

ARTICLE



It Takes a Village to Catch the Rain

You think you have trouble getting some people in your organization to get on board with your change initiatives. What if you had to convince a whole village?

Executive Summary

TBM Consulting worked with the Watershed Organization Trust (WOTR) to ensure that they can increase assistance to villages without incurring any additional expenses. They work in Indian villages to provide the technical knowledge required to shape the land and improve the watershed. WOTR also works to improve water quality which can dramatically reduce childhood mortality rates in villages where many children die from waterborne pathogens.

TBM provided lean certification training to some of the organizational managers to make operations more efficient. We introduced productivity-enhancing and waste-reduction processes across the WOTR group and its processes. They were able to streamline the processes and enjoy faster project completion without sacrificing the social mobilization benefits.

TBM Provides Lean Certification Training to Streamline Administrative Processes and Shorten Project Leadtimes

The Watershed Organisation Trust (WOTR, www.wotr.org) works with villages in drought-prone regions of India to restore the water supply and reduce the need for people to migrate to the cities during the dry season. The non-profit organization provides technical guidance and some funding. The villagers provide the collective will and labor to terrace and trench the land to catch the rain when it falls during the monsoon.

The idea is simple: Increasing plant cover, cutting fewer trees, diverting runoff and slowing the flow of rainwater, allows the soil to absorb more moisture. As a result erosion is reduced, soil nutrients are retained, the water table rises, and wells are less likely to run dry. The benefits flow down from there.

“The first thing people do when their watershed regenerates and their income goes up is to take their kids out of the fields and put them in school,” one of WOTR’s founders reported in a November 2009

National Geographic magazine article. Through 2009 WOTR had implemented over 200 watershed projects in the states of Maharashtra, Andhra Pradesh, Madhya Pradesh and Rajasthan, covering an area of more than 350,000 acres. In comparison to other non-profits WOTR has always been very efficient in terms of how much of the funding it raises goes directly to support village projects.

TBM Consulting Group provided LeanSigma certification training to some of the organization's managers so they could make it even more efficient. Their objective was to increase the assistance that they can provide to villages without incurring any additional expenses.

Among other tools we taught them how to create value chain maps and business process flow maps for administrative processes in order to identify wasteful steps and processes that could be eliminated.

Over the years WOTR has learned that the technical knowledge required to reshape the land and improve the watershed is only the beginning. For any changes to remain in place from season to season requires cooperation and careful attention to the social dynamics of the farming villages. This is where lean program managers and kaizen promotion officers might learn a lesson or two about building consensus to drive sustainable change.

In this region of India water is usually in very short supply during the months before the monsoon arrives in June, which causes families to migrate or to wait for the government to send in tanker trucks of drinking water. Besides the obvious impact on family cohesion, the forced migration has a negative impact on access to healthcare and childhood education. WOTR helps solve this problem at the beginning of a project by paying villagers a modest wage to stay home and move dirt around for three to five years. As attractive as such an offer might be, it comes with a number of conditions.

First, WOTR will not begin a project without the agreement of everyone in the village, including women and members of lower castes who are ordinarily excluded from such decisions. Another requirement is that villagers must have a personal stake in the success of the project in the form of sweat equity. WOTR pays people for 80 percent of their hours worked and every family is required to contribute free labor to the project. In addition, to give plants the opportunity to recover and grow, the villagers must agree to stop free-grazing cattle and not cut down any trees.

In addition to the farming benefits, WOTR simultaneously works to improve the cleanliness of the drinking water, which can dramatically reduce childhood mortality in villages where many children die from illnesses caused by waterborne pathogens. In addition to a year-long supply of safe drinking water, other improvements include increased milk production and higher income levels from growing cash crops. Despite such harsh realities and obvious benefits, the social realignment and other conditions can be very difficult for some people to accept.



WOTR's holistic approach yields holistic results

- Ground water levels typically increase 25 to 60%
- Cultivated areas increase by at least 80%, and irrigated agriculture areas increase five- to ten-fold.
- Crop production climbs 90% to 145 %
- Village school enrolment increases by 25% to 40% (to between 75-100% of all children).
- Clean drinking water becomes available year round or for a greater part of the year
- Milk production increases by at least 200%
- Former wastelands are replaced by tree and grass cover that's plainly visible in overhead before and after photographs.
- And finally, social harmony improves as women and the downtrodden gain a meaningful voice in local decision-making processes.

In the beginning of a project WOTR representatives will explain the requirements for collective participation and labor in a series of communication meetings. Many of these representatives speak from personal experience having once lived in other villages that have been transformed by the rain harvesting practices. But just as many manufacturing executives don't understand what lean is about until they visit a factory that is doing it, the real buy-in comes when villagers visit other successful projects and see the results of the work for themselves.

After everyone agrees to move forward, WOTR teaches villagers how to plan and track their work, including a large scoreboard similar to an hour-by-hour chart that displays overall progress. All of the work is performed by the villagers without the help of any outside contractors. Tracking and calculating how much each person earns is controlled by the villagers as well. As a project nears conclusion, while some are always reluctant to finish up and give up the steady source of income, people typically move on to higher-value work such as crop production that offers higher income levels.

At TBM we are proud to contribute to the future success of an organization that has already made such an impact on people's lives. During our visits the villagers have always been open, friendly and immensely appreciative of the guidance and support that WOTR has provided. In its most recent annual report, WOTR states that the LeanSigma trainers taught and certified by TBM are introducing the productivity-enhancing and waste-reduction processes across the WOTR group and its projects.

"The benefits have been observed in that the various wastes have been identified and are in the process of being reduced, without reducing

the quality of social mobilization. The projects can now be completed in a much shorter period than before," the report states.

Many watershed development projects in drought-stricken areas around the world have failed not because of a lack of funding or technical expertise. They have failed because organizers failed to manage the social aspects of such initiatives. The same could be said for the lean initiatives at many companies. By communicating the potential benefits and getting everyone on board by showing examples of the future potential, lean program leaders and kaizen organizations can avoid future hiccups that might delay or otherwise derail progress.

TBM commends the staff of WOTR for the work they have done, for the sustained impact of their programs, for the recognition that they have received, and also for their spirit of continuous improvement. Beyond watershed and land improvements, WOTR works with the villagers to think about a future that includes better healthcare, new schools, more efficient farming practices, replacing kerosene with pellet-burning stoves, and solar lighting. As they've learned, with collective participation and hard work, anything is possible.

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