### General conditions and classification of the project

The funds for this project were originally earmarked for the "Improved Provision of Basic Medication – Health Plus" project, aimed at improving the supply of basic medication by expanding a social franchising system to pharmacies. However, due to structural and financial weaknesses at the project-executing agency, the National Pharmaceutical Foundation, the project never entered the implementation phase and there were already plans to cut the funding. In view of the acute crisis situation following Typhoon Haiyan in November 2013, the Philippine Ministry of Finance asked the Federal Ministry for Economic Cooperation and Development to use these funds to supply medicines and tools to the affected areas. The remaining funds totalling EUR 2.8 million were subsequently reprogrammed, the Special Arrangements adjusted, and the objectives, indicators and target group changed accordingly. This evaluation relates solely to the emergency aid project and the adjusted target agreements.

#### Relevance

On the morning of 8 November 2013, Super Typhoon Haiyan (in storm category 5, the top category) struck the eastern coasts of the Philippine islands of Leyte and Samar, as well as other islands in the Visayas region and in northern Palawan in the 24 hours that followed. More than 6,300 people lost their lives as a result of the typhoon. More than 28,000 people were injured and a total of around 16 million people were directly affected by the natural disaster. Typhoon Haiyan was one of the strongest typhoons ever measured and the deadliest typhoon in the history of the Philippines.

Given that many health clinics and hospitals were destroyed or damaged by the typhoon and – at the same time – there was above-average demand for health services due to the medical emergency situation, the provision of medicines in the affected regions deteriorated significantly following the typhoon (core problem). In the most severely affected region of Eastern Visayas (Region 8) alone, a total of 180 healthcare facilities were damaged – of which, even seven months after the typhoon, only ten had been fully restored. What is more, local government authorities had been primarily responsible for basic healthcare provision since the decentralisation in the 1990s, and had already used up large portions of their annual budget in the final quarter of 2013. There was therefore an acute need for externally financed medical aid.

According to the project concept, the FC was to finance medicines and medical consumables (80% of the financing volume) as well as medical equipment and vehicles (20% of the financing volume). In supplying a total of 325 health facilities in 249 municipalities, the aim was to contribute to the restoration and increased use of healthcare in the regions affected by the typhoon (project objective/outcome level) and to stabilise the health situation of the population (impact). The results chain and project design were thus plausible in terms of addressing the core problem.

When designing the implementation concept, emphasis was placed on the rapid feasibility of the measures and the project was thus aligned well with the acute emergency situation. Delays were to be avoided by using accelerated award procedures for the procurement consultant and for the delivery of goods as well as through direct deliveries to the locations – without intermediate storage in collection points. Overall, the project deliveries of technical medical equipment and difficult-to-obtain but necessary



medicines are considered highly relevant. Since deliveries of infusions and regulated medicines for surgery, obstetrics and anaesthesia did not form part of the contributions made by other aid organisations and donors, those delivered by the FC were particularly likely to contribute to resolving the core problem.

The relevance of the project's geographical focus was also high: a total of 8 of the 9 affected regions, 22 of the 44 provinces and 249 of the 648 affected municipalities (38%) received aid supplies as a result of this project. The list of locations was based on the list of priority actions of the National Disaster Risk Reduction and Management Council (NDRRMC), which together with the UN OCHA was responsible for the overall coordination of all aid services; the list was geared towards meeting demands. Instead of concentrating on just one region or a single province like many other aid organisations, the project was thus able to reach a much larger section of the target population. By restricting the project to public healthcare facilities, the concept also ensured that the majority of the aid reached the poorest segments of the population.<sup>1</sup>

The Federal Ministry for Economic Cooperation and Development provided a total of EUR 22.5 million for emergency humanitarian aid and for medium- and long-term reconstruction efforts. Thanks to its sectoral focus on healthcare, the project fits well into the overall commitment of the BMZ following Typhoon Haiyan, which also included projects to rebuild infrastructure and support farmers.

Donor coordination for the typhoon aid deliveries was divided into clusters and the World Health Organization (WHO), together with the Philippine Department of Health (DOH), was responsible for coordination in the healthcare cluster. Overall donor coordination was satisfactory and the FC aid deliveries were well integrated into the overall measures in terms of both timing and scope of delivery.

In summary, the relevance can be assessed as very good since the project design – in particular the corresponding award and delivery procedures, the products delivered and the geographical focus – was adapted very well to the difficult starting situation and the project was therefore highly relevant in terms of resolving the core problem.

#### **Relevance rating: 1**

#### Effectiveness

The module objective (outcome) was to contribute to the restoration and increased use of healthcare services in the areas affected by the typhoon through the provision of medicines and medical equipment at short notice. The objective is appropriate and the project's short-term nature reflects the urgency of the emergency measures. To assess the objective, two indicators were agreed for measuring the availability of medicines and the accessibility of healthcare facilities. Both are good proxy indicators for use of the supplied goods. No target values were defined given the urgency; however, comparisons with national averages allow for an assessment of the trend.

Indicator	Status PA, target PA	Ex post evaluation
(1) Average availability of es- sential medicines in public healthcare facilities	25% (national average 2012, Source: WHO) No target value agreed.	62% in the hospitals and health stations surveyed; Last updated: July 2015
(2) Accessibility of the nearest public healthcare facilities in the supported areas	Average of 34 minutes to a healthcare facility (national aver- age 2013, Source: Philippine Sta- tistics Authority) No target value agreed.	<ul><li>70% of the patients surveyed reached the facility within 30 minutes;</li><li>95% within 60 minutes (average: 36 minutes)</li><li>Last updated: July 2015</li></ul>

Table 1, module objective indicators

<sup>1</sup> The most recent household survey conducted by the Philippine Statistics Authority in 2017 found that 84% of the poorest 20% of the population visit public healthcare facilities, while just 16% visit private facilities.



Data on the availability of medicines and access to healthcare facilities was collected in July 2015, two months after the project completion, in a survey of 30 project sites in the worst-affected Region 8 (Eastern Visayas). On average, 62% of the 15 essential medicines (WHO Level II indicator) were available at the sites. This is a good figure compared to the 2012 national average of 25%, and underlines the fact that the deliveries have contributed to an improved supply of medication. At 36 minutes, the time taken to reach healthcare facilities in the surveyed regions of Leyte and Samar is roughly in line with the national average. Although the measure did not contribute to improving the accessibility of healthcare facilities, this value indicates that access to the facilities was adequate, which is an important prerequisite for their use. Accessibility in line with the national average can be assessed as positive since these regions have less transport infrastructure and a lower density of healthcare facilities than more affluent regions (e.g. Luzon, the Manila Metropolitan Region) and were more greatly affected by the typhoon.

In addition to data on availability and accessibility, in order to obtain more direct information on the use of the medicines and technical equipment supplied, data relating to the operation of hospitals before and after the typhoon was analysed within the framework of the EPE. In 2014, the year after Typhoon Haiyan, the majority of the facilities surveyed registered an increase in bed occupancy and in the number of inpatients and outpatients. The responsible parties explained that this increase in operating figures was due to the effects of the typhoon. Since many healthcare facilities were only able to resume their full activity in the middle/at the end of 2014, the supply of medicines made an important contribution to restoring the operation of the supported facilities. Regulated surgical medications (ketamine, midazolam, oxytocin and morphine), infusion fluids and surgical instruments in particular were invaluable because they allowed hospitals to begin performing operations again immediately after reopening.

In relation to the effectiveness of the supplied medical equipment and vehicles (20% of the project volume), the result was mixed. While the majority of the equipment and vehicles were used regularly, in a few individual cases their usage was found to be at a very low level. This low usage was either due to a lack of sufficient specialist personnel, e.g. for incubators or ultrasound equipment, or to insufficient demand – as in the case of solar panels. Since many hospitals either already had generators or received them after the typhoon, solar-powered lamps were rarely needed here, if at all, whereas these were useful for smaller rural health stations.

Given that the project objective was aimed at making a "short-term" improvement to a supply situation suffering a temporary setback, the speed of implementation was also important for the effectiveness (and not just the efficiency) of the measure. The project implementation lasted 18 months in total. This is compared to the original plan of 9 months, in line with the deadlines set out in the concluded supply contracts. Owing to external delays (destroyed transport infrastructure, congestion in the port of Manila and at customs), the first deliveries did not reach the respective locations until mid-September 2014, even though the delivery process was to be completed by the end of August. Since it was already clear at the time that the facilities in the most severely affected city of Tacloban would have a sufficient supply of medicines for the coming months by virtue of deliveries from other aid organisations, and that there were only very limited options for storage due to the destroyed infrastructure, the project-executing agency requested that 20% of the outstanding deliveries be redistributed to other healthcare facilities. The majority of these healthcare facilities were located in the target region, but were not directly affected by the typhoon. Although the inclusion of these additional sites helped to avoid duplications, some of the funding was ultimately used for target groups which had not been directly affected.

On the other hand, all the facilities indicated that – despite the delays – the medicine deliveries arrived at favourable times after the completion of the rehabilitation work, and that the measure thus helped to ensure a smooth transition to normal operations.

Overall, the measure contributed to restoring and stabilising medical care, but the delayed start to the deliveries and the re-allocation of a portion of these – albeit small – had a negative impact on effectiveness. Despite this, the majority of the funds reached the target group on time, were used appropriately, and were deemed valuable contributions by the beneficiaries. The effectiveness is still considered good, as the majority of the deliveries still arrived on time and the measures were implemented flexibly and in line with demand.

#### Effectiveness rating: 2



#### Efficiency

The implementation costs, i.e. the expenses for the procurement consultant employed, amounted to just 2% of the total costs. The deliveries were put out to international tender in five different lots and awarded to two different companies. Due to the urgency of the situation, a shortened procedure was selected for the invitation to submit proposals; a comparison of the bids and an analysis of the tender documents revealed that the bids were in line with market conditions and thus the contracts were also awarded on a cost-oriented basis. In addition, the project reach of 325 locations was very high in relation to the funds deployed and compared to the aid provided by other donors, which had a more regional focus. The project's production efficiency can therefore be rated good.

The list of medicines and equipment to be supplied was drawn up by the project-executing agency – the Philippine Department of Health (DOH) – and its regional offices, in cooperation with the World Health Organization (WHO) and the procurement consultant, and was adapted several times before delivery. Thanks to the continuous coordination, the constantly changing needs were identified well and duplication with supplies from other donors was avoided, both of which can be considered positive in terms of efficiency.

In addition, selecting the locations on a needs-basis and the decision to supply only public healthcare facilities ensured that the most vulnerable groups among the affected population benefited from the measure. This can be seen as positive in terms of allocation efficiency. In addition, the medicines were made available free of charge to both inpatients and outpatients.

Although the decision to supply the local facilities directly increased the organisational effort, this was more efficient overall as it meant that the goods did not have to be stored elsewhere temporarily and no additional transport and storage costs were incurred by the responsible regional governments. Moreover, at the time of delivery, the options for intermediate storage were already very limited due to the large number of different aid deliveries.

The efficiency of the project can be assessed as good overall, as the delivery method, the allocation and the use of funds were efficient and thus the FC contribution to resolving the core problem was optimised with limited funds.

#### Efficiency rating: 2

#### Impact

The overall development objective of the project was to contribute to stabilising the health situation of the population affected by the typhoon. Due to the large number of other actors involved in disaster relief and as the measure was divided into various small deliveries across a large number of locations (325 facilities in 249 municipalities), it is difficult to determine the exact contribution of the FC measure to the change in the health situation of the population in the disaster area. The evaluation was therefore aimed at assessing the plausibility of the FC measure's contribution to the change in the overall situation in the target region.

To compare the general health situation of the population in the affected regions with other areas of the Philippines, the standardised regional indicators of maternal mortality, child mortality and infant mortality were analysed as impact indicators. An overview of the annual averages in the affected and unaffected regions is shown in the following table and in Figure 1.

Indicator		2012	2013	2014	2015	2016
(1) Infant mortality rate (per 1,000 live births)	affected regions	7.96	7.79	8.01	7.59	8.03
	other regions	8.43	7.12	7.20	7.09	6.82
(2) Maternal mortality rate (per 1,000 live births)	affected regions	8.22	10.04	11.79	10.38	11.87
	other regions	11.04	9.73	9.59	9.89	8.64



(3) Maternal mortality (per 100,000 live births)	affected regions	70.75	92.43	92.49	87.43	81.07
	other regions	66.25	53.57	57.76	66.29	54.58

Table 2 impact indicators; Source: Field Health Service Information System Annual Reports 2012-2016; According to the report by the Philippines National Disaster Risk Reduction & Management Council (NDRRMC), the following regions were affected by Typhoon Haiyan: IV-A, IV-B, V, VI, VII, VII, X, XI, XII. A mean value was calculated for both groups using the 17 regional values (not weighted by population).

While there were barely any significant differences in the rates of infant and child mortality between the affected regions and the rest of the country for the period under review, there was a slight difference in the trend for the maternal mortality rate. In the typhoon regions the rate rises comparatively sharply in 2013 and 2014, and then falls slightly again in 2015 and 2016. In the other regions, by contrast, this figure is relatively stable between 2012 and 2016 (Figure 1 illustrates the trend). It is difficult to determine to what extent these figures are directly or indirectly related to Typhoon Haiyan and why the differences in maternal mortality are greater than for the other two indicators. However, given that the Visayas region was also hit by the Bohol earthquake (magnitude 7.8) just one month earlier (October 2013), it seems plausible – given the magnitude of both natural disasters – that these had some impact on the health situation. In addition, the increase in maternal mortality rates in the affected areas coincide with the demand report submitted by the Department of Health to the FC at the time, based on which delivery kits were also included on the supplies list.

While it is difficult to determine the overall impact of Typhoon Haiyan and the subsequent aid deliveries using the three standard indicators, we can assume that, without the measures, the health situation would not have stabilised so quickly following two severe natural disasters in quick succession within the same structurally weak region. The Department of Health also considers it positive that no major epidemics broke out, despite the huge humanitarian disaster. Of course, the FC measures amounting to EUR 2.8 million only reflect a small portion of the total measures for emergency aid and reconstruction, which total over EUR 1 billion – however, it is plausible to assume that these have contributed to stabilising the health situation. The developmental impact of the project is therefore assessed as satisfactory.

#### Impact rating: 3

#### Sustainability

The FC project was an emergency measure by nature and did not follow a long-term structural approach. Nevertheless, it was agreed that medicines would be reimbursed by the national health insurance body PhilHealth provided they were included on the list of reimbursable medicines. These amounts would then flow into revolving funds managed by the individual hospitals for the procurement of medicines. Most of the medicines – between 70% and 80%, depending on the hospital – could be reimbursed because they were used for inpatients and were therefore eligible for reimbursement. The majority of hospitals surveyed did not have a revolving fund, but a national scheme guarantees that insurance revenues are available to hospitals for their operating and maintenance budgets, including expenditure on medicines. Given that an emergency aid project cannot be expected to have any structural effects, the reimbursement and reuse of a portion of the funds – albeit via a different structure – should be deemed positive.

The sustainability of the supplied equipment can also be assessed as positive. The majority of the medical equipment evaluated during the EPE is still functional and will continue to be used on a regular basis. Ambulances and service vehicles are also used and maintained regularly, and are still in a good condition. All of the hospitals surveyed during the EPE stated that their annual budget also included funds earmarked specifically for the maintenance of medical equipment.

Overall, the continued use of the equipment and the reuse of the reimbursed funds supported regular operations both directly and indirectly, and thus helped the connectivity of the project. The sustainability of the measure, gauged in relation to its nature as emergency aid, can thus be rated as good.

#### 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).