"BILT has created profitable partnerships with small and marginal farmers: the trees grown by these farmers are bought by our paper mills. This is a win-win for all stakeholders. We get easy access to raw material, the farmers gain livelihood out of their degraded lands, while the entire project has a positive environmental impact."
-R.R. Vederah, Managing Director, Ballarpur Industries Limited (BILT)

**Initiative Description**

In 2010, Ballarpur Industries Limited (BILT), India’s largest manufacturer of paper, joined the Business Call to Action with its commitment to integrate low-income, smallholder farmers into its supply chain.

Ballarpur Industries Limited’s (BILT) goals:
- Promote sustainable livelihoods for 5,000 small and marginal farmers in three Indian states
- Source 87,500 metric tons of raw materials from local farmers
- Generate total cost savings for the company in the amount of about US$1.3 million

**Business Model**

Ballarpur Industries Limited (BILT) is the largest domestic producer of writing and printing paper in India and Malaysia with annual production capacity of over 758,710 tons of paper and 250,000 tons of hardwood pulp. Since 2008, BILT has increased its annual paper production capacity by 88 percent. As the company continues to grow, so has its requirement for greater quantities of pulpwod—the raw material used to produce paper.

Traditionally, BILT sourced pulpwod from large plantation owners and landowners near its factories. In 2006, the company realized that by purchasing pulpwod from marginal and small farmers in the area around its mills, it could promote a sustainable pulpwod farming industry which would help assure a steady supply of pulpwod while promoting community development in areas surrounding the mills.

BILT established a pilot program near its mill in Orissa State in east India to help 127 small-scale farmers begin planting pulpwod on 249 acres of degraded farm land. The company provided the farmers with access to capital, saplings, and other required agricultural inputs. BILT also provided farmers with training on pulpwod farming techniques.

This early pilot proved so successful, the company has committed to significantly expand its reach. BILT joined the Business Call to Action (BCtA) with its commitment to expand this pilot to include 5,000 small and marginal farmers in its supply chain by 2014. The commitment targets small and marginal farmers owning between 0.4 and 1 hectares of degraded land and living on less than US$1 a day with the opportunity to participate in the company’s expansive value chain operations.

Through this initiative, BILT hopes to create a sustainable sourcing model for raw materials and realize cost savings in transportation while helping to improve incomes and earning opportunities for rural farmers.

**How it Works:**

To produce paper without depleting forests, BILT is dependent on sourcing raw material from private plantations. In order to successfully integrate small-scale farmers in its supply chain, BILT had to understand the needs of these
BILT's Sustainable Tree Farming Business Model

Farmers. BILT needed to build a comprehensive agricultural training program that would allow farmers to earn a sustainable income to support their families. It takes four to five years before pulpwood trees are ready for harvesting, so BILT helped farmers develop alternative income-generating activities, such as intercropping techniques, or growing vegetables between pulpwood plants; holding poultry; and rearing goat and cattle for milk production.

Working in partnership with Harsha Trust, a local non-profit organization, BILT helped organize farmers into groups that could access loans. These groups, called Joint Liability Groups, provide farmers with the collateral necessary to secure loans in the absence of land records identifying land owners. As the number of farmers participating in these groups grew from 36 to 516, Harsha Trust worked with the farmers to set up a cooperative.

In 2008, the Patneswari Agricultural Cooperative Ltd. (PACL) was established to help meet the growing demand for access to loans. The PACL authorized a management body consisting of 150 farmers selected by the members as their representatives. The PACL’s day-to-day operations are guided by a CEO, farmer representatives and administrative staff that seek to assure on-time supply and service flow and identify training and capacity-building needs.

Farmers participating in the cooperative gain access to new markets for their crops and receive training—provided by three technical staff employed by BILT—to improve their agriculture practices and water conservation measures. BILT also employs three people directly involved in managing the initiative, and has linked PACL to local suppliers of inputs such as eucalyptus clones, fertilizer and pesticides. PACL buys these products on behalf of the farmers and distributes them as needed.

The members sell their yield to PACL, which then sells it in bulk to BILT. PACL can also choose to sell to other buyers if that is more beneficial. Currently, there is a financial incentive for the cooperative to sell to BILT, as BILT assures a minimum price for the pulpwood, or at the prevailing market price, whichever is higher at the time the trees are harvested. In 2009, BILT was able to expand this initiative with the support of the National Bank of Agriculture and Rural Development (NABARD), which is providing funding for planting on 5,000 acres over the next five years.

To ensure the project not only makes business sense but also contributes to the development of rural communities, BILT has established a bottom-up approach to monitoring and evaluating impact. One person from the company is responsible for monitoring the project. The staff member also coordinates stakeholder dialogues between the farmers and representatives from partner organizations to address any concerns or bottlenecks.

All business activities related to sourcing from small farms remain within the cooperative. Tasks such as land clearing, pitting, transplanting clones, applying fertilizer, and weeding are labour-based activities which provide good employment opportunities in these remote areas. During harvest time, PACL members are employed to cut, debark and transport of pulpwood to BILT’s mills.

BILT believes that in the future PACL could also function as a buyback centre for the pulpwood and earn the same commission currently given to contractors. With support from BILT, PACL is expected to receive the Forest Stewardship Council (FSC) Chain of Custody Certification soon. FSC is an independent, global certification system of sustainably managed forests determined through a set of principles and criteria. This will increase the premium to the farmers by another US$2.23 per metric ton of wood supplied to BILT, and will help ensure that they will become preferred suppliers of material.
**Results Achieved**

As of July 2011, 1,481 farmers have planted 2,592 acres of trees as part of BILT’s Tree Farming Program. The company expects this to yield more than 100,000 metric tons of pulpwood by 2014.

**Business Impact**

Through its commitment to small and marginal farmers, BILT has created a new sustainable local source of raw material that will allow it to scale up its paper production.

While the supply from small farms represents only 10 percent of BILT’s overall supply of pulpwood, this model presents new local channels of supply for the company, allowing it to expand its production over time. Scaling up the availability of raw materials in the catchment area around its mills will also provide tremendous cost savings for BILT in the long-term in terms of transportation and assurance of supply. BILT projects that it will save INR 300 (US$6.7) per ton, or net US$670,000, on transportation costs from farm to mill on plantings from 2006-2011. Over the life of this project, the company hopes to nearly double this figure to save US$1.3 million in transportation costs.

As for covering its investment in the program, BILT has invested INR 22.6 million (close to US$500,000) since 2006 in the Tree Farming Program. The company expects to recover these costs by 2014, once the trees have matured and been harvested for paper production.

**Development Impact**

Farmers participating in the BILT program had unpredictable, seasonal incomes—often less than one dollar a day—that did not allow them to adequately care for their families. By working with BILT, these small-scale farmers are starting to break the cycle of poverty.

Pulpwood is grown on otherwise degraded land and the harvested materials are bought back by BILT at a minimum assured price of INR 1,500 per metric ton (MT) (US$33.55/MT) or at the prevailing market price, whichever is higher at the time the trees are harvested. This assured minimum price has the potential to increase farmer income tenfold compared to what the farmer is currently making from degraded land. In May 2011, the first group of 16 farmers harvested 602.56 MT of pulpwood and earned INR 1,446,144 (US$32,137), almost 10 percent more than they were able to earn previously.

By sourcing from local suppliers, BILT is directly tackling Millennium Development Goal (MDG) 1—eradicating extreme poverty and hunger. It is expected that more than 5,000 farmer families will be brought out of abject poverty in the next ten years as a result of this initiative, and BILT has already touched the lives of more than 1,400 farmers living in around 170 villages. Supporting the farmers to establish a cooperative has also resulted in better confidence, cohesiveness and cooperation among people in rural communities.

Indirectly, the initiative is contributing to MDG 2—achieving universal primary education and MDG 7—ensuring environmental sustainability. The increased incomes earned by farmers allow parents to send their children to school, and with the Forest Stewardship Council certification and potential for carbon trading, BILT is also reducing its impact on the environment.

**Ballarpur Industries Limited (BILT)**, part of the US$4 billion Avantha Group, is India’s largest manufacturer of writing and printing paper.
Key Success Factors

Key success factors have been identified as:

Focus on Sustainable Sourcing

Sourcing raw materials locally presents a savings opportunity for BILT. The company currently sources about 20 percent of pulpwood from areas close to their mills. Through this commitment to the BCtA, the company plans to increase this by nearly 40 percent.

In addition, the “clonal plantation” technique used on BILT pulpwood plantations has the potential to deliver significant productivity gains. BILT produces clonal saplings in state-of-the-art nurseries in Maharashtra and Orissa, India with a capacity to produce 10 million plants. These clonal varieties provide nearly three times the yield of the earlier variety of seedlings-based plantation. This project will create the availability of the first 3,800 tons of pulpwood to BILT in 2011 and significantly increase every year thereafter, as more land has been planted every year since BILT started working with the smallholder farmers.

Partnerships

BILT has created a partnership model building on the strengths of each of the partners to ensure a sustainable supply chain and reliable employment opportunities for the farmers, also contributing to stimulating the local economy and reviving rural areas. This partnership model includes BILT, the farmers, Harsha Trust, and NABARD.

Potential for Replication

BILT has created a supply chain model that can be replicated in several other areas of India where there are large groups of marginal and smallholder farmers with fragmented land holdings, to provide livelihoods and thus reducing poverty while achieving significant savings.

Next Steps and Spin Off Effects

Focus on Women

• BILT sees potential for expanding this project to more farms and more communities as the business grows, taking into special consideration the impact on families and women.
• BILT and Harsha Trust have recently developed a new strategy to include women farmers as primary members of the cooperative. So far, 30 women have been included as members, who will be taking up plantation on their degraded lands.
• BILT has encouraged farmers to open joint savings accounts with their spouses or mothers, in which proceeds from the sale of pulpwood are directly deposited. This enables women to be more involved in financial decision-making processes, leading to more economically empowered women at the household level.

Additional Incentives

• BILT is also looking into new ways that it can support the cooperative with additional extension services that will incentivize the farmers to continue planting trees for pulpwood.

Monitoring Impact

• BILT is preparing a rigorous monitoring of the initiative to better understand the economic and social impacts in the long-term and how it can improve, scale up and replicate this business model.

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