

# How data analytics can help us to end modern slavery: Examples from the Philippines

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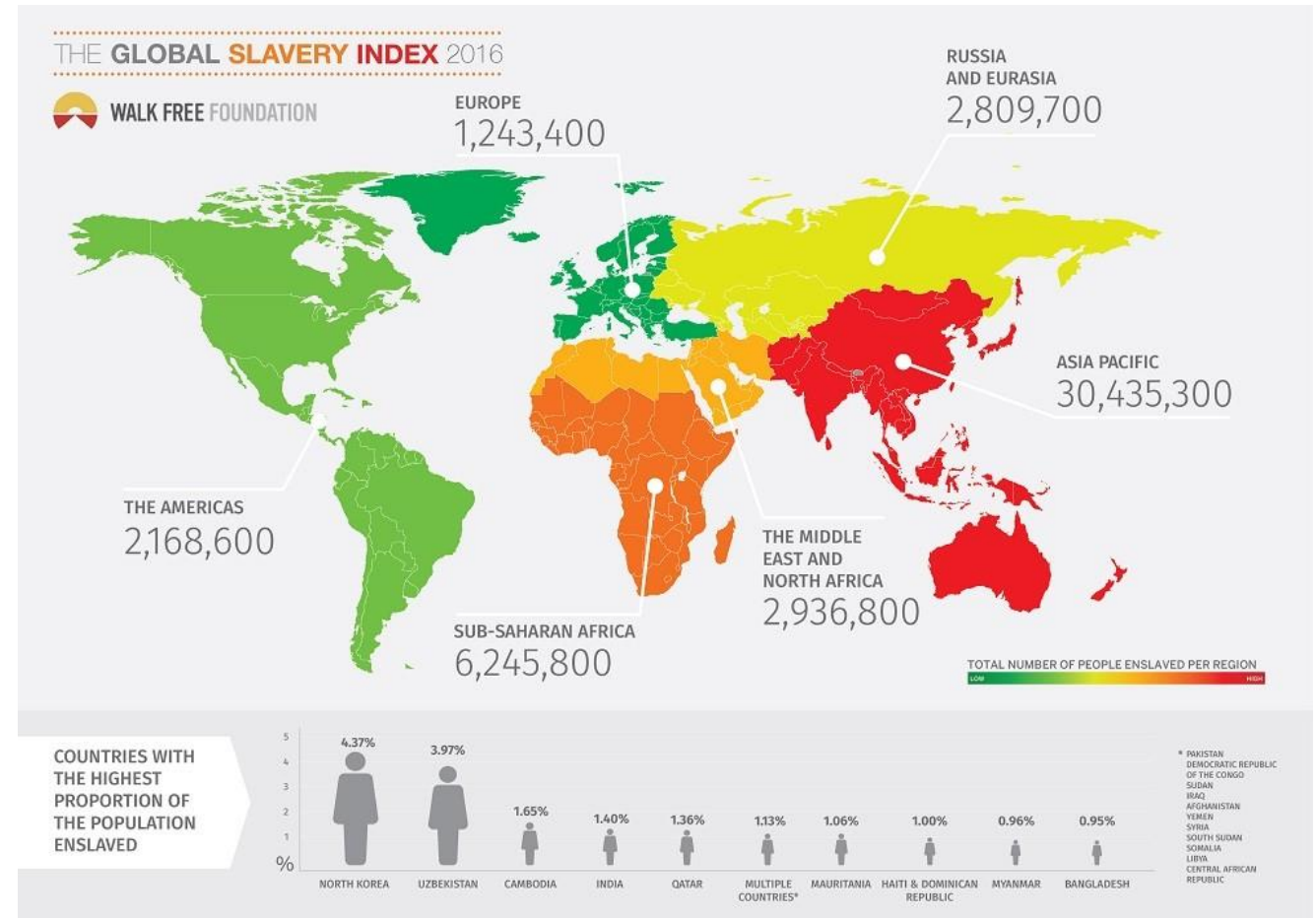


Novametrics **LLC**

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# Direct Measurement of Modern Slavery

- Difficult to measure
- Difficult to define
- Ethical Issues
- Safety Issues



# What about Indirect Measurement?

- Using techniques from environmental, geophysical sciences
- Is there a way to “characterize” the ecosystem of modern slavery?
- Can we use indirect data to point us to where vulnerabilities are?



# Hypotheses – vulnerabilities to trafficking

1. High un/underemployment would mean high prevalence of OFWs.
2. People are becoming OFWs to make more money
3. Regions with high numbers of OFWs will have higher numbers of victims

### Potentially Exploitive Industry (low skill, low pay)

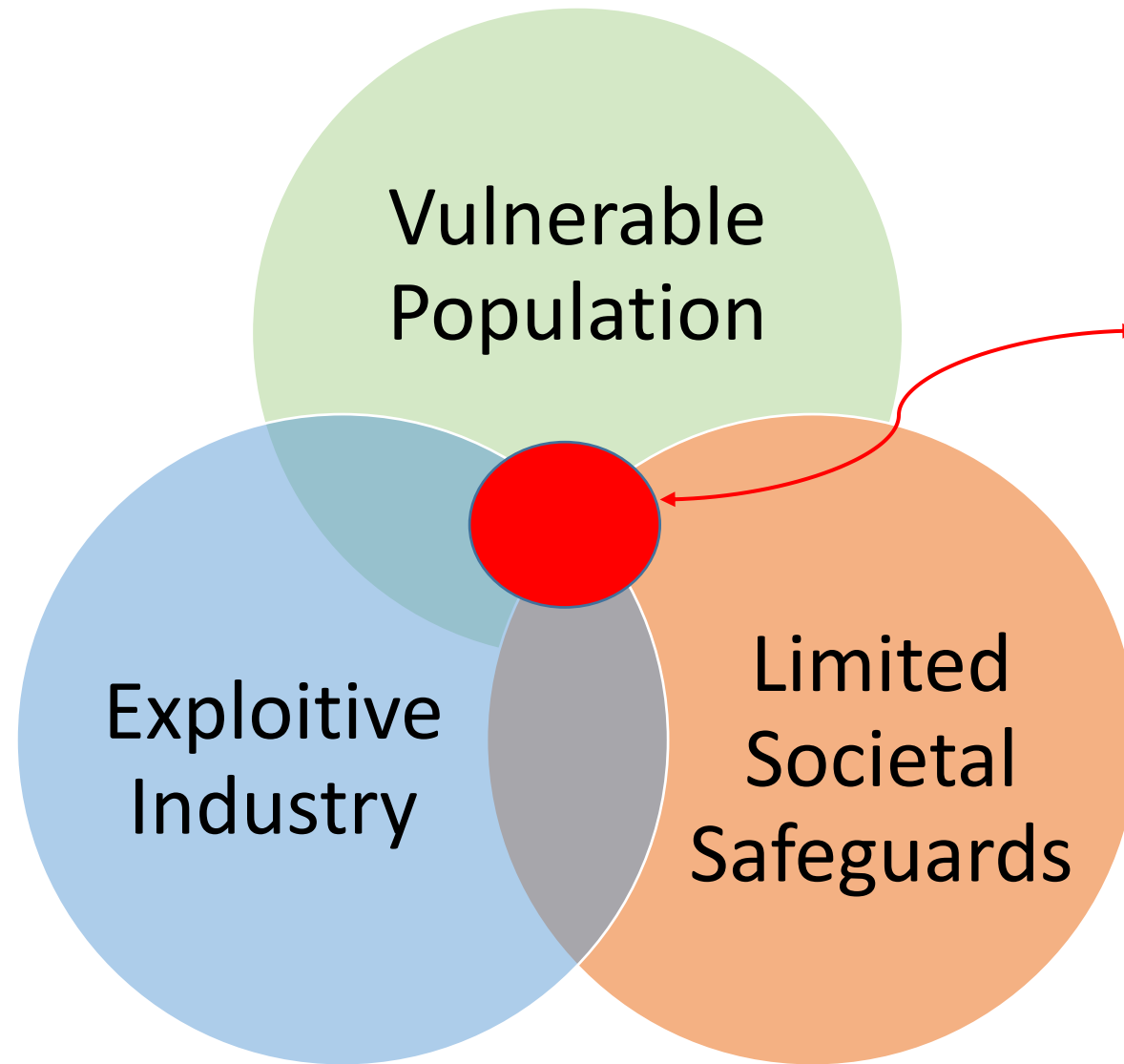
- Manufacturing /Factory (Clothing Processing)
- Domestic Service (housekeeping, OFW)

### Vulnerable Population

- Economic (poverty)
- Education (gender differences, access, attainment)
- Health (gender differences, access, age at first sex)
- Sociocultural (race, ethnicity, gender inequality)
- Political (Immigration policy, conflict, power of local government)

### Limited Societal Safeguards (weak capacity)

- Rule of Law (labor laws, enforcement, prosecution)
- Social Safety Nets (old age pensions, health coverage, support for disabled and victims)
- Institutional Systems (access to money, access to land, OFW system)
- Risk Perception (knowledge of rights, family influence)



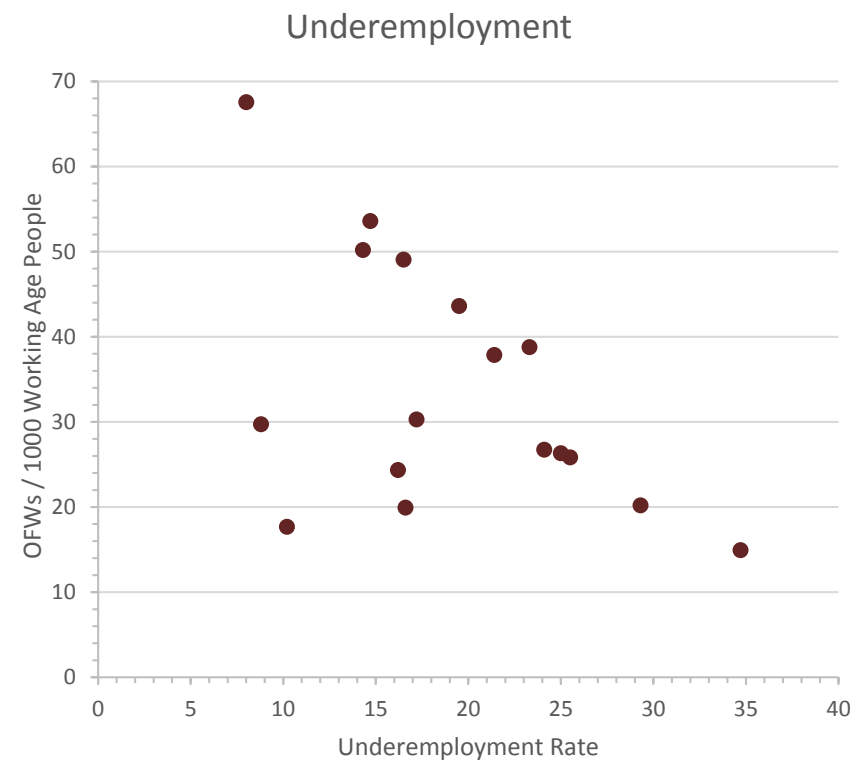
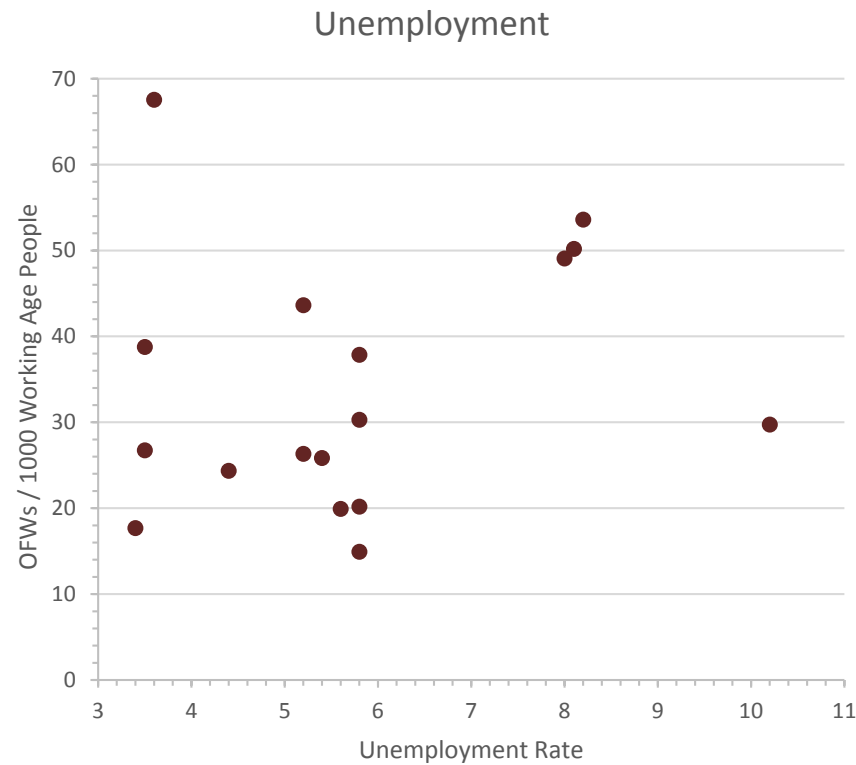
*Modern  
Slavery*



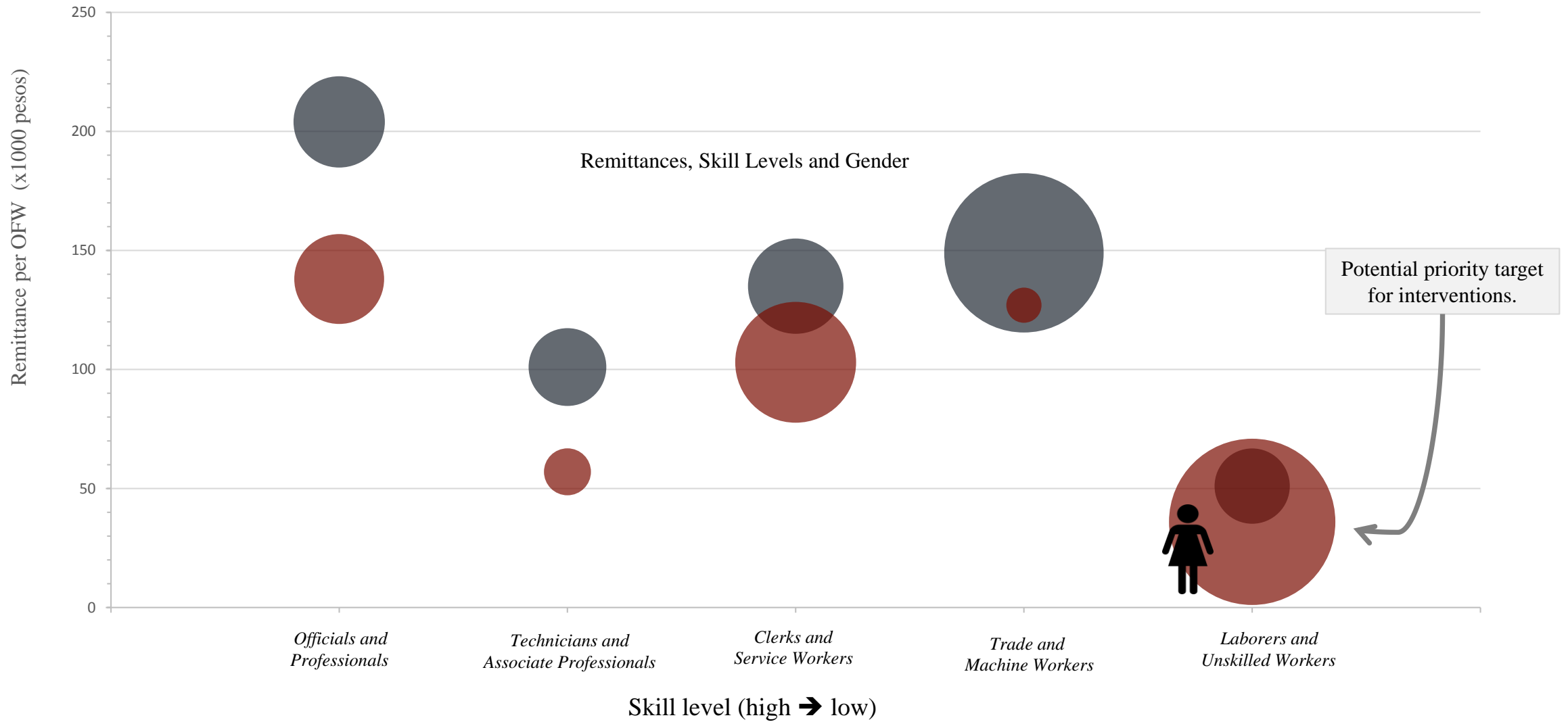




# *Prevalence of OFWs does not increase with increasing unemployment or underemployment rates*

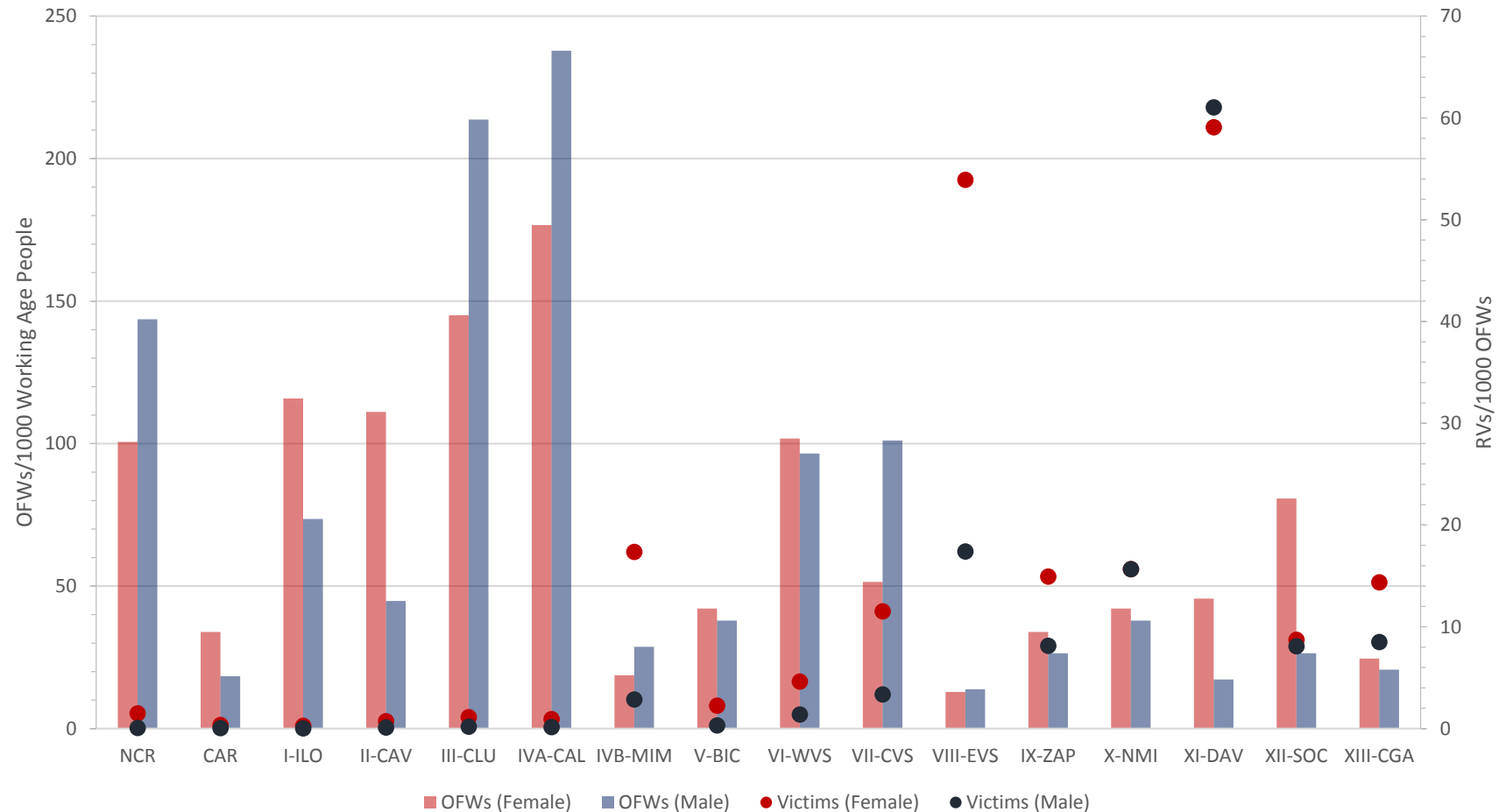




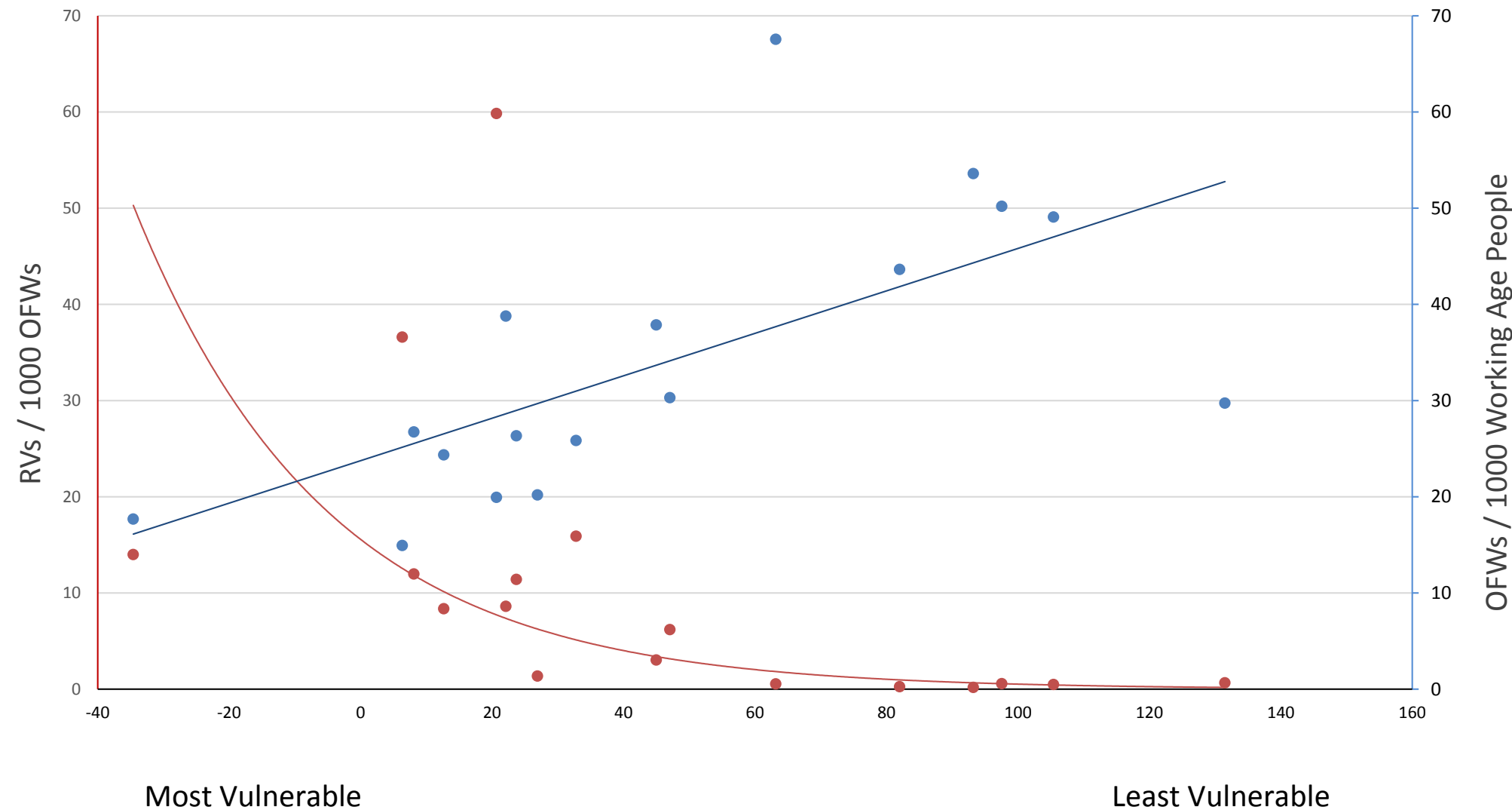


Over 50% of the female OFWs are working as unskilled workers providing remittances of less than \$750/ year.

# *Which regions have high prevalence of OFWs and Victims?*



*Vulnerability vs. OFW and RV prevalence*



Sources: Visayan Forum Foundation, Inc., International Organization for Migration, Philippines Statistics Authority, Philippines Department of Education, UN Office for the Coordination of Humanitarian Affairs, National Statistics Coordination Board, Food Nutrition Research Institute

# How can evaluators use this approach?

- Recommend using secondary data analysis/data analytics **BEFORE** evaluation
  - Better understand what is happening
  - Better able to target data collection in the right areas
  - Create a descriptive and predictive model
- Use primary data collection to feed back in to the model to move towards prescriptive solutions
- Keep building the model as you go along





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