

## **Vulnerability of the Rural Self-Constructed Housing with Social Programs and His Economic Impact in the South-East of Mexico**

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**Abstract :** In Mexico, as largely of the developing countries, the rural housing is a study object, since the diversity of constructive idiosyncrasies for locality, involves various factors that make it vulnerable; an important aspect of study is the progressive deterioration that is seen in the rural housing. Various social programs, contribute financial resources in the field of housing to provide support for families living in rural areas, however, they do not provide a coordination with the self-construction that is usually the way in which is built in these areas. The present study, exposes the physical situation and an economic assessment that presents the rural self-constructed housing in three rural communities in the south of the state of Quintana Roo, Mexico, which were built with funding from federal social programs. The information compilation was carried out in a period of seven months in which there was used the intentional sampling of typical cases, where the object study was the housing constructed with supports of the program "Rural Housing" between the year 2009 and 2014. Instruments were used as the interview, ballot papers of observation, ballot papers of technical verification and various measuring equipment laboratory for the classification of pathologies; for the determination of some pathologies constructive Mexican standards were applied how NMX-C-192-ONNCCE, NMX-C-111-ONNCCE, NMX-C-404-ONNCCE and finally used the software of Opus CMS ® with the help of tables of the National Consumer Price Index (CPI) for update of costs and wages according to the line of being applied in Mexico, were used for an economic valuation. The results show 11 different constructive pathologies and exposes greater presence with the 22.50% to the segregation of the concrete; the economic assessment shows that 80% of self-constructed housing, exceed the cost of construction it would have compared to a similar dwelling built by a construction company; It is also exposed to the 46.10% of the universe of study represent economic losses in materials to the social activities by houses not built. The system of self-construction used by the social programs, affect to some extent the program objectives applied in underserved areas, as implicit and additional costs affect the economic capacity of beneficiaries who invest time and effort in an activity that are not specialists, which this research provides foundations for sustainable alternatives or possibly eliminate the practice of self-construction of implemented social programs in marginalized rural communities in the south of state of Quintana Roo, Mexico.

**Keywords :** economic valuation, pathologies constructive, rural housing, social programs

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