



水土保持計畫審核與監督管理及教育訓練

成果報告書

ARDSWC-113-135

水土保持計畫審核與監督管理及教育訓練 成果報告書

農業部農村發展及水土保持署
與您一起打拼



113
年度
農業部農村發展及
水土保持署



農業部農村發展及水土保持署
54044南投市中興新村光華路6號
<https://www.ardswc.gov.tw>

農業部農村發展及水土保持署 編印
中華民國113年12月09日

水土保持計畫審核與監督管理及教育訓練
Soil and Water Conservation Plan
Censoring and Supervising Management with
Educational Training
成果報告書

執行單位：社團法人臺灣省水土保持技師公會

執行期間：113 年 01 月 17 日至 113 年 12 月 10 日

計畫主持人：李國正 理事長／水土保持技師

協同主持人：劉衍志 水土保持／大地工程技師

農村發展及水土保持署 編印

中華民國 113 年 12 月

（本報告書內容及建議純屬執行單位意見，僅供農村水保署施政參考）

水土保持計畫審核與監督管理及教育訓練 成果報告書

摘要

第一節 計畫緣起

山坡地開發利用行為依水土保持法規定應提送水土保持計畫，經主管機關審核後實施，達到減少災害、保育水土資源、促進土地合理利用之目的；為瞭解委託中央各目的事業主管機關執行水土保持計畫審核及監督管理情形，擇定案件邀請專家學者前往現場輔導執行成效，以完善全生命週期管理，達到落實水土保持法相關規定、永續水土保持管理及強化山坡地安全防護工作。

本計畫由農村發展及水土保持署（以下簡稱主辦機關）主辦，由社團法人臺灣省水土保持技師公會（以下簡稱執行團隊）承攬，針對山坡地開發水土保持管理法令、實務經驗交流座談會，以提升水土保持相關從業人員之法規素養及增加實務經驗交流分享，精進水土保持處理與維護監督管理能力。

依據「採購說明書」與「契約」所述，各項工作分為「審查／檢查作業」、「座談會」及「配合作業」等 3 個工作群，並就各階層工作項目予以編號以利指示，做為後續工作分配及搭配協調時的依據。

第二節 計畫項目與內容

依據招標文件所載，本計畫之項目與內容列示如下：

- 一、訪查中央機關及農村水保署各分署執行水土保持計畫，以及簡易水土保持申報書審核或監督管理情形總計 14 場次（項次 1）
- 二、執行完工永久水土保持設施資料蒐集及實地檢查 15 件（項次 2）

摘要

- 三、辦理山坡地開發水土保持管理法令、實務經驗交流座談會 5 場
(項次 3)
- 四、執行農村水保署水土保持計畫開工案件之施工及完工檢查與相關
會勘 (項次 4)
- 五、執行農村水保署水土保持計畫審核案件之委員審核 (項次 5)
- 六、彙整分析過往訪查案件、施工檢查及完工永久水土保持設施檢查等
教材 (項次 6)
- 七、衛星變異點查證 200 點位 (項次 7)
- 八、水土保持計畫審核及施工監督管理行政作業服務 (項次 8)
- 九、辦理工作執行計畫、期中、期末報告各 10 份；各期審查會議、工作
會議之誤餐費、雜支等費用，均由本案編列之預算經費內進行核銷
(項次 9)
- 十、配合與說明事項 (項次 10)

第三節 工作期限

本計畫工作期限自民國 113 年 01 月 17 日起至民國 113 年 12 月 10 日前完成。

第四節 本年度已完成工作項目

一、本案截至成果報告書提送，已完成工作項目，如下說明：

- (一)項次 1：輔導水土保持計畫（含簡易水土保持申報書）審核監督
管理，合約數量 14 件，本年度已完成合約數量 14 件。
- (二)項次 2：執行完工永久水土保持設施資料蒐集及實地檢查，本年
度已完成合約數量 15 件。

- (三)項次 3：辦理山坡地開發水土保持管理法令、實務經驗交流座談會，合約數量 5 場次，本年度已完成合約數量 5 場次，總出席人數為 296 位。
- (四)項次 4：執行農村水保署水土保持計畫開工案件之施工及完工檢查與相關會勘，本年度已完成 275 案次
- (五)項次 5：執行農村水保署水土保持計畫審核案件之委員審核，本年度已完成 77 案件，審查委員（僅估算外聘委員）出席 220 位。
- (六)項次 6：執行彙整分析過往訪查案件、施工檢查及完工永久水土保持設施檢查等教材。
113 年度「水土保持計畫監督管理常見問題」另冊
- (七)項次 7：辦理衛星變異點查證 200 點位，已派任數達 201 件，本年度已完成 201 件。
- (八)項次 8：協助農村水保署辦理水土保持計畫審核及施工監督管理相關行政作業，至本計畫結案，派駐人員配合作業。
- (九)項次 9：辦理工作執行計畫、期中、期末報告，如下：
- 1.期初工作執行計畫書，於 113 年 3 月 19 日進度期初報告審查，113 年 3 月 22 日監字第 1132665921 號，決議審查通過。
 - 2.期中報告：113 年 8 月 16 日農保管字第 1132670239 號，決議審查通過。
 - 3.期末報告：113 年 12 月 5 日農保管字第 1132671509 號，決議審查通過。
 - 4.執行團隊於期末簡報後提出成果報告書初稿及相關資料：113 年 12 月 9 日農保管字第 1132619574 號，審查原則同意。

摘要

5.正式成果報告書及相關資料，辦理正式驗收：收到成果報告書初稿之次日起 5 日內（不含例假日）完成，已於 113 年 12 月 10 日提送。

(十)項次 10：執行其他注意事項、配合與說明事項，如下：

- 1.113 年 01 月 22 日出席第 1 次工作會議。
- 2.113 年 08 月 01 日出席第 2 次工作會議。
- 3.113 年 09 月 20 日出席第 3 次工作會議。
- 4.113 年 10 月 17 日辦理契約變更議定會議。
- 5.113 年 12 月 02 日出席第 4 次工作會議。

第五節 結論與建議

一、各項工作執行情形：

- (一)項次 1：輔導水土保持計畫（含簡易水土保持申報書）審核監督管理，合約數量 14 件，截至 8 月 31 日，已完成合約數量 14 件。
- (二)項次 2：執行完工永久水土保持設施資料蒐集及實地檢查，已完成合約數量 15 件。
- (三)項次 3：辦理山坡地開發水土保持管理法令、實務經驗交流座談會，合約數量 5 場次，截至 8 月 31 日，已完成合約數量 5 場次。
- (四)項次 4：執行本署水土保持計畫開工案件之施工及完工檢查與相關會勘，截至 11 月，已辦理 275 場，已完成合約要求數量。
- (五)項次 5：執行本署水土保持計畫審核案件之委員審核，截至 11 月，已辦理 77 案件，審查委員（僅估算外聘委員）出席 220 人次，已完成合約要求數量。
- (六)項次 6：執行彙整分析過往訪查案件、施工檢查及完工永久水土保持設施檢查等教材，已完成合約要求工作。

(七)項次 7：辦理衛星變異點查證 200 點位，已派任數達 201 件，回報成果 201 件。

(八)項次 8：協助本署辦理水土保持計畫審核及施工監督管理相關行政作業，派駐人員持續配合作業。

(九)項次 9：辦理工作執行計畫、期中報告、期末報告及成果報告的提送。

二、建議事項

(一)訪查（項次 1）之委員意見，以及完工後檢查（項次 2）之結果，建議以教材或設計指引的方式回饋至設計端與審查端。

(二)訪開工案件之施工及完工檢查（項次 4），其結果歸納至教材（項次 6），建議與前項結合，並結合教育訓練。

(三)訪辦理衛星變異點查證，建議歸納成查證參考教材，並提供地方政府參考

(四)訪座談會部分除國防部專場，建議交通部亦開設專場。

第六節 績效評核

本計畫經彙整後，各項工作分為「審查／檢查作業」、「座談會」及「配合作業」等 3 個工作群，分述如下：

一、「審查／檢查作業」工作群

本工作群包含項次 1、項次 2、項次 4、項次 5、項次 6 及項次 7，其中項次 2 為執行團隊推薦技師完成完工永久水土保持設施資料蒐集及實地檢查 15 件、項次 6 為彙整分析過往訪查案件、施工檢查及完工永久水土保持設施檢查等教材，以及項次 7 為執行團隊接受指派進行變異點查證作業，其餘如項次 1、項次 4、項次 5 皆為配合審查或檢查案件進行聯繫、接駁、行政、文書等作業，兩類作業皆留存相當大量的記錄

摘要

與照片，最後藉由項次 6，將典型的缺失或問題化整成為教材，為本計畫相當重要的衍生成果。在考量工程全生命週期下，該教材除逐年搜集案例照片，更可朝生命週期的前緣，即調查、規劃、設計、審查，以及生命週期的後續，即管理維護、土地恢復原使用或重新立案。今年度的教材是一個好的開端，一個能夠凝聚眾人智慧並可廣為傳播的開端，希望能為工程全生命週期中，水土保持工程的各階段起到「正規化」的作用。

二、「座談會」工作群

本工作群以辦理座談會為主要任務，積極瞭解主辦單位在本項工作的想法與需求，包含交通便利性、場地氛圍、飲食規格、直播條件等，在參與人數上亦盡量在會議空間容許情況下，增加報名名額，每場參加人數需達 50 人以上，總人數需達 250 人次（以每日總簽到計算人次），俾使座談會效益擴大化。直播作業亦擴大座談會參與觸角，使無法出席與會者能夠遠端獲得最新資訊。在講座方面，在國防部專場、北中南東 5 個場次中，本署支援計 10 堂次的講座，以及執行團隊支援 4 位理事長級及 1 位資深講座，使整個座談會的總體滿意度達 94% 以上，實屬工作團隊相互融恰配合之作。

三、「配合作業」工作群

本計畫在執行過程中，主辦單位因本案提出的相關需求，皆由主辦單位與執行團隊駐點人員積極且直接聯繫溝通，在上述 2 個工作群中，駐點人員亦在接收資訊、初步規劃、人員聯繫、行政作業、文書處理等方面發揮極大助力，使得執行團隊在執行過程相當順暢。而執行團隊亦盡力滿足主辦單位各式需求與建議，俾使本計畫得以順利且圓滿進行。

近年來山坡地之各項開發案，因著都市發展、公共建設等因素，有逐年增多的趨勢。農業部農村發展及水土保持署(以下簡稱農村水保署)做為水土保持計畫之主管機關，長年針對公共工程水土保持計畫與簡易水土保持申報書，進行訪查、施工中監督檢查、完工檢查等工作，希冀藉此提升水土保持工程在監造、施工之品質，同時降低施工前、中、後相關單位可能缺失乃至於誤涉違規情事的可能。特別是在有限的水保程序與設施項目下，以及多年來累積的檢查經驗與共識。

為使水土保持計畫義務人、監造單位及施工單位，在施工及完工維護等階段掌握可能發生的狀況，特製作本教材。

本教材分析過往訪查、施工檢查及完工永久水土保持設施檢查，從法規、程序、檢查、施工等方面，整合相關缺失及照片供參，冀以提升工程品質。

關鍵詞：水土保持計畫、審核與監督管理、座談會、檢查、教材

Abstract

Chapter 1: Project Origin

The development and utilization of hillside land should submit soil and water conservation plans as stipulated by law. These plans are reviewed by the competent authority to achieve the goals of reducing disasters, conserving soil and water resources, and promoting rational land use. To understand the review and supervision of soil and water conservation plans executed by various central government departments, experts were invited to assist on-site. This aimed to perfect life cycle management and ensure the implementation of related laws and the sustainability and safety of hillside protection.

A symposium on hillside land development management laws and practical experience sharing is organized to enhance the legal literacy of practitioners and increase the exchange of practical experiences, improving management capabilities in soil conservation.

According to the "Procurement Description" and "Contract," the work is divided into three main clusters: "Review/Inspection," "Symposium," and "Coordination," with each task item numbered for easy reference during work allocation and coordination.

Chapter 2: Project Items and Content

According to the tender documents, the items and content of this project are listed as follows:

- Visit and review 14 cases of soil conservation plans executed by central agencies and the Soil and Water Conservation Bureau's branches (Item 1)
- Collect data and inspect 15 completed permanent soil conservation facilities (Item 2)
- Organize 5 symposiums on hillside land development management laws and practical experience sharing (Item 3)

Abstract

- Inspect and coordinate construction and completion of soil conservation plans by the Soil and Water Conservation Bureau (Item 4)
- Review 77 cases of soil conservation plans by committee members (Item 5)
- Compile and analyze past inspection cases, construction inspections, and permanent soil conservation facility inspections (Item 6)
- Verify 200 satellite anomaly points (Item 7)
- Provide administrative services for soil conservation plan review and supervision (Item 8)
- Complete 10 work plans, mid-term, and final reports, and cover meeting expenses (Item 9)
- Coordinate and explain other matters (Item 10)

Chapter 3: Work Duration

The project duration is from January 17, 2024, to December 10, 2024.

Chapter 4: Completed Work Items

As of the submission of the final report, the completed work items are as follows:

- Item 1: Assisted in reviewing 14 soil conservation plans and simple soil conservation declarations.
- Item 2: Collected data and inspected 15 completed permanent soil conservation facilities.
- Item 3: Organized 5 symposiums with a total of 296 participants.
- Item 4: Conducted 275 inspections of construction and completion of soil conservation plans by the Soil and Water Conservation Bureau.
- Item 5: Conducted 77 reviews with 220 external committee members participating.
- Item 6: Compiled and analyzed materials from past inspections and construction checks.
- Item 7: Verified 200 satellite anomaly points, completing 201 verifications.
- Item 8: Assisted in administrative tasks for soil conservation plan review and supervision.

- Item 9: Submitted initial, mid-term, and final reports, and conducted performance assessments.
- Item 10: Coordinated and explained other matters as needed.

Chapter 5: Conclusions and Recommendations

1. Execution of Various Work Items

- Item 1: Assisted in reviewing 14 soil conservation plans and simple soil conservation declarations.
- Item 2: Collected data and inspected 15 completed permanent soil conservation facilities.
- Item 3: Organized 5 symposiums by August 31, 2024.
- Item 4: Conducted 275 inspections by November 2024.
- Item 5: Conducted 77 reviews with 220 external committee members participating by November 2024.
- Item 6: Compiled and analyzed materials from past inspections and construction checks.
- Item 7: Verified 200 satellite anomaly points, completing 201 verifications.
- Item 8: Assisted in administrative tasks for soil conservation plan review and supervision.
- Item 9: Submitted initial, mid-term, and final reports, and conducted performance assessments.

2. Recommendations

- Incorporate feedback from reviewers and inspection results into design guidelines and educational materials.
- Combine inspection results into educational materials and training sessions.
- Summarize satellite anomaly verification results into reference materials for local governments.
- Organize special symposiums for the Ministry of Transportation and Ministry of National Defense.

Chapter 6: Performance Appraisal

After consolidating this project, various tasks were divided into three groups: "Review/Inspection Operations," "Seminars," and "Coordination Tasks," as described below:

1. "Review/Inspection Operations" Group

This group includes Items 1, 2, 4, 5, 6, and 7. Among them, Item 2 involves the recommended technicians by the execution team to complete the collection of data and on-site inspections of 15 permanent soil and water conservation facilities. Item 6 involves compiling and analyzing past inspection cases, construction inspections, and permanent soil and water conservation facility inspection materials. Item 7 involves the execution team being assigned to verify variations. Other tasks, such as Items 1, 4, and 5, all involve coordinating review or inspection cases, including liaison, transportation, administration, and documentation work. These operations leave a substantial amount of records and photos. Finally, through Item 6, typical deficiencies or issues are compiled into teaching materials, which are a significant derivative outcome of this project. Considering the entire lifecycle of engineering, these materials not only collect case photos yearly but also look towards the front end of the lifecycle, such as investigation, planning, design, and review, as well as the subsequent stages, including management, maintenance, land restoration, or re-filing. This year's materials are a good start, one that can gather collective wisdom and be widely disseminated, aiming to "standardize" the various stages of soil and water conservation engineering throughout the engineering lifecycle.

2. "Seminars" Group

The main task of this group is to organize seminars, actively understanding the host's ideas and needs regarding this work, including transportation convenience, venue atmosphere, food specifications, live streaming conditions, etc. The number of participants is also maximized within the permissible range

of the conference space, with each session requiring at least 50 participants, and a total of 250 participants (calculated by the total number of daily sign-ins), to maximize the effectiveness of the seminars. The live streaming also expands the reach of the seminars, allowing those who cannot attend to remotely access the latest information. Regarding the lectures, in the special sessions for the Ministry of National Defense and five sessions in the North, Central, South, and East regions, the agency supported 10 lectures, and the execution team supported 4 chairperson-level lecturers and 1 senior lecturer, making the overall satisfaction rate of the seminars exceed 94%, which is a result of the harmonious cooperation among the work teams.

3. "Coordination Tasks" Group

During the execution of this project, all related requests raised by the host were actively and directly communicated by the stationed personnel of the host and the execution team. In the aforementioned two work groups, the stationed personnel also played a significant role in receiving information, preliminary planning, personnel liaison, administrative operations, and document processing, ensuring a smooth execution process for the team. The execution team also endeavored to meet the host's various needs and suggestions, ensuring the project proceeded smoothly and successfully.

In recent years, various development projects on hillside land have been increasing due to urban development, public construction, and other factors. The Department of Rural Development and Soil and Water Conservation of the Ministry of Agriculture (hereinafter referred to as the Soil and Water Conservation Bureau) is the competent authority for soil and water conservation plans. For many years, it has been conducting inspections, construction supervision, and completion inspections for public works soil and water conservation plans and simplified soil and water conservation declaration forms, hoping to improve the quality of soil and water conservation projects in

Abstract

supervision and construction, while also reducing the possibility of related units making mistakes or violating regulations before, during, and after construction, especially given the limited soil conservation procedures and facility items and the accumulated inspection experience and consensus over the years.

To help soil and water conservation plan obligors, supervision units, and construction units grasp the possible situations during construction and maintenance stages, this teaching material is specially produced.

This teaching material analyzes past inspections, construction inspections, and completion inspections of permanent soil and water conservation facilities, integrating related deficiencies and photos from regulations, procedures, inspections, and construction aspects to improve engineering quality.

Keywords: Soil and Water Conservation Plan, Audit and Supervision Management, Symposium, Inspection, Teaching Material

