I would like, first hand, to thank you for your detailed elaboration.

Yes, I am using 3 rounds of Egypt DHS to feed the FEs/REs model. I use only 2 rounds to feed the diff-in-diff model.

The problem is that I had already run all models without weighting or clustering. I had no idea I had to weigh or cluster before running my models. My point is: if I had already calculated the district-level outcomes (dependent variables) without weighting or clustering, how can I apply what you have kindly recommended when you pointed out that "Everything is the same, but now instead of weighting when you collapse, you'd have to weight in the regression". To weigh and cluster in the regression will save me a lot of time unless it is necessary to go back to the the stage of collapsing (and apply weights and cluster then).

Please let me know should you require further elaboration.

Note: I have more than 200 districts.