IDEI’s Twelve-year Journey towards Facilitation

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The United States Agency for Development's (USAID) Microenterprise Development Division has been funding programs in microfinance and business development services (BDS) through the Implementation Grant Program (IGP) since 1995. As of 30th September 2004, over 90 grants have been approved for a total life-of-project funding greater than 100 million dollars. The current IGP-BDS grantees are an impressive group of organizations and projects that: cover almost every geographic region, consist of numerous value chains, use various approaches, and contain enormous potential to make a positive impact. These programs present an important learning opportunity on how to improve the design, implementation, and impact of BDS programs.

The USAID Microenterprise Development Division, in an effort to establish a participatory learning process, initiated a learning network for the IGP-BDS grantees. The SEEP Network, a non-profit organization in Washington, DC, is the secretariat for the IGP-BDS Learning Network. The SEEP Network provides resources for the IGP-BDS grantees to conduct technical exchanges, hold virtual discussions, organize an annual meeting, and learn about different approaches and tools that are being used in the various IGP-BDS grant programs. In addition, The SEEP Network generates opportunities for: peer exchanges, collaborative case studies, and conference participation for IGP-BDS Learning Network participants.

The goal of the IGP-BDS Learning Network is to be an excellent technical resource for the participants of the IGP-BDS Learning Network, furthering their program and organization objectives. Through the IGP-BDS Learning Network, lessons on sound practices will be captured and disseminated to the wider microenterprise development industry.

The IGP-BDS Learning Network was officially launched during a meeting organized by The SEEP Network and held in New Delhi, India in December 2003. This Learning Network identified the following three learning themes, which frame the common challenges of the IGP-BDS Learning Network participants, and are aligned with the market development goals of the IGP-BDS grants.

1. How to effectively manage the market facilitation role and tasks across a range of market settings and market problems.
2. How to build win/win business relationships between MSEs and other key market players.
3. How to effectively stimulate demand for business services.

Each IGP-BDS grant operates on a performance basis, tracking progress against targets established at the outset of the grant. The semi annual reports also provide qualitative narratives that link programmatic performance to the overarching IGP-BDS Learning Network’s agenda. The agenda aims to understand how to harness the power of increased MSE participation in growing markets to achieve positive and lasting development outcomes.

Six IGP-BDS Learning Network case studies have resulted from the first two learning themes. These cases were written against a set of guidelines adopted by the IGP-BDS Learning Network. These six case studies have initiated a process of learning linked to useful and practical outcomes. In the near future, the IGP-BDS Learning Network plans to: develop diagnostic tools that manage and track performance, document learning against current and future learning themes, and distill lessons on the links between better practice and performance.

- Marshall Bear, IGP-BDS Learning Network Facilitator
- Jimmy Harris, Deputy Director, The SEEP Network
- Jennifer Hansel, Program Associate, The SEEP Network

IDEI

International Development Enterprises (India), or IDEI, is a non-profit, non-governmental organization (NGO) registered as a Section 25 Company under the Indian Companies Act. Its registered office is in New Delhi. Until October 1, 2001, IDEI functioned as a branch of International Development Enterprises (IDE), an NGO registered in Canada, with its head office in Denver, Colorado, USA. IDEI is now an independent Indian entity.

IDE began operations in India in 1991 with the goal of enhancing the livelihoods of small and marginal farming families. IDE specializes in market-based approaches to improve rural livelihoods. The organization has long experience and expertise in agricultural intensification and income-generation for small-scale farmers.
The majority of India’s poorest people are subsistence farmers with small landholdings, typically less than two hectares. IDEI’s approach to poverty alleviation and rural development is to put income-generating technologies into the hands of poor rural families. It pursues this goal by stimulating the local private sector to: (i) consider poor farmers a viable market and (ii) provide them with productivity-enhancing tools at a price that is affordable yet fair to manufacturers and distributors.

With the right products—appropriately sized, priced, and marketed—the private sector can deliver income-generating technologies to small farmers on a sustainable “win-win” basis. The private marketplace is arguably the most efficient mechanism for widespread distribution of technology to maximize the distribution and impact of such technologies.

IDEI’s technical expertise lies in improving agricultural efficiency through technological innovation. Small-scale irrigation systems play an important part in its approach. Since technologies are disseminated through the open market, they are available to anyone who is willing to pay. The characteristics of the various technologies recommended by IDEI, however, make them particularly attractive to small-scale farmers: they are low-cost, manually powered, appropriate for small landholdings, and have a high rate of return. IDEI strives to make these technologies accessible to even the poorest farmers.

Donor funds are used to lay the groundwork for a sustainable market system. The creation of a market for a new and innovative technology requires certain costly up-front investments: product development, capacity building in the private-sector supply chain, and intensive marketing during product introduction to build a critical mass of awareness and demand. Donors bear these initial costs, which could never be borne by individual small-scale entrepreneurs.

IDEI’s approach leads to the creation of entirely new markets. Products that did not exist previously are manufactured and sold, generating new income for supply chain members. The products are purchased by the rural poor and used to improve production and increase income from existing resources. The result is true wealth creation, with benefits accruing directly to the rural poor.

### Framework for the Case Study

As mentioned above, IDEI has been working in India for twelve years, where it promotes two key technologies: the treadle pump and drip irrigation. The treadle pump program started in 1991 and continues to date. The drip irrigation program started in 1996, but caught on fully only in 1999. Since a major part of IDEI’s experience has been with the treadle pump program, this case study focuses on this technology.

The framework used for the study is the role that IDEI plays within the Product Life Cycle (PLC) of the technology. The PLC concept assesses changes that are normally made as a product passes through each stage of its life cycle. To say that a product has a life cycle is to say that:

- products have a limited life
- sales pass through distinct stages, each of which poses different challenges
- products require different strategies at each stage

Most PLCs are likely to be bell shaped (although the bell shapes may vary) and characterized by the following phases:

1. research and development, followed by product introduction
2. growth
3. maturity
4. decline

This case study analyzes the progression of the treadle pump program and the varying strategies that IDEI adopted for each phase of the product’s life cycle. The case also tracks the change in IDEI’s roles in these phases. The analysis continues through the maturity phase.

From 1991 to 1995, the treadle pump was in the introductory phase. For an enterprise, this phase is typically characterized by a period of slow sales growth as the product is introduced into the market. Profits are non-existent because of the high expenses associated with product introduction. In the IDEI program, the initial investment in market creation was borne by donors, enabling small manufacturers to enter weak markets for a new product.

Since the process of identifying and developing supply chains in India would take time, and since the product was ready for the market, IDEI initially planned to introduce the pump without wasting vital time. It thus decided to work through local-level NGO partners who could sell the technology to farmers in their respective areas. IDEI staff clearly explained the market approach to partner NGOs and expected them to sell the pumps to local farmers and farmer groups. In a very short time, however, IDEI found that most NGOs were giving the technology away to farmers and that cost recovery was as low as 10 percent.

The treadle pump introduced in India through the NGOs had been working satisfactorily in Bangladesh and IDEI had expected it to be received well by farmers in eastern India. Yet IDEI soon realized that the farmers were not accepting the product for two reasons. One, the length of the cylinder made it difficult—especially for women farmers—to climb up on the pedal, and two, the product needed to be primed very frequently. Thus, the research and development and product adaptation phase, which IDEI had assumed to be unnecessary, required revisiting.

Back to Product Adaptation

IDEI subsequently made modifications to the pump to meet the needs of farmers in India. The organization even went a step further and introduced five different versions of the pump for differing contexts. For example, the bamboo pump (the cheapest version) was designed for areas where bamboo is easily available, and the concrete pump, for coastal areas (where it could overcome the corrosion problem). In areas where bamboo was not available and mechanics were not easily found at the village level, IDEI introduced a complete metal pump, as installation of the bamboo pump required the services of a village mechanic.
The treadle pump first introduced was designed to lift water from approximately a 25-to-30-foot depth. In the course of introducing the pump, IDEI identified several areas where the water table was within 15 feet of the ground level. IDEI accordingly introduced pumps with larger cylinders, which allowed them to lift water from a depth of 15 feet and also provided a higher discharge for the same level of effort.

Establishing the Supply Chain

IDEI also initiated the process of identifying private supply-chain members, from manufacturers to distributors and retailers. IDEI started by identifying a good manufacturer in the region who had an interest in manufacturing the pumps, was quality conscious, and had the necessary infrastructure to produce them. Training the manufacturer took time as IDEI did not want to make the mistake of launching a poor-quality pump and risk market rejection of the product at the introductory stage.

IDEI also appointed distributors and dealers (retailers) who were ready to stock and sell the pumps. Although it was difficult to interest shopkeepers in stocking the product, some were willing to give it a try after seeing a demonstration and learning of IDEI’s market support activities.

Marketing Strategies during Introductory Phase

IDEI knew that it had a “killer” product, that is, the pump was a clearly differentiated offering that met a very specific need of low-income farmers. It was affordable, available locally, and provided a quick payback and a high return on the initial investment. IDEI then adopted a rapid penetration strategy. It launched the product at a low price (very low relative to available options) and incurred high promotional expenditures. This strategy was chosen because the market was large and potential customers were price sensitive and largely unaware of the product.

At this stage, IDEI’s role was focused on getting the right offering adapted and suited to the specific requirements of the target segment, then introducing it into the market through market actors.

Key Lessons Learned during Introductory Phase

- It is important to understand the local context first and then adapt the product and/or service to the specific needs of target customers. In fact, IDEI learned that regular market feedback, product modification, and adaptation needs to be a continuous process. At a later stage, for example, IDEI introduced a pump designed for surface water sources, as well as a rope pump for areas with falling water tables.

- It is important to maintain control over product introduction to avoid diluting the market approach, especially in weak markets. IDEI started by working through local NGOs, but the market approach failed because these organizations had a tendency to give the product away free of cost to farmers.

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3While diesel and electric engines cost Rs. 10,000 to 14,000, the IDEI treadle pumps cost the farmers Rs. 350 to 1,200.
The years 1996 to 1999 were a period of high growth for the IDEI program, during which the pumps were rapidly accepted. By now, IDEI had set up a private supply-chain network with locally trained manufacturers, distributors, and dealers. With sales going up, the IDEI role in product promotion was to ensure that farmers were aware of the pumps and that sufficient demand existed for them. Since sales were dependent on staff involvement, IDEI stepped up staff recruitment at the regional level. As staff increased, sales also proportionally went up. The three-year period saw sales growth of over 200 percent.

IDEI’s Role in Ensuring Supply

On the supply side, IDEI staff ensured that the supply chain worked well, i.e., that a stock of quality pumps was available at the right place and the right price. This meant that IDEI had to maintain good relations with the manufacturers, train them further if necessary, appoint distributors and dealers in new areas, encourage them to stock pumps and spare parts, explain the business model to all providers, train mechanics in repair and maintenance, and, finally, establish linkages between providers.

IDEI faced several difficult situations. In some areas, it was difficult to get a distributor to work with new products. While IDEI could clearly see the market potential, there was no strong private-sector player who was ready to take on the role of distributor in one program region, so IDEI decided to distribute the pumps itself in this area. In some instances, where retailers were weak or not present, IDEI staff directly supplied pumps to farmers by physically transferring them in their own vehicles to farmers’ fields. The sales staff also often assisted the supply chain by processing orders and collecting payments in the field.

IDEI’s Role in Creating Demand

IDEI realized that to effectively communicate product features and benefits it was necessary to brand the pumps. It decided on the brand “Krishak Bandhu,” or KB, which stands for “farmer’s friend.” IDEI aggressively promoted the KB brand and farmers started to demand KB products because the brand represented quality and affordability. Demand-creation activities were planned in detail by IDEI. These activities consisted largely of several promotional and awareness campaigns in villages and rural weekly markets. Activities included village meetings, demonstrations, video shows, individual follow-up meetings with potential customers, and distributing wall paintings and handbills.

To deliver on the promise of the KB brand, IDEI maintained stringent quality control (QC) at the manufacturer level, with an IDEI QC manager assigned to each region that manufactured pumps. These measures strengthened the brand image and contributed to improved sales. Manufacturers who were unable to conform to IDEI quality standards were eliminated. Other local fabricators and non-KB manufacturers could not compete with the KB brand on price because IDEI absorbed promotional and market-creation expenses.

Key Lessons Learned during Growth Phase

- A high-quality product is essential when launching a new product. A poor-quality pump (which would not have lasted long, but perhaps would have been cheaper) would have been rejected by the market.
- It is important to have an after-sales strategy in place at the start and to identify service providers who can stock spares. While farmers would go to distant markets to purchase a pump, they were hesitant to travel far to obtain small spare parts. Local, village-based service providers are needed to stock spares needed and must be identified when putting the supply chain in place.
- In a weak market where product awareness is very low, it may be necessary for the program implementer to play a direct distribution role. To catalyze market demand and demonstrate market potential IDEI needed to directly provide certain services. Once customers began demanding the product several dealers came forth to provide this service and IDEI exited the distribution function.
- While direct service provision may be necessary in weak markets, it is equally important that the program implementer quickly move into a facilitation role as demand picks up. Once sales grew due to IDEI implementation efforts, there was a rising sense of euphoria within the IDEI sales team, a feeling of a job well done. However, this feeling delayed the process of IDEI stepping into its new role of facilitator.
- By the end of the growth phase, IDEI had clearly identified the specific functional areas from which it needed to exit. On the supply side, IDEI needed to...
hand over physical and financial transactions completely to private service providers. On the demand side, the service providers needed to take on some of the marketing functions.

- In order for IDEI to effectively move into a facilitation role, the price of the product had to be increased, thereby creating sufficient margins for the supply-chain service providers to assume marketing functions. Until this point, all costs of market creation had been borne by IDEI. A new, increased price would also allow other market players (especially new manufacturers) to enter the market because they would be able to compete with existing service providers, given that the market-creation subsidy built into the product launch would no longer apply.

### Maturity Phase

The treadle pump program has been in the maturity phase since 1999. The sales growth rate has now slowed because the product has achieved acceptance by most innovators and early adopters. In this phase, the focus of IDEI has been to enhance product acceptance by reaching the next level of more risk-averse customers.

### Organizational “Right-sizing”

IDEI had heavily recruited sales staff in the product growth phase. In view of the stabilization in sales and the new facilitation role that IDEI had in mind for itself, the IDEI team needed to be “right-sized.” IDEI conducted an internal review and decided to reduce staff substantially and eliminate existing redundancies. Interestingly, when the sales staff was reduced by about 40 percent, sales decreased no more than 13 percent.

### Handing over Functions to the Supply Chain

IDEI assessed its strictly managed quality control systems and concluded that manufacturers were now well trained and capable of managing quality on their own, with periodic checks by IDEI. The only danger perceived

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by IDEI was the tendency of manufacturers to reduce quality and cut costs to increase profits.

At the same time, IDEI felt a need to increase the sense of product ownership by the supply chain and decided to co-brand the treadle pump. Instead of promoting KB pumps, each manufacturer now affixed their own brand to the KB logo as a suffix. For example, if the manufacturer brand was “Prachi,” the pump was branded as “KB-Prachi.” IDEI believed that co-branding would ensure that manufacturers maintained product quality, as well as assumed responsibility for some promotional functions. The strategy helped maintain quality and increased the engagement of manufacturers with the product.

IDEI tried to hand over promotional activities to the supply chain in a phased manner. To start with, IDEI transferred all static promotional materials to its partners, including leaflets and handbills, wall paintings, sign boards, and banners. Dynamic promotion tools, such as campaigns, village meetings, haat (rural market) demonstrations, and video van shows, were more dependent on IDEI staff and required an investment not only of money, but of time and effort as well.

Dynamic promotions could not and thus were not passed on to the supply chain entirely. Instead, IDEI agreed to continue to support demand creation via dynamic promotion tools, if its partners actively participated in these activities. The objective of the strategy was to allow supply-chain partners the time to understand the relevance of these activities in creating demand, learn how to conduct the activities, and eventually take responsibility for such promotions. It was quite clear, however, that certain tools (e.g., video shows) would not be continued by the supply chain because they incurred high costs that product margins did not support.

**Pricing Review**

Although IDEI sought to increase the price of the treadle pumps, affordability remained its key mandate. Pump prices were thus increased marginally, keeping in mind the ability of customers to pay, but the increase was insufficient to cover marketing costs.

At the same time, IDEI sought to tap the next level of price-sensitive customers who to date had been unable to purchase a pump. IDEI consequently worked to design a new, cheaper model of the pump. The new model was expected to last 2 to 3 years, as against the 5 to 6 years of the earlier models. The overall marketing idea was to offer customers a range of pumps to suit varying needs, contexts, and budgets.

**Sustainability**

After IDEI had shifted to a true facilitation role, it declared 1999-2002 would be a “sustainability” period for the treadle pump program. This meant that IDEI would transfer several activities and hands-on functions to the supply chain. When IDEI spoke of “sustainability,” however, its partners construed it to mean “withdrawal.” Since IDEI would hand over most functions to private-sector service providers, they assumed that IDEI would soon have no role at all. It took IDEI a few years to explain to its partners the process of sustainability and its implications.

<table>
<thead>
<tr>
<th>Function</th>
<th>Earlier role</th>
<th>New role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply chain management</td>
<td>Direct involvement in order processing, monetary transactions</td>
<td>Facilitation and coordination of linkages between supply-chain members</td>
</tr>
<tr>
<td>Promotion</td>
<td>IDEI staff directly involved in promotions in villages and rural markets</td>
<td>Gradual transfer of this responsibility to supply chain</td>
</tr>
<tr>
<td>Quality control</td>
<td>Highly controlled and centralized</td>
<td>Responsibility shifted to supply chain, with periodic quality checks by IDEI</td>
</tr>
<tr>
<td>After-sales service</td>
<td>Trained mechanics Extra spares provided with product</td>
<td>Facilitation of supply chain and new alternative channels for stocking spares</td>
</tr>
</tbody>
</table>
Key Lessons Learned during Maturity Phase

- When shifting from direct implementation to facilitation, a program must put the right staff structure in place. Reduced field staff may impact sales and outreach, but in the interest of long-term program sustainability, this shift must be made and the associated functions transferred to the service providers.

- It is important to clearly define and explain the facilitation role, both to program staff and private sector partners supported in previous product phases. An explicit plan of action that details new roles and areas of responsibility for all players is critical.

- Although it is imperative to ensure good quality when introducing a new product, over time quality must be considered in the context of affordability and the ability of target customers to pay. IDEI could have introduced price-quality variants earlier in the program.

- If IDEI had not acted quickly to introduce the new pump variant, the product would have gone into the decline phase a year or two after the growth phase. The introduction of a new variant, which meant returning to the first product phase of research and development, followed by product introduction, resulted in the treadle pump extending its product maturity phase.

Conclusion

The treadle pump program continues to be in the maturity phase. In its new role of facilitator, IDEI expects to enable the program to enter new areas, increase coverage and outreach, and thereby ensure that the maturity phase is enhanced. IDEI is now moving towards a more comprehensive approach to all of its programs (see annex 1), looking to facilitate value chains rather than supply chains. The organization is planning to facilitate a broader range of products and services for farmers in the future and expects not only to increase its outreach to larger numbers of small landholders, helping them to overcome water constraints, but also to significantly impact their incomes.
In 1991, IDEI began to work with treadle pumps, which are used to lift water in areas with shallow water tables. In water-scare regions of India, however, the need of the hour was low-cost water applications such as drip irrigation. Conventional drip systems were very expensive and bypassed the small and marginal farmer. In 1995-96, IDEI decided to study the market for and test the idea of a low-cost drip irrigation system targeted at small landholders.

From 1996 to 1999, IDEI completed concept testing and short-listing of the low-cost drip technology that it would promote. At this time, the IDEI treadle pumps were in the growth phase, although growth rates were stabilizing. Having learned from its experience with the treadle pump, IDEI decided that it would be best to design the new program with a much larger role for supply chain providers and a less direct role for itself. IDEI thus adopted the role of facilitator at the time of product introduction. This strategy was possible because the market for drip systems was better developed and farmers were well aware of the technology, unlike the treadle pumps, for which the market had been very weak.

Disseminating technology through private sector providers had worked very well in IDEI programs. However, it had become clear that IDEI needed to enhance its approach to include additional types of services. This shift in thinking resulted from impact assessment studies sponsored by IDEI. The studies revealed that, while the largest constraint is usually water, farmers faced

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**Table 2. Promoting a value chain**

<table>
<thead>
<tr>
<th>Function</th>
<th>IDEI role across a range of services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply chain management</td>
<td>• Identify, train and coordinate linkages between supply-chain members</td>
</tr>
<tr>
<td>Demand creation</td>
<td>• Engage in promotion with supply chain partners</td>
</tr>
<tr>
<td>Quality control</td>
<td>• Conduct initial rigorous training, followed by periodic quality checks</td>
</tr>
<tr>
<td>Quality input supply</td>
<td>• Train input seed suppliers and nursery growers on needs of small farmers</td>
</tr>
<tr>
<td></td>
<td>• Understand local requirements and facilitate appropriate stocking of quality supplies</td>
</tr>
<tr>
<td>Agronomic advice</td>
<td>• Organize training programs using local resource persons, including villagers, researchers, and government officials</td>
</tr>
<tr>
<td>Crop selection</td>
<td>• Assist in selection of high-value crops to be grown for crop diversification</td>
</tr>
<tr>
<td></td>
<td>• Facilitate training on cost-benefit analysis, production techniques, and best practices for new crops, using local resource persons</td>
</tr>
<tr>
<td></td>
<td>• Organize farmer-to-farmer contact programs</td>
</tr>
<tr>
<td>Information and market access</td>
<td>• Facilitate the creation of agri-service centers, using existing ICT services available through private service providers; help develop the center’s business model</td>
</tr>
<tr>
<td></td>
<td>• Train farmers on how to use market information (e.g., prices in various markets, consumer preferences, export-oriented crops) to earn higher returns</td>
</tr>
</tbody>
</table>
several other constraints which, if minimized, would result in much higher farmer incomes. This realization led IDEI to shift from the creation and management of supply chains to the creation and management of value chains.

The role of a facilitator in the drip irrigation program included the provision of several additional services, including nursery saplings, quality agriculture inputs, and knowledge of production practices for new, high-value marketable crops. This new role was put into practice in a BDS program implemented in the state of Maharashtra, beginning in October 2001 (see table 2).

IDEI faced several challenges in its new role. For example, agriculture training could be provided through local resource persons, but farmers were unwilling to pay for it. Because the sustainability of this service was questionable, IDEI tried to see if it could be embedded in another product or service. It realized that the first point of contact for information is almost always the seller of agricultural inputs, so, to the extent possible, IDEI insured that these service providers were included in the training programs led by experts.

Farmer-to-farmer contacts also needed to be encouraged so that the knowledge that existed within a village could be disseminated to larger numbers of farmers. While designing the business model for the agri-service center, IDEI tried to see if this service could be provided by the center and its price embedded in either the membership fee or recovered from the marketing fee charged for bulking farmer produce and taking it to larger markets.

The new and wider role of IDEI as facilitator for the drip irrigation program helped the program in several ways. In sum:

- the supply chain did not completely depend on IDEI staff to create the market for these products
- IDEI could achieve significant outreach with the same or fewer staff
- the product very quickly entered the growth phase
- IDEI could impact incomes of small farmers significantly by working along the value chain with various service providers
- as demand picked up for drip irrigation products and related services, IDEI found itself exiting some developed markets and entering new markets.