Mexico: Ecosystem fragmentation and inequity

Two-thirds of Mexico's territory was once covered with different type of tree formations, such as the riparian forests, the thorny chapultepeco thicket, the low thorny forest, the high evergreen forest, the crasicaule thicket, the mountain mesophyle forest and many others. Still nowadays Mexico is considered a "megadiverse" country with regard to both flora and fauna, part of which is hosted in forests and thickets. These rich areas have been suffering a severe degradation and destruction process in the last decades. Official estimates of forest loss vary widely (ranging from 370,000 to 746,000 hectares annually), but whatever the real figure, the situation is alarming.

Ecosystem fragmentation is a useful way to weigh the state of forests and thickets in a territory and that of biodiversity related to them. The fragmentation of their habitat can have severe effects on the population of insects, birds and mammals or even determine their complete loss once vital resources for their subsistence fall under a certain level. The so called biological corridors have not proved to be an effective solution for this problem. This negative effect is to be added to land erosion and water cycle alteration that occur when forests disappear. In a recent study on this issue based on cartographic interpretation to evaluate changes occurred between 1973 and 1993, vegetation fragments were classified according to the relationship between perimeter and area. It was proved that the number of the bigger fragments declined while that of the smaller ones increased, which means that during that period a severe ecosystem fragmentation took place.

The present situation is not the result of a natural process. "The profound inequity that characterizes Mexican society and the disadvantaged position of forest communities in negotiations with local, state, and federal agencies as well as with the private sector -which is the ultimate buyer of their resources- and the deep seated disagreement about the importance of protecting the environment and assuring its integrity for future generations while providing a reasonable livelihood on the basis of the precepts of sustainable production" are at the root of the problem, state David Barkin and Miguel Angel García in their research under the framework of the "Addressing the Underlying Causes of Deforestation and Forest Degradation" initiative, in which the WRM took part during 1998. In the meantime, the Mexican authorities not only continue to ignore the problem, but they also harass those who are defending the forests, as in the case of peasant leader Rodolfo Montiel (see WRM Bulletin 26 and 35).

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