

**Phone conversation between Dr. Manuel Novela, World Health Organization
EPI Specialist, Mozambique and GiveWell on March 19, 2012**

GiveWell: We are trying to understand the impact of VillageReach's Dedicated Logistics program in Mozambique in 2004-2007. We see that vaccination rates increased significantly over this period in Cabo Delgado. Do you think VillageReach was the primary cause of this increase?

Dr. Novela: There are a number of factors associated with this increase. VillageReach's strategy was a good one. Before VillageReach, there were many vaccine stock outs, and their program helped us overcome this kind of problem. We could conduct EPI activities without interruption.

The most important part of the project was distribution of refrigerators. VillageReach's refrigerators had much better performance than the old refrigerators. Before VillageReach, only 60% of facilities had refrigerators. VillageReach made this 100%.

FDC played an important role in the increase through its strong community component.

EPI plays a driving role in health outreach activities. Once you have a stockout of vaccines, the outreach activities don't happen, which means lower coverage for other interventions as well was lower, such as vitamin A. VillageReach made vaccines more available. By making more vaccines available, outreach happened more often.

Also, because clinics more regularly had vaccines, mothers were more likely to bring in their children.

GiveWell: Did outreach activities decrease during VillageReach's project?

Dr. Novela: Outreach continued to the 50% of people without access to health facilities, but with the project made it so the ~20% of the population that was only near a clinic without a refrigerator had access to vaccines in a facility.

Once the health facilities had vaccines, mothers didn't have to wait months until they conducted outreach. They could have vaccines available all the time.

GiveWell: Why is it better for people to receive their vaccinations in a facility rather than through outreach?

Dr. Novela: When you conduct outreach, some mothers are missed. Then they have to wait three months. Whereas if you have health facility with refrigerator, she can go any time. Also, outreach often doesn't happen as often as planned because of cars breaking down and other problems. If you don't show up for scheduled outreach

one time, the next time the people won't come.

GiveWell: Vaccination rates also increased in the neighboring province of Niassa in 2004-2007. Do you know what caused this increase in Niassa?

Dr. Novela: Niassa had a mass health day strategy. If a population did not have any health facilities, the district would conduct outreach to those places, delivering a package of interventions. This mass outreach would take place once a month in those communities. UNICEF and WHO financed this through the provincial government.

GiveWell: Did UNICEF and WHO support Cabo Delgado as well?

Dr. Novela: Yes, they were supporting Cabo Delgado as well. There were many other things going on. The cold chain was not breaking down because of VillageReach, which makes a big difference, but many other things were going on at the same time.

GiveWell: When did the financing for the mass health days start?

Dr. Novela: 2001. It's this money that usually pays for fuel, outreach, and allowances.

GiveWell: If the health days started in 2001, then what changed in the period 2004-2008 to drive up vaccination rates in Cabo Delgado and Niassa?

Dr. Novela: VillageReach and FDC's resources contributed. In Niassa, there were other donors supporting these activities.

GiveWell: Where would you look to see the impact of Cabo Delgado program? If you wanted to look at data on the impact of VillageReach's work, where would you look?

Dr. Novela: You could compare vaccination data for before and after VillageReach. All the other conditions, such as the mass health days, were already there. VillageReach was the changing factor. But it can't all be attributed to VillageReach.

GiveWell: Do you think the conclusion is that VillageReach had an impact?

Dr. Novela: I would say that it did. Coverage went up. Niassa did not have a VillageReach project, but it had some kind of special attention in terms of resources. On the other hand, Niassa is sparsely populated, with some small pockets of concentrated population. You can get a big difference in vaccination rates just by reaching a few areas. I don't think Niassa is a good comparison. Coverage in just 3 or 4 districts is all that's needed to reach 90% of the population in Niassa. So it's easier to fix than Cabo Delgado, whose population is more equally distributed. In Cabo

Delgado, you have to go to all districts except two to get to the people.

In my experience, VillageReach's strategy is worthwhile, but some changes are needed. The program needs to be owned by the province/districts. When they finished the project, everything broke down. It could also be adapted to other products: bed nets, ACTs, etc.

They took control from the district. When they left, districts didn't know anymore how many vaccines they needed. VillageReach took the ownership. Also, they should have a district vaccine deposit. During the VillageReach project, vaccines were delivered straight from provincial level. That means that vaccines were traveling in the car in a cold box for 10-15 days. The vaccines were already in stage 2 by the time they reached the facility. This increases the wastage rate.

GiveWell: Were there other donors working on EPI in Cabo Delgado in 2004-2008?

Dr. Novela: FDC was the only one.

GiveWell: What province(s) do you think should be compared with Cabo Delgado?

Dr. Novela: Maybe Sofala or Tete? They seem similar in the way the population is distributed. Niassa really is not a good comparison.

GiveWell: If you could spend money however you wanted in Mozambique, what would you do?

Dr. Novela: Implement the RED [Reaching Every District] strategy. There's not enough funding for this.