

## 短摘要

### 一、農路概況

本計畫執行的對象為台中市、台中縣以及苗栗縣境內由水土保持局歷年輔建目前已編號農路為調查對象，共計調查686條農路，其中台中市25條、台中縣250條以及苗栗縣411條，農路總長度約873.5公里。

### 二、農路綜合問題分析

農路調查項目及內容包括相關之工程設施，並記錄農路有明顯損壞或有影響人車安全及暢通之虞的路段；經調查並彙整相關資料後得知，計畫區內之農路損壞類型大致上分為：邊坡坡面問題、路基流失、路面問題以及排水不良等四類型。

### 三、農路整體規劃治理對策

以計畫區單一農路為計算單元，就調查成果，針對不同破壞類型，分析其致災原因並進行整體規劃與配置建議，以利後續比對或編列計畫使用。

### 四、治理工程實施計畫與經費需求

針對計畫區內農路調查結果加以規劃相關治理工程，並依據農路損壞嚴重程度及其維持暢通之重要性，進行工程改善之排序，將農路改善概分為立即改善、優先改善、一般改善3等級，再根據規劃配置之治理工程內容加以估算其相關治理經費；其中，立即改善有12處、優先改善有32處以及一般改善有265處，共計有309處；經費方面，立即改善為47,272仟元、優先改善為112,282仟元以及一般改善為148,807仟元。

### 五、預期效益評估

本計畫將農路改善後所得之經濟效益擬分：產業效益、交通效益、防災效益等三個面向評估。

其中，產業效益又分農作物產值、居民經濟收益、居民生命財產；交通效益含作物運輸費用、連接重要道路、居民聯外道路；防災效益則有災前施工道路、災時緊急道路、災後替代道路等評估項目；本計畫益本比經分析約為 1.24。

## Abstract

### 1. The state of access road

This plan included Taichung city, Taichung county and Miaoli county. The total number of investigated access road were 686. Taichung city had 250. Taichug county were 250 and Miaoli county were 411.

### 2. The analysis of the access road's problem

The access road investigate included engineer construction and the disaster plac. Based on the investigate result, the damage classes could divide into four parts : slope problem, foundation lose, surface problem and bad drainage.

### 3. The design treatments of the access road

Based on the investigate result, took the each access road of this plan as an accounted unit. According to the different damage classes, analyzed the reason and design the treatments.

### 4. Construction Planning, Cost Estimate

The construction planning were based on the investigated result. According to importance of the damage level and keep smoothly, this plan sorted priority of the access road. Dividing into three parts : immediately treatment, prior treatment and normal treatment. Based on the construction planning to estimate the cost. The immediately treatments were 12 places and cost 47,272 thousand NT dollars. The prior treatments were 32 places and cost 112,282 thousand NT dollars. The normal treatments were 265 places and cost 148,807 thousand NT dollars.

### 5. Prospective Benefit

This plan divided the prospective benefit into three parts : Property benefit, Traffic benefit and Disaster prevention benefit.

Property benefit included crop products value, economic benefit, life benefit. Traffic benefit included products transportation fee, connected to major road, contacted road. Disaster prevention benefit included the constructed road before disaster, emergency road in disaster, displaced road after disaster...etc. Benefit and cost ratio is 1.28