Regional Training Course on Agricultural Cost of Production Statistics 23–27 April 2018

## Session 3.4: Survey Design Considerations: Stratified Sampling

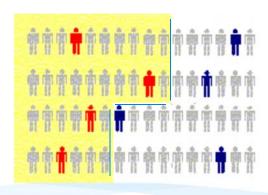
Miriam Hodge, PhD





## Stratified Samples

- \* Population divided into 2 or more groups according to some common characteristic.
- \* Simple random sample selected from each.
- \* The two or more samples are combined into one.









## Random Sampling Designs

- \* Often strata correspond to subgroups for which you want to disaggregated estimates.
- \* Stratified sampling design can be highly efficient if strata are defined on a variable, which is related to the variable being measured.
- \* For an efficient design, sample more variable strata more intensively.



## References

Rao, Poduri S. R. S. (2000). *Sampling methodologies: With applications*. Boca Raton, Fla: Chapman & Hall/CRC.

Thompson, S. K., & Seber, G. A. F. (1996). *Adaptive sampling*. New York: Wiley.

Amstrup, S. C., McDonald, T. L., & Manly, B. F. J. (2005;2010;2006;). *Handbook of capture-recapture analysis*. Princeton, N.J: Princeton University Press.

Royle, J. A., Chandler, R. B., Sollmann, R., & Gardner, B. (2014;2013;). *Spatial capture-recapture*. Amsterdam: Elsevier.

