

The Value Initiative

Advancing urban value chain development to help millions of people work their way out of poverty.

Giving a Market-Driven Perspective to Improving Working Conditions in Informal Sector Economies

Exploring the application of value chain finance strategies- microinsurance and microleasing

AUTHOR

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with contributions from

ACCESS Development Services (India)

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About SEEP

The SEEP Network is a nonprofit network of over 130 international organizations that believe in the power of enterprise to reduce global poverty. SEEP members connect in a global learning community to increase their impact in over 170 countries, where they collectively serve over 89 million micro-entrepreneurs and their families. Through SEEP's learning initiatives, microenterprise development practitioners co-create and exchange strategies, standards, and tools for building healthy economies with a sustainable income in every household.

www.seepnetwork.org

About The Value Initiative

From 2008 to 2011, with support from the Bill and Melinda Gates Foundation, The SEEP Network's Value Initiative advanced the knowledge and practice of urban value chain development to stimulate sustainable, large-scale, and poverty reducing economic growth, with a special focus on vulnerable populations. The \$6.5 million Value Initiative has two core Practitioner Learning Programs (PLPs): 1) Urban Value Chain Development and 2) Business Planning for Sustainability and Scale-Up.

Urban Value Chain Development

Although value chain development represents an innovative and systematic approach to address poverty, best practices for urban settings have yet to be well defined and broadly disseminated. In response to this need, the Value Initiative provided technical assistance with 3-year grants to four demonstration programs in Kenya, India, Indonesia and Jamaica. The SEEP Network facilitated capacity building, peer learning, and supported knowledge management process and research to advance and build the industry capacity in urban value chain development. The four Value Initiative Programs (VIPs) were implemented with the following partners:

Program Name	Lead Organization	Partner Organizations	Sub Sector	Location
VIP India	ACCESS Development Services	<ul style="list-style-type: none">• Jan Kalyan Sahitya Manch Sansthan (JKSMS)• Rajasthan Abhyudaya Sansthan (RAS)• Jaipur Jewelers Association (JJA)	Jewelry	Jaipur, India
VIP Kenya	Academic Model Providing Access to Healthcare (AMPATH)	<ul style="list-style-type: none">• Export Promotion Council (EPC)• Fintrac	Passion Fruit	Eldoret, Kenya
VIP Jamaica	Jamaica Exporters' Association	<ul style="list-style-type: none">• The Competitiveness Company• Area Youth Foundation	Ornamental Fish	Kingston, Jamaica
VIP Indonesia	Mercy Corps Indonesia	<ul style="list-style-type: none">• Swisscontact• PUPUK	Tofu & Tempeh	Jakarta, Indonesia

Business Planning for Sustainability and Scale-Up

The Value Initiative partnered with five organizations to foster learning on innovative business models for sustainable, larger-scale enterprise development reaching a wider target group of marginalized communities:

- Entrepreneurship and Community Development Institute (Pakistan)
- Fair Trade Forum (India)
- LabourNet (India)
- SDC Asia (Philippines)
- KeBal/Mercy Corps (Indonesia)

For more information about the Value Initiative, including tools, additional learning products, photos and videos, please visit www.seepnetwork.org or contact Yibin Chu, Program Manager of Enterprise Development Community of Practice at chu@seepnetwork.org.

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Executive Summary

Key words: Value Initiative, SEEP Network, urban economic development, social working condition, physical working condition, role of private sector in improving working condition, micro-leasing, micro-insurance, health insurance, occupational hazard, informal sector, decent work, value chain finance

While formal sector workers are protected by various laws and have access to safety net solutions provided by their employers, informal sector workers—especially working in urban value chains—are largely excluded as they are often not associated with any umbrella organizations. Most enterprise development programs, particularly value chain analytical frameworks, do not always look at socio-economic parameters, such as working conditions, as means of increasing productivity and complementing livelihood promotion efforts. Governments continue to be the most influential players in this space as they establish the overall enabling frameworks, but unfortunately exclude the bulk of people in the informal sector. Market driven models for improving working conditions within informal value chains are negligible and generally undocumented.

The Value Initiative, a global urban value chain action-research program (a joint project of the SEEP Network and the Bill and Melinda Gates Foundation) addresses some of these issues by answering one of its core action research question: How can you apply market development and private sector development principles to address working conditions challenges faced by the urban poor? This paper demonstrates how financial products, or interventions (here, micro-leasing and micro-insurance), can improve value chain productivity, lead to improvement in physical and social working conditions, and complement economic interventions.

The paper focuses on two different case study interventions: The Value Initiative Project in Indonesia which reduced the impact of poor physical working conditions for urban tofu and tempeh workers through micro-leasing; and the Value Initiative in India, which introduced micro-insurance to improve social working conditions for urban jewelry artisans. Both cases offer lessons in linking private-sector financial services that are often intended to increase productivity in a value chain context, but have also resulted in a significant reduction of occupational hazards and an increase in the overall well being of workers employed in the informal sector.

The Value Initiative Program in India

VIP India experimented with integrating micro-insurance from both public and private enterprises as a way to provide a safety net for jewelry artisans in the informal sector and complement value chain productivity interventions. The crucial social working condition challenge was the migrant artisans' lack of government identification cards and poor delivery mechanisms for the existing government-subsidized insurance system. Without ID cards, the artisans could not access the benefits mandated by the government for low income communities. In cases where they did use the government insurance, the claim-settlement process was weak and took an inordinate amount of time to process claims. In addition, the artisans lacked the financial literacy to understand the policy details or even complete the paperwork.

The VIP India team worked with the government agencies to improve the delivery mechanisms for the existing government insurance schemes. It also found and convinced a leading health insurance provider in the private sector (Max Bupa) to offer insurance to the jewelry artisan community. The VIP India team also trained local NGOs and independent community-based agents to help artisans register for ID cards and access both public and Max Bupa in-

surance plans. They also worked with the jewelry association to issue artisan ID cards to complement the government programs and open access to the broader industry to migrant artisans.

Work to streamline and simplify paperwork and processes for insurance claims remains a further challenge.

Value Initiative Program in Indonesia

The VIP Indonesia team identified upgrading to modern production equipment as a way to improve the value chain competitiveness and productivity. This intervention also helped improve overall working conditions by providing a smoke-free environment.

Workers in urban tofu and tempeh factories in Indonesia earn a relatively good year-round income, with some possible upward mobility to become small producers. In contrast, however, are the poor physical working conditions that threaten the production of large number of producers, ranging from poor safety and sanitation standards to the quick deterioration of workers' health and stamina.

One of the major hurdles faced by the VIP Indonesia team was financing the equipment upgrade. The producers faced a relatively expensive process where existing financial institutions only offered high interest loans and terms that did not fit tofu and tempeh production cycles. After several less successful attempts to design an appropriate financial product with various mainstream financial service providers, the VIP Indonesia team facilitated a tripartite lease-purchase arrangement that included an equipment manufacturer, a tofu cooperative, and a leasing company, to guarantee loans to purchase improved tofu production equipment. The model is replicable, given the prevalence of tofu and tempeh cooperatives which generally accepted and took on the role of third-party guarantor for tofu and tempeh producers, who are often members of the cooperatives.

Continuing to build the capacity of the cooperatives and introducing the potential of improved production practices and leased equipment widely within the sector, however, remains a constant challenge.

Conclusion

The paper concludes by recognizing the need for further action research to identify and demonstrate innovative business models that apply market driven principles to deliver improved working conditions, especially where productivity improvement is not an outcome but a key input into the process. The paper summarizes the key interventions used in the two projects in facilitating value chain finance, the service providers used in delivering the intervention, and the impact on working condition as well as productivity for each intervention.

1. Introduction

The greatest challenge to economic development is ensuring that development translates into better living conditions for the poor. Workers in formal economies are protected by laws and regulations, and receive health benefits from their employers or have access to some kind of government safety nets. People working in informal sectors—especially in urban value chains—are largely excluded because they are often not associated with any umbrella organizations. Most enterprise development programs, and particularly value chain analytical frameworks, do not always look at socio-economic parameters, such as working conditions, as a way to increase productivity and complement livelihood promotion efforts.

Barring fair trade and microfinance, which currently cover a very small portion of the informal sector, other models for improving working conditions primarily include efforts by corporate citizens or civil society organizations and remain less replicable. Governments continue to be the most influential players by setting the overarching enabling framework, but unfortunately exclude the bulk of the informal sector. Market-driven models for improving working conditions within informal value chains are negligible and even less documented.

Replicable models that contribute to economic growth, as well as urban poverty alleviation, and contribute to decent living and working conditions can be valuable tools for value chain development. Evidence that market development principles can be adapted to social issues such as working conditions, offers a persuasive incentive for entrepreneurs, businesses, and proponents of decent work to look for market-based solutions to improve working conditions.

The Value Initiative, an action-research program focusing on global urban value chain development (see description on page 1), aims to address some of these issues by answering one of its core action-research questions: how can market development and private sector development principles be applied to the working conditions challenges faced by the urban poor? This paper discusses two different interventions: 1) the Value Initiative program in Indonesia (VIP Indonesia) to reduce the impact of poor physical working conditions for urban tofu and tempeh workers through micro-lease purchasing; and 2) the Value Initiative program in India (VIP India) to improve social working conditions for urban jewelry artisans by improving access to micro-insurance as a way of expanding formal safety net.

Both cases offer lessons in linking private-sector financial services, such as micro-insurance and micro-leasing, that are often intended to increase productivity in a value chain. They also eventually reduce the impact of occupational hazards and have potential to increase the overall well being of workers and artisans employed in informal sectors.

The objective of this paper is to demonstrate through these two cases how market development and private-sector development principles can be applied:

- To improve physical working conditions by using a financial product (micro-leasing), while primarily improving business productivity; and
- To improve social working conditions by providing different types of micro-insurance as a way of expanding formal safety nets, which eventually complement income-generating interventions.

1.1 What Is Meant by Poor Working Conditions?

According to the International Labor Organization (ILO), decent work involves opportunities for work that is productive and delivers a fair income, security in the work place, and social protection for families.¹ The term “working conditions” means both physical and social conditions, encompassing a range of social and economic issues that people face in the workplace, including—but not limited to—fair wages, work safety, child and bonded labor, sexual harassment, maternity protection, and the right to organize. Poor working conditions, as defined by the United Nations, generally encompass low wages, a high level of work discrimination, occupational hazards, lack of equal employment opportunities, and a lack of social security, among other elements. These factors influence future economic and social opportunities and degrade the livelihoods of the workers and their families.

Minimum standards for working conditions are defined by each country, but the majority of workers—especially those whose conditions are most in need of improvement—are excluded from existing labor regulation measures. Workers in cottage industries, the urban informal economy, agriculture (with the exception of plantations), small shops, local vendors, and domestic workers often fall outside the scope of protective legislation. Others are deprived of effective protection due to weaknesses in enforcement of labor laws. This is particularly true for workers in small enterprises, which account for over 90 percent of enterprises in many countries.² Efforts to address this problem stem not only from an ethical standpoint but also an economic standpoint, as better working conditions translate into better worker efficiency and productivity.

1.2 Why Are Working Conditions Important in an Urban Development Context?

The employment of the poor across the globe can be largely classified into formal and informal sectors. In developing countries, 50–90 percent of the workforce toils in the informal sector. Most poor and marginalized urban dwellers tend to be concentrated within slums and are largely engaged in the informal sector. With increased population growth and the promise of better livelihood opportunities in the urban centers, a large proportion of the rural workforce has migrated to urban hubs and increasingly accepted jobs that offer little to no worker protection and are characterized by dangerous physical working conditions. As unregistered migrants or informal workers, they may have no knowledge of or access to basic entitlements, such as safe working conditions, social security, and legal protection.

A key concern regarding working conditions is the high probability of occupational hazards, especially within the informal sector. Workers are likely to face chronic occupational hazards due to long working hours, as well as sleeping where they work. Like social protection, physical protection is seldom a priority for informal sector employers, particularly if they do not face stringently enforced labor regulations. The World Health Organization³ cites work-related stress in developing countries as a major factor contributing to the incidence of accidents and diseases. Workers who are engaged in activities or environments prone to hazards face immediate physical harm from accidents or long-term physical harm if they are exposed to toxic substances for long periods. These conditions carry negative consequences for workers’ families and the local economy at large if productivity levels are compromised as a result of lost labor. When occupational hazard statistics are aggregated across the world, ILO estimates that 4 percent of global gross domestic product is lost as a result of work-place accidents and diseases.⁴

1 <http://www.ilo.org/global/topics/decent-work/lang--en/index.htm>.

2 www.ilo.org/public/english/protection/condtrav/workcond/index.htm.

3 http://www.who.int/occupational_health/publications/raisingawarenessofstress.pdf.

4 Ibid.

1.3 Why Consider Market-Driven Solutions to Improve Working Conditions?

Developing countries with large urban informal economies often do not have appropriate government policies in place to establish and protect workers' rights. Research shows that change agents influencing working conditions can be primarily classified into four categories: 1) the government, which plays a major role as an important welfare organization by laying out the overall policy framework for improving working conditions; 2) civil society organizations and community-based organizations engaged in improving working conditions that may have dedicated resource support from various donors; 3) individuals, who often take care of their employees through informal transfer of resources and in kind support; and 4) corporate social responsibility initiatives within the private sector.

Government and civil society organizations play larger, more significant roles than corporate social responsibility and individuals in improving either physical or social working conditions. The private sector has more influence over the formal work force, but informal sector workers are largely left out. There is significantly less documentation and awareness about private-sector and market-driven models impacting the informal sector workforce.

1.4 What Role Can Value Chain Finance Interventions Play in Improving Working Conditions?

Value chain finance interventions are meant to directly improve productivity and volume of business by increasing access of actors across the value chain to various types of financial services. Value chain finance is financing provided to or by a value chain actor in order to increase value chain growth and competitiveness. Working conditions are not commonly addressed in the analysis of value chain frameworks and productivity, although working conditions have a direct impact on productivity.

For example, in the tofu and tempeh value chain in Indonesia, upgrading production equipment by improving access to micro-lease purchase facility was an essential intervention to improve productivity and production quality. (See appendix 2 for a description of the project.) Its effect on improving working conditions was phenomenal, but it was not a primary objective of value chain development. Given the importance of working conditions in urban informal enterprises, the Value Initiative decided to make this a key learning theme and drew lessons for market-driven financing strategies that have a clear effect on improving working conditions for informal sector workers.

2. Value Initiative India: ACCESS Development Services and the Costume Jewelry Value Chain

Strategy for introducing micro-insurance to improve social working conditions in the informal sector

2.1 The Indian Context

Jaipur has been a center for gem processing and jewelry making since the mid-18th century and is now the global hub for skilled labor to process semi-precious gems. Jaipur's gem heritage, combined with the skill of artisans in surrounding villages in traditional silver ornaments, led to rapid growth in the 1970s as a new mass market in silver ethnic jewelry. Today, Jaipur's gem and metal jewelry sector is estimated to employ approximately 200,000 people: nearly 135,000 work in gem cutting and polishing (processing 95 percent of all semi-precious stones in the country), and the balance works in associated metalwork and other traditional jewelry making. The industry is closely linked with the global jewelry market, which is predicted to grow to \$196 billion by 2015.⁵

2.2 Social Working Condition Challenges

Today, this industry is still largely informal, unorganized, and dominated by significant challenges. Its largely migratory workforce, lack of direct market access by primary producers, and pervasive low trust combine to keep many small producers and workers in conditions of poverty. Almost 95 percent of the workers in the jewelry value chain in Jaipur are employed informally; only 3–4 percent of artisans are organized into small-to-medium enterprises, which have only been established in the last few years. Working in jewelry includes cutting, faceting, polishing, drilling, and so on. Gem cutters, gem polishers, and lac workers labor long hours on hazardous machines, with gem, metal dust and fire close to their faces, for less than minimum wages.

Artisans lack official identity for various reasons like migration, lack of efficient government delivery mechanisms, and inadequate government guidelines (guidelines that do not classify jewelry artisans as handicraft enterprises because some stages in the production cycle use machinery).

Setting up independent workshops and investing in better equipment to upgrade production is an expensive process and needs capital investment. Artisans typically lack access to financial services primarily because they lack formal identity and financial institutions lack customized products that take into account social collateral. Financial service organizations consider these areas as “credit negative” or highly risky to finance because of past defaults in some cases. Lack of identity cards also denies artisans credibility in the market place and limits their ability to form new business



Women working in a workshop.

⁵ The market was \$146 billion in 2006. GJEPC-KPMG, 2007, “The Global Gems and Jewelry Industry—Vision 2015: Transforming for Growth,” report prepared for the Ministry of Commerce, Government of India.

Micro-Insurance

Micro-insurance is a powerful tool for:

- Protecting the poor and their assets from negative external shocks;
- Compensating the effects of covariate shocks (e.g., natural disasters);
- Addressing gender-specific vulnerabilities;
- Freeing up household capital for investment in a small enterprise;
- Helping households avoid poverty traps; and
- Expanding informal insurance schemes and social protection.

Source: M. Maleika and A.T. Kuriakose, "Microinsurance: Extending Pro-Poor Risk Management through the Social Fund Platform," Social Funds Innovations Notes 5 (2): 2.

The JJADe Financial Product

Max Bupa Health Insurance, with the support of ACCESS Development Services and as part of the Value Initiative's Jaipur Jewelry Artisan Development Project (JJADe), launched the "Swasthya Pratham Micro Insurance Plan," a group health insurance product for urban poor. During the implementation of the JJADe project, Max Bupa was approached to create a product which could cater to the needs of poor artisans and secure them socially. After several strategic meetings and brainstorming sessions with the ACCESS team, Max Bupa came up with a product that provided health insurance for the informal jewelry artisans. The product was tested in the JJADe project participants and was modified through feedback from the field staff and beneficiaries. The most important components are:

1. Family coverage: Family of 4 that includes the primary holder (aged 18–65 years), legally married spouse, 2 children or other dependents (aged 3 months–65 years).
2. Premium: INR 1,124 for a coverage of INR 20,000 for a family of 4. Changes with age and number of family members covered.
3. Policy tenure: 1 year
4. Insurance benefits: The sum insured ranges from INR 5,000 (USD 109) to INR 30,000 (USD 660) for individuals and INR 10,000 (USD 220) to INR 30,000 for family floater policies. Covers reasonable and customary expenses incurred towards medical treatment taken during the policy period for an illness or an accident.

In its collaboration with ACCESS and the Value Initiative, Max Bupa covered more than 10,000 people with the JJADe program product. After the pilot, Max Bupa replicated and launched the product in Bihar and West Bengal, and by the end of 2011 covered 15,000 more people.

The other benefits of the insurance product include medical expenses for doctors' fees, diagnostic tests, medicine and consumables, intravenous fluids, blood transfusions, administration charges, injections, surgery, prosthetics and internal devices or equipment implanted during surgery, intensive care, and hospital stay (reasonable and customary charges).

Source: http://www.maxbupa.com/customer-care/DownloadAll-From/Swasthya_Pratham_sales_prospectus_for_web.pdf.

linkages, as well as access to government-mandated programs, such as subsidized insurance and credit.

Such workers do not have access to any kind of safety net to cushion them against the occupational hazards they are routinely exposed to. Historically, development agencies and practitioners achieved limited success in sustainably addressing the gaps between demand and supply of formal safety net services for the informal sector. While sustainable livelihood approaches represent the predominant strategy to tackle economic development for vulnerable populations, generating sustainable safety nets for beneficiaries within existing market systems is rarely convincingly addressed. Consequently, there remains an unmet need for safety net mechanisms for informal sector workers, especially making such protections available on a consistent basis and in a scalable manner.

2.3 Core Value Chain Development Strategy for the Costume Jewelry Sector

The core strategy for increasing competitiveness and income-generation potential within the Jaipur jewelry value chain was to link artisans to higher-value markets that value design as well as clean and fair supply chains. Critical interventions included upgrading skill sets, technology, establishing product and design development, opening access to new markets, and engaging in advocacy. An important focus was providing identity cards to the informal sector artisans to enable access to insurance and other entitlements (particularly earmarked for the handicraft artisans by the government of India) that complement economic interventions by cushioning against shocks.

2.4 The Approach to Value Chain Finance

Finance was identified as an important accelerator in the costume jewelry value chain from the very outset. Opportunities to use finance included investment capital (for equipment and technology upgrades) and working capital.

However, in value chains with a large informal sector workforce, income growth by increasing overall industry competitiveness is limited in the short-to-medium term as such markets are highly unorganized, often deal with a range of mass-produced or low-end products, provide low-entry barriers for newcomers, and are typically characterized by disguised unemployment. As a result, the temporary and seasonal income gains experienced by clients of value chain development programs are often quickly offset by negative shocks, such as accidents, illness, disabilities, and family

emergencies, which quickly erode any savings generated. Thus, the Value Initiative team looked for opportunities that were more systemic and had the potential to complement existing income-generation efforts for this target population. (For the overall project strategy, see appendix 1.)

Micro-insurance for poor and low-income people represents one emerging solution: a market-based approach to providing a safety net that has an expanding body of evidence and of its effectiveness. The Value Initiative project experimented with an innovative model that expanded formal safety net services—by improving access to micro-insurance—as a way of increasing value chain competitiveness (box 2). While financial services and other economic interventions are often offered, the use of micro-insurance in a value chain context is relatively new.

2.5 Steps to Facilitate Access to Safety Net Solution for Urban Informal Jewelry Artisans

The VIP India team integrated health insurance as a safety net solution in the value chain development project. This was expected to complement economic interventions as a cushion against health-related shocks, such as illness and accidents. This is an unconventional value chain intervention, but given the focus of the program on integrating vulnerable populations (especially the marginalized producers), this was an important step. The team, however, was keen to keep to basic market-development principles and apply them to solutions for better working conditions. The team took the following steps to introduce health insurance as a way of improving social working conditions for the marginalized producers involved in jewelry value chain activities.

Research

The team conducted secondary research to understand the current landscape of insurance products, delivery mechanisms, and challenges in Jaipur. It identified potential private-sector and government insurance service providers to test out how their services fit the jewelry community.

Various private sector insurance service providers (TATA AIG, Max New York Life, ICICI) serve the Indian market. In addition, there are government insurance providers, such as the Life Insurance Corporation of India (LIC) and other subsidized government schemes. However, most products and delivery models exclude the urban poor. Entrepreneurial or agency models exist and are common for “big ticket” policies, but they are not profitable enough to service smaller clients. Other models are microfinance institutions (MFIs) or non-governmental organizations (NGOs), which service their own clients. These too leave out a wide section of the low income population.

The products that actually existed had difficult challenges, such as taking an inordinate amount of time to settle claims and producing a relatively low quantum of benefits, neither of which gave clients an incentive to purchase these policies. In cases where government-mandated insurance schemes for artisans existed, such as Rajiv Gandhi Shilpi Swasthya Bima Yojana (a health insurance scheme for handicraft artisans), workers did not meet the prerequisite of having a valid identity card.

On the demand side, JJADe clients often lacked the financial literacy to understand and purchase policies, or even to complete the paperwork. This resulted in few claims made and settled, which exacerbated poor confidence in the product.

Artisan credibility

The JJADe project simultaneously identified cross-cutting enabling factors, such as identification (ID) cards, and analyzed the reasons why jewelry sector workers did not have ID cards. The team recognized that the jewelry artisans

Table 1 Results of Improving Access to Micro-Insurance

Interventions providing access to financial services	Outreach
Facilitation of ID cards for artisans (from government and other trade bodies)	20,000 artisans
Direct access to ID card information (social recognition)	1,405 enterprises
Insurance (medical, life, and pension)	23,151 lives
Direct access to insurance information (social security)	1,255 enterprises
Number of claims settled	139

lacked basic entitlements partly because they were migrants. In addition, the government's delivery system was weak, which also made it difficult for the artisans to register for identity cards and in turn access other services earmarked for the handicraft artisans. Lack of identity also created a major barrier to forming new business links and accessing financial services that enhance value chain competitiveness.

Although the Indian government is a key source of providing identities, its system of issuing cards is ineffectual. The JJADe project identified these weaknesses and trained local NGOs and a cadre of private service providers to manage a streamlined process for helping the artisans fill out the ID card forms, deliver the forms to the appropriate government agency, and pick the ID cards up. The project also worked with the various government divisions to help them reorganize their systems.

In addition, one of the strongest jewelers associations collaborated with JJADe to provide identity to artisans under its banner. This was a crucial move because the association included pre-eminent jewelers and offered recognition of the informal artisans in the mainstream market. This intervention alone led to low rejection rates of ID card applications. In a short time, over 20,000 jewelry artisans gained access to identity cards (table 1), which in turn gave them the credibility with financial service organizations and the jewelry market.

Tests and demonstration

To test insurance services, the JJADe team identified a few pre-existing government insurance schemes, such as Janshree Bima Yojna and Rajiv Gandhi Swasthya Bima Yojna (RGSBY). The latter scheme, delivered by a private provider ICICI Lombard, was 80 percent subsidized by the Indian government, yet outreach to the jewelry artisan community was very poor. JJADe tried to identify the reasons and realized the main challenges were the artisans' lack of identity and their poor understanding of the paper work required for ID cards and claim settlement process.

The project team focused on these challenges and designed a better system to help artisans register for ID cards as described above. It also developed specific interventions to help new service providers and the government address the current weaknesses in the system:

- It requested comprehensive training by ICICI Lombard field managers for the facilitating local NGOs and private service providers, so they learned the basic insurance procedures and details of coverage, such as which hospitals were permissible, what kind of bills were needed for submission of claims, etc.
- It trained a cadre of community partners and independent community mobilizers to walk the artisans and community members through the paper work for claim settlement and explain new policies for a fee.
- It continuously communicated with the government's Development Commissioner for Handicrafts to pressure ICICI to improve delivery mechanisms.
- It continued to identify other providers to increase competition, quality of service, and sustainability.

These interventions smoothed the settlement process and increased the number of claims presented, effectively demonstrating to the community the potential benefits of insurance.

Partnerships and product customization

After demonstrating the potential of micro-insurance to the artisan community, JJADe continued to look for service providers interested in serving the base of the pyramid market and identified Max Bupa, a leader in providing health insurance, as a key partner. The team and Max Bupa worked together to customize a product for the urban poor through the following process:

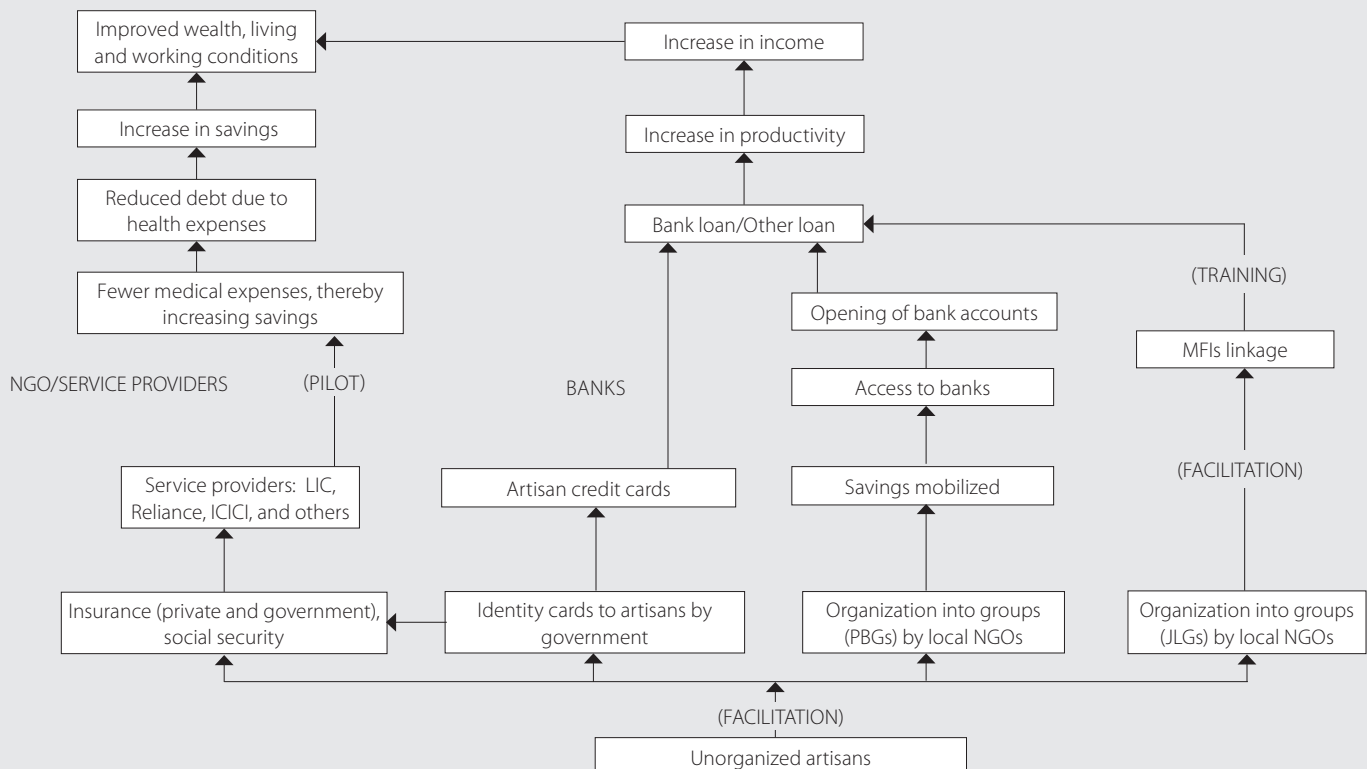
- Demonstrated business potential at the bottom of the pyramid market to the insurance providers by using the numbers from the program database.
- Assessed need and potential of target clients by facilitating interactions between insurance service providers, artisan community, and local NGOs that were potential delivery agents.
- Organized several meetings with insurance organizations to help them project their business plans and negotiate insurance policy terms (premium, coverage, etc.) that were favorable to the community and fit their payment capacity.
- Structured the product by prior identification of who pays whom, how much is paid, what the waiting for payment is, and other details.
- Customized the pilot product for the urban community working in the jewelry sector.
- Shared product details with potential service providers, such as NGOs and the community through focus group discussions.

Shambhudayal Verma, a gem-stone artisan, settled a claim worth INR 10,000 against a submission of INR 12,500. He admitted that, although it took time and the paper work requirement was heavy, he was happy he made the claim when settlement was finally made.

Further Challenges

With a mix of better delivered and affordable government insurance schemes, combined with private insurance providers, the jewelry artisans now have a choice of insurance providers. With a good number of claims already settled, the insurance product has been demonstrated as a desirable product to the community. Although the customizations addressed the socio-economic profile of the clients, several levels of finer details need to be worked out to scale up the product more widely—within and outside the jewelry sector. The complex documentation especially needs trained agents to explain and interpret it, and needs to be further simplified, which ultimately affects the number of future claim settlements. Delivery models also need more streamlining.

JJADe Flow Chart of Access to Finance and Impact on Working Conditions



3. Value Initiative Indonesia: Mercy Corps and the Tofu and Tempeh Value Chain

Strategy for introducing micro-lease purchasing to improve physical working conditions in the informal sector

3.1 The Indonesian Context

Tofu and tempeh are widely accepted and consumed as staple foods in Indonesia. The high concentration of nutrients and protein, low price, and good taste make these soy-based products a favorite food for most Indonesians. As such, the tofu and tempeh value chains are essential to the local economy, serving as a source of income for 85,000 businesses, which in turn support approximately 285,000 workers (40–50 percent of whom are women) and generate approximately IDR 700 billion (USD 78 million) per year.

3.2 Physical Working Condition Challenges

Workers in urban tofu and tempeh factories in Indonesia earn an average of USD 3–4 per day—a relatively high wage in comparison to workers in other industries with similar low education levels. In addition, the employer often provides three meals per day, allowing employees to save approximately USD 100 each month. This enables workers to send their wages as remittances to their families in their home villages. Tofu and tempeh production provides a constant, year-round income, thus offering stability. Upward mobility is also an advantage unique to this industry: tofu and tempeh workers can often graduate to become small producers, at first renting and then owning their own factories.

In contrast to the advantages this sector offers are the poor conditions that threaten the workers' well being. Many workers are marginalized migrants, unable to obtain a residence permit and thus trapped in the informal sector. Lack of regulation means the entire system functions with safety and sanitation standards well below the minimum.⁶

In tofu and tempeh factories, excessive heat, humidity, and smoke from rudimentary equipment makes workers susceptible to eye irritation and respiratory diseases.⁷ Using firewood as fuel in home production results in smoke, high temperatures, and odor in workers' houses where work and family space are the same. Workers spend 7–8 hours per day, 7 days a week, in a gloomy room darkened by smoke and acid residues. Visibility is low and poor factory layout adds to physical effort required, making the production process less efficient. No formal health insurance or health compensation is available, although some employers do cover costs of doctor visits.

Some indications of the physical exhaustion involved in tofu and tempeh production are the relatively high wages

6 Mercy Corps, 2009, Annual Report

7 H. Penelitan, 2004, "The Study on the Effect of Humidity and Air Temperature on Skin Diseases among Tofu Manufactory Workers in Binjai," report prepared by the Department of Occupational Health and Safety, School of Public Health, University of North Sumatra, Medan, Indonesia.

that workers send home, as well as how frequently (every 2–3 months) many of them return to their villages. After a certain period, they are simply unable to work anymore as their health deteriorates. Employers recognize the need for employees to rest, and most have devised rotational systems, whereby employees take turns taking leave. Smaller-scale producers must find others to replace their employees when they are off, which costs them additional time and resources.

Given the importance of tofu and tempeh in the Indonesian diet, and its high level of consumption by low- and middle-income Indonesians, the Value Initiative team saw that improving production practices was one of the most important interventions. It identified two significant ways to improve production: 1) create and disseminate training material for better tofu and tempeh production practices via soybean cooperatives, and 2) upgrade equipment (e.g., gas cooking stoves and stainless steel production vats) to more efficiently produce more hygienic tofu and tempeh.

Upgrading production equipment is expensive and different units range from USD 50 to USD 500—unaffordable by the typical producer. Existing relations with financial institutions are weak and bankers and MFIs generally do not lend to the small tofu and tempeh producers because they cannot offer any collateral.

Mercy Corps Indonesia identified leasing as a potential solution for upgrading technology among formerly unbanked producers, after a number of less successful attempts with banks and MFIs. This case offers lessons on strategies to introduce energy efficient and hygienic production and processing techniques that not only increase margins in the tofu and tempeh industry but also improve the working conditions for producers and employees.

3.3 Value Chain Development Strategy in the Tofu and Tempeh Value Chain

The core strategy for increasing income potential of the enterprises involved in tofu and tempeh production and marketing was to introduce cleaner and efficient production systems, link them with financial institutions and promote improved branding and marketing by labeling tofu produced using cleaner equipment to realize better market value for the product. The objective was to increase incomes by an average of 15 percent and to help 4 million consumers gain access to quality tofu and tempeh.

3.4 The Approach to Value Chain Finance

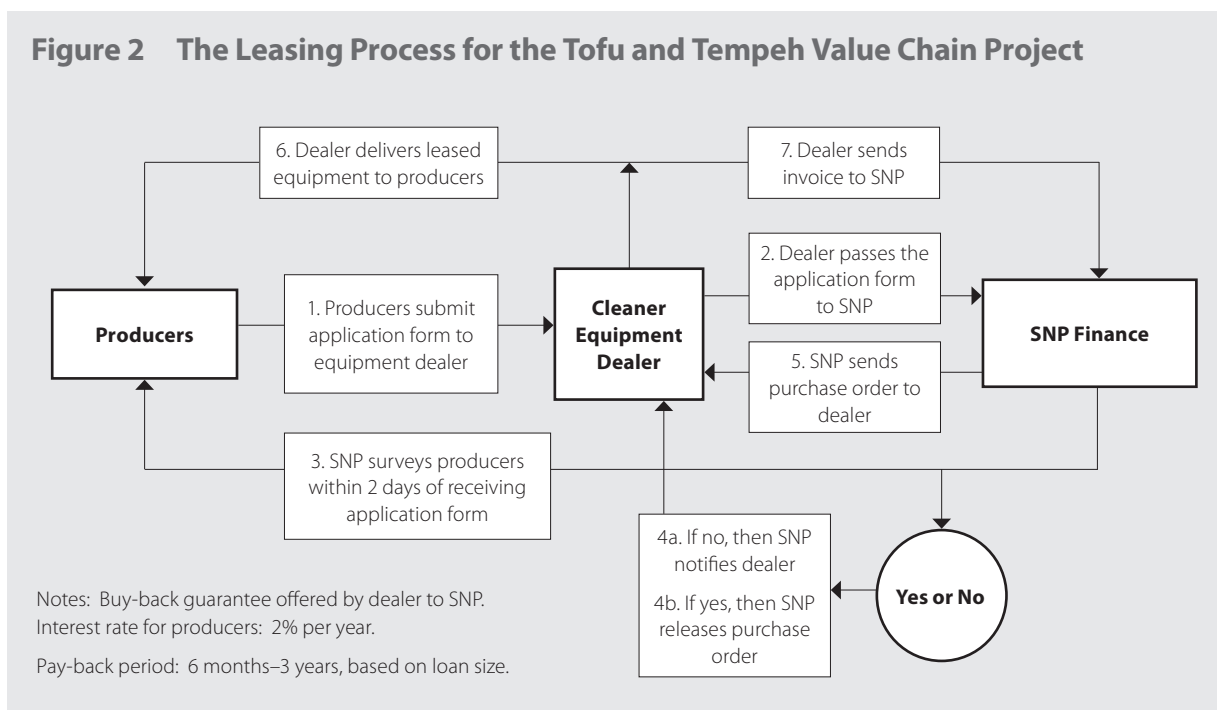
From the very inception of the project, the key objectives were to introduce new financial products for the tofu and tempeh producers, processors, and vendors, and build the retail capacity of MFIs and other financial service providers to serve the urban food market.

After testing several products from formal financial institutions for tofu producers, the strategy that held most potential (for overall project strategy, see appendix 2) linked producers with a lease-purchase company to upgrade their production equipment. The team met with various financial institutions to demonstrate the vast business potential of loan products designed for tofu and tempeh producers. However, the informal nature of the industry and artisans' inability to offer collateral created a major hurdle in linking financial institutions to the producers of tofu and tempeh.

Without an incentive to design customized products, financial service institutions offered loans at high interest rates with loan terms that did not fit tofu and tempeh production cycles. The VIP team experimented with using subsidized loans from government banks, as well as using project funds, to subsidize the cost of clean equipment (plus awareness trainings) and thus generate demand. Realizing that scale was still a challenge, the project team continued to look for financial institutions that could offer affordable loans for factory renovation at terms suited to the tofu and tempeh producers.

After several attempts with various mainstream financial services and providers, leasing presented an attractive financing option because it is relatively easy to access and the collateral is the equipment purchased, plus it took advantage of the trust system in a tightly knit community, where failure to pay may translate as dishonoring the family back in the village. The team finessed a critical tripartite leasing arrangement (figure 2) with a manufacturer, a tofu cooperative, and a leasing company for guaranteeing the loans to purchase improved tofu production equipment. The model can be easily replicated, given the prevalence of cooperatives and their willingness to accept the role as a third-party guarantor for the tofu and tempeh producers, who are often members of the cooperatives.

The producer offers a guarantee of quality tofu and tempeh, and the cooperative arranges to buy back the equipment should the producers fail to repay the installments to the leasing company.



3.5 Steps to Upgrade Tofu and Tempeh Production Equipment and Improve Physical Working Conditions

The VIP Indonesia team, as part of its value chain analysis, identified improved production practices by upgrading to energy efficient production equipment as key strategies to improve productivity, working conditions, and ultimately increase income.



Smart subsidies and partnerships to stimulate demand

Since clean production technology was unconventional in the tofu and tempeh market, project funds were used to offer a 40 percent subsidy of the retail price for some of the equipment to stimulate demand in the market. This subsidy increased the willingness of producers to purchase the clean equipment. Initially, 219 tempeh producers purchased the subsidized stainless vats. After the subsidy ended, other producers wanted stainless vats, even at current market prices.

Other positive effects of the subsidized price for stainless steel vats became clear once producers started using them. After tempeh producers installed the new vats, many producers also switched from firewood to liquefied petroleum gas (LPG) as fuel to prevent the vats from becoming dirty from the soot from wood fires. Demand and markets for stainless soybean skin-removers, stainless filters for tofu production, LPG steam boilers, and centrifuges (separator), etc., were also created as a result.

Providing subsidies as a way of demonstrating the potential of clean equipment did not disturb the commercial market, especially since the producers saw value in the products, which created long-term equipment market and introduced new vendors.

Training for good hygiene practices

The Value Initiative Indonesia, in collaboration with the government's Industry and Energy Provincial Office and PRIMKOPTI, a cooperative of tofu and tempeh producers in Jakarta, conducted training courses on good hygiene practices for producers in the South Jakarta area. It introduced relevant technical standards and procedures of food processing, as well as related government regulations. Along with the importance of efficient and sanitary production, the training also stressed marketing and product branding. A blog⁸ was developed to create awareness and share information on an ongoing basis. PRIMKOPTI in South Jakarta has now launched its own website,⁹ which updates activities, business developments, current soybean prices, and more.



Promotion

At the same time, the Value Initiative team intensively promoted the opportunity to improve productivity with upgraded equipment and better hygiene techniques by disseminating brochures and leaflets, and conducting fairs to demonstrate the available equipment and introduce the vendors.

Consolidated partnerships

A leasing company, Prima Finance (with branch offices in the Greater Jakarta area, as well as Java and Sumatra), was brought in during the second phase of the project and became a key partner. The tofu and tempeh sector was new to Prima Finance, but they recognized a business opportunity and were interested. Prima Finance's willingness to customize a product to suit the tofu and tempeh market helped consolidate the partnership with the Value Initiative team, the tofu cooperatives, and the financial company (table 2).

Table 2 Financial Products to Improve Tofu and Tempeh Productivity and Working Conditions

Type of financial institution	Amount of loan	Purpose	Interest rate	Repayment period
Bank	IDR 5 million–IDR 100 million	Investment, purchasing equipment, working capital	Subsidized loan: 14% per year (declining);	
Commercial loan: 16%–18% per year	2–3 years			
Microfinance	IDR 10 million–IDR 30 million	Purchasing equipment, working capital	2% per month	2 years
Leasing company	IDR 1.5 million–IDR 30 million	Purchasing equipment	2% per month	1–2 years

The team also tried to identify parties to act as distributors by offering incentives. Cooperatives were obvious targets because they could provide guarantees, distribution and a buy-back mechanism.

8 www.koptijaksel.blogspot.com.

9 www.tntwarehouse.co.cc.

Building a Tempeh Factory According to Good Manufacturing Production Standards



“Rumah Tempeh Indonesia” (Indonesia Tempeh House) was built to produce high quality tempeh, as well as provide a place for education, training, and research associated with good manufacturing production practices for tempeh products nationwide. Located in Bogor, it is expected to provide benefits to all tempeh producers in Greater Jakarta, West Java Province and Banten Province.

The idea of constructing Rumah Tempeh Indonesia was initiated by the Value Initiative and its partner, Mercy Corps Indonesia, plus Forum Tempeh Indonesia and PRIMKOPTI in Bogor. The total cost of the building, equipment, and machinery is around USD \$33,000. PT GCU (Gerbang Cahaya Utama), the biggest soybean importer in Jakarta, contributed USD \$11,000; PRIMKOPTI, \$17,000; and Forum Tempeh, USD \$5,500. The VIP team will contribute by providing information about the equipment suppliers and biogas contractors, and a better lay out for the factory. Rumah Tempeh Indonesia is managed professionally and independently, and is no longer supported by outside funders. The concept is to generate profits, which will be used as capital to run the business and offer information and training to promote quality tempeh. The tempeh it produces will not be marketed in the traditional market, but rather to the high-end market to meet the demands of consumers segments that appreciate quality and hygienic products. One of the targets is the food industry, which places large-scale orders. Rumah Tempeh Indonesia will be a model to help traditional small producers identify opportunities in the high-end market and learn about the required product standards. Around 85% of the construction of the building was completed, as of January 2012. It is projected that by the end of March 2012, Rumah Tempeh Indonesia will start production of high-quality tempeh products. Its maximum capacity is 500 kilograms of soybeans.

Scale Up

While scale is attained over time, the need to demonstrate the potential for new markets is a necessity. Continuously updating key stakeholders (such as the government, financial institutions, cooperatives, associations, etc.) with the results is also important in scaling up. As the project team raised new funds to support a significant demonstration effect across a wider area, it was also able to influence some key stakeholders. Consequently, “Tempeh House”—a demonstration facility with key industry stakeholders—was set up to demonstrate state-of-the-art practices in tofu and tempeh production and plough back its profits to support the industry (box 3).

Further Challenges

The Value Initiative team felt that financing for equipment upgrades—which is a limitation for continued scale up of the tofu and tempeh industry—needed to go hand in hand with identifying and linking to further business opportunities. Also, the tofu cooperatives need comprehensive information and demonstration of change to be active participants. Building the capacity of the cooperatives and demonstrating the potential of the leased equipment to market them is a challenge—especially since selling soybeans is relatively hassle-free.

4. Common Lessons in Facilitating Value Chain Finance Interventions to Improve Working Conditions

While improving working conditions is not always the primary topic in value chain development, it is important in the context of an urban informal economy. In urban settings, living conditions and working conditions are often the same, working conditions affect health, and poor health affects overall value chain productivity. The following are key lessons learned from the experiences of the Value Initiative programs in India and Indonesia.

► **Impacting the most vulnerable in value chains needs strategies that complement productivity related interventions.**

In informal sector economies, market development approaches have limited scope to create opportunities for incremental incomes as such economies often deal with mass-produced, low-quality products, where improving cost of the product after a point is limited (unless exploring the potential of export markets is a core strategy). In order to make an impact on the lives and livelihoods of the most marginalized urban producers, it is important to identify and analyze conditions that fall outside the typical value chain development frameworks. For example, in the Indonesian tofu and tempeh project, the VIP team's initial analysis revealed that the incremental income would be only about 10–15 percent for the most marginalized producers and vendors in the value chain. The incremental incomes were expected to be higher farther up the value chain where only medium-size producers and enterprises are able to upgrade their processes, access finance, and link with higher-end or export markets.

Ideally, the idea is to find complementary approaches for improving productivity and income that also bring better working conditions, offer access to rights and entitlements, and expand formal safety net solutions. These solutions boost the impact of income-generation efforts by increasing the number of days that workers can work, creating savings, and eventually providing a cushion against health-related shocks and occupational hazards.

► **Applying a value chain lens can help identify solutions to traditional social issues, such as working conditions.**

Looking at the issues of informal-sector workers through a value chain lens enabled the VIP teams to look at economic potential and bottlenecks of the sectors overall, as well as the wellbeing of the artisans and producers.

Practitioners involved in improvement of working conditions and market development need to explore the benefits of jointly solving social issues, such as working conditions, with market-based solutions. Similarly, market development and value chain professionals can analyze cross-cutting economic and social factors that create overall pro-poor impact within a value chain. For example, focusing on working conditions allowed the Value Initiative project to develop a market for micro-insurance, whereas this typically is not part of any value chain analysis and strategy. Identifying key outcome and spill-over outcome indicators is helpful in demonstrating holistic impact.

In order to make a more holistic impact—particularly if the program team thinks about core indicators, as well as indicators for spill-over benefits—it is helpful to demonstrate impact on social aspects, such as working conditions.

Spill-over social benefits are often not analyzed in routine market development work. For example “household savings per year as a result of accessing health insurance” can be a social indicator. While calculating income increases per household, savings may also be added to make a better case for increased income.

► Building a clear link to productivity is critical for market-driven solutions.

For scale up, it is important to demonstrate a clear link between productivity and improved working conditions. Approaching the discussion from both productivity- and savings- enhancement perspectives is helpful. For example, in the tofu and tempeh project, the core deliverable was to increase incomes. However, improving working conditions and making a positive impact on the work (and community) environment were also key project outcomes from the start. Thus, demonstrating that improving working conditions results in increased production efficiency was paramount.

► Use of smart subsidies to create demonstration effect for unconventional products.

Table 3 Results of Improved Working Conditions for Tofu and Tempeh Production

Increase in sales for producers and vendors	5%
Increase in profit for producers and vendors	10%
Home-production spaces experience less smoke	8,616 households
Improved working conditions for workers	3,512 enterprises

In both cases, the Value Initiative teams recognized that they were introducing an unconventional product or service, for which there was no recognized need in the community. Instead of subsidizing the product during the project, the team designed smart subsidies—using project funds—in order to create a demonstration effect. In India, project funds were used to create better awareness among service providers and community through trainings. In Indonesia, the cost for tofu and tempeh equipment was subsidized for a short period. New demand for both the micro-insurance and upgraded equipment (purchased via the program’s micro-leasing scheme) stemmed from the fact that Indian clients actually had claims settled and paid, and Indonesian clients saw the improved productivity (table 3). Simultaneously, the project teams continued to identify

market players who could deliver the different products at scale per market terms.

► Demonstrating the market potential in the bottom of the pyramid.

Facilitating a series of discussions with the local community and service providers, and demonstrating service feasibility and business potential of serving the base of the pyramid were significant steps. For example, the ACCESS team in India worked with insurance provider Max Bupa to help them project their business plan if they serviced a certain number of artisan clients. As a result, Max Bupa was also able to launch a tested, customized product in other locations, such as Bihar and West Bengal. Thus, scalability occurred across other similar informal sectors—not just within the costume jewelry sector.

Similarly, in Indonesia, collaborating with a leasing company, which was a non-traditional player, and realizing new advantage with the tofu and tempeh cooperatives’ leadership roles demonstrated the business potential in serving the tofu and tempeh production market.

► Including local institutions as service providers to reduce service cost is key.

Because one of the biggest challenges of reaching low-income clients is the cost of servicing them, existing market players, as well as local institutions with stakes in the local communities, were brought in for distribution, guarantee and buyback, and servicing needs, which were key components of the arrangement. The Indonesian tofu cooperatives played the roles of distributor and guarantor. Similarly, local NGOs, in case of the Indian jewelry artisans, became service agents. Both distribution channels were non-traditional, but were rooted in the local communities and were critical to the successful functioning of the value chains.

5. Conclusion

While there is significant data linking improved working conditions to improved workplace productivity, it has been difficult for advocates of decent work for the poor to persuade businesses to improve working conditions as a way increasing their productivity. There is little literature on market-based solutions that deliver better working conditions, but these two Value Initiative projects demonstrate that it is possible to apply principles of market development and facilitation to a social issue, such as working conditions. Further action research is needed to identify and demonstrate innovative business models where productivity is not an outcome but a key input into the process.

Table 4 Overview of the Financial Services interventions Employed to Improve Working Conditions and Productivity

Value chain financial interventions	Service providers	Facilitation strategy	Potential impact on working conditions	Impact on business productivity
Identity cards (India)	Development Commissioner for Handicrafts, District Industries Center, and Jaipur Jewelers Association	Streamline government ID registration operations Set up local service agents to facilitate obtaining ID cards Encourage professional jewelry association to issue additional registration cards under its reputable banner	Improved social status Legitimate documentation providing access to government health insurance and other benefits earmarked for handcraft artisans	Ability to form new business relations beyond existing social networks Access to subsidized loans for equipment upgrades
Insurance (medical, life and pension)	Max Bupa (Reliance, ICICI Lombard, and LIC also tested)	Bring in various private sector providers Complement Government delivery mechanism with trained service providers Demonstrate business potential Support customization of insurance product by facilitating interaction with community through several rounds of group discussions and pilot project	Freed up household capital available to invest in small enterprise Improved savings and less indebtedness Help households to avoid poverty traps Improved health for family head and members by reduced vulnerability to occupational hazards	Increased number of work days Increased savings and wealth due to less indebtedness from health expenses
Other financial services (India)	MFIs: Basix, SKS, Saarthi, Janalaxmi, Fullerton, Earth Microfinance, PSC, Share Microfinance, and Digamber Banks: Punjab National Bank, SBBJ, ICICI, SBI, VIYAY Bank, District Industries Center	Introduce MFIs active in the project locations, including areas formerly designated as credit negative Promote artisans through local NGO partners and facilitate opening bank accounts Facilitate bank loans through artisan credit card scheme	Increased ability to invest in process upgrades Increased social status	Improved access to loans for working capital
Micro-leasing (Indonesia)	SNP, Cooperative, manufacturer, fabricator	Demonstrate model through subsidies and subsidized loans Create tripartite partnership Convince leasing company to explore business potential with tofu tempeh producers	Fewer visits to doctors Better health due to less smoke and pollution in work and living areas Less frequent visits to hometown due to exhaustion	Increased productivity and sales from more efficient fuel and cleaner equipment Increased number of work days available

Appendix 1

Value Initiative Indonesia: Tofu and Tempeh Project

Partners: Mercy Corps, Swisscontact, Pupuk, MICRA

Project location: Greater Jakarta (Jakarta, Bekasi, Depok, Tangerang, and Bogor)

Project goals

- Increase income, improve working conditions, and diminish environmental impact of production for 15,200 enterprises in greater Jakarta.
- Provide safe food to 4 million consumers in greater Jakarta.

Project description

In Indonesia, tofu and tempeh are consumed daily by some 40 million people. Not only are these food sources high in protein, they are also an affordable food product for the 40 percent of the population living on less than USD 2.00 per day. The majority of the tofu and tempeh producers and vendors in the urban areas of Jakarta use rudimentary, outdated technology for cooking, straining, and storing their products, resulting in poor hygienic practices and increased pollution in production. In most cases, improvements in technology will increase production, reduce costs, and improve the hygiene and quality of the final output. Mercy Corps Indonesia found that the producers in the various tofu and tempeh production clusters studied migrated from the same villages and it explored transferring new technology, improved production techniques, and finance through the producers' existing social networks based on village of origin.

Constraint #1: Poor quality production techniques

- Low productivity due to lack of access to finance and better technology
- Inefficient and unhygienic production from using firewood, overusing cooking oil, and using formaldehyde in tofu production
- Environment pollution, odor pollution, uncontrolled disposal of liquid waste, and smoke and fumes from wood fires used in production

Intervention and activities: Improve production for tofu and tempeh.

- Focus social marketing on community leaders in clusters and cooperatives to raise awareness of clean production, access to finance, product branding, and marketing.
- Upgrade one tofu and one tempeh factory as pilots to model new techniques and technology.
- Identify small-scale manufacturers for tofu and tempeh equipment.
- Identify actors interested in leasing and providing new services to new tofu and tempeh clients.
- Link small-scale manufacturers, equipment distributors, and leasing companies to established tofu and tempeh cooperatives and equipment dealers, which provide services to producers.

Constraint #2: No differentiation between healthy and non-healthy products

Intervention and activities: Introduce product branding for marketing purposes and consumer education.

- Encourage producers already using clean production equipment to brand their products.
- Identify branding companies and link to producers interested in branding.
- Identify and support a well-established tofu and tempeh cooperative interested in providing new services to its members, and offer a specific logo to differentiate healthy products.
- Link branding company to the cooperative and support them in identifying producers in order to promote branding on a larger scale.
- Support the cooperative in establishing “one stop services” that market both clean production equipment and branding.

Appendix 2

Value Initiative India, Jewelry Artisan Project (JJADe)

Partners: ACCESS Development Services, JKSMS, RAS

Project location: Jaipur, India

Project goals:

- Increase incomes.
- Improve working conditions for fashion jewelry artisans.

Project description

Jaipur, India, is a renowned hub for fashion jewelry production, where ethnic, religion, caste, and gender affect the functioning of this historic and very informal industry. The sector is largely influenced by the Jaipur Jewelers Association (JJA), a trade union established over 100 years ago. The members of JJA include manufacturers, exporters, brokers, and traders. They contract out stone cutting and polishing, and metal processing to artisans of both Muslim and Hindu faiths through networks of brokers and other manufacturers, and sometimes directly through home-based enterprises. The artisans, skilled at specific tasks, work independently with brokers taking their products from stage to stage. They are all linked socially, yet the artisans are isolated in home-based enterprises. In order to remain competitive, the sector needs to be able to respond to consumer demand with new designs, improved quality, and more efficient production methods.

Constraint #1: Lack of social security impeding access to finance and government services

Intervention and activities: Make documentation accessible to artisans.

- Sensitize artisans to the importance of social security—identification cards and artisan cards.
- Build capacity of artisans.
- Mobilize community and brokers in helping artisans fill out ID forms and register for ID cards.
- Inspire government institutes, gem trade bodies, and NGOs to become card-issuing agencies for artisans.

Constraint #2: Lack of technical skills and production techniques to produce to buyer specification

Intervention and activities: Improve access to design and technical skill development.

- Facilitate development of customized training modules and training delivery.
- Develop a market-based school for the children of artisans that offers skill development and encourages innovation.
- Facilitate and promote design entrepreneurs.
- Facilitate linkages between artisans and the Design Institute and design interns.

Constraint #2: Lack of market access

Intervention and activities: Improve market access with new market links.

- Promote and build capacity of social enterprises (SRIJAN and Ode to Earth) to penetrate newer market avenues, such as fair trade.
- Facilitate participation of artisans in trade fairs organized by government, NGOs, and market promoters.

Constraint #3: Lack of access to new and improved technology

Intervention and activities: Improve links between technology service providers and artisans.

- Stimulate technology service providers.
- Facilitate linkages between artisans and technology service providers.

Constraint #4: Lack of access to finance services

Intervention and activities: Make financial services (insurance, savings, loans) accessible to artisans.

- Build capacity of artisans.
- Mobilize community organizations and brokers to help artisans fill out and submit forms, and register at correct agency.
- Encourage locals to be agents who, for a fee, help artisans fill out forms, facilitate getting forms to correct agency, and picking up ID cards.
- Link insurance companies with NGOs and agents, which then become insurance brokers for a fee.
- Develop institutional linkages with financial service providers.
- Mobilize artisans to form savings-led producer groups.

