## Identify the level of income qualification

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## **Data understanding**

Variables:

Income level of families of Latin America was calculated.

- 1. Train data has 143 columns and test data has 142 columns.
- 2. Target is output variable
- 3. There are 130 columns integer types, 8 float64 type, that won't create problem. Let's figure out object type column and what are they.

## Model used

- 1. Predict the accuracy using random forest classifier.
- 2. Check the accuracy using random forest with cross validation.

## Model Interpretation and findings

- 1 = extreme poverty 2 = moderate poverty 3 = vulnerable households 4 = non vulnerable households very small value of small poverty in comparison with others shows there is biasness in the data.
- 85 families do not have same poverty level
- Out of 9557 rows 2973 are head of families. idhogar, Household level identifier helps to figure out families without head.
- Target is calculated using Random forest classifier.
- Model was later validated by cross validation with 10 random forest.
- Mean of prediction score is later calculated.