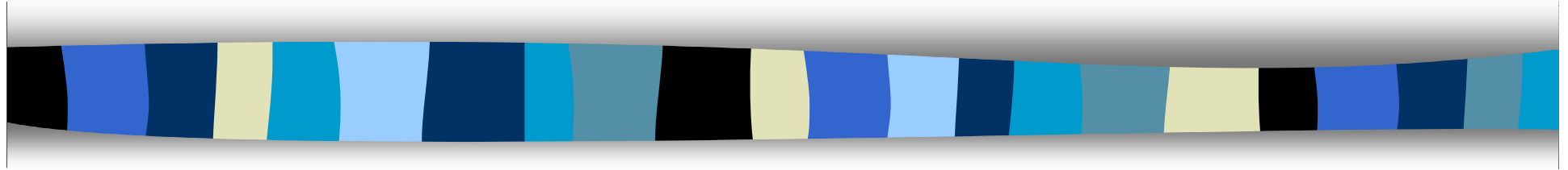


# International Development Enterprises



The Development & Commercialization of  
the Treadle Pump in Bangladesh:

A Case of Product Market on a Mass Scale

Jeanne Downing and Paul Polak



# Project Background

- 15 year history
- Project goal
- Target group
- Project objective
- Funders
- Background



# IDE's Approach

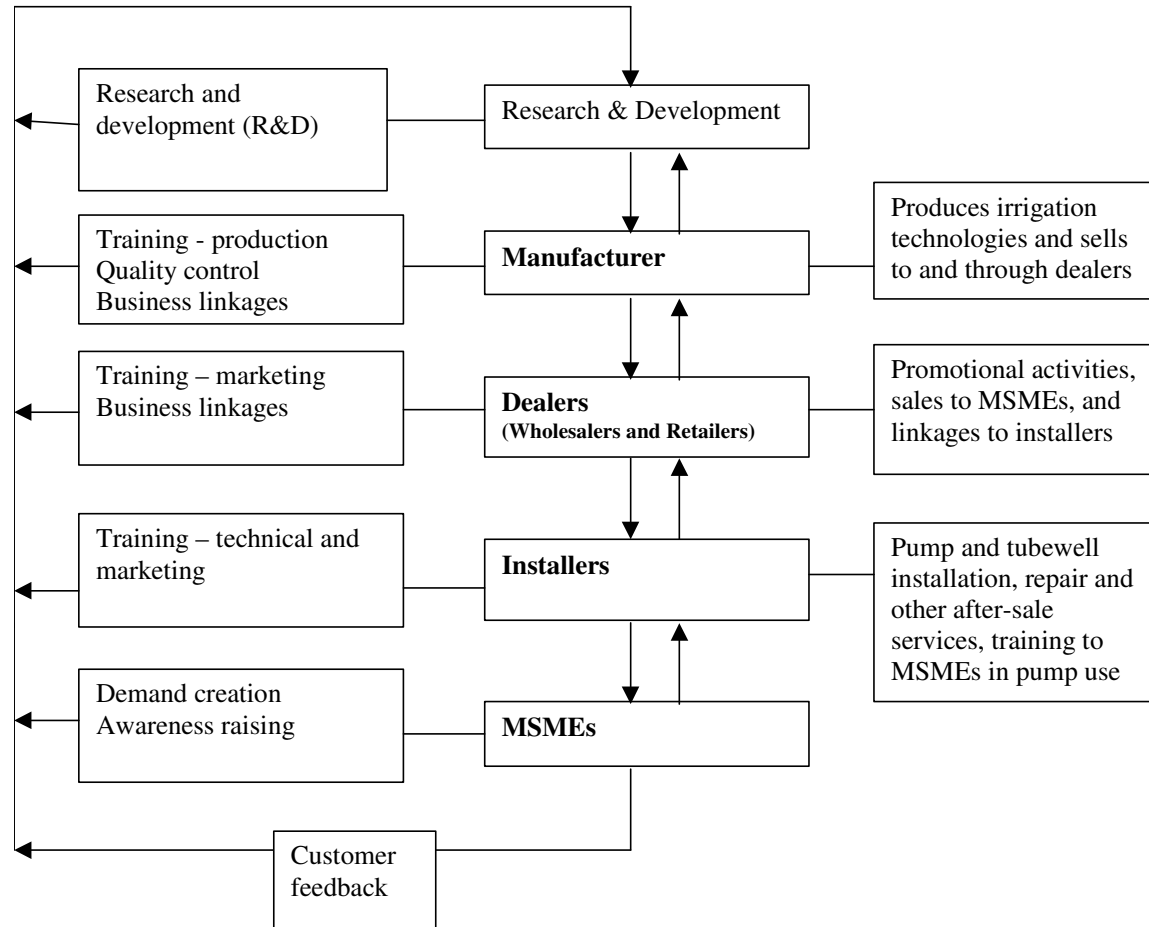
- Identify a “killer product”
- Develop the supply chain
- Promote business linkages
- Launch marketing and promotion activities
- Facilitate the market (don't control it)
- Leverage impact through investments in market leaders

# Project Description: BDS Services, Providers and Facilitator

**Services Provided by  
Facilitator to Providers  
With Small Cost Sharing**

**The Supply Chain of  
BDS Providers**

**BDS Providers' Services & Products  
Sold at Market Price**





## The Performance Measurement Framework

- The BDS Service - product development & commercialization
- The product - small plot irrigation equipment
- The market - national in scope - for irrigation equipment for small farmers w holdings between .05 and 2.49 acres
- The size of the market - 12.5 million farmers (this is conservative)



# The Performance Measurement Framework: The Three Goals

- **BDS Market Development**
  - scale
  - access
  - a vibrant, competitive market
- **Sustainability & Cost Effectiveness**
- **Impact - on MSMEs or Customers**

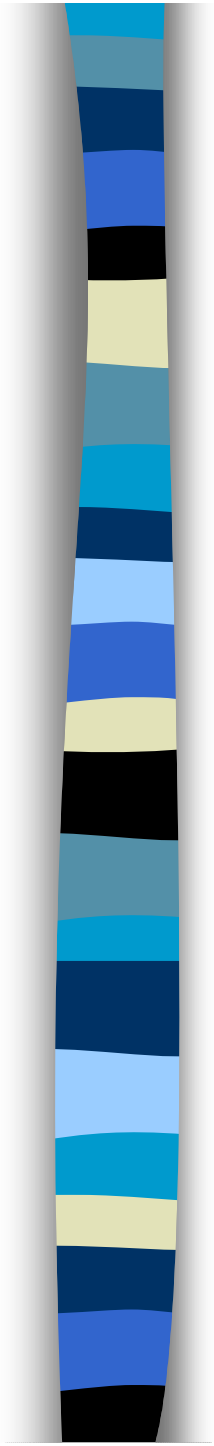
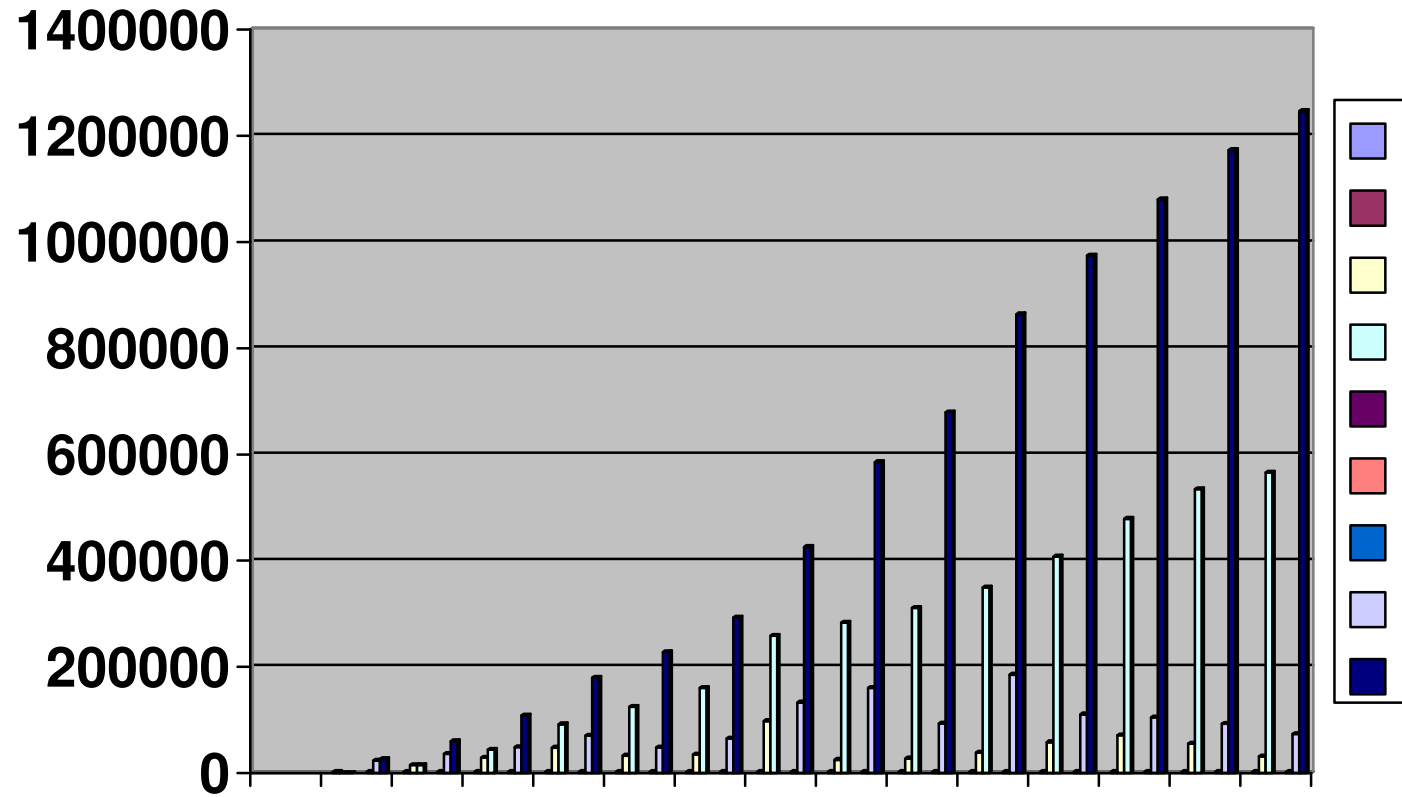


## Goal #1: Scale, Outreach, Market Development

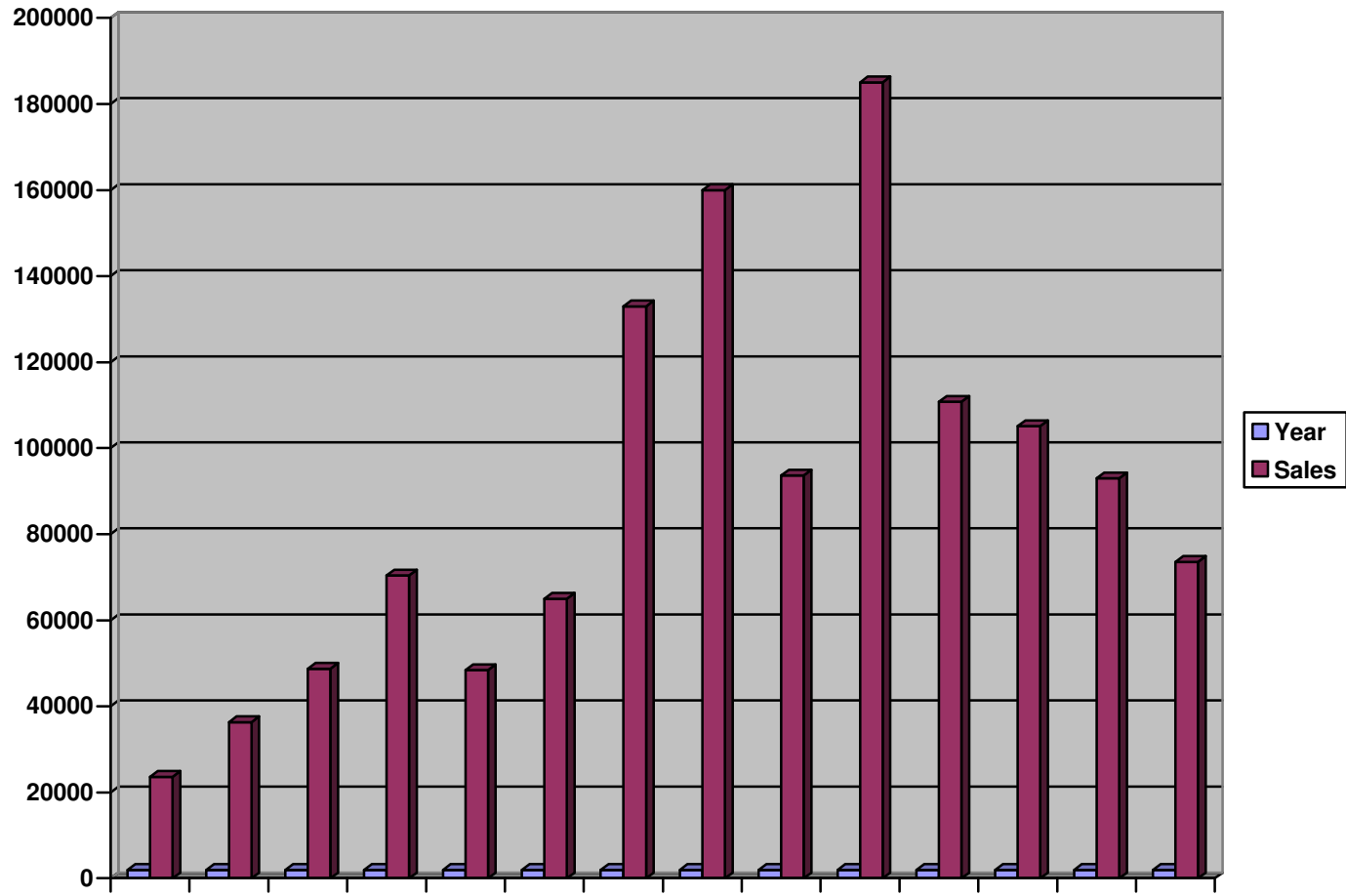
### ■ Scale

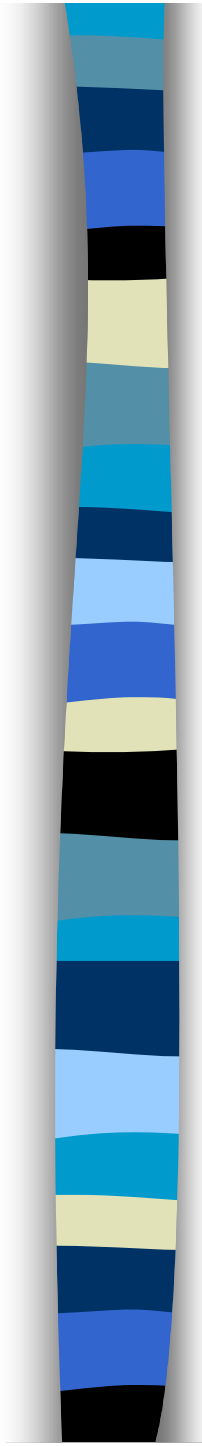
- two sets of numbers - direct & indirect
- cumulative sales - 1.3 million
- market penetration - 10.4 %
- scale is significant - massive but still market penetration indicates there is still a market to be tapped
- annual sales - declining since mid 90s

# Cumulative Sales



# National Sales



- 
- Creating a vibrant and competitive market
    - have IDE interventions contributed to market development?
    - increased number of providers over time
    - increased number of products
    - a wider price distribution
    - but we only have data on program not market
    - what is happening in the larger market?
    - what impact have IDE interventions had on the market for small plot irrigation equipment?



## ■ Methodological Challenges

- look at declining annual sales
- what is happening - is this project failing?
- are we just seeing the end of the product cycle?
- but there are new and multiple options in the market greater than the number of products
- a new revolution in the market due to a new product (the Chinese diesel pump)
- indicators are static and do not reflect the dynamism in the market



## Dynamism in the market

- The number of options have multiplied more than the products
- Innovative uses of TPs, diesel, buying water, selling water, etc
- Increased land use intensity
- Shift in cropping patterns to higher return crops
- Women in the fields
- Increased incomes & opportunity costs of labor



## ■ The Innovators Dilemma

- Waves of innovation
- The first allows for the second by increasing incomes, developing markets, etc
- In Bangladesh, the TP created one revolution in the market
- Now the Chinese pump is creating a revolution in the market



## Goal 2: Sustainability & Cost Effectiveness

### ■ Sustainability

- measured in terms of cost recovery
- IDE providers fully covering their costs
- Still promotional activities covered by IDE - who is in the process of exiting

### ■ Methodological Challenge

- cost recovery of supplier too narrow
- need to look at sustainability of business system
- what happens when IDE exits



## Goal 3: Impact

- Customer satisfaction - use of referrals as well as repeat business
- New business practices, new markets
- Value added - \$100 - \$500 per year
- The IDE program results in significant impacts or benefits for farmers



# Implications for Best Practices

- Facilitation leads to greater impacts
- Influence the market (e.g. product quality) through market leaders, customer education
- Learning from the market key to success - e.g. the copy cats and trade offs between quality and prices
- Facilitation is not a silver bullet
- An exit strategy from the beginning



# Implications for Donor Interventions

- Donors need to provide incentives for BDS market development - rather than for selling a particular product
- Donors need to support product development to address poverty and MSME development (MSMEs lack access to products to increase their incomes and graduate out of poverty)