



Adding value to the IPM Coalition Database:

Development of the  
**“Which Pesticide?” - App**  
to support reduction of  
pesticide use and risks



## **Our aim is**

to harness technology to reduce environmental impacts from pest control by improving access to toxicity information, standards' restriction status and available registered alternatives of harmful pesticides to enable pest control with less negative environmental impact by technical decision-makers of farms, fields and forests.

## **Which Pesticide? App**

In partnership with the IPM coalition, SAN will coordinate the development of a mobile application that builds on the pesticides database of the Integrated Pest Management -IPM- Coalition.

Information will be available online and offline, in English, Spanish and Portuguese. This will include information about less-toxic pesticide alternatives registered in Brazil, Colombia, India, Mexico and South Africa.

# Why this project?

**Common use of highly hazardous pesticides (HHPs) in the field**

**Pesticide users lack information on pesticides' toxicity and less toxic alternatives**

Because the use of highly hazardous pesticides (HHPs) is common and pests affecting crops, grasses and trees are rarely controlled with the least toxic chemical options based on integrated pest management planning.



**"Which Pesticide?" - App**

Because pesticide users - usually living or working in rural areas with no internet access - are hardly informed about pesticides' toxicity from independent sources in a comprehensive way. Usually, they are not aware of less toxic pest control alternatives.

# Key facts



## About 2 million tons of pesticides

are consumed worldwide per year.

## About 1.8 billion people

engage in agriculture and most use pesticides to protect the food and commercial products that they produce. There is a high pesticide use on crops grown for export.

## \$250.5 billion by 2020

is the projected value for the agrochemicals market. In 2014 the market value was \$207.4 billion.

## Use of pesticides has risen

in developing countries and the fastest growing markets in Africa, Asia, South and Central America, and Eastern Mediterranean.



## Risks

## Around 25 million agricultural workers worldwide

experience unintentional pesticide poisonings each year.

## Developing countries experience 99% of the deaths caused by pesticides

even though they use only 25% of the pesticides in the world.

# Innovation to drive action

The project innovates in the way that it compiles and adds value to data. Information on pesticides is based on data compiled from government authorities or academic institutions instead of agrochemical company information of other APPs.

The “Which Pesticide?” App will build on the existing [IPM coalition database](#) and will offer:

- A creative and effective communication strategy to reach more pesticide users.
- Off-line access in field conditions via smartphones, tablets and computers.
- Information available in English, Spanish and Portuguese.
- Information about less-toxic pesticide alternatives registered in five pilot countries provided in a user-friendly way.
- Display of registered pesticides and their toxicity profile in a categorized way by crop and pesticide category level.

# Piloting the App in Five Key countries



## Brazil

- 4th largest food exporting country in 2014 (\$78 billion).
- 31% of area is used as cropland (65 million hectares).
- Ninth largest economy in the world mainly due to its agriculture production.
- Seventh biggest exporter of wood products (11 billion kilograms of wood processed annually).



## Colombia

- The agriculture sector provides a fifth of Colombia's jobs.
- Its primary agricultural products are coffee (fourth-largest producer in the world), cut flowers, bananas, rice, tobacco, corn, sugarcane, cocoa beans, oilseed, vegetables, figue, and panela.
- The import of pesticides grew 360% in the last 20 years.
- Colombia has more than 7.2 million hectares of cultivated land.



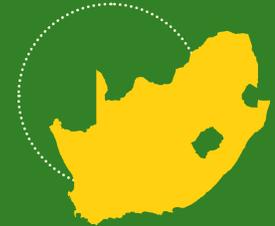
## India

- 2nd most productive food country in the world.
- 12th largest food exporting country in 2014 (\$36 billion).
- Ranked second by production of rice in the world.
- India's share of worldwide pesticides consumption is 3.75 %



## Mexico

- 19th largest food exporting country in 2014 (\$25 billion).
- More than 5.5 million people work in agriculture.
- Mexico has more than 30 million hectares of farmland.
- The main export agricultural products are avocado, malt, tomatoes and berries.



## South Africa

- Biggest economy in Africa.
- One of the world's largest producers of chicory roots, grapefruit, cereals, maize, castor oil seed, pears, sisal and fibre crops .
- Has more than 500 registered pesticides (PAN, 2010) and is one of the four largest importers of pesticides in sub-Saharan Africa.
- Due to the aridity of the land, only 13.5% can be used for crop production, and only 3% is considered high potential land.

## Direct

Farms, fields and forest units whose technical decision-makers make use of the APP that will be better informed about the toxicity of pesticides, why they are restricted, and what are the potentially less toxic pesticides registered in their country to control a given pest.

## Indirect

Workers and neighbouring communities of farms, fields and forests, that will benefit from increased awareness about pesticide risks and better practices implemented.

## BENEFICIARIES



# About SAN

*Partnering with businesses and organizations to advance sustainability in agriculture.*

The Sustainable Agriculture Network (SAN) is a global network of NGOs that works to transform agriculture into a sustainable activity. With 20+ years of experience working across more than 40 countries and 100 crops, we are a powerful and effective ally of producers, companies and donors to achieve and monitor goals, to transform agricultural practices and create value on the ground.

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Partners

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