

Economic Health Decision Making

You have been hired by the World Health Organization and as leader in the organization you have been assigned to assess a small developing nation and determine the most cost effective public health solutions to improve overall health in the country. You need to select public health options that will allow you to help the most people. You have a budget of \$700 million, you cannot divide services in half as a means of cutting cost and you cannot go over budget.

National Health Indicators:

This (fictitious) country is about the size of Alaska. There is a Mountain dividing the southern region from the northern region of the country. The total population is 20 million with 75% of them living in the Northern region. The country is an island making acquiring supplies difficult. The climate is fairly harsh sometimes creating significant transportation issues in the Northern region. Paved roads are rare and often go many years without repairs. The population is divided evenly between urban and rural settings. The Northern region has a cold, hostile climate. The Southern region has fertile land ideal for farming. It is warm with a mild climate. The Southern region has limited rain fall so irrigation of farmland is challenging. Access to care is a significant issue in both regions and few people are vaccinated. Infectious diseases are prevalent throughout both regions and many children die before their 5th birthday. Only the wealthiest families send their children to school or have indoor plumbing. Access to clean drinking water is rare. The majority of families grow their own food but seeds are limited and malnutrition is rampant.

Service	Cost	Notes
Nutrition Education	\$100 Million	Adequate nutrition is important for a strong immune system.
1 Life Straw for each family	\$125 Million	Life Straws allow someone to drink from any water. They remove the harmful bacteria and parasites making the water safe to drink. They will need to be replaced every year.
Water Purification	\$175 Million	A water purification system will provide clean water for generations to come.
Vector Control	\$25 Million	Vector control will eliminate harmful disease causing insects.
Vaccines	\$75 Million	At this cost you would be able to vaccinate each man, woman and child from six potentially fatal infectious diseases.
Hospital(s)	\$80 Million	Each staffed hospital can serve up to 2 million people. You would need 10 staffed hospitals to cover the entire population. You can include more than one

		hospital in your budget should you choose to do so.
Antibiotics	\$30 Million	This would assure the nation has adequate antibiotics to treat infections including pneumonia.
Disease Detection	\$30 Million	Monitoring the outbreak and spread of infectious diseases.
Schools for Healthcare Training	\$75 Million	Train the future doctors, nurses, dentists etc.
Diarrhea Prevention Program	\$20 Million	This would provide rehydration therapy to people in hospitals and clinics that were suffering from severe diarrhea. Diarrhea is a top cause of death in countries with unclean water.
Irrigation System	\$100 Million	An Irrigation system would allow for more successful farming in the Southern region.
Road Improvements	\$100 Million	Paving and repairing roads would allow for greater transportation and easier access to care. It would also simplify getting food from the Southern region to the Northern region.
Plumbing Improvements	\$200 Million	This initiative would provide indoor and advanced plumbing for all public places as well as 75% of the population.
Seeds	\$75 Million	Farmers would be given a wider selection of seeds to farm with thereby expanding the food options in the area.
Schools	\$125 Million	Putting schools within walking distance of each village.
Health Education Program	\$80 Million	Training for all the citizens on healthy living including hand-washing, diet, exercise, diabetes, etc.