


“Let Justice Roll Down Like Waters”:

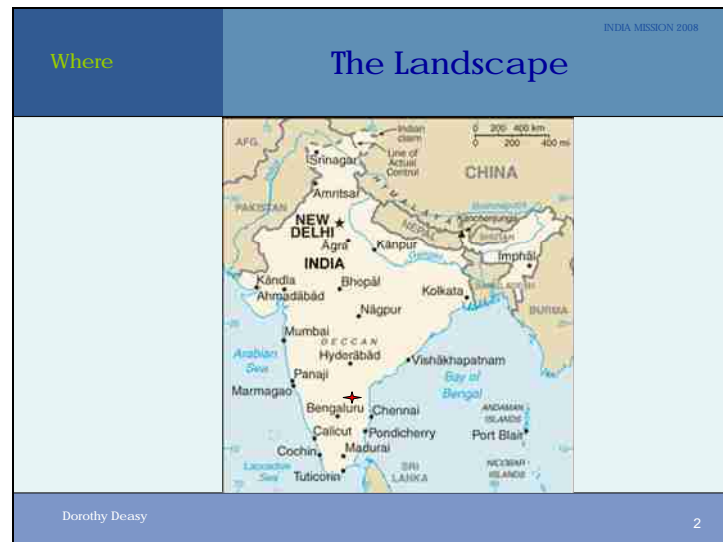
A Holistic Approach for Addressing Poverty in Rural India

A presentation by Dorothy Deasy on the mission of the Bharati Integrated Rural Development Society.

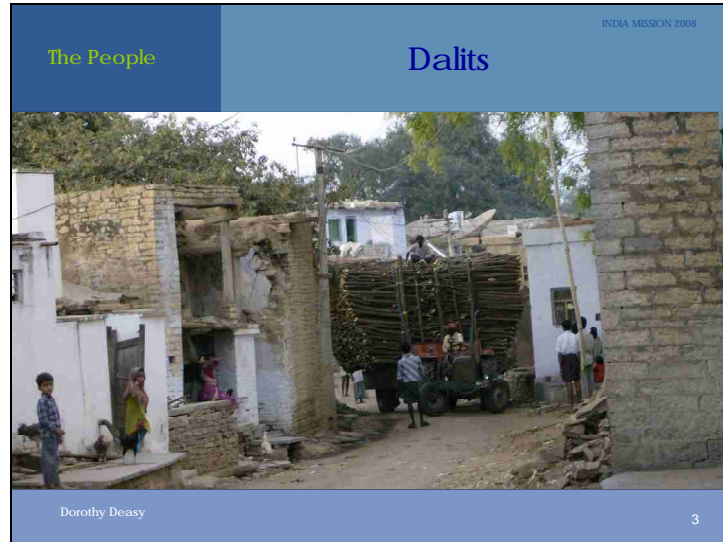
Presented at Baylor University’s “Bottom-Up Approaches to Global Poverty” conference on October 24, 2008.

Dorothy Deasy is enrolled in the Master’s Degree Program for Applied Theology at Marylhurst University, which is located near Portland, Oregon.

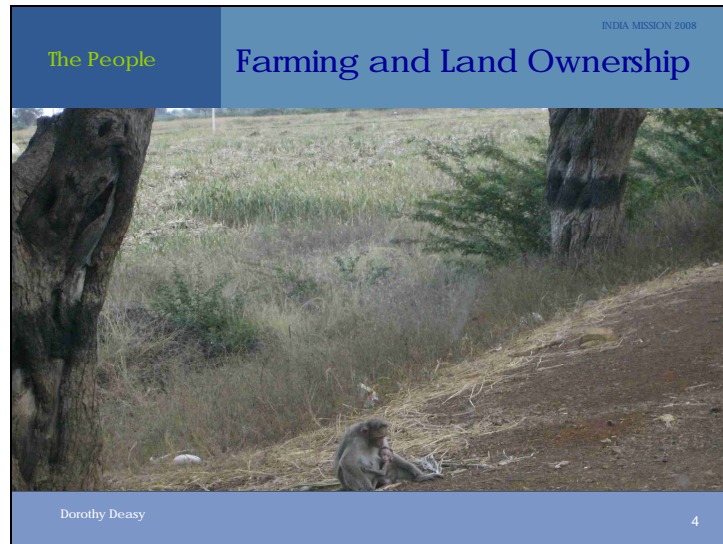
B.I.R.D.S.-- Mission and Water in Rural India		<p>"Let Justice Roll Down Like Waters":</p> <p>A Holistic Approach For Addressing Poverty in Rural India</p>



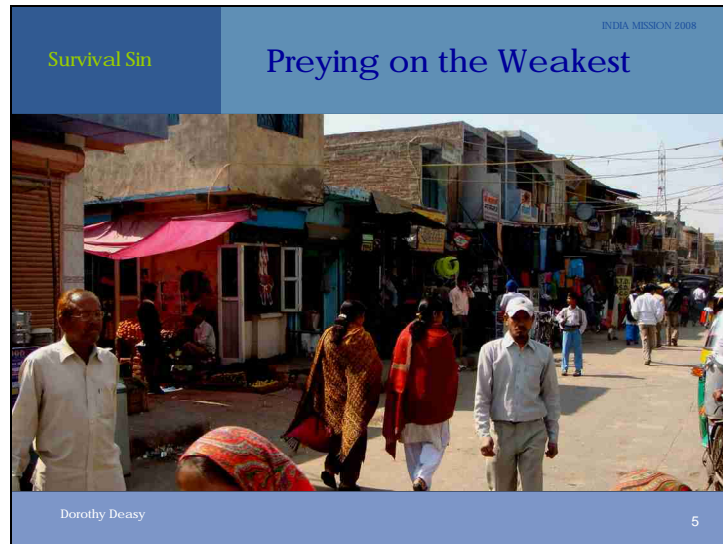
The offices for BIRDS are in Hyderabad and Nandyal. The organic farm that serves as a hub for much of the activity is further south in the Kurnool district of Andrah Pradesh.



To understand poverty in India, one must first understand, if only in a cursory way, the caste system. In India there is a pervasive belief that people are born into a particular social/spiritual standing known as a caste. There are technically 5 castes, yet each caste is not homogeneous. According to Deliege in “The Myths of origin of the Indian Untouchables”, each is divided creating hundreds of castes all over the country. While broadly the castes are occupational designations, the honor or wealth that accompanies occupation also implies a stigmatization or honor, depending upon the castes. The people at the very bottom of the economic system are the outcastes. They are scorned, denied education and traditionally have been considered “untouchables.” This lowest caste has historically been relegated to dealing with impure occupations such as waste removal, death and corpses, sweeping streets and working with leather and skins. Even the term “untouchable” is stigmatizing. Another term to use is Dalit, meaning “the exploited ones.”



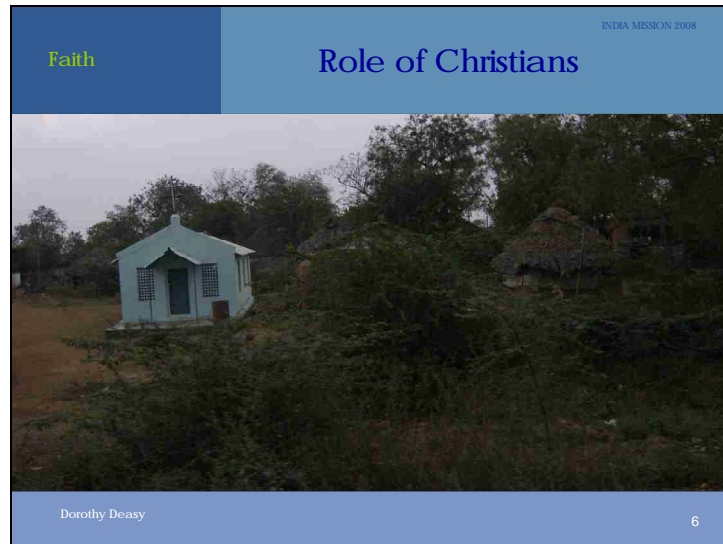
Farms are owned by wealthy land-owners. They lease small tracts of land to Dalit farmers. But, the farmer needs to pay for seed, fertilizers and pesticides in addition to the rental rates for the land, often ending up at the end of a growing season more in debt.



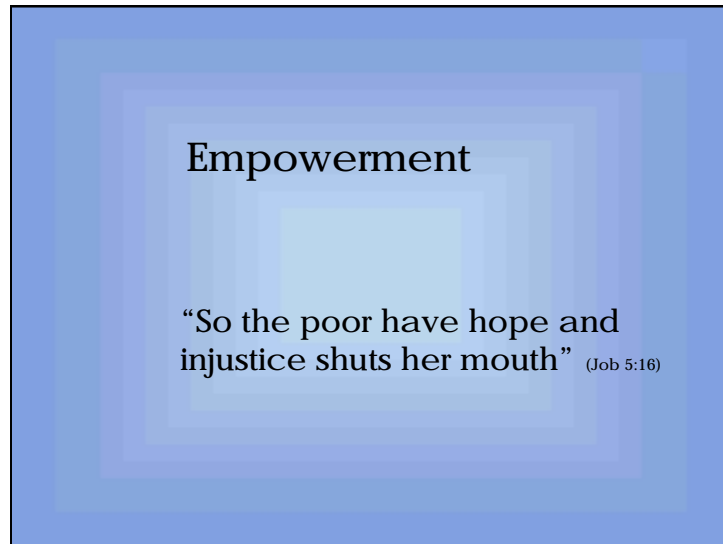
It used to be that people working on farms were paid in grain. The grain was brought back home and families were fed. Massive poverty in agriculture though led more men to seek jobs in cities. There, if they were able to find work, they were paid in hard currency which often does not make its way back to women and children in the village, leaving family members to beg, find other employment, or starve.

Yet there is rampant discrimination against women and the elderly. Few avenues are open for women to find work. This has lead to a huge sex trade. It is important to underscore that these women are not choosing prostitution, rather they turn to it for survival.

And, truck drivers who will use women for sex in rural areas are bringing with them the AIDS virus, leading to an explosion of infections in poor, underdeveloped areas. Yet AIDS isn't the only health care concern. Malnutrition, anemia, malaria and water-borne diseases are equally deadly.



It is fair to say that the caste system came from Hinduism. However, it is as much societal as it is religious. Christianity in rural India is largely associated with Dalit populations. The man who runs BIRDS in Nandyal is the Reverend Paul Valaperla. He is a minister with the United Church of South India.



In terms of the context then, we have touched on several of the underlying factors associated with poverty in rural India: societal stigmatization, inequitable farming practices, marginalizing women and the elderly, risks associated with disease, lack of education and lack of jobs and viable employment.



This was my first visit to India. It seemed like a different world than my home here in the US. What I saw, what I learned helped to reshape my soul. While I went with preconceived notions about what poverty is, I learned that poverty is more than a scarcity of money. It is as much about being denied access and voice as it is about economic opportunity.

BIRDS has a deep understanding of the interconnectedness of the issues of poverty. Its goal is as much about social justice as it is about any specific program. For example, in areas that BIRDS serves, some Dalits were expected to clean up dead carcasses and were paid only in beer. BIRDS help to organize labor strikes, eventually getting a nominal wage for people performing such services.



To address issues with women, BIRDS helps to facilitate women's empowerment programs. Women are given small seed loans to begin their own businesses.



The women themselves work together to determine what businesses may be viable. Those interested in receiving a loan must put together a proposal and the village women will collectively agree whether or not the proposal should move forward.



Empowerment programs might include spice packaging, weaving textiles, creating saris, rolling cigarettes, etc.

The women, themselves gather to collect the funds earned from the empowerment programs to repay loans. They also set aside some of the profit to create new loan opportunities.



The women's programs both support the women and children and also help keep many women out of the sex trade. To date, 175 sex workers have been able to become self-supporting in other occupations because of the microfinance loans, while another 325 are on the waiting list. A microfinance loan of just \$35 is enough to get someone started.

BIRDS will provide training. This woman for example is learning brick-making.

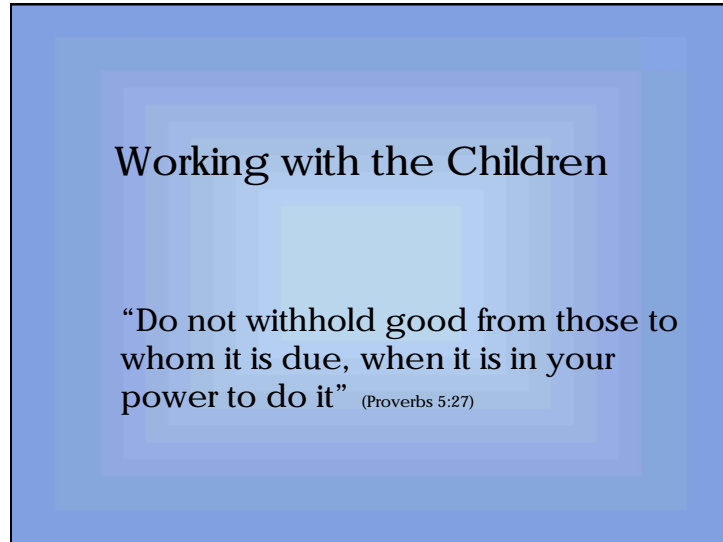


The empowerment programs are designed to help men find employment as well.
Men are trained in chalk making, carpentry skills

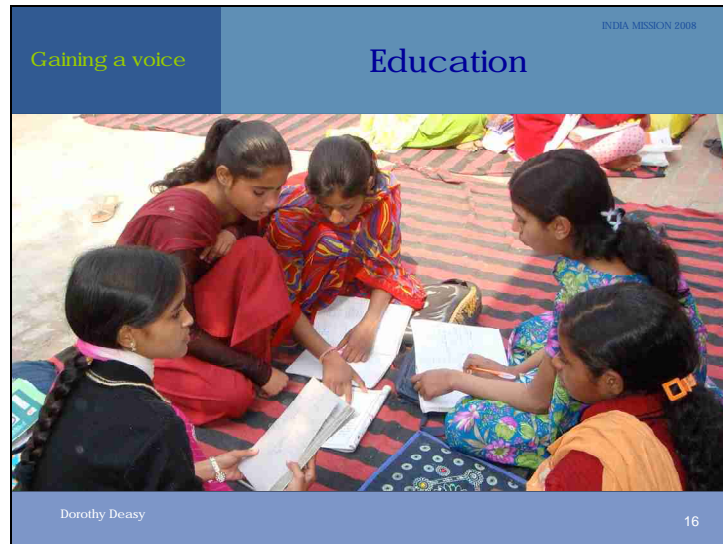


Or in making sustainable disposable plates. These plates are made from banana leaves, stitched together and then pressed onto newspaper. They're used throughout India for special events such as weddings.

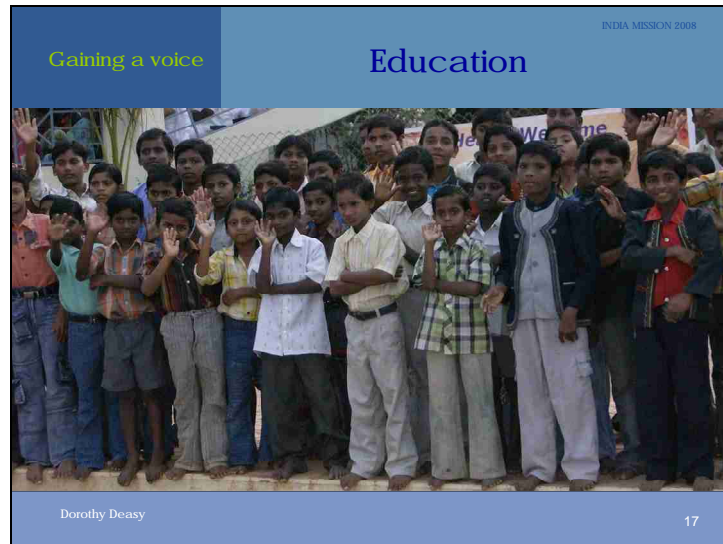
The empowerment programs are designed to help people create jobs that can support them and their families. These businesses, however, do not generally lead to growth or the development of larger companies.



Breaking the cycle of poverty, though, means helping the next generation do better.



Boarding schools are common throughout India. The children live away from home and the village. English is needed to advance in career or to be able to attend college. The chance to attend school is often the difference between literacy and illiteracy.



At BIRDS, parents often bring their children there during the dry season in hopes that BIRDS will feed them when food is scarce. BIRDS looks for sponsors to help pay for children whose parents can not support them. At BIRDS they are provided with room and board, classes, physical education and bible study.

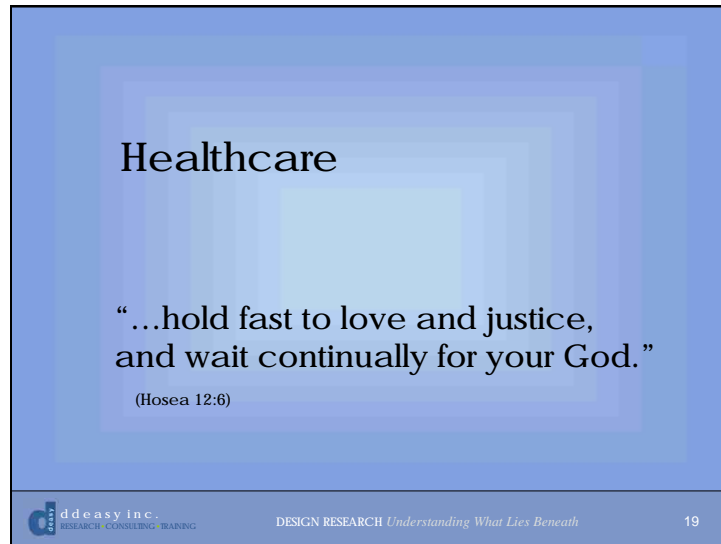


The goal, though, is to have villages be self-supporting and able to pay for their children to get the education needed to gain entrance into a college.

School is the best hope for a Dalit child. If the child can learn English, he or she may be able to get a fairly good paying job. If the child can get access to college, then the opportunities further expand. While the caste system is still discriminatory, education can make the difference between abject poverty or a modest form of financial security.

Recently a couple of “one laptop per child” laptops were introduced in hopes that the children might be given computer access. Increasingly, in India as in the states, literacy means computer literacy as well. An application has been made to get BIRDS listed as one of the recipients of these OLPC devices.

Broadband is only just now making its way to the rural areas. It is to be seen what other changes connectedness will bring.



The Spirit knows justice not just as livelihood or the enrichment the mind, but also healing the body.

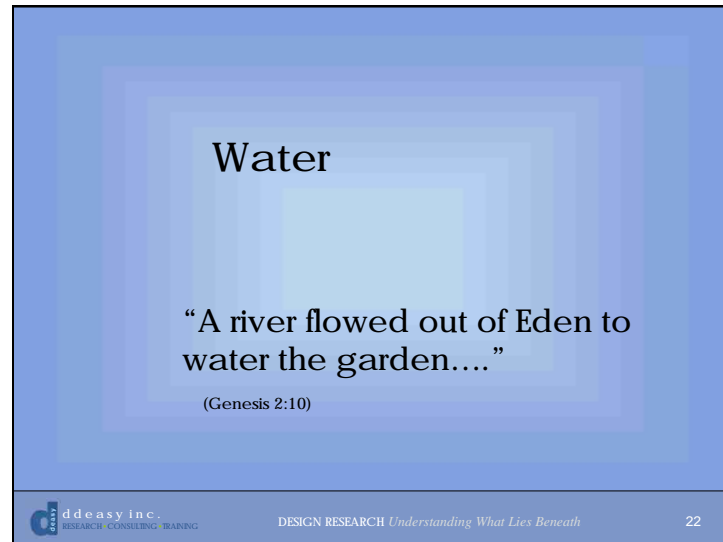


Improving healthcare access is a key mission for BIRDS. They see firsthand the connection between body, mind and spirit. Each year BIRDS trains village women to serve as healthcare apostles. These women come to BIRDS to be trained and then return to their villages to provide first aid, pre and post natal care and education to stop the spread of AIDS. They are also the ones who deal with domestic violence topics, consoling women and helping to educate men. For some villages, they may be the only people who have any healthcare training at all. As such they also serve as triage, convincing those who need a hospital to visit one, even though fears may run high.



BIRDS offers one of the few hospitals available to people in the rural. They depend upon donated medications and are often in short supply of what we would consider basics. Steadily, though, they are improving their offerings as they are able.

One key hurdle is maintaining a doctor on staff. Some doctors as part of their training may spend a few months in the rural to get some experience, but the stigma of class often prevents doctors from choosing to serve rural areas on a full time basis.



If BIRDS offered only the interventions discussed so far, they would still be an inspiring example of holistic mission. They are addressing the pillars of society – education, employment, health – to strengthen the fabric as a whole. But what they have done with water management and farming is truly remarkable.

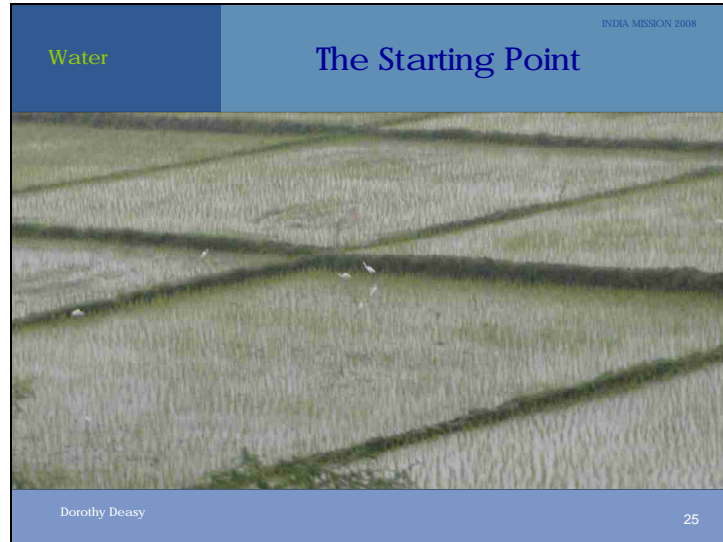


BIRDS tackled the issue of farm inequities. They examined the cycles of poverty and set about to identify and address the drivers that kept the system in imbalance.

The main issues were related to water and water usage, the crops grown and the farming methods used.



The farm south of Nandyal seeks to train farmers in organic farming methods. By eliminating pesticides and commercial fertilizers, much of the debt burden associated with farming can also be eliminated. The pesticides have the effect of killing both the beneficial and dangerous pests. The switch to organic farming allowed farmers to let nature help in the process.



I'm sure you'll not be surprised to hear that rice was a staple crop in rural India.

Nor that rice is a water intense crop.

But water is a scarce resource, even today.

Rice requires about 180 days or six months to grow. And, it needs water every day.

It requires about 10 bags of fertilizer per acre, or about 2 tons of manure.

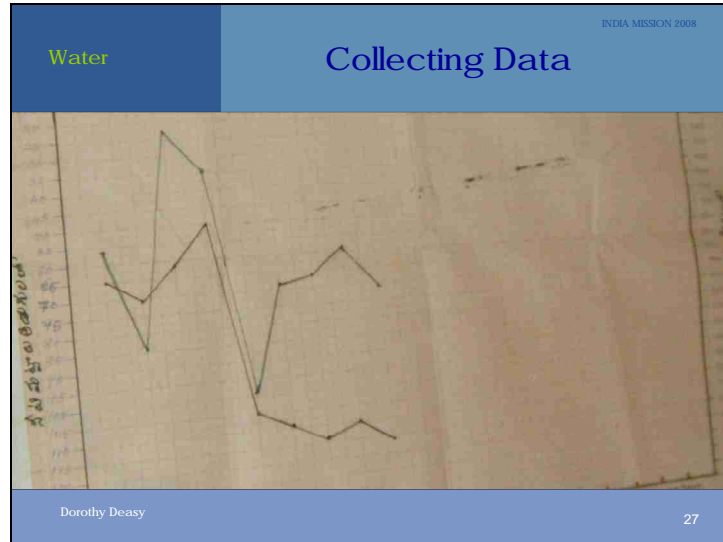
There is a limited electricity supply, 5-6 hours per day, to pump water and the irrigation method being used was full-farm flooding.

What would happen, then, is that when the water was first pumped, it would flood part of the field, and then cut off.

This would be repeated daily, so the result was the section of the field near the pump received too much water, the section furthest from the pump too little water and only a fraction of the field was receiving the optimum amount meaning any given field never yielded a full crop.



More than 10 years ago, BIRDS villages as part of the Andhra Pradesh Farmer Managed Groundwater Systems Project began to study rainfall and groundwater levels. Of the 162 bore wells in the area, they took 10 to observe. The measurements were taken every two weeks.



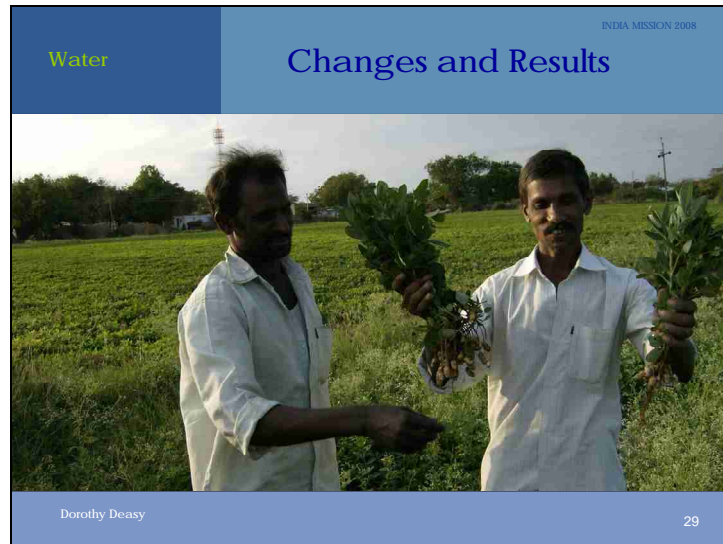
As you can see here, rainfall and ground water used to chart more or less in lockstep. Then, beginning in about 2002, the lines diverge. They started tracking greater rainfall, but over fewer number of days. Because much of the area is dry pan, the water ran off and was unable to contribute to the ground water supply.

This means that as the water table drops, the bore wells are at risk. Once the water level drops below the level of the well, the well becomes useless.

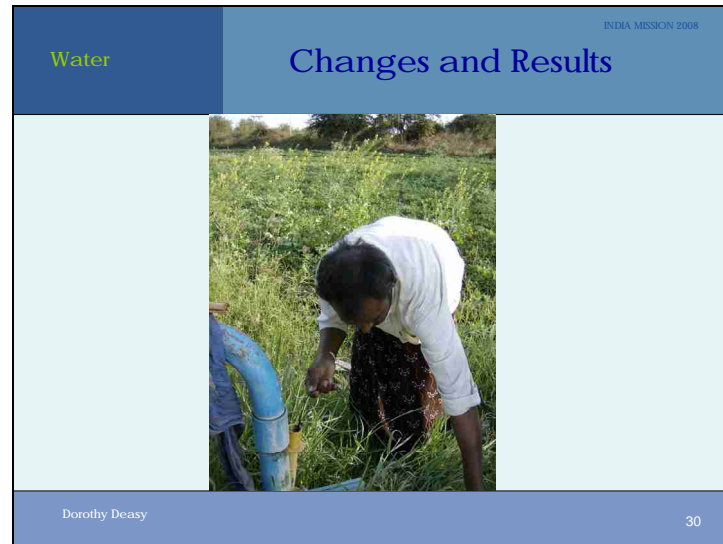


In areas where the ground water is low, BIRDS began to encourage farmers to switch crops. Instead of water-intensive rice, farmers were encouraged to grow peanuts (called ground nuts in India), tobacco and curries. Whereas rice requires 6 months to grow, peanuts require only 4 months. That means more crops per year. Whereas rice requires water everyday, peanuts require water only every 12-15 days.

Because crop rotation can be used, and farmers were trained on the practice by BIRDS, less fertilizer is needed. Sometimes the fields are allowed to lay fallow as well.



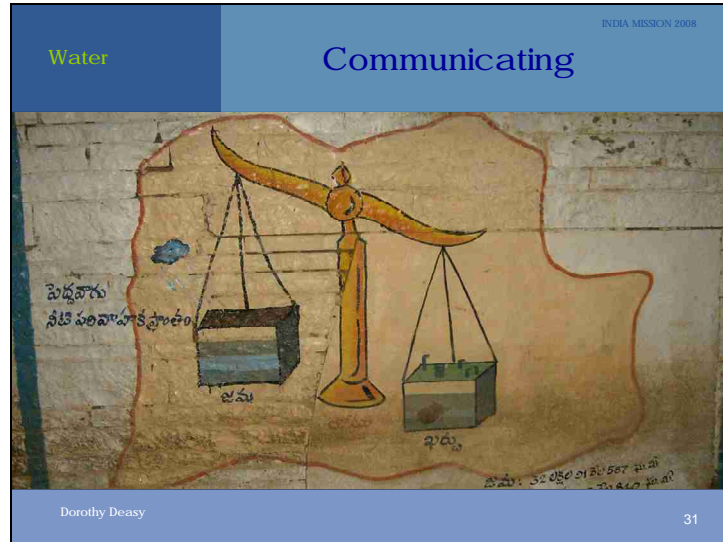
The varieties of nuts are an issue as well. 70% of peanuts come from Hybrid seed. There are, though, 5 types of peanuts in the area. 3 are hybrids, where the crop needs to be sold to the company that provided the seed. Plus two local varieties. The seed from the local varieties can be sold to other farmers, allowing for another income stream.



The irrigation system changed as well. Instead of using flooding, irrigation was switched over to a check basin system. Check basin is watering blocks of the field at a time, one block per day. Whereas previously only a portion of the field received adequate water, now the entire field is getting adequate amounts for the crops planted. Sprinkling systems are also used when and where appropriate. Check basin irrigation uses 20% less water than flooding and sprinkling uses 40% less water.

The results have been tri-fold:

Better water conservation, more crop production and more lucrative crops being produced. Combined with organic practices, the farmers in the BIRDS villages are seeing prosperity farming unknown in the past. For some, the standard of living is increasing and people are able to afford to send their kids to boarding schools.



The changes in crop management strategies is only half of the story. Once the data were collected, farmers needed to be trained on the findings and convinced to change their practices. India is very much a collective culture. Whole villages needed to be educated and word of mouth used to spread the learning to other villages. Sessions were held to train 30 farmers at a time directly. Then, each farmer disseminated that learning to another 4-5 farmers. And, media appropriate to village is used to help carry the communication, whether it is a painting on the village wall,

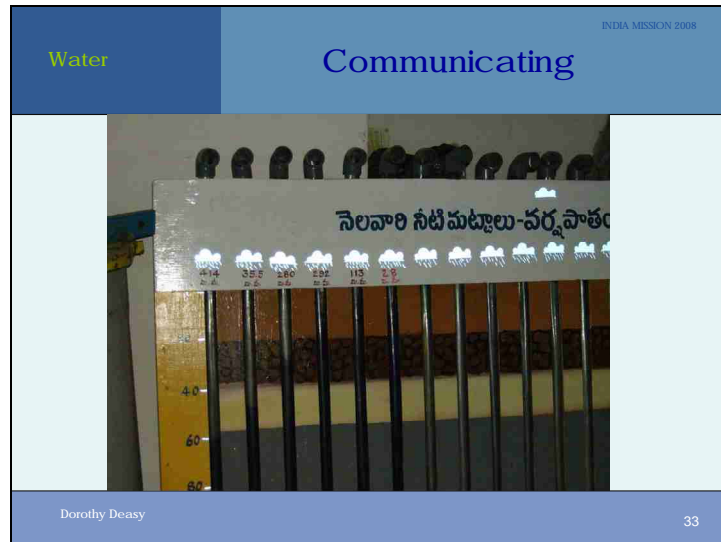
Water Communicating

The image shows a large, yellowed, and stained document, likely a form or report, titled "Water Communicating". The document is heavily stained and discolored, suggesting it is old and has been exposed to water. The header section contains text in Telugu and English, and a large table below. The text in the header includes "Water Communicating" and "Water Communicating". The table has multiple columns and rows, with some text visible in the first few rows. The document is heavily stained and discolored, suggesting it is old and has been exposed to water.

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Charts that show how much each farmer is earning and what crops and method he is using

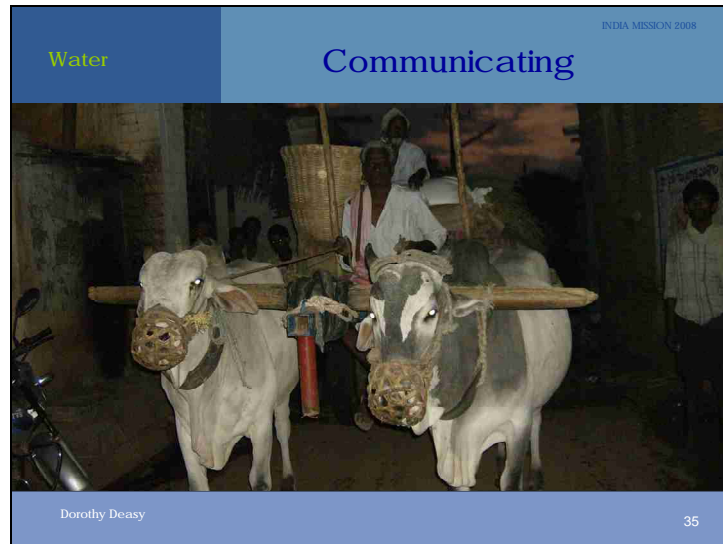


3-d models that demonstrate the connection between rainfall and groundwater



Or computer kiosks, at the village level, that allows farmers to look up a variety of data on a village by village basis.

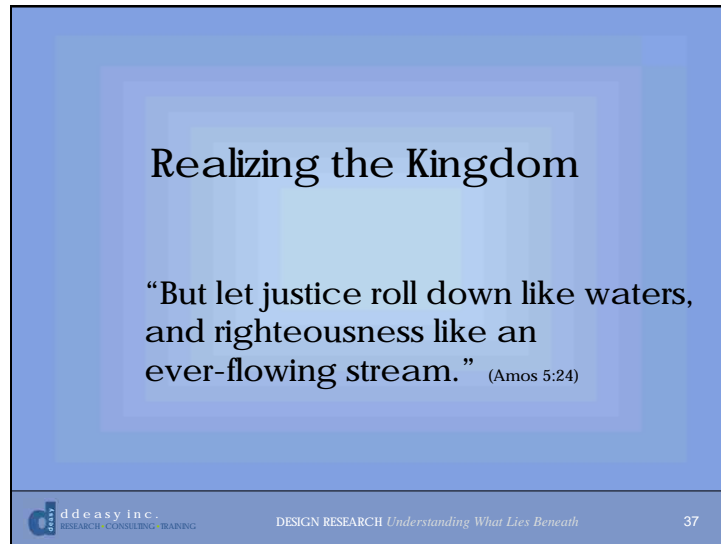
When I first saw the kiosks, I was skeptical.



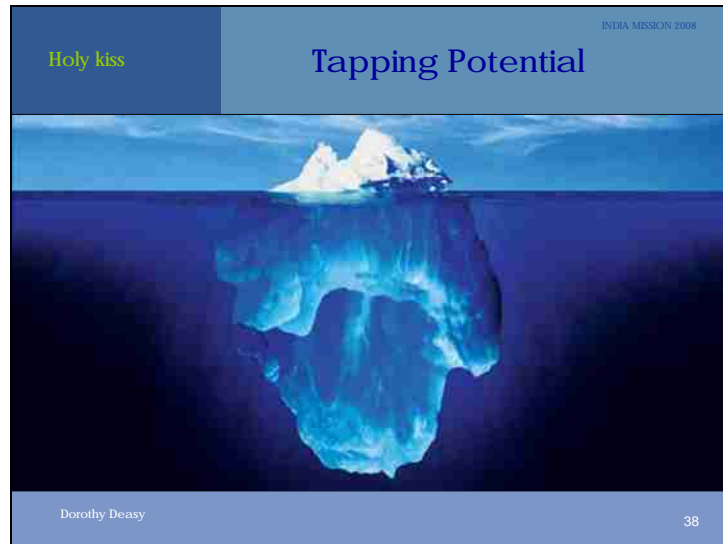
After all, for days I had been seeing ox carts, and mud homes. I had mistaken simple for primitive, uneducated for ignorant. What I learned was that the farmers are themselves very resourceful and adept at collecting and aggregating data. Once trained on the technology, kiosks can become an effective communicating tool, though certainly not the only one.



The promise exists for even more advances in the future. This summer a member of St. Mark's church in Portland who has a degree in chemical engineering plans to work with BIRDS to begin a castor oil bio-fuel program. Castor beans are already being raised, and the castor cake is being used as an organic fertilizer. The oil from the castor beans can be used to run engines instead of using fossil fuels, bringing down the cost and making mechanization more readily available.



The BIRDS example is a metaphor for us all. Water management is a key that helps to unlock basic justice. Changing farming techniques means overall prosperity and hope for breaking the cycle of poverty.



Who among us is without poverty?

If it were not for poverty of spirit all would be fed.

If it were not for poverty of Hope, all would be fed.

If it were not for poverty of empathy, all would be fed.

If it were not for poverty of imagination, all would be fed.

When those in need have the resources to help themselves and access to education, they have a fighting chance to attack financial poverty. Further, when they have access to the mainstream, when their voices can be heard and their ideas and solutions shared, they become saviors themselves.



Thank you. I hope this presentation has contributed to you. God bless.