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Prioritizing landscape interventions in the Ethiopian highlands

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Despite millions of dollars invested by donor agencies in soil and water conservation practices and other landscape interventions in Ethiopian highlands, and billions of hours of food-for-work farm labour, sediment concentrations in rivers are increasing. Combating these growing sediment loads requires a renewed analysis of the effectiveness of landscape interventions to reduce soil losses. This presentation combines the findings of several watershed studies in the Blue Nile basin in the Ethiopian highlands. These studies indicated that while most runoff and erosion was generated from saturated bottom lands and degraded hillsides, the majority of conservation practices is directed to the uplands where the direct runoff is minimal. Based on these studies, we recommend that in the humid areas of the Ethiopian highlands, more emphasis should be placed on erosion control in saturated bottom lands (where gullying is most extensive) and on the degraded areas in the landscape. In addition, measures need to be found to reduce interflow in bottom lands by increasing infiltration rates through the hard pan in the top 50 cm of the soil.