

REACTIONS TO OUR APPROACH

It is not cement, but “Do-nou” bags to facilitate the building of a base course that can efficiently bear traffic load without any equipment for compaction in rural areas in developing countries. At first, the villagers could not believe that the road was maintained using “Do-nou” bags: they were able to maintain the road with their own labor. They were surprised to see the conditions of the improved road. In Kenya, not only villagers, but also a colonial immigrant from Europe who owned a large area of land could not believe the effect of “Do-nou”. He passed by the construction site where the villagers were working on the road using “Do-nou”, and simply said, “Such “Do-nou” bags cannot improve the road!” After a couple of days, he came to our office to apologize for his rash comment. The section of road had vastly improved and is now passable even during the rainy season.

“The maintained road soon becomes impassable again, doesn’t it?” We heard this comment numerous times. The road is not sealed by asphalt or concrete. This is a simple spot improvement of an earth road through building a base course utilizing locally available “Do-nou” bags. This maintenance method will be implemented continuously in the future by villagers who acquire technology with a willingness to solve their problems by themselves. The technology leads to sustained trafficability of rural roads.

The villagers received powerful reminder that they themselves could improve their own lives (Figure 13). The application of this technology motivates and empowers farmers to initiate their own development schemes. Geotechnical engineering methods are delivered to the villagers in rural areas of developing countries; this helps encourage local villagers to maintain their own roads. After problematic portions are improved using “Do-nou” technology (Figure 14 and 15), the villagers’ life has changed. This is because the volume of crops transported to markets increases as the number of buyers’ cars passing increases. The transportation fee for goods is reduced; public transportation options from the villages to towns are increased. This enables the villagers to commute to towns daily.



Figure 13. Villagers who participated in the demonstration of road maintenance using “Do-nou” technology (Kenya)



Figure 14. The road situation before the maintenance, in September 2008 (Kenya)



Figure 15. The road situation after two years of maintenance at the same place as in Figure 14 (Kenya)