

Economic Impact of Aerial Spray in the Philippine Cavendish Banana Industry

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Outline

- Background
- Objectives
- Methods
- Results
- Conclusions
- Recommendations

Current status of Aerial Spray Issue



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SC voids Davao City ban on aerial spraying in banana plantations

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By VIRGIL LOPEZ, GMA News

The Supreme Court (SC) struck down the Davao City ordinance banning aerial spraying in banana plantations, a measure passed during the term of then mayor and now President Rodrigo Duterte.

Affirming the decision of the Court of Appeals, the high court on Tuesday said Davao City Ordinance no. 0309-07, series of 2007, which banned indiscriminate aerial spraying of chemicals as an agricultural practice in the city, is unconstitutional.

Philippine Cavendish Banana Industry

- Export market expanding sustaining 4% annual growth 1986-2012
- 2nd largest banana exporter in the World
- 55-75T hectares, 100-140T direct jobs (production only)
- Both aerial and ground spraying for sigatoka control are practiced in the Philippines (Except Bukidnon and North Cotabato)

Issues on Aerial Spray

- Issues on adverse effects on health and environment
- Aerial Spray Banned in Davao City in 2007
- Issues on economic impact of aerial spray ban to industry
- CA reversed the Aerial Spray Ban (as unconstitutional)
- Opposing views *(Case was brought to the Supreme Court)*



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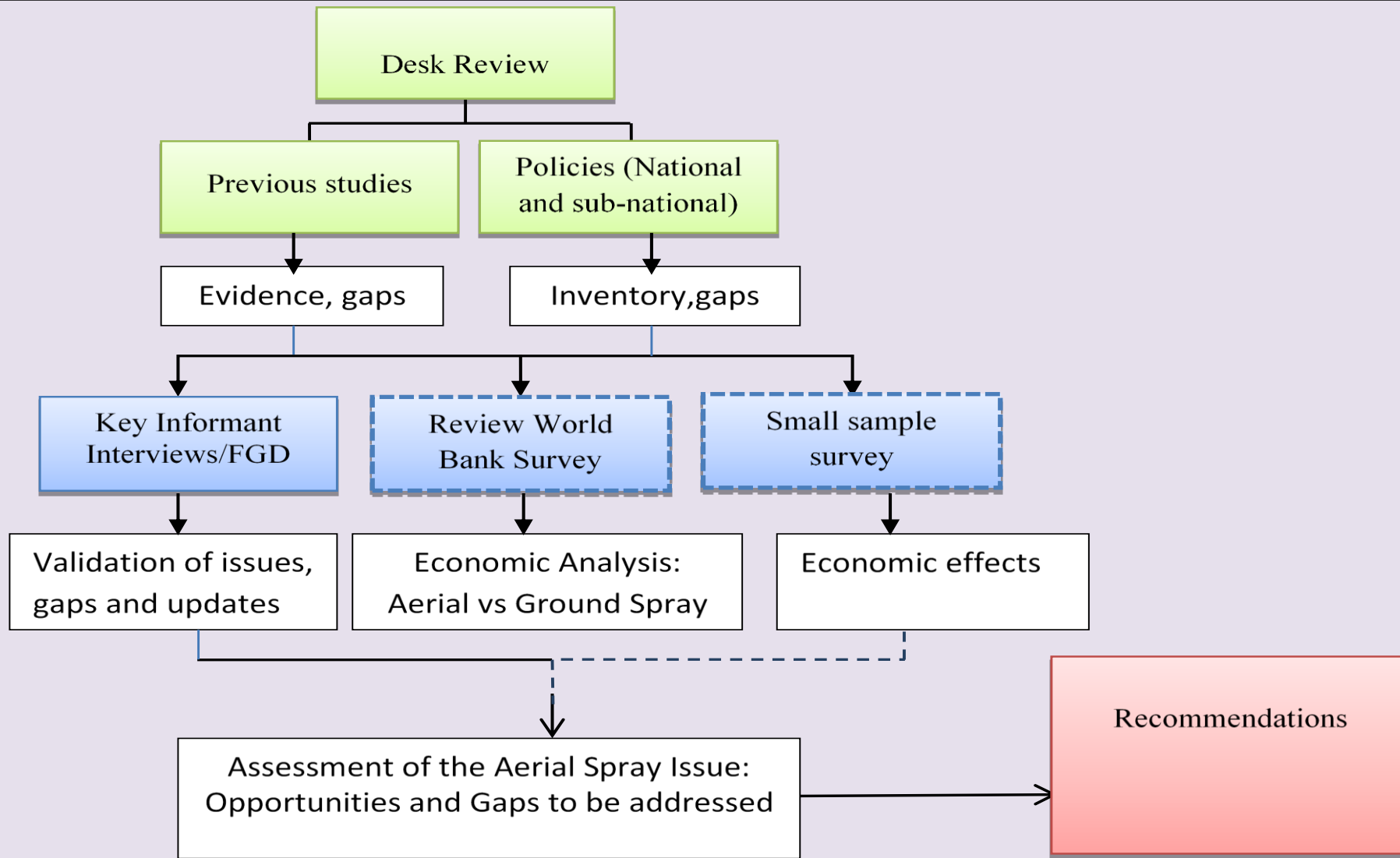
Objectives of the study

- ▶ Review policies on pesticide application relevant to aerial spraying
- ▶ Examine the economic impact of aerial spray
- ▶ Identify key issues and opportunities and recommend strategies to help resolve issues in using aerial spray

Data

- ▶ Primary and secondary data
- ▶ Key informant interviews and FGD
- ▶ Small survey in Davao City (60 respondents)
- ▶ World Bank survey data in Davao del Norte 2013-2014 (200 respondents)

Framework of analysis



Impact of aerial spray ban in Davao City

- About 70% reduction of areas under aerial spray
- 2000 has no longer used for Cavendish banana plantation
 - Aerial spray ban
 - Conversion to Industrial or other alternative uses
 - Not contiguous

Economic effect of aerial spray (previous studies)

- ▶ Shifting from aerial to ground spray is better for small farmers since aerial spray is expensive
- ▶ Large banana plantations prefer aerial spray since it is economical for contiguous areas.

Economic effects of aerial spray in Davao City

- Aerial spray is expensive but can control sigatoka disease
- 27% higher income than those using ground spray (lease)
- Income of growers cannot be disaggregated as to type of technology used in sigatoka

Economic effect of aerial spray in Davao del Norte

- ▶ Higher cost compared to ground spray but profits are higher
 - 6% higher volume sold
 - 22% higher price
- ▶ Better profitability of small farms using ground spray is not always applicable.- (contiguous small farm in DdN, used to be plantation now under CARP)

Conclusion

- ▶ International best practice in aerial spraying are being followed by large players
- ▶ Regulatory practices on aerial spray are in place however some policies are not strictly implemented
- ▶ Economic effects vary between aerial or ground spray, and type of plantation
- ▶ Those small farms under contiguous areas support aerial spray

Recommendations

- ▶ Create a multi disciplinary research team
- ▶ Methods, scope and sample size should be presented to a multi-stakeholder for approval (PBGEA, MBGEA, NGO, Gov't, etc.)
- ▶ DENR & FPA to aggressively monitor compliance to MC No.2 & MC 2009-14
- ▶ DA in coordination with LGU, academe and private sector establish demo farms, showcase technology developed on resistant varieties. (update Sept. 2)

Thank you!

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