

SMALL HOLDER IRRIGATION MARKET INITIATIVE : A BDS APPROACH TO HORTICULTURAL DEVELOPMENT FOR POOR SMALLHOLDERS

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ABSTRACT

Smallholder irrigation market initiative (SIMI) is taking a business development services (BDS) approach to linking smallholder vegetable producers to technologies and markets. SIMI builds and strengthens private sector manufacturers of micro irrigation equipment, dealers and installers, agro-input suppliers, and output marketers. SIMI efforts provide the initial support to adapt technologies to local circumstances, identify and disseminate suitable productivity packages, popularize micro irrigation, build market linkages, and build linkages to national extension and research systems and the agricultural development community. SIMI sustainability is based on the profitable returns to farmers and the enterprises providing the farmers with services.

SIMI is working in seven districts of the west and Midwestern development regions (Kapilvastu, Palpa, Syangja, Rupandehi, Banke, Bardiya and Surkhet) The project has a central office in Kathmandu, two regional offices (Butwal and Nepalganj) and five district offices.

INTRODUCTION

The Smallholder Irrigation Market Initiative is a global effort of International Development Enterprises (IDE) and Winrock International (WI) to promote micro irrigation for poverty alleviation.

IDE and Winrock developed a global business plan (2002) for SIMI including detailed planning for regions in Africa, S.Asia (hills, plains, and Deccan Plateau), and China. The Plan is grounded in over 10 years of experience and success in promotion of micro irrigation.

IDE and Winrock initiated SIMI activities with donor support in 2003. IDE and Winrock are working jointly on SIMI programs in Nepal and Zambia. Winrock is also working in Mali, and Ghana and IDE is working in seven additional countries.

THE SIMI CONCEPT IS BASED ON

- Development of low cost micro irrigation technologies: drip, sprinkler, small diesels, and water storage / harvesting.
- Close collaboration among NGO's, the Private Sector, Government and donors needed to make a significant improvement in the status of the world's poor.
- A better understanding of how market failures influence poverty and how to address them.
- A Business Development Services (BDS) approach to building private sector capacity in the supply / value chain to provide services and technologies to poor smallholders.

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AN EXAMPLE OF MICRO IRRIGATION SUCCESS: BANGLADESH TREAD PUMPS

- Donor Investment \$ 6.7
- Farmer Investment \$33.4 m
- Number of Farm Families 1.3 m
- Annual Incremental Income/Family \$100
- Annual Total Incremental Income \$130 m
- An IRR of over 200% in terms of public investment and increased smallholder income.

NEPAL SIMI

- Nepal SIMI is a multi donor supported program including USAID, the Dutch government, OPEC fund, and others.
- International Partners: Winrock International and IDE
- National Partners: CEAPREAD, SAPROS, and AEC
- Currently Nepal SIMI is a 2.5 year program (6/03 to 9/05)
- Nepal SIMI represents a scale up of IDE activities initiated in the early 1990s

GOALS

Nepal SIMI has the goal of working with 27000 households (over 150000) people during the project period increasing incomes by USD 200-500 per year. In the process of reaching these targets SIMI will establish sustainable private sector supply chains providing services required by smallholders to produce for high value markets.

NEPAL SIMI DISTRICTS

SIMI is working in four districts of the western development region (Kapilvastu, Palpa, Syangja, Rupandehi) and three districts of the midwestern development region (Banke, Bardiya and Surkhet). The project has a central office in Kathmandu, two regional offices (Butwal and Nepalganj) and five district offices.



NEPAL SIMI AN INTEGRATED APPROACH

- Water is the entry point to develop the capacity of poor smallholders to become high value horticulture product producers.
- SIMI takes a BDS approach building a sustainable supply chain and output markets.
- SIMI's role is to generate demand for micro irrigation equipment and work with farmers to respond to market demand.
- SIMI is a partnership based program working to leverage impact.

NEPAL SIMI COMPONENTS

- Supply chain development. The program is working to develop the capacity of manufactures, dealers, installers, input suppliers (agro-vets), and output marketers to more effectively reach smallholders and provided embedded training services.
- Product Development adaptive Research. SIMI is working to improve micro irrigation equipment and high value productivity packages suitable to smallholders.
- Market Development. SIMI is working with local communities, government, and partners to establish hybrid village drinking water/micro irrigation water supply schemes.
- Social Mobilization. The program is working at a grass roots level to build awareness of micro irrigation and high value crop opportunities to raise incomes
- Gender/Micro Credit. The program has a focus to work with women who more effectively use households income including a modest micro credit program
- Government Linkage/ Capacity Building. The program is working closely with government line agencies and partners to build capacity and to leverage additional resources to met SIMI objectives.
- Clean Energy/Post harvest processing. SIMI is working to improve post harvest handling to improve product quality including a component linking clean energy technologies such as solar drying.

NEPAL SIMI RESEARCH COLLABORATION WITH NARC

- Adaptive research on returns to different micro irrigation technologies and regimes for high value horticulture crops
- Testing of protection measures for hail on high value crops
- Hybrid tomato seed production by women's groups
- Looking at the integration of high value and medium value grain crops in terai based systems
- Adaptive research on post harvest, marketing, and the application of solar drying of high value crops during peak production periods
- Adaptive research on the design of low cost water storage systems

NEPAL SIMI PROGRESS

- Program was initiated in June 2003. Over 180 staff (including 100 Social Mobilizers) have been mobilized and trained. Full field operations started in Sept 2003.
- Mobilization. SIMI is now working with over 14,000 households in about 600 micro irrigation groups (with 47% women membership).
- Sales. To date SIMI has facilitated sales of almost 6,000 micro irrigation units (treadle pump, drip, high performance sprinklers, and low cost water storage).
- Each adopting household has sold at least USD 60 in high value horticulture crops resulting in total first season sales of \$320,000.
- Completed three hybrid village drinking water/irrigation systems with four more under construction.
- Completed two market collection centers with three more under development and strengthened existing marketing committees. Developed private sector linkages for vegetable marketing.
- Developed close links with partners and government, through the SIMI advisory body we are working to coordinate with government.

RECOMMENDATIONS

- The SIMI approach represents the vision of the Nepal APP and should be replicated
- Take a comprehensive approach dealing with all aspects of smallholder needs
- Work with the private sector to build supply chains, link farmers to markets, and disseminate technology
- Create a positive environment for high value crop production, marketing and export
- Tremendous need for adaptive research to develop competitive horticulture technology packages