Encouraging the widespread adoption and use of improved bean technologies is an important part of productivity-led strategies to promote sustainable agricultural intensification and development. Increasing the use of beans in production systems can improve soil fertility (reducing the need for chemical fertilizer) and, to the extent that households consume some portion of increased legume production, improve nutrition outcomes. While many interventions have been designed to promote agricultural technology adoption through extension and education, little is known about how these efforts influence farmer willingness-to-pay (WTP) for new technologies in the marketplace. We use a Becker-DeGroot-Marschak (BDM) mechanism to elicit farmer WTP for high-yielding bean varieties and a disease-reducing seed treatment under two different non-governmental lead-farmer extension treatments in Tanzania. The first treatment uses the planting of demonstration plots to showcase new bean technologies within a village. The second treatment includes the same demonstration plot approach, but adds the distribution of trial packs of the improved inputs that allow some farmers to test improved bean technologies on their own plots of land. Additionally, we use the application of the seed treatment to determine if farmers value the provision of basic agricultural services by looking at WTP differentials for self- and pre-treated seed. Our study finds little evidence to suggest that either extension treatment significantly affects smallholder WTP for the improved bean technologies we consider. However, we do find that farmers are willing to pay more for bean seeds that are pre-treated than for those they have to treat at home. These results suggest that donor extension efforts may be less effective at influencing farmer valuation of productivity-enhancing agricultural technologies than previously assumed. Instead, having lead farmers function as local agro-dealers and provide basic agricultural services (e.g. bean seed treatment) might generate more value for smallholder producers than traditional education and outreach. Overall, these results suggest a need to rethink the role of non-governmental extension efforts, and the resources devoted to their operation, in promoting the adoption and diffusion of new agricultural technologies as part of a larger sustainable development agenda.