

## Executive Summary

## Overview of pesticide management, trade and use in Lam Dong Province, Vietnam

**Report commissioned by:** IDH, The Sustainable Trade Initiative

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## **Executive summary – Agrochemical use in Lam Dong province**

This report provides an overview of pesticide management, trade and use in Lam Dong Province. It was developed by Fresh Studio to provide information to the Initiative for Sustainable Landscapes (ISLA) - an initiative by IDH, The Sustainable Trade Initiative Through ISLA, IDH convenes coalitions of public & private stakeholders to jointly formulate and invest in sustainable land and water management in a specific landscape. This report is the final outcome of the first phase of a two-phase research intended to support the development of a management system for agrochemical use and trade in Lam Dong province of Vietnam.

The objective of this report is to provide insight into the key sustainability issues related to the use of agrochemicals in Lam Dong province. It provides information on

- Agrochemical use and how it affects food safety, trade, the environment and health and safety of workers, smallholder farmers, and communities
- Risks to responsible use of agrochemicals
- The current agrochemical management system, including distribution, storage, and disposal
- Local, national, and international stakeholders, including farmers, companies, government bodies, and NGOs

Rapid Diagnostic Appraisal (RDA) was used to conduct the research. In a first stage, key informants were identified and contacted by phone. Additional stakeholders were identified during these interviews through a snowballing process. In total, 35 in-depth interviews were held with representatives from government, the private sector, and NGOs. In addition, four focus group discussions were organized with a total of 28 vegetable, flower, tea, and coffee farmers. Outcomes from these interviews were complemented with a desk study of scientific literature, reports, publicly accessible trade data, and government regulations.

Desk research showed that Vietnam has only very limited pesticide production capacity, consequently almost all pesticides are imported. Data provide a clear image of the pattern of pesticide trade in Vietnam. Official trade statistics show a dramatic increase in pesticide imports, from 26,231 tons (150 million USD) in 2001 to 82,399 tons (665 million USD) in 2011, the last year for which direct import data are available - an increase of 214% in 10 years. More than half these imports come from China. At the province level, no detailed data are publicly available.

All official imports need to be registered with the Ministry of Agriculture and Rural Development (MARD) which uses the World Health Organization (WHO) classification to

record their toxicity. At the end of 2015, MARD registers contained around 5,800 pesticide tradenames. Of these, around 750 are considered extremely hazardous, over 3,000 moderately hazardous, 800 slightly hazardous, and 1,200 are of unknown toxicity. Volumes traded in each of the WHO categories is unknown, although these data might be inferred from the sales tax data collected by the tax department.

Pesticides enter Lam Dong province through traders. The province does not contain any registered pesticide production facilities. A total of 146 companies import or produce pesticides that are traded in Lam Dong province. An additional 30 wholesalers and 763 retail shops are responsible for local distribution to the end-user: farmers. Although there are only 817 farms in the province meeting the statistical office's official definition – which sets standards on minimum size – the province is estimated to contain more than 250,000 small-scale household farmers, cultivating 354,120 hectares of land. Of this, 57,268 hectares are used for vegetables, 7,763 for flowers, 21,354 for tea, and 158,944 for coffee.

Although Vietnamese consumers rate food safety as one of their primary concerns, this is not reflected in the product offering in supermarkets and restaurants. Even wholesalers and retailers who require certain production standards often do not have an adequate quality assurance system in place to make sure these standards are met.

Part of the lack of downstream requirements may be explained by the way food safety is regulated. While in many countries food safety enforcement is the responsibility of a single government agency related to the department of public health, in Vietnam this responsibility is split between the Ministry of Health, the Ministry of Agriculture and Rural Development, and the Ministry of Industry and Trade. Although a special task force has been created, its responsibility and executive authority are unclear.

Pesticide monitoring is also the responsibility of MARD. It contains two main components: registration and inpection. Registration is required for pesticide companies, active ingredients (AIs), and tradenames. Conditional on succesful registration, companies are also required to meet certain labelling requirements for each pesticide they sell.

Inspections take place at three levels: company, import, and trader level. Inspections of companies and imports is the responsibility of the Plant Protection Department reporting to MARD (MARD-PPD). Import inspections check whether the products meet legal standards on ingredient content and quality. Trader inspections are the responsibility of province-level PPDs. Regular inspections are pre-announced and can take from 30 minutes to a whole day. For extreme inconformities, a specialized task force is available.

The research also highlighted several issues in pesticide trade and use which an improved pesticide monitoring system may be able to help resolve. First, there are several products

on the MARD list of allowed pesticide with a high potential negative impact on health and environment. Although it may not be feasible to withdraw the registration for these products, care could be taken to prevent such high-impact products from receiving registration in the future.

Second, there are a large number of tradenames on the market. Either the exact same product is traded under different names or the ingredient composition is changed very slightly. This creates a confusing situation for farmers, since an identical product might be presented to them as something completely new. Consequently, farmers may unwittingly be contributing to building pesticide resistance. Allowing the same ingredient mix to be traded under a single tradename and requiring a minimum amount of differentiation in ingredients between products could help prevent this situation.

Third, the registration process requires companies to specify for which crops the pesticide can be used. The initial registration and first crop costs around 200 million VND and each additional crop another 60 million VND. These additional costs encourage companies to register products for as few crops as possible leading to situation in which there are many pesticides available for nationally important crops like rice, but few for smaller crops like chinese cabbage. When a pesticide is not registered for a certain crop, farmers are not allowed to use it even if the pesticide is perfectly safe to use and registered as such in other countries.

Finally, there are a large number of generic, counterfeit, and even illegal products offered for sale. Generics may be legal to use, but their generally low effectiveness leads to high dosage and thus high health and environmental impact. Counterfeit and illegal products should receive more attention in trader inspections. Unfortunately, the Lam Dong PPD appears to have insufficient resources to carry out the detailed inspections that would be required. Perhaps changing to a system of less but more intense inspections combined with higher punishment for non-conformities could help reduce the problem.

This report also considered farm-level factors affecting the health and environmental impact of pesticide use. Health and environmental risks were found to occur at four levels: application, post-harvest, storage and disposal. Although several production standards and certifications exist that attempt to address this gap, these appear to be insufficiently supported by quality assurance systems and regular inspections. Further research at farm level will provide more detailed information on these factors.