LINE 行動化推播服務應用於農業防災

Application of LINE Mobile Notification Service in Agricultural Disaster Prevention

國家災害防救科技中心

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摘　要

因應資通訊應用技術進步，行動通訊軟體提供即時性的資訊傳遞能力，臺灣行動通訊使用已為常態，許多政府部門亦透過 LINE 推播即時相關的資訊。故國家災害防救科技中心(以下簡稱：災防科技中心)於 108 年度起與行政院農業委員會農業試驗所合作(以下簡稱：農試所)，利用 LINE 通訊軟體建立官方帳號與 API 擴充等功能，開發農業行動化災害示警資訊推播工具「農災 LINE」，包括農作物專區氣象臨界訊息推播、農作物防減災圖卡，以及各項常見災害類型之作物災害預警，作為農民於災時應變之防範工具。

「農災 LINE」提供作物即時示警、作物氣象監測、歷史颱風查詢、農業情資彙整等災前、災中災害作物預警的服務，其中即時示警功能主要介接農試所農作物專區燈號 API、政府 Open API 及 CAP 示警訊息。以簡單操作的介面，分為「農業防災資訊儀表板」、「訂閱作物示警」、「災防快訊」三大功能，透過作物訂閱功能，當作物達致災門檻時使用者可接收到作物的預警訊息，傳送符合使用者關注的訊息。藉由整合多元化農業應變資訊，提供快速分享之管道，提升農業災害即時預警與防範作為之情資推播蒐整工具。

關鍵詞：行動化推播，作物即時示警，農災 LINE

Abstract

With the rapid advancement of information communication application technology, mobile communication software can offer real-time information transmission to a large-scale audience. Government agencies also utilize LINE software to deliver real-time information. In response to this technological trend, the National Science and Technology Center for Disaster Reduction (later referred to as" NCDR") partnered with the Taiwan Agricultural Research Institute Council of Agriculture of the Executive Yuan (later referred to as" TARI") in 2019. The two teams collaborated to develop the "Agricultural Disaster LINE" tool by creating an official account on LINE software and adding API data transfer function. This tool acts as a mobile disaster alert system to better assist farmers in responding to incoming disasters. It can deliver notifications such as critical weather

information in crop areas, crop disaster prevention charts, and warnings on common disasters.

"Agricultural Disaster LINE" also provides additional pre- and post-disaster services such as real-time crop warnings, weather monitoring, historical typhoon search queries, and agricultural information collection. The real-time crop warning notification, in particular, is synced with CAP warning and the interfaces of TARI using API. This allows rapidly presenting complex information in LINE through a simple application interface with three primary function tabs: "Agricultural Disaster Prevention Information Dashboard," "Subscribe to Crop Alert," and "Disaster Prevention Alert." After signing up for the crop subscription, the user will receive warning notifications when a crop reaches a disaster threshold. By integrating agricultural information, our LINE application provides a channel for quick information sharing. It further enhances the information delivery on real-time early warning to prevent agricultural disasters effectively.