Carbon Sequestration in the Millennium Villages: Potential Models to Follow

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Agroforestry, sustainable woodlots, strategic crop rotations and planting strategies and reforestation efforts all help farmers improve soil fertility, water retention, and crop yields while preventing erosion and environmental degradation (Kundhlande, Adamowicz et al. 2000; Girmay, Antle and Diagana 2003, Singh et al. 2008). Despite their benefits, these practices are often passed over in favor of traditional, less sustainable farming methods, as newer take time to learn, funds to implement and can be, at least initially, more labor intensive (Antle and Diagana 2003; Antle and Stoorvogel 2008, Graff-Zivin and Lipper 2008).

How, then, can the switch sustainable farming be made more palatable? One answer is carbon crediting. All of these practices help sequester carbon dioxide from the atmosphere, and these carbon credits can be sold to individuals, corporations and countries looking to offset their emissions. The funds from these contracts provide additional income, helping farmers make the transition to better practices and improve their standard of living (Antle and Diagana 2003; Graff-Zivin and Lipper 2008).

In the Millennium Villages, carbon sequestration can help improve the local environment, reduce the amount of global CO$_2$ in the atmosphere, and give some of the world’s poorest farmers a better life.

The question is “how?”

After reviewing 21 existing biological carbon sequestration projects registered through the World Bank Carbon Finance Unit and other organizations, 5 with the most complete available information and similarity to the proposed Millennium Villages activities were selected for further study and two, the Green Belt Movement and Trees for Global Benefit, have been recommended as potential models for the Millennium Villages.