This series on Inclusive Innovations explores business models that improve the lives of those living in extreme poverty. Editors are Elaine Tinsley and Natalia Agapitova. Researched and developed by Intellecap.
the quality and quantity of the items and issues a warehouse receipt to the farmers certifying the weight, grade and quality. The enterprise is able to negotiate better prices on behalf of the farmers, based on this data. The micro warehouse network helps Ergos accomplish business development as well as transaction execution. This arrangement also ensures optimum capacity utilization of the warehouse, and low wastage and higher price realization for the farmers. Ergos is able to achieve higher turnover with limited capital. It has also achieved greater price efficiency in certain crops such as maize, wheat and paddy as these are the major crops cultivated in the region.

Ergos has introduced a unique concept of farmers’ portfolio management, wherein its software application captures basic information about all associated farmers. The software captures information related to various business transactions between the farmer and Ergos. The enterprise also provides several value added services including grading, cleaning, sorting, and packaging to its members. It also trains farmers on various in all aspects of financial transactions, contracts and markets.

The enterprise makes use of technology such as SAP and other web applications. It has also developed a mobile app for farmers, end users and internal staff to ensure minimum turnaround time on any service request, and to make the operations easy and transparent. Ergoslive, a webapp for forward link, is a unique portal linked to SAP core database. The application runs on all browsers and can be accessed by users even remotely.

Ergos generates general awareness among smallholder farmers regarding the importance of storage solutions. It showcases the significance of storage solutions through videos, roadshows, and midnight cafes. It works with local farmer leaders to mobilize interest, and has tied up with Rajendra Central Agriculture University, Pusa to conduct awareness programs in its different markets.

Ergos was founded with the support of some donor and government initiatives such as JEEVIKA (a World Bank project to support Bihar Rural Livelihoods Project), and NABARD producer groups. National Collateral Management Service Limited (NCML) helped the enterprise to understand warehousing and credit access, and also provided access to finance to Ergos associated smallholder farmers. Ergos collaborated with National Commodity and Derivatives Exchange e-Markets Limited (NeML) for forward linkage to access the national platform. It also partnered with LTC Commercial to adopt better warehousing practices. Ergos received an investment from Aavishkaar, an early-stage investor in March 2015. It works with the government, banks such as Industrial Development Bank of India (IDBI) and State Bank of India (SBI), and World Bank (WB) programs to facilitate consumer financing.

**Financial Sustainability**

Ergos, being a smallholder farmer focused social enterprise, ensures that the base price charged to the farmers is almost half in comparison to other warehouses. For instance, it charges USD 0.09 to USD 0.18 per quintal as against USD 0.25 to USD 0.27 charged by others. The enterprise also offers various packages that customers can choose according to their requirements. These packages include warehousing, loans and linkages to processors. In addition, the enterprise facilitates loans at 10-10.5 percent as it has access to the collateral stored in its warehouses.

Ergos currently works with NCDEX e-market Limited (NeML) to provide electronic warehouse receipts (e-WHR) that farmers can use as collateral with banks to access credit. Through this platform, it connects the rural warehouses to national market that helps discover better prices for farmers. Going forward, the enterprise will directly issue the warehouse receipt, which will reduce the intermediary cost.

Ergos’ micro warehouse network helps to achieve procurement and transaction execution, and ensures maximum capacity utilization of the warehouse. Some of the major costs incurred by the
enterprise include warehouse rent, relationship managers’ salaries, operations fee, and insurance fee. This amounts to nearly USD 3,000 to USD 3,750 per annum for a 200 metric ton (MT) capacity warehouse, USD 4,500 to USD 6,000 per annum for a 500 MT capacity warehouse, and USD 7,500 to USD 9,000 per annum for a 2000 MT capacity warehouse. The major revenue streams of the enterprise include warehousing services and advance advisory and processing fee. Ergos plans to achieve break-even by December 2016.

Impact
Ergos’ warehousing and collateral management solution has innumerable direct and indirect impacts on the lives of the smallholder farmers. Some of the direct benefits include support in better price discovery. The indirect benefits include providing better access to finance, and inculcating the habit of storing the agricultural produce and not selling immediately after harvest. This reduces post-harvest losses by 20 percent to 25 percent, and prevents a situation of distress sale. Reduction in post-harvest losses increases the disposable income of the smallholder farmers that they can invest in their family’s health and education.

Challenges and Lessons
Ergos faces several challenges linked to financing, marketing and distribution. Some of the major financial challenges include maintenance of cash-flow and operational expenses, especially for small-size warehouses. This is due to the gap in the meticulous calculations required while managing the consumables, safety and security of the warehouses. The enterprise also faces marketing and distribution challenges related to customer engagement, awareness and trust building, and the need for behavior change amongst the smallholder farmers to adopt warehousing practices. The enterprise also finds it difficult to attract, train and retain suitable talent, as the concept is new, and people with desired skill-sets are rarely available. The enterprise needs to recruit the right talent, and train them professionally, to obtain the required business outputs.

Road Ahead
By next year, Ergos plans to rent 30-35 additional warehouses; and expand its operations to Karnataka, by replicating the Bihar model. The enterprise wishes to explore various other opportunities under the project JEEViKA, whereby it plans to scale up warehousing capacity to 5000 MT to connect with one lakh farmers by 2017, and subsequently to a capacity of one million MT to connect a million farmers in the next 2-3 years.

By 2020, Ergos aims to reach 500,000 farmers and 5,000,000 ton warehousing capacity. It plans to establish a unique procurement process in India that can be replicated globally. The enterprise has a long term vision to establish a Non-Banking Financial Company (NBFC) to further support smallholder farmers to have better access to finance. This initiative will impact the farmers who do not comply with banks’ norms for access to credit, forbidding them to access finance.