

Revitalization of Main Line South Project

Report Date: March 2000
Field Survey: February 2000

1 Project Summary and Japan's ODA Loan

This project aims to improve the safety, speed and punctuality of operations on the Philippine National Railways Main Line South (443km between San Pedro and Lagaspi) which has many deteriorating facilities. These improvements are to be made by rehabilitating tracks and bridges, procuring rolling stocks and taking other measures.

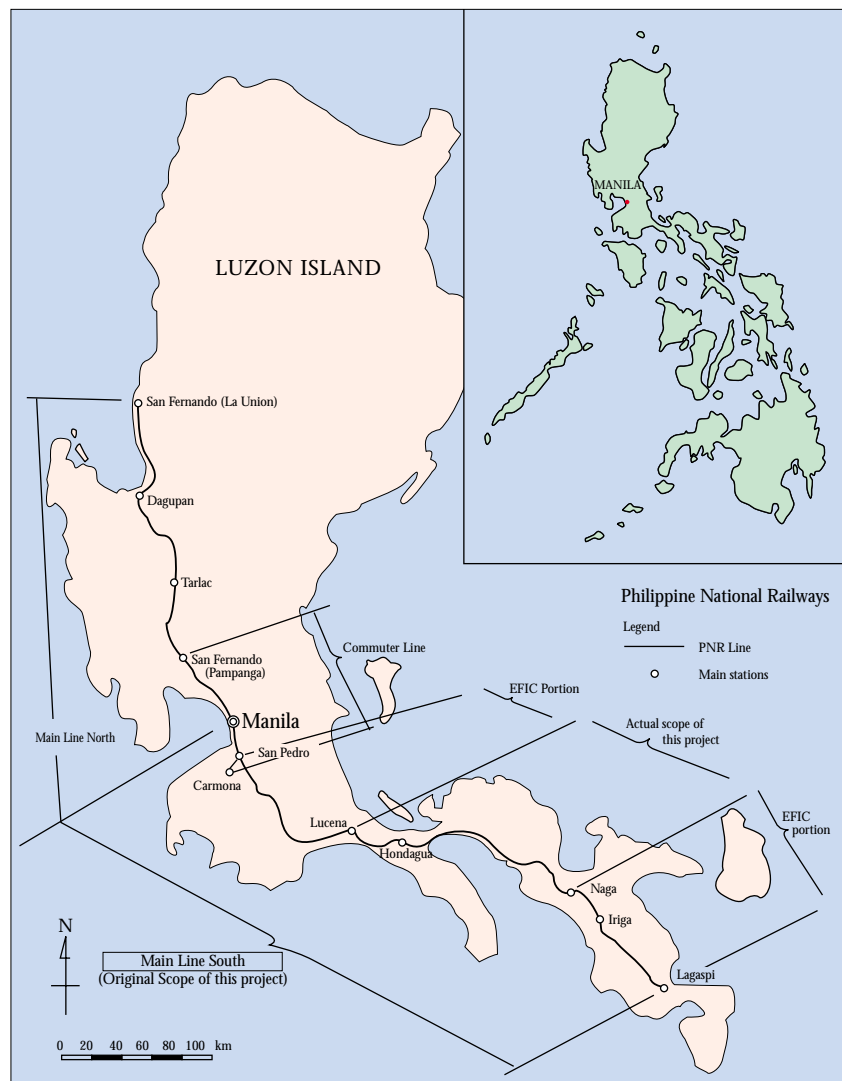
The ODA loan covers the entire foreign currency portion and a part of the local currency portion.

2 Analysis and Evaluation

(1) Project Scope

The bidding amounts for this project far exceeded the estimates at the time of the appraisal, and consequently the project scope had to be altered (scaled back). The target track section from San Pedro to Legaspi (443km) was reduced to the section between Lucena and Naga (245km). Plans for signal devices, station repairs, and fences to prevent trespassers along the tracks had to be eliminated. New diesel-electric locomotives were procured as planned, but plans to rehabilitate rolling stocks had to be scaled back. In order to scale back the plan, target tracks, facilities and coaches were reexamined and priority was given to those with the greatest urgency. The scaling back of the project had to be undertaken as the bidding amounts exceeded earlier estimates.

The section of the track eliminated from this project (between San Pedro and Lucena and between Naga and Legaspi) was completed separately in July of 1998 with financing provided by EFIC



Borrower	Republic of the Philippines
Executing Agency	Philippine National Railways (PNR)
Loan Amount	¥5,054 million
Loan Disbursed Amount	¥5,037 million
Date of Exchange of Notes	November 1988
Date of Loan Agreement	May 1989
Final Disbursement Date	September 1996

(Australia's Export Finance and Insurance Corporation).

(2) Implementation Schedule

This project (after reducing the scope) was completed in March of 1996, roughly one year later than the originally planned completion date of March 1995. This extension was needed to repair damage caused by a typhoon that struck soon after the project was completed.

(3) Project Cost

As mentioned above, the bidding price for this project far exceeded the estimates at the time of the appraisal. This was derived from several unforeseen circumstances such as a sudden sharp increase in the cost of construction materials derived from inflation and the outbreak of the Gulf War. The bid price included many additional expenses that reflected the political instability at the time. Such expenses included those to cover security measures and the risks of a sudden devaluation of the peso.

Comparison of Original Plan and Actual

Item	Plan	Actual
1. Project Scope		
i) Rehabilitation of tracks		
Extension of tracks	San Pedro ~ Legaspi (443km)	Lucena ~ Naga (245km)
Installation of ties	250,000 ties	157,000 ties
ii) Rehabilitation of bridges	10 bridges	7 bridges
iii) Procurement of diesel-electric locomotives	6 locomotives	Same as left
iv) Rehabilitation of passenger coaches	67 coaches	16 coaches (additional 20 coaches through self financing)
v) Rehabilitation of diesel-electric locomotives	5 locomotives	(Not implemented)
vi) Improvement of signal facilities	14 sets of tokenless system etc.	(Not implemented)
vii) Improvement of communication facilities	7 sets of VHF system etc.	15 sets of VHF system 4 sets of SSB transceivers
viii) Workover of station buildings	Cable circuit 378km 28 stations	(Not implemented)
ix) Installation of fences to prevent trespassing on the tracks	San Lazaro ~ Mesa (3.5km)	(Not implemented)
x) Consulting Services	338 M/M	313 M/M
2. Implementation Schedule		
Start of project to completion of project (Civil works)	February 1992 to March 1995	February 1992 to March 1996 (12-month delay including disaster relief construction)
3. Project Cost		
Total project cost	¥6,317 million	¥6,150 million
ODA loan portion	¥5,054 million	¥5,037 million
Exchange Rate	1 peso = ¥6.3 (October 1998)	1 peso = ¥4.9 (average rate at the time of loan disbursement)

(4) Project Implementation Scheme

The Philippine National Railway (PNR) was the executing agency for this project. The implementation method was on a contract basis by contractors and external consultants carried out detailed designing, bidding support, construction supervision and maintenance guidance. The executing agency can be praised for taking appropriate steps to deal with the fact that the bid price exceeded the earlier estimates. Furthermore, during the implementation stage there were no reports of problems with the performance of the contractors and consultants.

(5) Operations and Maintenance

After the completion of the project, operations and maintenance were conducted by PNR's Train Operations Department, Rolling Stock Maintenance Department, and Engineering Department. PNR has not been able to secure an adequate budget for maintaining and repairing their trains. Therefore, there has been a low rate of operation for the rolling stocks in their possession, and even though this project helped to improve the conditions of the tracks, there was no increase in the number of trains operated.

(6) Project Effects and Impacts

(i) Quantitative Effects

(a) Shorter Travelling Times

The travelling time between Manila and Naga was 15 hours before the project, but only 11 hours after completion of the project. This is seen as an effect of the track improvements made by this project.

(b) Increased Number of Trains and Passengers

The original plans called for increasing the number of roundtrip trains each day from two to five, and increasing the annual number of passengers from 1 million to 2.5 million. However, the number of roundtrip trains remained unchanged, and the number of annual passengers reached only 540,000.

(c) Reduction in Derailments

There was a decrease in the number of derailments after track restoration was completed. There were 44 derailments between Lucena and Naga in 1990, but only six in 1997 after restoration was completed.

(d) Financial Internal Rate of Return (FIRR)

At the time of appraisal it was estimated that this project would produce FIRR of 7.9% due to better passenger earnings. However, the South Line has been recording losses each year up until now, and therefore calculation of FIRR has been postponed at the present time.

(ii) Qualitative Effects

Safety has been improved due to the reduction in derailments as mentioned above. In terms of improvements to service, the trains now operate with greater regularity, and vibrations on the trains have been reduced to provide more pleasant rides.



Railway Track(1993) before the Project :
Implementation with Superannuated
Ties and Bent Rails



The Rehabilitated Track after this Project



Rehabilitation Works on a Passenger Coach