

Ex post evaluation

Slum rehabilitation programme through FUNDASAL, El Salvador



Title	Slum rehabilitation programme through FUNDASAL		
Sector and CRS code	Low-cost housing 16040		
Project number	2005 66 158		
Commissioned by	BMZ		
Recipient/Project-executing agency	FUNDASAL (Fundación Salvadoreña de Desarrollo y Vivienda Mínima)		
Project volume/financing instrument	Total of EUR 10.2 million, including a grant of EUR 8.03 million, difference is the counterpart contribution		
Project duration	01.09.2007 – 28.02.2015		
Year of report	2021	Year of random sample	2019

Objectives and project outline

The objective at outcome level was to increase the potential for empowerment in the construction of housing and living environments in poor urban communities. At impact level, the objective was to physically and socially integrate these poor communities and their residents into the urban environment.

The project included expanding and improving the material infrastructure (living environment) of slum areas, legalising ownership, establishing connections to the city supply network, strengthening residential organisational structures and empowering residents.

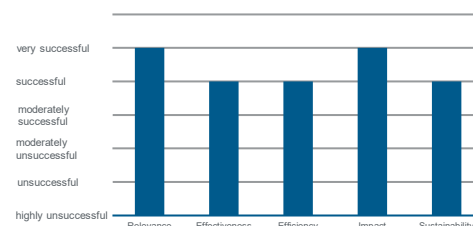
The socially integrative approach is a particular highlight: it was implemented by the NGO FUNDASAL, which guided the target group in poverty-stricken neighbourhoods in urban areas in how to build the basic infrastructure themselves through community work.

Key findings

The project had a developmental impact as the inhabitants of the supported districts created essential infrastructure for drinking water, sewage disposal and electricity themselves and were successfully granted property rights. Sustainable use and maintenance are ensured, and the project can be rated as “successful” overall.

- The project addressed a central development problem in El Salvador with a high level of need among the target group. The project locations were selected according to rigorous criteria, and the programme approach of a locally rooted NGO working with empowerment-oriented, conflict-sensitive, and socially integrative measures was a perfect fit for the problem to be addressed. The impact logic convincingly combines technical and social components that work together to successfully achieve outcome and impact objectives.
- The infrastructure was created particularly efficiently through (guided) community work; at the same time, community work generates positive social-integrative effects.
- The effects of the project are still visible today – in some cases more than ten years after construction – and continue to have a positive influence on people’s everyday lives. There is a high degree of identification with what was accomplished collectively and a willingness to continue to maintain these structures. The physical and social integration, especially destigmatisation, can be considered successful.

Overall rating:
Successful



Conclusions

- The implementation model of the socially inclusive approach and community work was a key factor in the success of the project. This requires a strong, locally rooted NGO – an agency of this kind makes community-based approaches particularly effective.
- The empowerment of the target group – especially women and young people – is based on providing them with basic infrastructure. Future projects could include an education or employment component to improve empowerment in the long term.
- The detailed monitoring of the executing agency during programme implementation was outstanding. Monitoring after the project ends can help the executing agency ensure that the measures are successfully continued and should be encouraged in future projects.

Rating according to DAC criteria

Overall rating: 2

Ratings:

Relevance	1
Effectiveness	2
Efficiency	2
Impact	1
Sustainability	2

Relevance

The project “Slum Rehabilitation through FUNDASAL” – below also according to the “Programa Mejoramiento de Barrios” (PMB) implementation model (district improvement programme) – was aimed at improving the housing shortage both in terms of quality and quantity. This was (and still is) a core problem in the housing sector in El Salvador and other Central American countries.¹ At the time of the programme appraisal (2005), the Salvadoran Vice-Ministry of Housing (VMVDU) estimated the country-wide housing shortage at around 520,000 housing units – out of a total of around 1.6 million existing units in 2004, nearly two-thirds in urban areas. A large part of the shortage was related to quality – i.e., housing units in need of rehabilitation – and was characterised in particular by poor building materials, inadequate connections to water, sewage and electricity and overcrowding.² The housing shortage was caused by several structural factors: high population pressure, low economic performance compared to the rest of Latin America (although more positive relative to neighbouring countries), inadequate poverty and social policies of the Salvadoran governments, often unclear legal relationships between building land and housing, lack of financing possibilities. The deficiencies are generally even more pronounced in rural areas than in urban areas³, with the added challenge of the marginalisation and lack of social inclusion of the poor settlements in urban areas.

The project was implemented by the project-executing agency FUNDASAL, Fundación Salvadoreña de Desarrollo y Vivienda Mínima. The tendering and implementation modalities comprised four elements, (i) Contrato - public tender and award to construction companies, (ii) Administración - construction overseen by FUNDASAL, (iii) Ayuda Mutua - organised community work with direct involvement of the target group, (iv) Esfuerzo Propio - empowered beneficiaries. The implementation model revolves around (iii) organised community work where FUNDASAL supports the beneficiary families in the supported districts through preparatory and supporting social work, through technical supervision, by equipping them with construction equipment and involving skilled workers for more complex work, in such a way that the families are empowered to build the basic infrastructure and improve their living environment themselves.

The implementation model therefore included and integrated technical and social components. At output level, the technical components aim to improve the infrastructure and quality of housing, at outcome level, the use and maintenance of the same by the target group, and at impact level, the physical integration of poor communities and their residents into the urban environment. At output level, the social components help improve organised participation and indirectly the consolidation of inter-institutional cooperation as well as the inclusion of urban district rehabilitation in national policies; at outcome level, they help strengthen the potential for empowerment in the construction of housing; and at impact level, the social integration of poor communities and their residents into the urban environment. The impact logic is adequate also from today’s perspective to address the identified core problem, and it coherently and effectively combines technical and social components.

¹ See Centro Latinoamericano para la Competitividad y el Desarrollo Sostenible CLADCS (2016), Estado de la vivienda en Centroamérica, INCAE Business School und Habitat for Humanity: Costa Rica and El Salvador.

² DIGESTYC (2005), Encuesta de Hogares Propósitos Múltiples 2005, Dirección General de Estadística y Censos: San Salvador.

³ *ibid.*

The target group of the project comprised the residents of poor urban communities. The specific project locations were identified in a multi-phase process: 1) pre-selection of the municipalities with poor communities, with a focus on the most densely populated ones: Soyapango, Mejicanos, Ilopango, San Martín and San Salvador; 2) discussions with the municipal administrations or mayors' offices to identify the most vulnerable districts in the municipalities, i.e. those districts that most urgently need the basic infrastructure of water and sanitation as well as the possibility of legalising individual housing; 3) on-site visits to the districts and discussions with district organisations to assess the specific need for help.

The project was a coherent follow-on to previous FC activities in this sector in the 1990s and early 2000s. FUNDASAL also cooperated with TC, particularly in the areas of youth work, conflict prevention and social integration of young people, supporting the PMB. Other donors were (or are) active in the same sector with similar programmes, some of which are much more extensive, such as the IADB's "Programa de vivienda y mejoramiento de asentamientos urbanas y precarias", which addressed other communities.⁴ The programme approach was also based purely on infrastructure measures without a social component, and responsibility for implementation fell to the municipalities, which generally have weak capacities. Despite the fact that the activities were generally complementary, there was no donor coordination in the strictest sense of the word. The latter makes it more difficult for individual programmes to have a greater impact on a national policy strategy.

With the exception of the last point, from today's perspective, the project is very relevant: PMB addressed a core problem of El Salvador that is crucial for the country's development. The target group clearly needed basic infrastructure. The specific project locations were selected according to rigorous criteria and in line with the goals, while the programme approach of a strong, locally rooted NGO working with empowerment-oriented, conflict-sensitive, and socially integrative measures was a perfect fit for the problem to be addressed. The impact logic is coherent, detailed, and the overall objective and programme objective build consistently on the results at output level. From today's perspective, the output result of the political integration – i.e. the intended effect on housing policy via implementing the PMB – appears to be too ambitious for the reasons mentioned above. However, implicit output mechanisms can be referenced here, since according to the Vice-Ministry's own account, its strategy development may draw on successful models that have been tried and tested in practice, without explicitly highlighting this.⁵ The impact model of integrated district rehabilitation is thus also credible from today's perspective, and the still precarious situation of many communities in El Salvador⁶ underscores the relevance of this development approach, both today and in the past.

Relevance rating: 1

Effectiveness

The objective at outcome level was to increase the potential for empowerment in the construction of housing and living environments in poor urban communities.

The target achievement at outcome level is summarised in the table below.

Indicator	Status PA, target PA	Ex post evaluation
(1) The operation and maintenance of the infrastructure by the district residents and the responsible authorities is ensured.	n/a	Achieved. The families and district communities jointly develop and implement operation and maintenance plans for the infrastructure created. There are sporadic deficiencies on the part of the municipalities in the

⁴ FAO (2011), El apoyo del Banco Interamericano de Desarrollo a El Salvador, <https://www.fao.org/in-action/agronoticias/detail/en/c/491030/>. The programme's name was indicated in the conversation with the IADB on site as follows. There are different figures on the exact scope of the programme, but with USD 35 million (FAO 2011) or USD 70 million (interview) and the number of households reached >10,000, it is significantly larger than the PMB.

⁵ Interview VDVMU 28.01.2020.

⁶ DIGESTYC (2020), 2020 Encuesta de Hogares Propósitos Múltiples, Dirección General de Estadística y Censos: San Salvador.

		implementation of the agreed services. They do not endanger the existence or operation of the infrastructure. ⁷
(2) 90% of the families in the supported districts use the public and private services of the infrastructure supplied.	a. Water supply: 73% b. Wastewater disposal: 42% c. Surface drainage: 15% d. Power supply: 73% Unweighted average: 51%	Achieved. a. Water supply: 98% b. Wastewater disposal: 99% c. Surface drainage: 88% d. Power supply: 100% Unweighted average: 96% ⁸
(3) At least 80% of the families in the supported districts have improved their housing conditions.	n/a	Achieved. - 96% use the new infrastructure (see indicator (2)) - 45% of families in the endline survey said they had further improved their homes (after building basic infrastructure) - 86% of the land parcels have been legalised, or 98% of the parcels have either already been legalised or are in the process of being legalised ⁹
(4) More women and young people are actively participating in representative bodies of the district organisation.	No baseline data on participation was available at the start of the project. 70% of the residents have a positive opinion of the participatory work of the district organisations.	Achieved. Roughly 43% of the members of the formed district organisations are women, and 5% are young people (significant increase during the project period). The participatory work of the district organisations was rated positively by 95% of the residents when the project was completed.

A total of 3,144 families in the above-mentioned communities were reached and supported by the programme.

The operation and maintenance of the infrastructure by the residents of the supported districts and the responsible authorities are essentially ensured. The EPE on-site visits showed that the infrastructure is functional everywhere, in some cases more than ten years after its construction. Interviews and focus groups with beneficiaries, FUNDASAL, the district-wide residents' organisation MAPUS (Movimiento de Asentamientos Populares Urbanos) and district leaders found that residents in particular ensure functionality through operation and maintenance plans. This can clearly be considered a project success. Public authorities such as the municipal administrations and the national water authority ANDA (Administración Nacional de Acueductos y Alcantarillados), on the other hand, do not always fully meet their obligations.

⁷ Data sources indicator (1): target group interviews as well as focus groups with district leaders in districts of the municipalities Ilopango, Soyapango, Mejicanos; interviews with a) FUNDASAL, b) mayors' offices, c) residents' organisation of urban slums MAPUS.

⁸ Data source indicator (2): FUNDASAL monitoring data.

⁹ Data source indicator (3): FUNDASAL monitoring data.

The central result of the project is the construction of basic infrastructure at output level and its subsequent use at outcome level, especially the drinking water supply (“agua potable”) and wastewater disposal (“aguas negras”). The project-executing agency recorded these indicators and their target achievement in detail at district level in its monitoring. One example is shown in Figure 1 for the municipality of Mejicanos and the wastewater disposal indicator (“aguas negras”). Green means a change in the indicator – share of households with wastewater disposal – of 68-100%, yellow means 34-67% and red corresponds to 1-33%. This monitoring was carried out from the start of the project (2007) to the end (2015). The target achievement was already nearly 100% in 2015 for the four infrastructure indicators (a)-(d) as shown in the table above; this was confirmed by field visits at the time of the evaluation.

Indicator (3) aimed to measure the improvement of housing conditions (target value: 80% of families). From today’s perspective, this indicator has three dimensions. The first dimension is the use of the newly built basic infrastructure by 96% of families. The second dimension is the percentage of families who report that they have continued to invest in housing quality improvements at the time of the endline survey. Around 45% of families reported this. Based on the interviews with beneficiaries on site at the time of the EPE, it can be assumed that this value represents a lower limit. Furthermore, indicator (3) is also represented by the “legalisation” dimensions (see also the section “Impact” below). The target achievement values are very high here: 86% of the parcels have been legalised, or 98% of the parcels have either already been legalised or are in the process of being legalised.

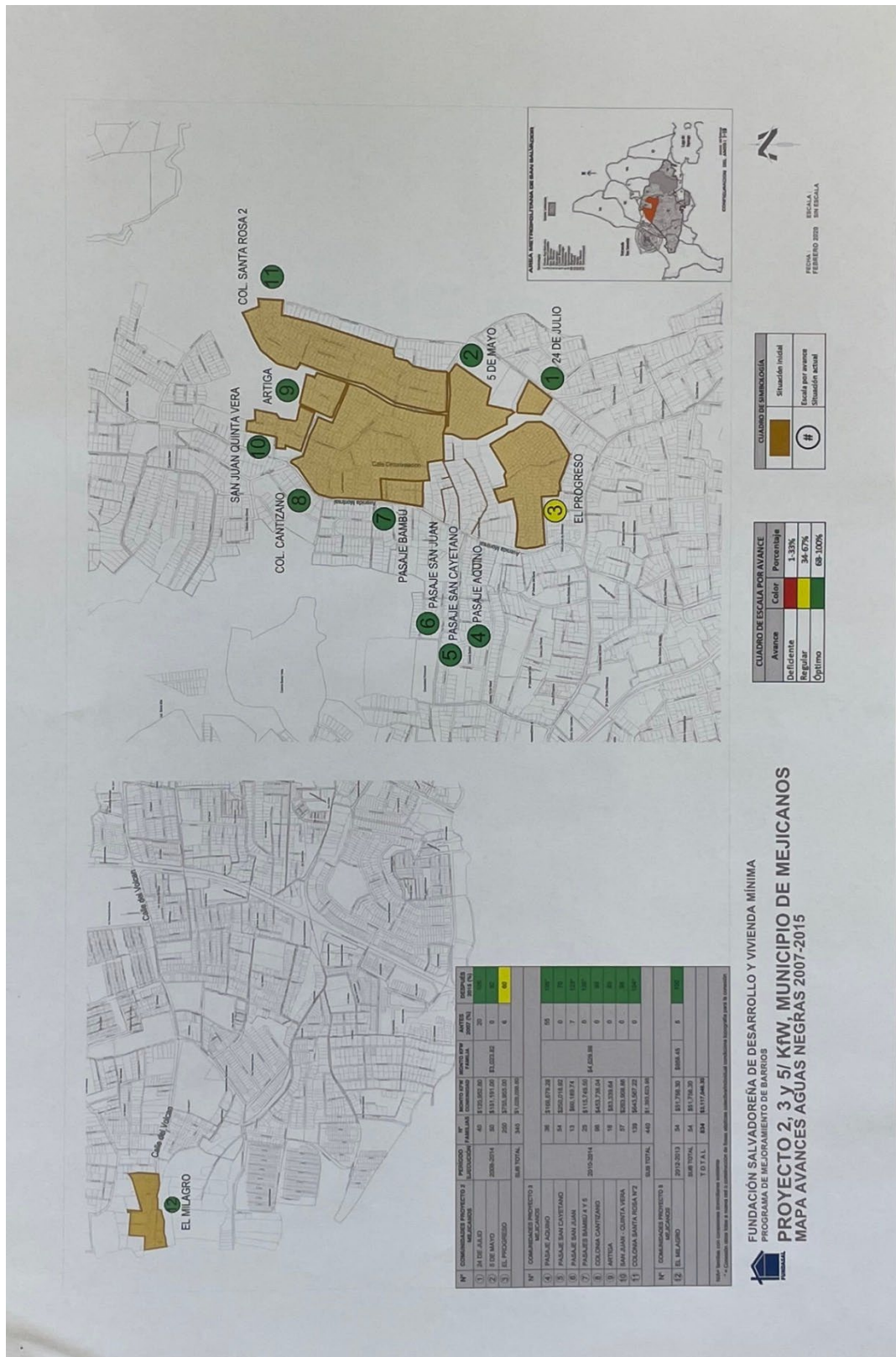
The indicator on the active involvement of women and young people in district organisations was not quantified either; the information provided as well as the composition of the group interviews conducted as part of the EPE in the districts visited suggest that the targeted increase was achieved, especially with regard to the involvement of women. In the interviews in the districts visited, it was reported that the adult men typically work outside the district and the local women organise the daily life of the district (Ilopango); there were also positive reports of sports groups being set up for young people (Soyapango).

Effectiveness rating: 2

Efficiency

FC funds of EUR 8.03 million and EUR 1.88 million of the Salvadoran partners’ own funds were used to finance the project measures. The latter consisted of services provided by the district organisations in the amount of EUR 1.10 million and services provided by FUNDASAL and other institutions in the amount of EUR 785,000. In addition, leftover funds from a previous project as well as funds from the Study and Experts Fund totalling approximately EUR 250,000 were used to prepare the project and share experiences in the area of empowerment.

Figure 1. Improvement of wastewater disposal through PMB at district level in the municipality of Mejicanos¹⁰



¹⁰ Source: FUNDASAL monitoring

The project investments were used to implement slum rehabilitation measures in 40 districts, benefiting a total of 3,081 families (planned: 2,500). The distribution across the three municipalities is as follows: 12 districts with a total of 834 families in Mejicanos (Fig. 1), 14 districts with a total of 1,100 families in Ilopango and 14 districts with a total of 1,047 families in Soyapango. In addition, after tropical cyclone Ida (11/2009) reconstruction measures were carried out in six other city districts that had already received funding from a previous programme (Slum Rehabilitation Las Palmas, BMZ no.: 1996 65 522), which benefited another 63 families. This results in a total of 3,144 beneficiary families.

The implementation period, originally estimated at 4 years, almost doubled to nearly 8 years during implementation. The delays were due, among other things, to stalled construction work (e.g. due to unexpected exogenous factors such as cyclones) and lengthy approval processes in the area of sanitation as well as in the legalisation of ownership in the slum areas. The extensions approved by KfW several times during the implementation were designed to be cost-neutral with respect to the total volume of the project and the costs contributed by the participants.

The investment amount per family from FC funds assumed at the time of project appraisal was EUR 2,750; during implementation, an average of EUR 3,120 per family was spent from FC funds. The increased need for financing resulted mainly from higher costs for the introduction of the basic infrastructure (drinking water, wastewater, rainwater, and electricity), and also from higher costs due to the longer duration of the project. Taking into account El Salvador's own contributions, the average investment amount per family was EUR 3,904 (planned: EUR 3,435).

Despite the higher investment amount required per family relative to the planned value, it was possible to stay within the overall financial budget or to fall slightly below it. Around 25% more families were reached than the minimum target planned by the programme, which means that from today's perspective, the higher investments per family are not critical.

The implementation of the construction measures revolved around community work with adequate support from experts and construction companies ("ayuda mutua"), i.e. a large part of the work was carried out by the beneficiaries themselves with guidance. The opportunity costs of the community work are estimated to be low since it was mainly carried out by women and young people who were not employed or in school. As described in the section "Effectiveness" above (outcome indicator (1)), the operation and maintenance of the constructed infrastructure is basically ensured, i.e. the added value created is also available to the beneficiaries in the long term. The social value of the services provided, which goes beyond the mere use of the new infrastructure, cannot be put into monetary terms (see Impact below), but further increases the benefits of the services. It can therefore be assumed that the outcomes were achieved at the lowest possible cost and a high production efficiency was attained.

This outcome was also ensured by the fact that in the selection process the project-executing agency identified districts in which the measures were likely to be successful; i.e. to minimise the risk, for example, that the programme would have to be discontinued in a district due to gang violence or a lack of willingness to cooperate. In the end, the colours in Figure 1, for instance, show that this selection was successful. In hindsight, the fact that the risks identified at the time of the programme appraisal – essentially: lack of willingness to cooperate by the various stakeholders, natural disasters, violence – have all occurred intermittently over the years, clearly caused delays on the one hand, but on the other, it did not lead to restrictions in the scope and achievement of the programme's objectives. Overall, the allocation efficiency can therefore also be rated as good.

Efficiency rating: 2

Impact

The overall objective of the project was to physically and socially integrate poor communities and their residents into the urban environment.

Target achievement at the impact level is summarised in the table below:

Indicator	Status PA, target PA	Ex post evaluation
(1) 90% of the plots promoted by the project have now been legalised.	n/a 56% of the starting value in 2007 according to data from FUNDASAL ¹¹	By the time the project was completed, 86% of the land parcels had been legalised, or 98% had either already been legalised or were in the process of legalisation. ¹² According to information from the district administrations, this number increased again at the time of the EPE; quantitative monitoring was no longer carried out.
(2) The health situation of the residents improves significantly, especially in terms of parasitosis and diarrhoea.	n/a	At the time the project was completed, cases of diarrhoeal diseases had decreased by about 20%. The incidence of parasitosis and diarrhoea was not monitored quantitatively. The group interviews uniformly reported a significant improvement in the hygiene and health situation. Connection to a wastewater disposal system can serve as a quantitative proxy indicator for the health situation: the percentage of connected households increased from 42% to 99% (see above).
(3) Creation of institutional structures to support social integration.	n/a	Foundation of the MAPUS movement.

The integration of poor communities should be pursued in three dimensions: (a) physically through legalisation, (b) socio-economically through empowerment, and (c) politically-institutionally through legitimised structures.

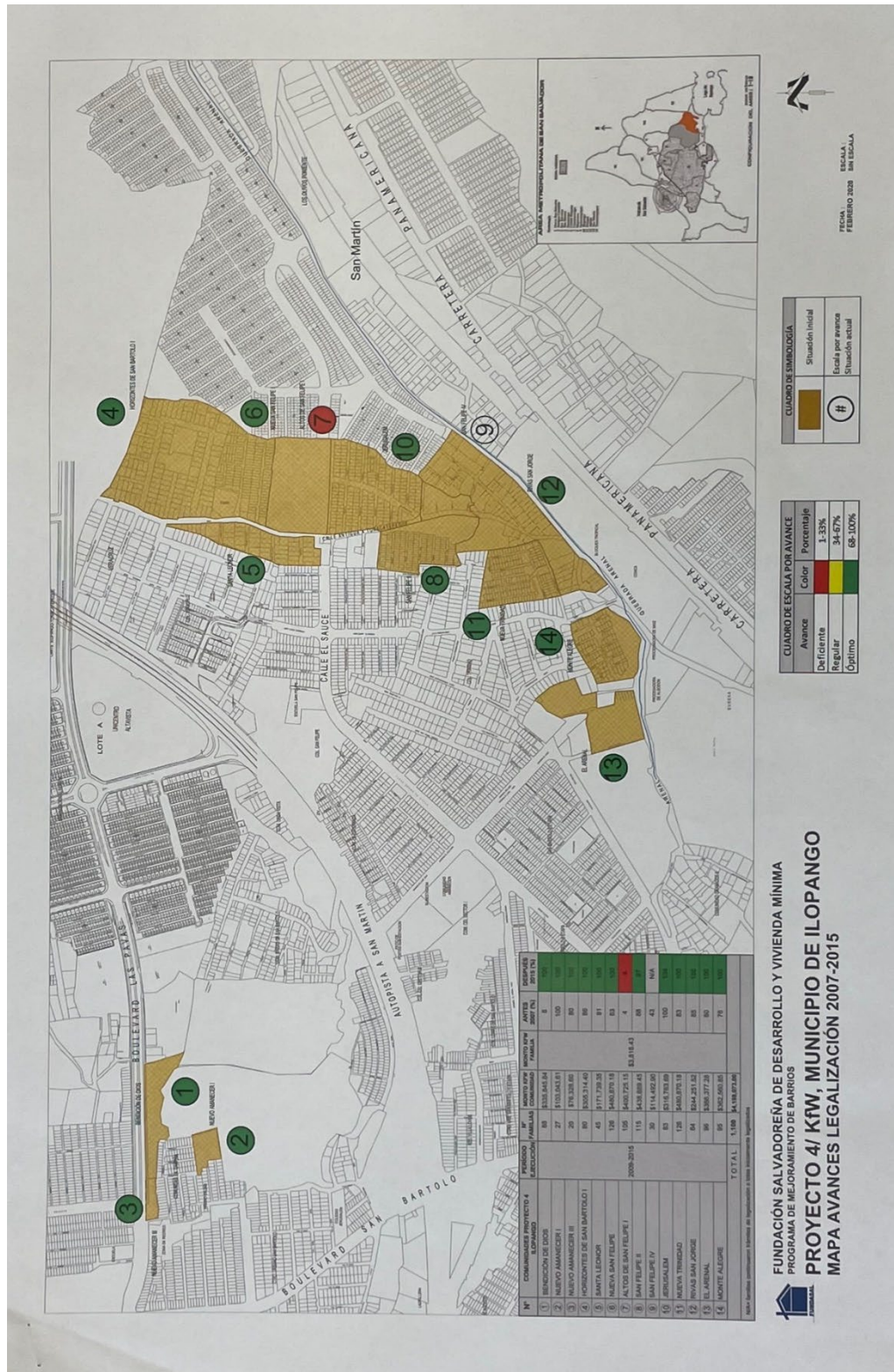
Indicator (1) for dimension (a) represents the structurally most important and quantitatively most tangible dimension: only legalisation enables residents to gain formal recognition of their rights and support from the municipality and gives them themselves the grounds to get involved in their district (“comunidad”). Similar to Figure 1 above on wastewater disposal for the municipality of Mejicanos, Figure 2 shows the high level of target achievement for this indicator in the detailed diagram using the example of the supported districts in the municipality of Ilopango.

Socio-economic integration (b) is represented by a health indicator, which is very important in itself, but is not quantified in monitoring and does not explicitly address the aspects also mentioned in the project appraisal, such as youth and recreational opportunities, community work, training for women or connectivity to formal markets. Information on this came from the on-site interviews (see further below). The impact of the project on health aspects can be quantified by the proxy indicator for wastewater disposal, which implies a high level of target achievement (42% of connected households before the programme, 99% afterwards).

¹¹ Unweighted average of the values recorded at district level.

¹² Data source indicator (1): FUNDASAL monitoring data.

Figure 2. Percentage of legalised parcels in districts supported by PMB in the municipality of Ilopango¹³



¹³ Source: FUNDASAL monitoring

With regard to target dimension (c) – the creation of opportunities for the population through political representation of the interests of slum residents – the foundation of the MAPUS movement (“Movimiento de Asentamientos Populares Urbanos”) initiated and organised by FUNDASAL as part of the project is a particular highlight. MAPUS is a cross-district advocacy group for poor communities. Even though the political leverage of the movement is limited, it is nevertheless noteworthy as the only way to combine advocacy of the geographically fragmented and socially mostly marginalised poor communities and to represent their interests nationally. In this role, MAPUS was also involved in drafting the housing law passed in 2015, an achievement to which the PMB’s activities thus contributed indirectly.

It can be assumed that the impact indicators specifically defined for the project will have other positive effects. The on-site visits show how essential basic infrastructure is for a decent everyday life. Providing this basic infrastructure creates potential for the social integration of marginalised groups in the first place. This cannot solve all the problems since residents of the districts, who are very aware of their living situation and articulate it clearly, report that violence in youth gangs (“maras”), very limited educational, employment and social advancement opportunities, for example, still exist and would have to be addressed by other policy measures. Still, the people interviewed in all districts report how much the programme has contributed to enhancing the sense of community and helping the district to feel represented (“empoderado”) and that the supported districts are no longer as socially stigmatised as before.

This finding is supported by a rigorous impact evaluation conducted by economists for a related programme involving housing infrastructure for poor communities in El Salvador, Mexico, and Uruguay¹⁴. Through the NGO TECHO (“roof”), the programme provides slum residents with simple, prefabricated corrugated iron houses and thus, in its impact mechanism, also aims to positively influence the everyday housing situation (but without the social-integrative component of the PMB’s community work). The study found significant effects on the well-being of the slum residents, on the health of the children and on their sense of security. These scientifically based findings suggest that the developmental impact of the PMB is likely to go beyond the directly recorded indicators.

Overarching developmental impact rating: 1

Sustainability

The timing of the EPE five years after the project ended and the long implementation period of the project allow a long-term view of the project outcomes. On the one hand, it shows that the infrastructure built at the time is still functional and in use, and that the residents of the poor communities take care of its maintenance and upkeep. The public service providers – such as the water authority ANDA – usually perform their maintenance duties, but not always, or not always promptly. It also became apparent during the on-site visits that the responsible municipal administrations are not always fully committed to maintaining the project outcomes achieved, or do not have the necessary financial resources to do so. Still, the profound and sustainable change in the quality of life of the people in the supported poor communities as a result of the project is visible, tangible and was highlighted by all stakeholders as well as the target group itself in the respective interviews.

The socially inclusive nature of the measure has fostered cohesion in the districts, a community that has essentially been maintained to this day. The project has laid the foundation of empowerment by removing social stigma from the supported districts and enabling dignified and communal everyday life, not least by almost completely legalising the land parcels. The work of FUNDASAL, a strong, locally rooted NGO, made a significant contribution to this – and so did the FC project. The model of socially integrative, community-based support – underpinned by intensive monitoring by FUNDASAL, even for at least one year after construction ended – is clearly to be rated successful.

At the same time, some objectives for a basic infrastructure measure appear too ambitious from today’s perspective. Although the founding of MAPUS has created an important, unified voice for marginalised districts, which is also recognised nationally, it has not yet been able to exert a sustainable influence on housing policy and cannot be expected to do so in the near future either. FUNDASAL continues to

¹⁴ Galiani S., P.J. Gertler, R. Undurraga, R. Cooper, S. Martínez, A. Ross (2017), “Shelter from the storm: Upgrading housing infrastructure in Latin American slums”, *Journal of Urban Economics* 98: 187-213.

implement its PMB model in poor communities but faces challenges in securing new funding – which generally comes from international donors rather than the national government.

PMB creates the fundamental basis for the target group to improve their economic situation. However, demarginalisation also in terms of access to education, employment and social advancement opportunities would require extensive supporting policy measures in these areas. In addition, the situation in poor communities in El Salvador remains fragile: gang crime has increased since the project began, and the macro-economic situation remains volatile.

Despite the pressing problem of the housing shortage – especially in terms of quality – that has existed for decades (see above), housing policy plays a secondary role on the agenda of (changing) Salvadoran governments, and the financial and political reach of the responsible vice ministry remains very limited. The adoption of a Política Nacional de Vivienda y Hábitat in 2015 is an important step towards a policy strategy, but it only formulates guidelines in this sense and is not regulatory in nature.

Sustainability rating: 2

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

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

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.

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).