

Ex Post-Evaluation Brief

INDONESIA: Reconstruction Assistance Housing and Residential Construction and Infrastructure Assistance



Sector	Emergency relief and corresponding services (7201000)	
Programme/Client	(1) Rehabilitation and reconstruction of housing and settlements in Aceh province – BMZ no: 2005 65 655* (2) Infrastructure assistance of housing and settlements BMZ no.: 2006 65 133	
Programme executing agency	PU – Dinas Bina Marga Cipta Karya Propinsi Aceh	
Year of sample/ex post evaluation report: 2013/2013		
	Appraisal (planned)	Ex post-evaluation (actual)
Investment costs (total)	(1) EUR 36 million (2) EUR 5 million	(1) EUR 36 million (2) EUR 5 million
Counterpart contribution (company)	Non-monetary	Non-monetary
Funding, of which budget funds (BMZ)	EUR 41 million, EUR 41 million	EUR 41 million, EUR 41 million

* random sample 2013

Short description: Both projects financed the immediate reconstruction of housing, as well as the repair and/or creation of basic community infrastructure to restore settlements in the districts affected by the Asian tsunami of December 26, 2004 in the Province of Aceh. In 2006, the project extended restoration activities to war-affected districts of Bener Meriah and Ulee Glee in the mountainous highlands of Aceh (Highland Reconstruction Programme, BMZ-Nr. 2006 65 133). These districts had been affected by a separatist movement. In addition, the project financed restoration of war-ravaged coffee and cacao plantations.

Objectives: The overall goal of the programme was to contribute to reconstruction, the stabilisation of the region and the improvement of living conditions among the population in the programme region. The programme objective immediately provide appropriate housing, as well as the repair and/or creation of basic communal infrastructure in the areas affected by the natural disaster.

Target group: The target group consisted of all households in the programme region, whose houses had been severely damaged or destroyed by the natural disaster. In particular, the needs of low-income groups of people who had previously not had adequate housing were to be considered. After 2006, the project extended its housing reconstruction approach to villages of former ex-combatants from the Free Aceh Movement (GAM).

Overall rating:

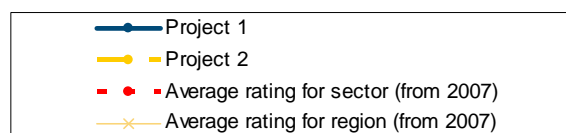
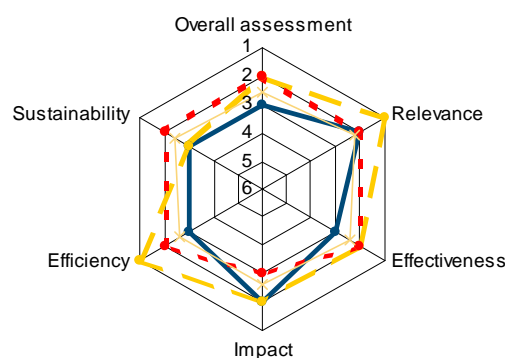
Coastal Reconstruction Programme: 3

Highlands Reconstruction Programme: 2

The reconstruction after the double catastrophe of tsunami and civil war was successful, although difficulties remain, above all with respect to maintenance.

Points to note: The project's on-budget, off-treasury approach ensures that on the one hand the rehabilitated public infrastructure is accounted for by the local government with respect to future maintenance budgets (on budget), and on the other hand avoids complicated Indonesian administrative procedures (off treasury), thus ensuring quick visibility.

Rating by DAC criteria



EVALUATION SUMMARY

**Overall rating: Coastal Reconstruction Programme: 3
Highlands Reconstruction Programme: 2**

The two programmes mentioned above are evaluated separately below and are therefore named according to their respective project region. The first project (Rehabilitation and reconstruction of housing and settlements in Aceh – BMZ no: 2005 65 655*) is thus described below as the "Coastal Reconstruction Programme" and the second (Infrastructure assistance of housing and settlements – BMZ no: 2006 65 133) as "Highlands Reconstruction Programme".

Relevance

The Coastal Reconstruction Programme was relevant in that it provided reconstruction assistance for the coastal zone devastated by the tsunami in Aceh. It was designed in accordance with the "Master Plan for the Rehabilitation and Reconstruction of Aceh and Nias" by the Indonesian government, which established the foundation for co-ordination and execution of all the reconstruction programmes. At EUR 36 million, the programme was a significant component of the German reconstruction assistance for Aceh of a total of EUR 250 million for Aceh reconstruction.

The highlands programme was highly relevant, since it contributed directly to the peace process and reduced the imbalance of donor assistance concentrated in the coastal areas. Germany was one of the few bilateral donors who took a conflict-sensitive approach and not only financed reconstruction for the communities affected by the tsunami. Starting in 2007, Germany also financed reconstruction for farmers in the highlands that were displaced by the conflict and facilitated their return home, as well as rehabilitating their livelihoods. Germany thus supported the strategy of the 2005 Helsinki MoU and the 2008 Aceh Reintegration Agency's (BRA) "Role and Strategy in Building Sustainable Peace in Aceh", thus contributing to a reduction in conflict.¹

Both programmes were designed to support homeowners with money, materials and guidance for the construction, which was then completed independently or by a construction firm. Material and labour costs were allocated and/or paid for by local distribution centres in individual instalments according to project progress.

The underlying results chain, according to which enabled the creation of housing (outcome) contributed significantly to the reconstruction of the region and thus put in place the prerequisites for improved living conditions (impact), was methodically plausible in the context of the planned sector programme. From today's perspective as well, the underlying problem analysis of the twofold catastrophe, is coherent and sensible.

¹ The Aceh Reintegration Agency (BRA) 2008. BRA Role and Strategy in Building Sustainable Peace in Aceh.

The programme in Aceh was unique due to the fact that it implemented an *On Budget - Off Treasury* approach, which ensured that the FC-financed infrastructure was included into the Indonesian government's accounting system, which was key to maintenance. At the same time, this facilitated flexible and fast implementation, since payments were controlled by the FC consultant and not the Indonesian bureaucracy.

**Sub-Rating: Coastal Reconstruction Programme: 2
Highlands Reconstruction Programme: 1**

Effectiveness:

The programme objective of the **Coastal Reconstruction Programme** provided for a prompt and tailored creation of housing, as well as the repair and/or creation of basic communal infrastructure in the areas affected by the natural disaster. The programme objective of the **Highlands Reconstruction Programme** consisted in the restoration of housing communities in the areas affected by the natural disaster and the conflict, through timely and customised housing construction, the repair or creation of basic communal infrastructure, as well as creating livelihoods, by restoring agricultural areas.

Indicator	Status of ex-post evaluation 2013:
Two years after conclusion of programme, 90% of the houses constructed or repaired are being used.	<i>This indicator was met. According to a UN habitat survey, FZE housing surveys, focus group discussions, conversations with mayors and previous representatives of the reconstruction authority BRR, approx. 90% of the reconstructed houses are inhabited.</i>
90% of the new or restored infrastructure facilities are being used for the intended purposes.	<i>This indicator was met. Up to 90% of housing infrastructure, such as sanitary facilities, streets, access roads, drainage systems, water supply and social infrastructure, is being used. Sports facilities, which have deteriorated in the meantime and are no longer used, are an exception.</i>
Up to 70% of rehabilitated agricultural areas are being used by the target group two years after the end of the programme.	<i>This indicator was exceeded. A total of 1,400 hectares of agricultural areas were rehabilitated and planted with coffee and cocoa. According to the survey of an evaluation mission in two of six villages in Bener Meriah, 85% of the farmers who had received coffee plants actually cultivated coffee.</i>

The *output* indicator of reconstructing of 6,000 houses was exceeded. A total of 7,623 houses were reconstructed and repaired. Of these, 5,915 new houses were built and another 175 repaired. As part of consulting services, the construction of 1,533 houses financed by the Indonesian reconstruction authority, BRR, was also monitored.

UN Habitat published a comprehensive monitoring study in 2009 that evaluated 35 national and international donor organizations participating in home construction in Aceh. The analysis of the study compared organisations in terms of construction quality, satisfaction of the target group and the transparency of the use of funds. The survey placed houses

financed by the German FC just above the average, as far as construction quality is concerned, and just below the average in terms of owner satisfaction and transparency.²

The FC consultant used a design for home construction that certified earthquake resistance up to magnitude 6 on Richter scale and was vetted by the Technical University in Banda Aceh.³ Indeed, the homes have since survived the earthquake of 9 May 2010, with a magnitude of 7.2, and the earthquake of 11 April 2012, with a magnitude of 8.6 on the Richter scale, without damage.

In the highland districts, over 1,400 hectares of agricultural land were rehabilitated and planted with coffee, cocoa, spices and other crops. The newly planted coffee bushes bore fruit for the first time in 2012 and families were able to sell 400 kg of coffee on average for the first time. They received an average of EUR 344 (86 cents/kg) in 2012, with high global prices for coffee, while lower revenues are expected for 2013 due to the drop in coffee prices.

We assess the effectiveness of the programmes with the sub-ratings three and two, due to the satisfactory quality of the reconstructed settlements on the coast, and the good quality of the settlement and the ability to make a livelihood in the highlands

Sub-Rating: Coastal Reconstruction Programme: 3
Highlands Reconstruction Programme: 2

Efficiency

In comparison to the reconstruction programmes of the 35 large development organisations operating in Aceh in the disaster aftermath, each of which financed between 1,000 and 15,000 houses, the FC projects were faster and more affordable. With 173 houses per month, the project is well above the average of 85 houses per month; at USD 5,473 per house, the manufacturing costs are also more affordable than other organisations which have an average of USD 8,114.⁴

² UN Habitat. 2009. Post Tsunami Aceh-Nias Settlement and Housing Recovery. Review. Aceh, Indonesia.

³ The simple construction, specified by the Indonesian reconstruction authority at 36 m², was equipped with careful design of the joints of the pillars and the ring beams. This contributes to the houses not collapsing like simple brick houses without reinforcement; rather, the concrete steel skeletal structure remains standing, even if walls and roofs may experience structurally insignificant tears. Furthermore, a standard of earthquake resistance up to magnitude 6 on the Richter scale is a customary standard for developing countries.

⁴ UN Habitat. 2009. Post Tsunami Aceh-Nias Settlement and Housing Recovery. Review. Aceh, Indonesia. This includes the following text: "The policy target was to build 36 m² homes for about USD 3,000 per unit, which was a difficult target for full brick houses in compliance with the reinforced concrete standards of the building code. USD 3,500 to USD 4,000 would have been more realistic, before inflation set in. By late 2007, average costs had escalated to a range between USD 6,500 for 36 m² units built with local labour, mostly through community-based programmes, and over USD 13,000 for 45 m² houses commissioned by many Red Cross organisations and built by national contractors."

Allocation efficiency is assessed differently for both programmes. According to the reconstruction strategy in the coastal programme, everyone who had lost a house, including orphans, tenants, the homeless and emigrants, received a house, whether it was used or not. Not all houses were equally needy, however, which resulted in partial vacancies of houses especially on the West coast, where the number of victims was especially high. The allocation efficiency was high in the highlands programme. A good deal of time was spent there determining who had lost their home and livelihood or had been displaced and therefore had a claim to assistance according to the 2005 MoU.

Sub-Rating: Coastal Reconstruction Programme: 3
Highlands Reconstruction Programme: 1

Impact

The overall goal of both programmes was to contribute to reconstruction, the stabilisation of the region and the improvement of living conditions among the population in the programme region.

Overall, reconstruction after the tsunami and conflict in Aceh was a success and the FC programmes played a key role, something particularly appreciated by Minister Kuntoro Magkusubroto, who at the time was also the director of BRR.

From an economic point of view, the province of Aceh is better off than before the tsunami. The poverty rate in Aceh decreased by 9 percentage points between 2004 and 2011 (from 28.5 percent to 19.48 percent), while in Indonesia on the whole it dropped only 4.2 points (from 16.7 percent to 12.5 percent). The unemployment rate is just above the country's average (7.5 percent for Aceh as compared to 6.6 percent nationwide). Economic growth in the province amounted to 4.45 percent during 2011 compared to 6.1 percent (2012) in Indonesia on the whole. This shows that the province of Aceh, which was one of the poorest provinces of Indonesia only ten years ago, has recovered economically partly due to reconstruction after the tsunami.

The programme also contributed to a stabilisation of the region after the conflict. The German FC was one of the few organisations that used funds in the Aceh highlands for pacification after the conflict, in order to allow the internally displaced people to return to their villages by constructing buildings and by rehabilitating coffee and cocoa plantations. In 2013, villages in the highlands had been resettled as well. Conflicts are receding and people feel safe and in a position to generate their livelihoods and to safely send their children to school. When asked to assess the peace process at the time of the mission on a scale of one to ten, with one representing civil war and ten sustainable peace, the average rating on the part of government representatives, donors and professors was an eight in all four programme regions.

However, the economic situation in the highlands improved only slowly, since the newly planted bushes are not yet fully productive. Overall, 53% of the 45 target group members surveyed at the time of the mission in the highlands of Bener Meriah responded that they were financially better off thanks to the programme of subsidised coffee cultivation. They have more cars, motorcycles, television sets, radios and mobile phones, which were interpreted to represent affluence, than a comparable village with 34 households in the vicinity.

Sub-Rating: Coastal Reconstruction Programme: 2
Highlands Reconstruction Programme: 2

Sustainability

After the end of the reconstruction process, the Province of Aceh is in the difficult position of having to record and maintain infrastructure that was not accounted for in the provincial bookkeeping, because infrastructure was constructed by donors in an *off budget - off treasury* approach. The FC constitutes a positive exception, because the FC-financed infrastructure was set up as *on budget* with the knowledge of the Indonesian government and entered into its books. This was a first step to guarantee maintenance for the future. In principle, the province disposes over funds for maintenance, due to a *Revenue-Sharing Agreement agreed upon* under the peace treaty. Hurdles still exist with respect to the allocation of funds by the local government, however. In response, a World Bank-financed project was designed to create local capacity in order to utilise budget resources in a more selective manner in future than has been the case in the past, i.e. for maintenance.

Overall, the massive reconstruction effort fostered a consumer mentality; tsunami victims continue to this date to expect external subsidies for community work, such as maintenance. The mission was told that nowadays homeowners demand payment if the community asks them to cut the lawn in front of their house or clean the drainage channel. It is true that fees are paid for maintenance on water supply, but the drainage channels had grown over and homeowners were complaining that their septic tank was not being emptied and that they did not have the money to pay for it on their own.

During construction there were isolated problems with respect to safeguarding the environmental and the quality of labour and materials due to time pressures in the immediate response to the tsunami: the high-volume of sand taken from river beds led to erosion; wood was stored only for a short period of time and not treated sufficiently, so that in 2013, door and window frames were being damaged by termites. A bridge in the mountain region financed by the programme was washed away due to heavy rains. Overall, these problems were isolated and did not in principle diminish the success of the programme.

The programme has significantly reduced future disaster risk, by using earthquake-resistant construction of houses - and in some cases constructed dams to prevent flooding. As evidenced by the destroyed bridge and the degradation of river valleys, flood damage in the

highlands was given less consideration than the risks arising from earthquakes and tsunamis. The German Development Corporation also financed tsunami warning buoys and risk mapping; other donors, as well as the Indonesian government, have also constructed emergency shelters. However, problems in communicating warning signals and organising evacuations still persist.

With respect to peace-keeping, two free elections and the handover of the provincial government to former rebels, as well as the *Revenue Sharing Agreement*⁵, disarmament and the *Monitoring* of the region have contributed to pacification. It is important for the future, however, to strengthen *good governance*, to use budget resources more efficiently via the local government and to create a climate that conducive to private-sector investment.

Sub-Rating: Coastal Reconstruction Programme: 3
Highlands Reconstruction Programme: 3

⁵ The Helsinki Peace Treaty of 2005 specified the financial participation of the government of Aceh in profits from oil and gas resources. The *Revenue Sharing Agreement* means: "Joint management of oil and gas resources between the province and central government, and transparency in revenue-sharing allocation, audited by independent auditors." The World Bank. 2006. Aceh Public Expenditure Analysis Spending for Reconstruction and Poverty Reduction. Jakarta, Indonesia-

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:

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).