With an estimated 31 percent of Nepalis living below the poverty line, more than 80 percent of the poor depend on farming for subsistence and income. They struggle to produce sufficient food on their small plots of land and rely on water-intensive crops that lack sufficient back-up when water is scarce. The combination of these elements has contributed to low crop yields and incremental agricultural growth.

To address productivity, growth, and development in Nepal, USAID’s Smallholder Irrigation Market Initiative (SIMI) aimed to improve smallholder farmer income through the production and promotion of high value goods. Irrigation technologies such as Multiple Use Water Systems (MUS), storage tanks, sprinkler systems, local water storage technologies, and treadle pumps were introduced to help smallholders to continue production on marginal land and during the offseason.

SIMI’s value chain approach aimed to improve input, production, output, service markets, and improve connections between small holders and service markets and suppliers. SIMI worked with local committees and collection centers, to aggregate smallholder produce and provide services. The project also worked to build government capacity in micro-irrigation and market-led agriculture thereby developing enabling policies for smallholder farmers. The project provided technical assistance and a range of training and learning programs to farmers.

- Assisted in the construction of 70 MUS, including modified storage tanks (Thai Jars), drip and micro sprinklers systems, low cost diesel, and electric water pumps.
- The MUS increased the incomes of nearly 500,000 individuals by an average of $209 annually.
- 15 new technologies were introduced in Nepal; increased productivity generated more than $30 million in agricultural sales.
- When farmers utilized drip systems, they were able to use 50 percent less water and irrigate between 80 to 2,000 m² (total land), improving yields by 30 percent.
- Irrigation technologies have helped households decrease water consumption by 50 percent while increasing yields by 30 percent.

### SIMI

- **LOCATION**: Nepal
- **DURATION**: 2003-2009
- **FUNDING**: $9 million
- **IMPLEMENTING PARTNER**: Winrock International

Images courtesy of Gautam Bahadur
and Winrock International.