>>Janet Tobias: I came to Rwanda to visit the village of Mayange. It is part of the Millennium Villages Project, one of the biggest poverty-reduction programs in Africa. The goal, to permanently improve life in a rural village within five years. The challenge is that in the last 40 years, more than half a trillion in aid has not made life better for most Africans.

>>Janet Tobias: Tell me what this is.
>>Josh Ruxin: This is just the main commercial area in Mayange, which -- where there wasn't any commerce before. But now you can see they're drawing sorghum, probably for...

>>Josh Ruxin: The very heart of the Millennium Villages Project is to demonstrate that it is possible to alleviate, if not eliminate, extreme poverty very rapidly with a set of integrated interventions.
>>Janet Tobias: Josh Ruxin runs the Millennium Villages Project here in Rwanda, one of 80 villages spread throughout ten different African countries.

>>Janet Tobias: And this is -- two and a half years ago, did this exist.
>>Josh Ruxin: This existed here, but there really wasn't a lot happening. But today there's actually tailoring that's happening, there's a hair salon -- which was unimaginable then.

>>Janet Tobias: Josh agreed to take this job because from the beginning, the Rwandan government took a unique approach to the Millennium Villages Project here. They wanted to be a full partner and were committed to the idea of social entrepreneurship.
>>Josh Ruxin: We don't want hand-outs, we don't want to really cultivate a climate or a culture of dependency. We really want to get this right and we want this to be replicable.
>>Janet Tobias: We first started documenting the experiment in Mayange two and a half years ago, not long after the project was launched. This Rwandan village wasn't just poor, it was in the middle of a humanitarian crisis.
>>Josh Ruxin: It was far worse than anything that I expected. When I walked through the streets, people yelled out "Nmazi (ph). Nmazi." There's no water. "Nabiryo (ph). Nabiryo." There's no food.
>>Janet Tobias: Beyond that, the villagers in Mayange were suffering from the emotional shockwaves of living in one of the epicenters of Rwandan's 1994 genocide which killed one in ten Rwandans.
In Bugesera District, where Mayange is located, more than half the population was murdered.
>>Josh Ruxin: It was everywhere. But in Bugesera, it was literally every household.
>>Donald Ndahiro: On the wall here, it is black.
>>Janet Tobias: Rwandan Donald Ndahiro joined Josh in launching the Millennium Village. He is a Tutsi, the ethnic group targeted in the genocide.
This church was the scene of one of the worse massacres.
>>Donald Ndahiro: More than 10,000 people came running to this church. Killers forced the door open. They used different types of weapons to crush their skull. They were too smashing the babies over the war.
>>Janet Tobias: When Donald and Josh arrived in Mayange, healthcare was essentially nonexistent. 60 percent of those tested for malaria were
positive. More than 15 percent of the children died before the age of five. He described what it was like when he first arrived.

**Josh Ruxin:** There’s lines every morning starting about 7:00. And that’s in dramatic contrast to what you had before, which might have been a couple of desperate people -- maybe one or two farmers dying of malaria or at least extremely sick from malaria -- would be sitting on the steps hoping that for some reason maybe some malarial medicines were going to arrive that day at the health center.

**Janet Tobias:** Back in 2006, getting bed nets was a top priority.

**Josh Ruxin:** These are insecticide-treated bed nettings that we just got in recently.

**Lady:** Yeah.

**John Ruxin:** But I'm still noticing a lot of mosquitos --

**Lady:** Yeah.

**John Ruxin:** -- like in the bathroom and in other rooms. I wonder if we can just take some of this material and use it in the windows as a covering.

**Josh Ruxin:** These are severe -- severely malnourished kids. They look like were just born, they're so tiny, but in fact they might be three, six, nine months old. It's a real balance for a health center. We're here to treat illness, but what happens when the illness that’s coming in is caused by something that's not exactly health related, it's agricultural related?

**Donald Ndahiro:** This area receives low and uncertain rainfall. The land has also been deteriorating over time.

**Janet Tobias:** Donald’s focus at the Millennium Village was turning around local farming. Donald knew that to break the persistent cycle of subsistence and starvation, he needed to get the villagers to diversify their crops and to terrace their land to help spread irrigation in this bone-dry soil.

**Donald Ndahiro:** We are replenishing the soil with nutrients. We're now starting with improved seeds for sorghum, for maize, for beans, and for sweet potatoes.

**Janet Tobias:** When we left Mayange in 2006, there were some small successes in health and agriculture, but the village was still really struggling.

We came back to Rwanda in the spring of 2008, at the mid point of the five years the Millennium Villages Project says it needs to turn a community around. The changes were striking.

**Josh Ruxin:** So this is the disease-resistant cassava. Cassava is a wonder crop. It's totally draught-resistant, and you just put it out in the field and it's just the stems.

**Janet Tobias:** Today, there are signs of terracing everywhere.

**Josh Ruxin:** You'll just see the difference everywhere. I mean, just listen to the bird life and the insect life. Much greater here, in great part because we've got the terraces that have been dug. And then this is napier grass. So that napier grass helps to hold the soil in place.

**Janet Tobias:** Agricultural output in the village has increased by 60 percent. The village now grows a variety of crops including vegetables that could be front and center at Whole Foods. There are also new, fast-crowing citrus trees.

**Donald Ndahiro:** The trees are now my height.

**Josh Ruxin:** After one year.

**Donald Ndahiro:** After one year, they're my height.

**Janet Tobias:** And it isn't just agriculture that has experienced radical change. The community now has comprehensive healthcare.

**Josh Ruxin:** Antiretrovirals right here.
Availability of drugs, proper staffing at the clinic, and the widespread distribution of bed nets have cut the early childhood death rate by two-thirds. Two years ago malaria was rampant. Now the lab technician has to go through pages in the record book before he finds a case.

>>MAN: Negative. Negative.
>>Janet Tobias: Working with the Rwandan government, they are taking on clinics like this one in the nearby town of Gatore.
>>David Canter: And the only water source is that water tank that takes the water from the roof.
>>Janet Tobias: To help spearhead this change, Josh is bringing in business advisors like David Canter, who ran two Pfizer research facilities in Michigan.
>>David Canter: Management, healthcare is actually about managing tools. So a drug is a tool. If people don't know how to use them properly or organize it or it sits in a warehouse and it completely destroys itself, then the tool you gave them is of no value.
>>Janet Tobias: However, expanding efforts beyond one model village can be daunting.

For example, at each Mutuelle clinic -- Mutuelle is the name of the national health service -- every manager independently organizes the healthcare records.

>>Josh Ruxin: This is so confusing.
>>David Canter: This particular organization is not by family or not by village or cell. This is all organized by the date that you last came here. So if you know from some notes when you were last ill, they can find your record.
>>Josh Ruxin: If something is misfiled, then you can conceivably have to go through 18,000 pieces of paper --
>>David Canter: Right.
>>Josh Ruxin: -- to find the one that you're looking for.
>>David Canter: Supporting and developing management just may not be the attractive program for funders, but in the end it will probably lead to the success of many, many more programs.

>>Josh Ruxin: Amakuru.
>>Man: Nimeza.

>>Janet Tobias: Josh says the improvements in health and agriculture have fundamentally changed the mindset of villagers.

>>Josh Ruxin: As soon as people realize we can produce enough food to eat so we don't have to go hungry, our children aren't going to die and we're not going to get too sick from disease, let's start thinking about prosperity creation.

>>Janet Tobias: The new focus in the Millennium Village is on business development. They've been hosting funders, some of them eager to support major business opportunities.

>>Josh Ruxin: An organic specialist came out and said, "Josh, this looks a lot like Southern California. It's incredibly dry, the soil quality is not that great, and it seems like a terrific place to grow fruit trees, such as pomegranates.

>>Janet Tobias: POM Wonderful, America's largest producer of pomegranate products heard about the idea. They sent a thousand seedlings to start a new farm co-op. In turn, the Mayange farmers once again took a leap of faith, this time a big one. They invested their land in a fruit they knew nothing about.

>>Josh Ruxin: They'd never seen a pomegranate before. We showed them pictures of what the pomegranates were.
Janet Tobias: So they'd never actually felt one?
Josh Ruxin: They never even felt one. We tried to bring some in, but they got nabbed at customs.
Janet Tobias: Next year, the pomegranate trees will bear their first crop.
Josh Ruxin: We sort of have calculated just off the cuff. Each of those farmers would easily stand two years from now to earn $500 a year.
Janet Tobias: Percentage-wise, how much is their income increasing when they -- they're going from --
Josh Ruxin: These are farmers who have no income. They're going from zero to 500.
Janet Tobias: And it isn't just Mayange farmers who've become entrepreneurs. Freed from caring for routinely-ill children, 194 women have joined a basket-weaving cooperative.
Donald Ndahiro: We now have master weavers, many.
Josh Ruxin: Really!
Donald Ndahiro: Placements and coasters.
Janet Tobias: The cooperative now makes more money in one afternoon that most Mayange families used to earn in a year.
(Lady speaking in foreign language.)
Interpreter: She's very happy because, first of all, when she made the income, she used it paying school fees. And her husband will see that she's able to help.
Janet Tobias: The profits from the basket-weaving have also given the women money to start other businesses.
(Woman speaking foreign language.)
Interpreter: Now she has five goats.
Josh Ruxin: We really need to start thinking about what's next, how do we help the women to innovate. Because maybe there's something that they want to do as a cooperative. Maybe they want to start a big goat farm with stables. That takes a big capital investment.
Janet Tobias: As with healthcare, this fall the focus is on expanding business creations from the Millennium Village to the entire Bugesera District.
Josh Ruxin: Is it possible that we can help create a dozen terrific businesses which are employing two dozen, three dozen, six dozen people? Because that's what really creates change.
Janet Tobias: The government is committed to building a new international airport in the District. Josh is working with them to launch a rural enterprise zone here. He is hoping to raise enough money to build a major processing plant to package juice from those pomegranate and fruit trees.
There are also plans to take a small socially responsible tourism business, one that currently brings tourists to the Millennium Village, and expand it to include birding and a high-end eco lodge. The focus has shifted far beyond the original Millennium Villages goal.
Josh Ruxin: Extreme poverty is terrible. I don't think that anyone would question that it is a worthy goal to figure out what is an integrated set of solutions that you can apply anywhere. But ending extreme poverty is a lot different from creating prosperity.
Janet Tobias: There's much more to explore on our website. Discuss
the world and tell us what you think of our stories from a small planet at pbs.org/frontlineworld.

CERTIFICATE OF TRANSCRIPTION

I hereby certify that the foregoing transcription is a true and accurate verbatim record of the recorded proceedings.

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